# ECOSTAT NEWS

VOLUME II (ISSUE 1 TO 6)

&

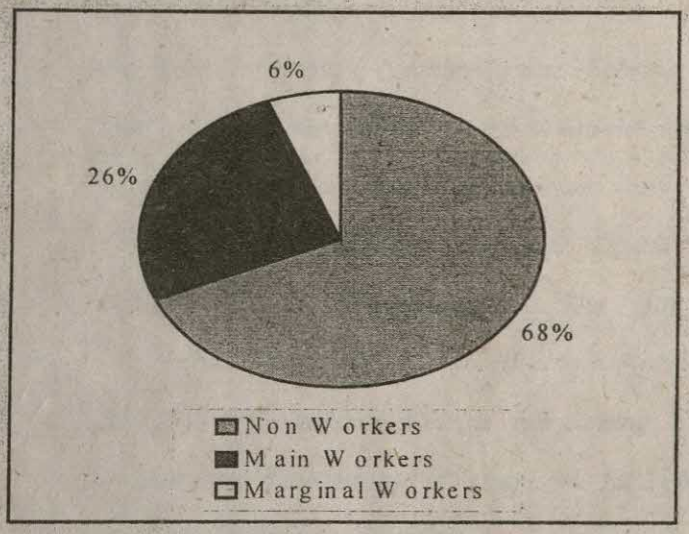
VOLUME III (ISSUE 1 TO 6)

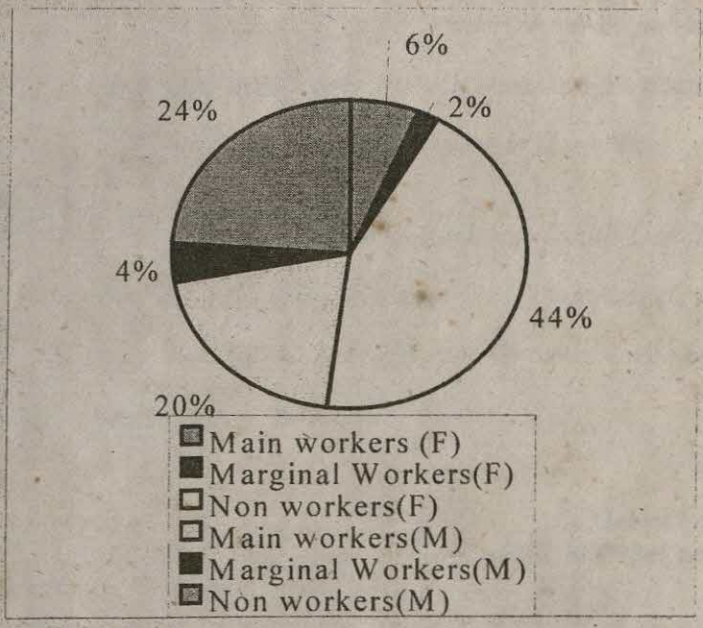
# EcoStat News

Feb, April 2002
Volume - 2 Issue - 1&2

*For Official Use only*

1 Population
2 Environment
3 Telecom.
4 Tourism
5 Agriculture
6 Economy
7 National Income
8 Articles
9 Coir Export
10 Indices
11 Prices




**Department of Economics & Statistics**
**Government of Kerala**

1&2

## From Editors Desk

*This is the 10th edition of Ecostat News and the first issue of the year 2002. We couldn't publish the February issue intime due to the strike of the Government Employees of the State. However we have decided to bring out a combined issue (February and April). This issue contains very valuable data on population especially data on workers and Non-workers, work participation rate, etc. District wise details are also reproduced. The data on telecommunication statistics would also be useful for planners. A Statistics Cell is functioning in the department of Tourism and is responsible for bringing out Tourist Statistics of the State.*

*They are doing a wonderful job by publishing data on foreign tourist arrivals, earnings from tourism, etc. The data on tourism is given in five tables.*

*Dr.P.V. Borkil's article on Death Certificate and Shri. P.D.Jerome's paper viz. Indian Agriculture Approaching the Limits to Growth, are added attractions of this issue.*

**A. Meera Sahib,**
**Director & Chief Editor**



Edited printed & published for Department of Economics and Statistics, Government of Kerala

## Contents


| | Page |
|---|---|
| Population | 3 |
| Environment | 10 |
| Indian Telecommunication Statistics | 12 |
| Tourist Statistics | 17 |
| Agriculture | 18 |
| Economy | 24 |
| National Income | 26 |
| Articles | 29 |
| Coir Exports | 32 |
| Indices | 34 |
| Prices | 42 |

## Figures at a Glance-2001

| Population | India | | | Kerala | | |
|---|---|---|---|---|---|---|
| | Total | Rural | Urban | Total | Rural | Urban |
| Persons | 1025251059 | 740255371 | 284995688 | 31838619 | 23571484 | 8267135 |
| Males | 530422415 | 380438194 | 149984221 | 15468664 | 11450785 | 4017879 |
| Females | 494828644 | 359817177 | 135011467 | 16369955 | 12120699 | 4249256 |

| Decadal Population Growth 1991-2001* | India | | Kerala | |
|---|---|---|---|---|
| | Absolute | Percentage | Absolute | Percentage |
| Persons | 180627359 | 21.34 | 2740101 | 9.4 |
| Males | 91944020 | 20.93 | -- | -- |
| Females | 88683339 | 21.79 | -- | - |

| Sex Ratio (Females per 1000 Males)* | India | Kerala |
|---|---|---|
| Total | 933 | 1058 |
| Rural | -- | 1059 |
| Urban | -- | 1059 |

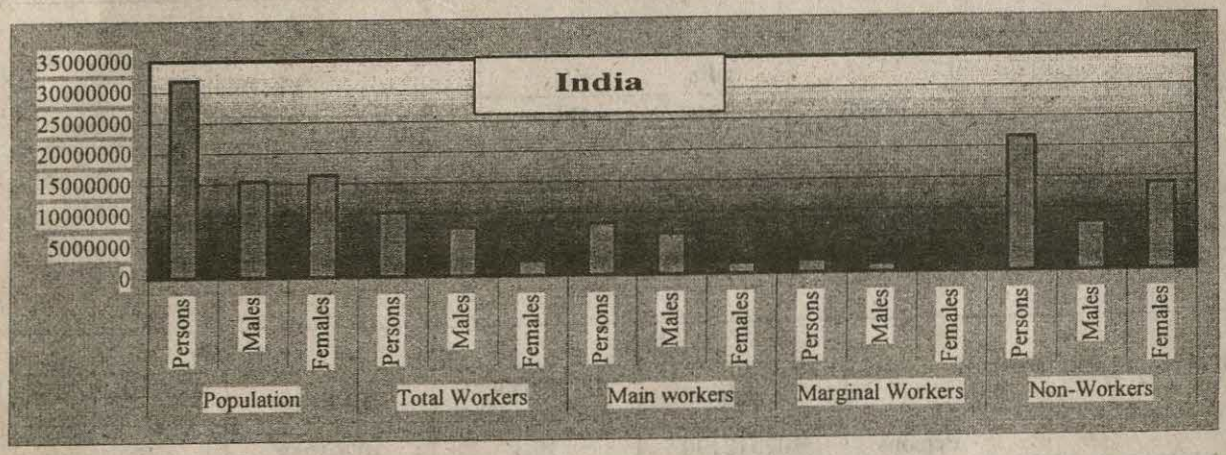
| Literacy Rate | India | | | Kerala | | |
|---|---|---|---|---|---|---|
| | Total | Rural | Urban | Total | Rural | Urban |
| Persons | 65.38 | 75.85 | 54.16 | 90.9 | 90.1 | 93.4 |
| Males | -- | -- | -- | 94.2 | 93.5 | 96.1 |
| Females | -- | -- | -- | 87.9 | 86.8 | 90.9 |

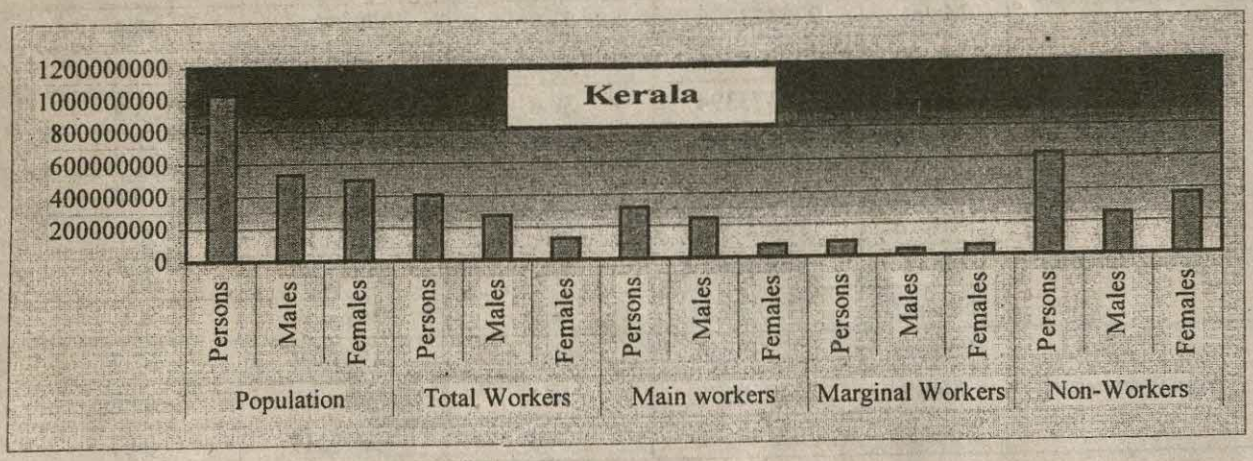
| Workers and Non-workers | | India | | Kerala | |
|---|---|---|---|---|---|
| | | Absolute | Percentage to total population | Absolute | Percentage to total population |
| Total Workers (Main and Marginal | Persons | 402512190 | 39.3 | 10291258 | 32.3 |
| | Males | 275463736 | 51.9 | 7790522 | 50.4 |
| | Females | 127048454 | 25.7 | 2500736 | 15.3 |
| Main workers | Persons | 313173394 | 30.6 | 8236741 | 25.9 |
| | Males | 240520672 | 45.3 | 6479350 | 41.9 |
| | Females | 72652722 | 14.7 | 1757391 | 10.8 |
| Marginal Workers | Persons | 89338796 | 8.7 | 2054517 | 6.4 |
| | Males | 34943064 | 6.6 | 1311172 | 8.5 |
| | Females | 54395732 | 11.0 | 743345 | 4.5 |
| Non-Workers | Persons | 622738869 | 60.7 | 21547361 | 67.7 |
| | Males | 254958679 | 48.1 | 7678142 | 49.6 |
| | Females | 367780190 | 74.3 | 13869219 | 84.7 |

*Figures at a Glance-2001 (Contd.)*

| Category of Workers | | India | | Kerala | |
|---|---|---|---|---|---|
| | | Absolute | Percentage to total population | Absolute | Percentage to total population |
| Cultivators | Persons | 127628287 | 31.7 | 740403 | 7.2 |
| | Males | 86328447 | 31.4 | 622724 | 8.0 |
| | Females | 41299840 | 32.5 | 117679 | 4.7 |
| Agricultural Labourers | Persons | 107447725 | 26.7 | 1653601 | 16.1 |
| | Males | 57354281 | 20.8 | 1103317 | 14.2 |
| | Females | 50093444 | 39.4 | 550284 | 22.0 |
| Workers in Household Industry | Persons | 16395870 | 4.10 | 364770 | 3.5 |
| | Males | 8312191 | 3.00 | 181935 | 2.3 |
| | Females | 8083679 | 6.4 | 182835 | 7.3 |
| Other workers | Persons | 151040308 | 37.5 | 7532484 | 73.2 |
| | Males | 123468817 | 44.8 | 5882546 | 75.5 |
| | Females | 27571491 | 21.7 | 1649938 | 66.0 |

**Total Population, Total Workers, Main Workers, Marginal Workers and Non-Workers By Sex**



## Work Participation Rate in India and Kerala for 1981-2001

| Census Year | India | | | Kerala | | |
|---|---|---|---|---|---|---|
| | Persons | Males | Females | Persons | Males | Females |
| Total | | | | | | |
| 1981 | 36.7 | 52.6 | 19.7 | 30.5 | 44.9 | 16.6 |
| 1991 | 37.5 | 51.6 | 22.3 | 31.4 | 47.6 | 15.9 |
| 2001 | 39.3 | 51.9 | 25.7 | 32.3 | 50.4 | 15.3 |
| **Rural** | | | | | | |
| 1981 | 38.8 | 53.8 | 23.1 | 31.3 | 45.2 | 17.7 |
| 1991 | 40.0 | 52.5 | 26.7 | 32.1 | 47.9 | 16.9 |
| 2001 | 42.0 | 52.4 | 31.0 | 32.6 | 50.2 | 15.9 |
| **Urban** | | | | | | |
| 1981 | 30.0 | 49.1 | 8.3 | 27.4 | 43.4 | 11.8 |
| 1991 | 30.2 | 48.9 | 9.2 | 29.6 | 46.8 | 13.0 |
| 2001 | 32.2 | 50.9 | 11.6 | 31.6 | 50.8 | 13.5 |

## Percentage of Total Workers, Main Workers, Marginal Workers and Non-Workers to Total Population by Residence and Sex – State and District 1991 and 2001

| State/ District | Total/ Rural/ Urban | Persons/ Males /Females | Percentage to Total Population | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Workers | | | | | | Non Workers | |
| | | | Total Workers | | Main Workers | | Marginal Workers | | | |
| | | | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Kerala | Total | P | 31.4 | 32.3 | 28.5 | 25.9 | 2.9 | 6.4 | 68.6 | 67.7 |
| | | M | 47.6 | 50.4 | 44.8 | 41.9 | 2.8 | 8.5 | 52.4 | 49.6 |
| | | F | 15.9 | 15.3 | 12.8 | 10.8 | 3.1 | 4.5 | 84.1 | 84.7 |
| | Rural | P | 32.1 | 32.6 | 28.8 | 25.5 | 3.3 | 7.1 | 67.9 | 67.4 |
| | | M | 47.9 | 50.2 | 44.9 | 41.0 | 3.0 | 9.2 | 52.1 | 49.8 |
| | | F | 16.9 | 15.9 | 13.4 | 10.8 | 3.5 | 5.1 | 83.1 | 84.1 |
| | Urban | P | 29.6 | 31.6 | 27.6 | 27.1 | 2.0 | 4.5 | 70.4 | 68.4 |
| | | M | 46.8 | 50.8 | 44.6 | 44.5 | 2.2 | 6.3 | 53.2 | 49.2 |
| | | F | 13.0 | 13.5 | 11.3 | 10.6 | 1.7 | 2.9 | 87.0 | 86.5 |
| Kasaragod | Total | P | 33.4 | 34.7 | 30.5 | 27.3 | 2.9 | 7.4 | 66.6 | 65.3 |
| | | M | 46.1 | 49.3 | 43.6 | 41.2 | 2.5 | 8.1 | 53.9 | 50.7 |
| | | F | 21.0 | 20.8 | 17.7 | 14.0 | 3.3 | 6.8 | 79.0 | 79.2 |
| | Rural | P | 33.8 | 35.3 | 30.8 | 27.5 | 3.0 | 7.8 | 66.2 | 64.7 |
| | | M | 46.5 | 49.6 | 44.0 | 41.5 | 2.5 | 8.1 | 53.5 | 50.4 |
| | | F | 21.3 | 21.5 | 17.8 | 14.1 | 3.5 | 7.4 | 78.7 | 78.5 |
| | Urban | P | 31.3 | 32.5 | 29.1 | 26.2 | 2.2 | 6.3 | 68.7 | 67.5 |
| | | M | 43.8 | 47.8 | 41.6 | 40.0 | 2.2 | 7.8 | 56.2 | 52.2 |
| | | F | 19.3 | 18.1 | 17.1 | 13.3 | 2.2 | 4.8 | 80.7 | 81.9 |

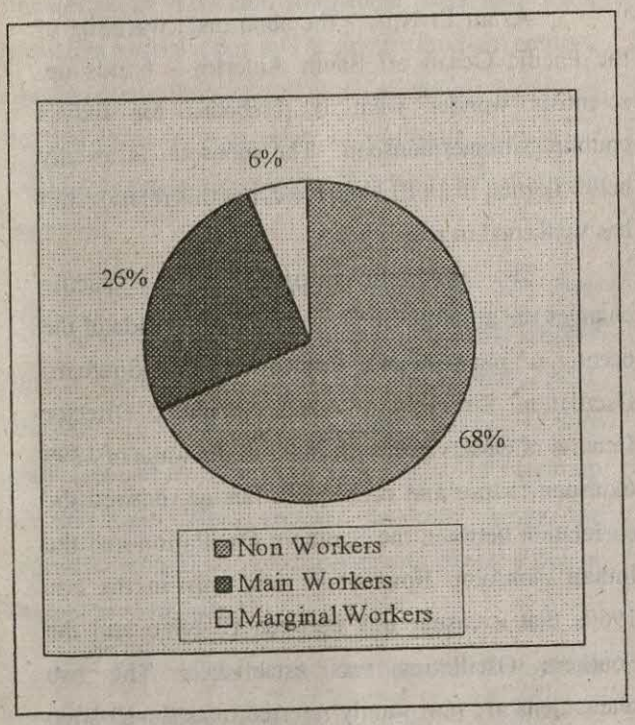
| State/ District | Total/ Rural/ Urban | Persons/ Males /Females | Percentage to Total Population | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Workers | | | | | | Non Workers | |
| | | | Total Workers | | Main Workers | | Marginal Workers | | | |
| | | | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Kannur | Total | P | 28.9 | 31.8 | 26.2 | 26.0 | 2.7 | 5.8 | 71.1 | 68.2 |
| | | M | 44.7 | 50.0 | 42.0 | 42.9 | 2.7 | 7.1 | 55.3 | 50.0 |
| | | F | 13.8 | 15.2 | 11.2 | 10.5 | 2.6 | 4.7 | 86.2 | 84.8 |
| | Rural | P | 30.8 | 34.0 | 27.5 | 26.2 | 3.3 | 7.8 | 69.2 | 66.0 |
| | | M | 45.9 | 51.4 | 42.8 | 42.3 | 3.1 | 9.1 | 54.1 | 48.6 |
| | | F | 16.1 | 17.8 | 12.5 | 11.2 | 3.6 | 6.6 | 83.9 | 82.2 |
| | Urban | P | 27.0 | 29.7 | 25.0 | 25.8 | 2.0 | 3.9 | 73.0 | 70.3 |
| | | M | 43.5 | 48.6 | 41.1 | 43.5 | 2.4 | 5.1 | 56.5 | 51.4 |
| | | F | 11.7 | 12.7 | 10.0 | 9.9 | 1.7 | 2.8 | 88.3 | 87.3 |
| Wayanad | Total | P | 38.8 | 39.3 | 33.9 | 28.0 | 4.9 | 11.3 | 61.2 | 60.7 |
| | | M | 53.2 | 55.7 | 49.3 | 42.8 | 3.9 | 12.9 | 46.8 | 44.3 |
| | | F | 23.8 | 22.8 | 17.8 | 13.0 | 6.0 | 9.8 | 76.2 | 77.2 |
| | Rural | P | 38.8 | 39.2 | 33.8 | 27.8 | 5.0 | 11.4 | 61.2 | 60.8 |
| | | M | 53.2 | 55.6 | 49.3 | 42.6 | 3.9 | 13.0 | 46.8 | 44.4 |
| | | F | 23.8 | 22.8 | 17.8 | 12.9 | 6.0 | 9.9 | 76.2 | 77.2 |
| | Urban | P | 39.0 | 40.8 | 34.7 | 32.0 | 4.3 | 8.8 | 61.0 | 59.2 |
| | | M | 54.1 | 57.3 | 49.9 | 48.1 | 4.2 | 9.2 | 45.9 | 42.7 |
| | | F | 23.0 | 24.1 | 18.6 | 15.9 | 4.4 | 8.2 | 77.0 | 75.9 |
| Kozhikode | Total | P | 26.6 | 27.9 | 23.3 | 21.9 | 3.3 | 6.0 | 73.4 | 72.1 |
| | | M | 44.6 | 48.8 | 40.3 | 39.5 | 4.3 | 9.3 | 55.4 | 51.2 |
| | | F | 9.0 | 8.1 | 6.6 | 5.3 | 2.4 | 2.8 | 91.0 | 91.9 |
| | Rural | P | 27.0 | 27.4 | 22.9 | 20.4 | 4.1 | 7.0 | 73.0 | 72.6 |
| | | M | 44.1 | 47.5 | 39.1 | 36.7 | 5.0 | 10.8 | 55.9 | 52.5 |
| | | F | 10.3 | 8.4 | 7.0 | 4.9 | 3.3 | 3.5 | 89.7 | 91.6 |
| | Urban | P | 26.0 | 28.7 | 23.9 | 24.4 | 2.1 | 4.3 | 74.0 | 71.3 |
| | | M | 45.4 | 50.9 | 42.3 | 43.9 | 3.1 | 7.0 | 54.6 | 49.1 |
| | | F | 7.0 | 7.7 | 5.9 | 6.0 | 1.1 | 1.7 | 93.0 | 92.3 |
| Malappuram | Total | P | 24.3 | 24.1 | 21.7 | 19.1 | 2.6 | 5.0 | 75.7 | 75.9 |
| | | M | 40.7 | 42.8 | 37.7 | 34.9 | 3.0 | 7.9 | 59.3 | 57.2 |
| | | F | 8.7 | 6.6 | 6.5 | 4.3 | 2.2 | 2.3 | 91.3 | 93.4 |
| | Rural | P | 24.4 | 24.1 | 21.7 | 18.9 | 2.7 | 5.2 | 75.6 | 75.9 |
| | | M | 40.8 | 42.7 | 37.7 | 34.6 | 3.1 | 8.1 | 59.2 | 57.3 |
| | | F | 9.0 | 6.6 | 6.7 | 4.2 | 2.3 | 2.4 | 91.0 | 93.4 |
| | Urban | P | 22.9 | 24.4 | 21.1 | 20.5 | 1.8 | 3.9 | 77.1 | 75.6 |
| | | M | 40.2 | 43.6 | 37.7 | 37.2 | 2.5 | 6.4 | 59.8 | 56.4 |
| | | F | 6.3 | 6.3 | 5.1 | 4.7 | 1.2 | 1.6 | 93.7 | 93.7 |

| State/ District | Total/ Rural/ Urban | Persons/ Males /Females | Percentage to Total Population | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Workers | | | | | | Non Workers | |
| | | | Total Workers | | Main Workers | | Marginal Workers | | | |
| | | | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Palakkad | Total | P | 35.5 | 36.2 | 33.0 | 29.4 | 2.5 | 6.8 | 64.5 | 63.8 |
| | | M | 48.6 | 52.2 | 46.6 | 44.6 | 2.0 | 7.6 | 51.4 | 47.8 |
| | | F | 23.1 | 21.1 | 20.2 | 15.1 | 2.9 | 6.0 | 76.9 | 78.9 |
| | Rural | P | 36.2 | 36.5 | 33.5 | 29.4 | 2.7 | 7.1 | 63.8 | 63.5 |
| | | M | 48.7 | 52.2 | 46.5 | 44.2 | 2.2 | 8.0 | 51.3 | 47.8 |
| | | F | 24.4 | 21.8 | 21.3 | 15.4 | 3.1 | 6.4 | 75.6 | 78.2 |
| | Urban | P | 31.8 | 34.0 | 30.4 | 29.6 | 1.4 | 4.4 | 68.2 | 66.0 |
| | | M | 48.2 | 52.4 | 46.9 | 47.2 | 1.3 | 5.2 | 51.8 | 47.6 |
| | | F | 16.2 | 16.5 | 14.7 | 12.8 | 1.5 | 3.7 | 83.8 | 83.5 |
| Thrissur | Total | P | 32.0 | 32.2 | 29.4 | 27.2 | 2.6 | 5.0 | 68.0 | 67.8 |
| | | M | 47.2 | 50.8 | 44.8 | 44.5 | 2.4 | 6.3 | 52.8 | 49.2 |
| | | F | 17.9 | 15.1 | 15.2 | 11.4 | 2.7 | 3.7 | 82.1 | 84.9 |
| | Rural | P | 32.4 | 32.3 | 29.6 | 26.8 | 2.8 | 5.5 | 67.6 | 67.7 |
| | | M | 47.1 | 50.8 | 44.6 | 43.9 | 2.5 | 6.9 | 52.9 | 49.2 |
| | | F | 18.9 | 15.4 | 15.9 | 11.2 | 3.0 | 4.2 | 81.1 | 84.6 |
| | Urban | P | 30.7 | 31.9 | 28.8 | 28.2 | 1.9 | 3.7 | 69.3 | 68.1 |
| | | M | 47.4 | 51.0 | 45.4 | 46.2 | 2.0 | 4.8 | 52.6 | 49.0 |
| | | F | 15.1 | 14.2 | 13.3 | 11.6 | 1.8 | 2.6 | 84.9 | 85.8 |
| Eranakulam | Total | P | 33.5 | 36.1 | 31.0 | 29.5 | 2.5 | 6.6 | 66.5 | 63.9 |
| | | M | 51.5 | 55.4 | 19.1 | 47.4 | 2.4 | 8.0 | 48.5 | 44.6 |
| | | F | 15.5 | 17.1 | 13.0 | 12.0 | 2.5 | 5.1 | 84.5 | 82.9 |
| | Rural | P | 35.3 | 37.7 | 32.2 | 29.7 | 3.1 | 8.0 | 64.7 | 62.3 |
| | | M | 52.5 | 56.3 | 49.8 | 47.2 | 2.7 | 9.1 | 47.5 | 43.7 |
| | | F | 18.0 | 19.3 | 14.6 | 12.4 | 3.4 | 6.9 | 82.0 | 80.7 |
| | Urban | P | 31.6 | 34.3 | 29.8 | 29.3 | 1.8 | 5.0 | 68.4 | 65.7 |
| | | M | 50.5 | 54.4 | 48.4 | 47.6 | 2.1 | 6.8 | 49.5 | 45.6 |
| | | F | 12.7 | 14.7 | 11.3 | 11.5 | 1.4 | 3.2 | 87.3 | 85.3 |
| Idukki | Total | P | 39.7 | 43.3 | 36.1 | 35.5 | 3.6 | 7.8 | 60.3 | 56.7 |
| | | M | 55.2 | 58.4 | 52.4 | 50.4 | 2.8 | 8.0 | 44.8 | 41.6 |
| | | F | 23.8 | 28.1 | 19.4 | 20.6 | 4.4 | 7.5 | 76.2 | 71.9 |
| | Rural | P | 40.1 | 43.8 | 36.3 | 35.9 | 3.8 | 7.9 | 59.9 | 56.2 |
| | | M | 55.3 | 58.6 | 52.4 | 50.6 | 2.9 | 8.0 | 44.7 | 41.4 |
| | | F | 24.4 | 28.8 | 19.8 | 21.0 | 4.6 | 7.8 | 75.6 | 71.2 |
| | Urban | P | 32.4 | 33.7 | 31.4 | 29.0 | 1.0 | 4.7 | 67.6 | 66.3 |
| | | M | 51.8 | 53.0 | 50.9 | 46.5 | 0.9 | 6.5 | 48.2 | 47.0 |
| | | F | 12.7 | 14.7 | 11.6 | 11.7 | 1.1 | 3.0 | 87.3 | 85.3 |

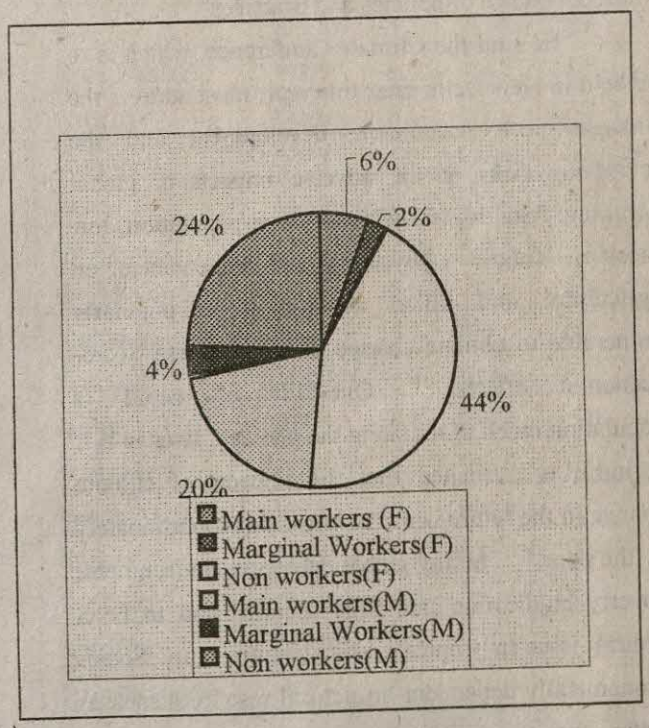
| State/ District | Total/ Rural/ Urban | Persons/ Males /Females | Percentage to Total Population | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Workers | | | | | | Non Workers | |
| | | | Total Workers | | Main Workers | | Marginal Workers | | | |
| | | | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Kottayam | Total | P | 31.2 | 32.9 | 29.4 | 27.6 | 1.8 | 5.3 | 68.8 | 67.1 |
| | | M | 50.4 | 52.4 | 48.5 | 45.4 | 1.9 | 7.0 | 49.6 | 47.6 |
| | | F | 12.1 | 13.9 | 10.3 | 10.3 | 1.8 | 3.6 | 87.9 | 86.1 |
| | Rural | P | 31.5 | 33.3 | 29.5 | 27.8 | 2.0 | 5.5 | 68.5 | 66.7 |
| | | M | 50.8 | 52.8 | 48.8 | 45.6 | 2.0 | 7.2 | 49.2 | 47.2 |
| | | F | 12.3 | 14.1 | 10.3 | 10.4 | 2.0 | 3.7 | 87.7 | 85.9 |
| | Urban | P | 29.9 | 30.8 | 28.8 | 26.8 | 1.1 | 4.0 | 70.1 | 69.2 |
| | | M | 48.5 | 49.9 | 47.2 | 44.2 | 1.3 | 5.7 | 51.5 | 50.1 |
| | | F | 11.3 | 12.4 | 10.3 | 10.0 | 1.0 | 2.4 | 88.7 | 87.6 |
| Alappuzha | Total | P | 34.1 | 34.4 | 30.1 | 26.0 | 4.0 | 8.4 | 65.9 | 65.6 |
| | | M | 46.8 | 49.7 | 43.4 | 39.7 | 3.4 | 10.0 | 53.2 | 50.3 |
| | | F | 22.0 | 20.2 | 17.5 | 13.3 | 4.5 | 6.9 | 78.0 | 79.8 |
| | Rural | P | 34.2 | 33.8 | 30.1 | 24.5 | 4.1 | 9.3 | 65.8 | 66.2 |
| | | M | 47.0 | 48.7 | 43.4 | 37.3 | 3.6 | 11.4 | 53.0 | 51.3 |
| | | F | 22.1 | 20.1 | 17.4 | 12.8 | 4.7 | 7.3 | 77.9 | 79.9 |
| | Urban | P | 33.9 | 35.8 | 30.3 | 29.5 | 3.6 | 6.3 | 66.1 | 64.2 |
| | | M | 46.5 | 52.0 | 43.5 | 45.2 | 3.0 | 6.8 | 53.5 | 48.0 |
| | | F | 21.7 | 20.5 | 17.5 | 14.7 | 4.2 | 5.8 | 78.3 | 79.5 |
| Pathanamthitta | Total | P | 29.7 | 29.7 | 27.0 | 23.2 | 2.7 | 6.5 | 70.3 | 70.3 |
| | | M | 48.0 | 47.6 | 46.0 | 38.6 | 2.0 | 9.0 | 52.0 | 52.4 |
| | | F | 12.5 | 13.2 | 9.2 | 9.0 | 3.3 | 4.2 | 87.5 | 86.8 |
| | Rural | P | 29.9 | 29.9 | 27.1 | 23.1 | 2.8 | 6.8 | 70.1 | 70.1 |
| | | M | 48.4 | 48.0 | 46.3 | 38.7 | 2.1 | 9.3 | 51.6 | 52.0 |
| | | F | 12.6 | 13.4 | 9.1 | 8.9 | 3.5 | 4.5 | 87.4 | 86.6 |
| | Urban | P | 28.3 | 27.7 | 26.5 | 23.3 | 1.8 | 4.4 | 71.7 | 72.3 |
| | | M | 45.7 | 44.5 | 44.2 | 37.7 | 1.5 | 6.8 | 54.3 | 55.5 |
| | | 33F | 11.8 | 12.0 | 9.8 | 9.9 | 2.0 | 2.1 | 88.2 | 88.0 |
| Kollam | Total | P | 32.1 | 32.1 | 27.9 | 25.3 | 4.2 | 6.8 | 67.9 | 67.9 |
| | | M | 47.7 | 48.5 | 44.2 | 38.9 | 3.5 | 9.6 | 52.3 | 51.5 |
| | | F | 17.0 | 16.7 | 12.2 | 12.6 | 4.8 | 4.1 | 83.0 | 83.3 |
| | Rural | P | 32.7 | 32.2 | 28.2 | 25.0 | 4.5 | 7.2 | 67.3 | 67.8 |
| | | M | 48.1 | 48.3 | 44.4 | 38.0 | 3.7 | 10.3 | 51.9 | 51.7 |
| | | F | 17.8 | 17.3 | 12.5 | 13.0 | 5.3 | 4.3 | 82.2 | 82.7 |
| | Urban | P | 29.7 | 31.2 | 27.0 | 26.5 | 2.7 | 4.7 | 70.3 | 68.8 |
| | | M | 45.9 | 49.5 | 43.3 | 42.9 | 2.6 | 6.6 | 54.1 | 50.5 |
| | | F | 13.8 | 13.6 | 11.1 | 10.8 | 2.7 | 2.8 | 86.2 | 86.4 |

| State/ District | Total/ Rural/ Urban | Persons/ Males /Females | Percentage to Total Population | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Workers | | | | | | Non Workers | |
| | | | Total Workers | | Main Workers | | Marginal Workers | | | |
| | | | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 | 1991 | 2001 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Thiruvananthapuram | Total | P | 32.6 | 32.4 | 30.2 | 25.3 | 2.4 | 7.1 | 67.4 | 67.6 |
| | | M | 50.2 | 51.5 | 48.1 | 41.0 | 2.1 | 10.5 | 49.8 | 48.5 |
| | | F | 15.6 | 14.4 | 12.8 | 10.4 | 2.8 | 4.0 | 84.4 | 85.6 |
| | Rural | P | 33.6 | 32.3 | 30.5 | 23.8 | 3.1 | 8.5 | 66.4 | 67.7 |
| | | M | 51.5 | 51.8 | 49.0 | 39.3 | 2.5 | 12.5 | 48.5 | 48.2 |
| | | F | 16.4 | 14.0 | 12.7 | 9.4 | 3.7 | 4.6 | 83.6 | 86.0 |
| | Urban | P | 30.6 | 32.6 | 29.4 | 28.0 | 1.2 | 4.6 | 69.4 | 67.4 |
| | | M | 47.7 | 50.9 | 46.4 | 44.2 | 1.3 | 6.7 | 52.3 | 49.1 |
| | | F | 14.0 | 15.1 | 13.0 | 12.5 | 1.0 | 2.6 | 86.0 | 84.9 |

**Percentage Distribution of Non Workers, Main Workers, and Marginal workers 2001**




**Percentage Distribution of Non Workers, Main Workers, and Marginal workers by Sex -2001**




*Source Census Dept. G.O.I - -Provisional Population Totals - Paper 3 of 2001*

## Gobal Warming will hit rice, wheat yields

*Gargi Parsai, Hindu 2nd May '02*

Responding to findings that global warming will have an impact on Indian agriculture resulting in up to 30 per cent drop in crop production by 2050, the Government today said that adaptation strategies and resource-conserving technologies were being evolved for sustainable farm development and improved productivity through low cost mechanism. Current climate models predict a global warming of about 1.4 to 5.8 degree centigrade over the present century. This was likely to have an impact on rice and wheat yields.

Inaugurating the South Asia Expert Workshop on 'Adaptation to the Climate Change for Agricultural Productivity ', the Agriculture Minister, Ajit Singh, said projections of reduced crop yields were of grave concern, taking also into consideration the growing food demand on account of urbanization and industrialisation. "An important priority, therefore, is to ensure that developing countries gain access to technological advances and develop a more informed choice of policies and practices".

He said the Climate Conference, which is to be held in New Delhi later this year, must address the linkages with sustainable development and the increasing risks of the adverse impacts of global warming. "South Asia with its large population, low incomes, fragile ecosystems and dependence on agriculture and allied activities is popularly vulnerable to climate change and its adverse Socio-economic effects. One-fifth of world 's population,much of it among the poorest , lives in this region.It is estimated that the impacts of climate change in the future world be borne disproportionately by the poor." "In any global debate on environment, poverty eradication and food security had to be a central issue.In tropical Asia, countries are Socio-economically dependent on natural resources such as water, forests, grassland, rangeland and fisheries, which are currently under tremendous stress. Agricultural productivity is greatly effected by rapidly by shrinking per capita land, increasing soil degradation, reduced availability of water coupled with surface and ground water contamination, increasing deforestation and desertification " He said there was no room for complacency despite a record foodgrains production of over 211 million tone's as the rain-fed areas in the country still suffered from low yields and instability production..

The Executive Director of the United Nations Environment Programme (UNEP), Klaus Toepfer, pointed out that the developing countries would bear the brunt of climate change and its negative impacts. The consequences could be wide-ranging affecting crop yields, soil fertility and agricultural zones. Plant species and metabolic pathways were among the important determinants of how crops would respond.

---

## El Nino and the Indian monsoon

*Gopal Raj, Hindu 29th April*

As an El Nino - the abnormal warming of the Pacific Ocean off South America - builds up, scientists wonder what it forebodes for India's commingsummermonsoon.. The monsoon is usually below normal in an El Nino Year, but this relationship has weakened in recent years.

The abnormal warming of the Pacific changes the atmosphere pressure on either side of the ocean, a phenomenon known as the Southern Oscillation. Sir Gilbert Walker, appointed Director General of Observatories in India in the wake of 1899 monsoon failure and consequent famine, noticed the correlation between the Southern Oscillation and the Indian monsoon. However, it was only in the late 1960s that a casual link between El Nino and the Southern Oscillation was established. The two phenomena are now jointly referred to as the El Nino Southern Oscillation (ENSO)

Although a statistical correlation between the ENSO and the outcome of the Indian monsoon has been found, a clear casual link between the two is yet to be established. Even the statistical correlation between the two has broken down in recent years. Although the strongest El Nino of the 20th century occurred in 1997, the monsoon that year was slightly above normal, a fact scientists have been trying to understand.

A fewyears back, K. *Krishna Kumar of the Indian Institute of Tropical Meteorology at* Pune and other researchers suggested that decreasing snow cover in Eurasia might be responsible for the phenomena. Less snow cover meant that more solar radiation was absorbed on the ground and less reflected back into space.

Also, when spring came, less solar energy was consumed in melting the snow and therefore, the land heated up more. The heating up of the land was increased by the fact that there was less water available to cool it down. The greater land-sea contrast would serve to initiate and sustain a strong monsoon. In this manner, a decrease in Eurasian snow cover could counteract the effects of El Nino on the Indian monsoon.

In a recent paper Srinivasan and Ravi Nanjuundiah of the Indian Institute of Science, argued that a single event could turn a monsoon around. Various climatological parameters, which usually forbode a bad monsoon, were present in 1997 right up to mid-June. What appears to have swung the monsoon around was the copious rain over the Bay of Bengal around June 15.

The rain acted as a heat source. Since water has to be heated to vapourise it, the reverse process of condensation must necessarily release heat. The rain made the atmosphere above the Bay of Bengal hotter than over the Arabian Sea. The resulting difference in atmospheric pressure caused moisture-laden windstblow from the Arabian Sea more strongly.

**Airport Performance**
**April - February 2001-2002**

| Air port | Passenger traffic ('000) | Passenger traffic (% chg) | Share of domestic passengers (%) | Share of international passengers (%) |
|---|---|---|---|---|
| Bombay | 10486.5 | -6.4 | 57.1 | 42.9 |
| Delhi | 7766.1 | -4.7 | 56.6 | 43.4 |
| Madras | 3460.4 | -7.1 | 54.1 | 45.9 |
| Calcutta | 2350.2 | -4.7 | 77.1 | 22.9 |
| Bangalore | 2070.7 | -7.6 | 91.5 | 8.5 |
| Hyderabad | 1536.7 | 4.2 | 80.4 | 19.6 |
| Trivandrum | 879.8 | -5.3 | 23.7 | 76.3 |
| Cochin | 770.5 | 10.4 | 50.4 | 49.6 |
| Goa | 739.8 | -5.3 | 77.2 | 22.8 |
| Ahmedabad | 708.9 | -9.1 | 78.3 | 21.7 |
| Calicut | 475.6 | 6.6 | 37.4 | 62.6 |
| Guwahati | 399.5 | -4.2 | 100.0 | 0.0 |
| Pune | 341.9 | -10.3 | 100.0 | 0.0 |
| Lucknow | 273.2 | -2.0 | 93.4 | 6.6 |
| Coimbattore | 222.3 | -8.8 | 98.6 | 1.4 |
| Vadodara | 221.3 | 15.5 | 100.0 | 0.0 |
| Srinagar | 219.7 | -4.4 | 100.0 | 0.0 |
| Jaipur | 204.5 | -18.8 | 100.0 | 0.0 |
| Mangalore | 190.4 | -4.0 | 100.0 | 0.0 |
| Jammu | 174.6 | -17.1 | 100.0 | 0.0 |
| Nagpur | 170.8 | -5.9 | 100.0 | 0.0 |
| Varanasi | 152.2 | -22.5 | 81.6 | 18.4 |
| Amritsar | 111.0 | 13.5 | 10.1 | 89.9 |
| Tiruchirappalli | 62.5 | -13.2 | 21.3 | 78.7 |
| **All Airports** | **36574.5** | **-4.9** | **66.2** | **33.8** |

## PROGRESS IN TELEPHONE LINES AND DENSITY

| Item | 1951 | 1961 | 1671 | 1981 | 1991 | 1992 | 1993 |
|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* |
| Equipped capacity * | 0.12 | 0.41 | 1.19 | 2.47 | 5.82 | 6.78 | 7.97 |
| Direct Exchange Lines(DELs)* | 0.10 | 0.33 | 0.98 | 2.15 | 5.07 | 5.81 | 6.80 |
| Waiting List* | 0.03 | 0.00 | 0.31 | 0.45 | 1.96 | 2.29 | 2.85 |
| Fixed Lines (DELs) (in million) | 0.10 | 0.33 | 0.98 | 2.15 | 5.07 | 5.81 | 6.80 |
| Cellular Mobile Phones (in million) | -- | -- | -- | -- | -- | -- | -- |
| Number of Telephones(fixed + cellular) per 100 Pop | 0.03 | 0.08 | 0.18 | 0.31 | 0.60 | 0.67 | 0.77 |
| Number of Telephones per Sq Km | 0.03 | 0.10 | 0.30 | 0.65 | 1.54 | 1.77 | 2.07 |

| Item | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|
| *1* | *9* | *10* | *11* | *12* | *13* | *14* | *15* |
| Equipped capacity * | 9.80 | 12.03 | 14.63 | 17.74 | 21.26 | 26.05 | 32.77 |
| Direct Exchange Lines(DELs)* | 8.03 | 9.80 | 11.98 | 14.54 | 17.80 | 21.59 | 26.51 |
| Waiting List* | 2.50 | 2.15 | 2.28 | 2.89 | 2.71 | 1.98 | 3.68 |
| Fixed Lines (DELs) (in million) | 8.03 | 9.80 | 11.98 | 14.54 | 17.80 | 21.59 | 26.51 |
| Cellular Mobile Phones (in million) | -- | -- | -- | -- | -- | -- | -- |
| Number of Telephones(fixed + cellular) per 100 Pop | 0.89 | 1.07 | 1028 | 1056 | 1094 | 2032 | 2.86 |
| Number of Telephones per Sq Km | 2.44 | 2.98 | 3.64 | 4.42 | 5.41 | 6.57 | 8.05 |

**In million numbers*

## CIRCLE WISE STATUS OF TELEPHONE (BSNL & MTNL)

As on March 31, 2000

| State | Equipped capacity | Direct Exchange Lines (DELS | Waiting List | Waiting List as per cent of DELS |
|---|---|---|---|---|
| *(1)* | *(2)* | *(3)* | *(4* | *(5)* |
| 1 Andaman and Nicobar | 33558 | 24463 | 2002 | 8.2 |
| 2 Andhra Pradesh | 2585516 | 2227487 | 377058 | 16.9 |
| 3 Assam | 352189 | 273068 | 5475 | 2.0 |
| 4 Bihar | 820726 | 627400 | 106096 | 16.9 |
| 5 Gujarath | 2299754 | 1921850 | 232624 | 12.1 |
| 6 Haryana | 825150 | 642001 | 73262 | 11.4 |
| 7 Himachal Pradesh | 369906 | 285130 | 24708 | 8.7 |
| 8 Jammu & Kashmir | 197003 | 130021 | 31882 | 24.5 |
| 9 Karnataka | 2236732 | 1829400 | 332189 | 18.2 |
| 10 Kerala | 2203954 | 1705139 | 647165 | 38.0 |
| 11 Madhya Pradesh | 1472515 | 1095952 | 40534 | 3.7 |
| 12 Maharashtra | 2889295 | 2331793 | 263434 | 11.3 |
| 13 North-East | 296364 | 195396 | 26023 | 13.3 |
| 14 Orissa | 526061 | 423309 | 42527 | 10.0 |
| 15 Punjab | 1662656 | 1292252 | 176732 | 13.7 |
| 16 Rajasthan | 1413740 | 1109400 | 95172 | 8.6 |
| 17 Tamil Nadu | 2300536 | 1926967 | 598505 | 31.1 |
| 18 Uttar Pradesh (E) | 1521115 | 1106574 | 201242 | 18.2 |
| 19 Uttar Pradesh (W) | 1306574 | 994004 | 123806 | 12.5 |
| 20 West Bengal | 705027 | 541131 | 157561 | 29.1 |
| 21 Kolkata | 1141242 | 1029121 | 313 | 0.0 |
| 22 Chennai | 968243 | 767863 | 16591 | 2.2 |
| 23 Delhi | 2124679 | 1818236 | 81871 | 4.5 |
| 24 Mumbai | 2515188 | 2213388 | 23843 | 1.1 |
| **All India** | **32767723** | **26511345** | **3680715** | **13.9** |

*In actual Numbers*

## NUMBER OF VILLAGES WITH DIRECT ACCESS TO TELECOM FACILITIES IN VARIOUS TELECOM CIRCLES

**As on March 31, 2000**

| State | No. of Rural Exchanges | No. of DELs in Rural Area | Total DELS | Percent of DELS in Rural Area | Total Villages | Villages covered by VPTs | Per Cent of Villages covered | VPTs on MARR | VPTs O/H |
|---|---|---|---|---|---|---|---|---|---|
| 1 Andaman & Nicobar | 34 | 11110 | 24463 | 45.4 | 282 | 274 | 97.2 | 146 | 128 |
| 2 Andhra Pradesh | 2042 | 532857 | 2227487 | 23.9 | 29460 | 23379 | 79.4 | 12399 | 10980 |
| 3 Assam | 296 | 45615 | 273068 | 16.7 | 22224 | 14181 | 63.8 | 9293 | 4888 |
| 4 Bihar | 766 | 126046 | 627400 | 20.1 | 79208 | 24923 | 31.5 | 14281 | 10642 |
| 5 Gujarath | 1663 | 342330 | 1921850 | 17.8 | 18125 | 13923 | 76.8 | 7413 | 6510 |
| 6 Haryana | 734 | 139583 | 642001 | 21.7 | 6850 | 6807 | 99.4 | 3634 | 3173 |
| 7 Himachal Pradesh | 641 | 161779 | 285130 | 56.7 | 16997 | 10364 | 61.0 | 2842 | 7514 |
| 8 Jammu & Kashmir | 149 | 7738 | 130021 | 6.0 | 6764 | 3793 | 56.1 | 2601 | 1178 |
| 9 Karnataka | 1944 | 439017 | 1829400 | 24.0 | 27066 | 25801 | 95.3 | 14692 | 11108 |
| 10 Kerala | 720 | 906997 | 1705139 | 53.2 | 1530 | 1530 | 100.0 | 32 | 1498 |
| 11 Madhya Pradesh | 2971 | 533074 | 1095952 | 48.6 | 71526 | 46498 | 109.5 | 25553 | 20923 |
| 12 Maharashtra | 2504 | 227139 | 2331793 | 9.7 | 42467 | 31541 | 44.1 | 18848 | 12693 |
| 13 North-East | 257 | 40014 | 195396 | 20.5 | 14446 | 4336 | 30.0 | 3622 | 987 |
| 14 Orissa | 708 | 110741 | 423309 | 26.2 | 46989 | 22928 | 48.8 | 11542 | 113/81 |
| 15 Punjab | 962 | 303805 | 1292252 | 23.5 | 12687 | 12123 | 95.6 | 6195 | 5928 |
| 16 Rajasthan | 1674 | 256794 | 1109400 | 23.1 | 38634 | 23727 | 61.4 | 17703 | 6024 |
| 17 Tamil Nadu | 890 | 177972 | 1926967 | 9.2 | 17991 | 17845 | 99.2 | 7229 | 10616 |
| 18 Uttar Pradesh (E) | 1210 | 173856 | 1106574 | 15.7 | 75698 | 46492 | 61.4 | 27352 | 19065 |
| 19 Uttar Pradesh (W) | 722 | 104293 | 994004 | 10.5 | 39551 | 23531 | 59.5 | 13751 | 9780 |
| 20 West Bengal | 782 | 197526 | 541131 | 36.5 | 38337 | 19997 | 52.2 | 12129 | 7868 |
| 21 Kolkata | 0 | 3779 | 1029121 | 0.4 | 468 | 421 | 90.0 | 56 | 365 |
| 22 Chennai | 0 | 0 | 767863 | 0.0 | 0 | 0 | | Na | Na |
| 23 Delhi | 0 | 0 | 1818236 | 0.0 | 191 | 191 | 100.0 | 0 | 191 |
| 24 Mumbai | 0 | 0 | 2213388 | 0.0 | 0 | 0 | | 0 | 0 |
| **All India** | **21669** | **4842065** | **26511345** | **18.3** | **607491** | **374605** | **61.7** | **211313** | **163167** |

*VPT: Village Phone Terminal, MARR: Multi-Access Radio Receiver*

## CELLULAR MOBILES SERVICE

As on March 31, 2000

| State | No. of Cellular Providers | No. of Town having Mobile Service | No. of Cellular Subscribers | No. of Basic Lines (BSNL/ MTNL) | Total Telephone (including Private | Share of Cellular Subscribers to All India | Cellar as Percent to total Telephones |
|---|---|---|---|---|---|---|---|
| 1 Andaman&Nicobar | - | - | - | 24463 | 24463 | - | - |
| 2 Andhra Pradesh | 2 | 72 | 105469 | 2254200 | 2359669 | 526 | 1.5 |
| 3 Assam | 1 | 1 | 5823 | 273068 | 278891 | 0.3 | 2.1 |
| 4 Bihar | 1 | 8 | 21901 | 627400 | 649301 | 1.2 | 3.4 |
| 5 Gujarath | 2 | 98 | 146175 | 1921850 | 2068025 | 7.8 | 7.1 |
| 6 Haryana | 1 | 17 | 25047 | 642001 | 667048 | 1.3 | 3.8 |
| 7 Himachal Pradesh | 2 | 23 | 5048 | 285130 | 290178 | 0.3 | 1.7 |
| 8 Jammu &Kashmir | - | - | - | 130021 | 130021 | - | - |
| 9 Karnataka | 2 | 51 | 127967 | 1829400 | 1957367 | 6.8 | 6.5 |
| 10 Kerala | 2 | 65 | 106560 | 1705139 | 1811699 | 5.7 | 5.9 |
| 11 Madhya Pradesh | 2 | 18 | 40544 | 1095952 | 1228463 | 2.2 | 3.3 |
| 12 Maharashtra | 2 | 87 | 115086 | 2331793 | 2469792 | 6.1 | 4.7 |
| 13 North-East | 2 | 1 | 722 | 195396 | 196118 | 0.0 | 0.4 |
| 14 Orissa | 1 | 3 | 9139 | 423309 | 432448 | 0.5 | 2.1 |
| 15 Punjab | 1 | 54 | 94403 | 1292252 | 1386655 | 5.0 | 6.8 |
| 16 Rajasthan | 2 | 9 | 20025 | 1109400 | 1129425 | 1.1 | 1.8 |
| 17 Tamil Nadu | 2 | 56 | 90956 | 1926967 | 2017923 | 4.8 | 4.5 |
| 18 Uttar Pradesh (E) | 1 | 17 | 113587 | 1106574 | 1220161 | 6.0 | 9.3 |
| 19 Uttar Pradesh W) | 1 | 33 | 55950 | 994004 | 1049954 | 3.0 | 5.3 |
| 20 West Bengal | 2 | 8 | 3978 | 541131 | 545109 | 0.2 | 0.7 |
| 21 Kolkata | 2 | 1 | 90036 | 1029121 | 119157 | 4.8 | 80. |
| 22 Chennai | 2 | 4 | 54256 | 767863 | 822119 | 2.9 | 6.6 |
| 23 Delhi | 2 | 5 | 332330 | 1818236 | 2150566 | 17.6 | 15.5 |
| 24 Mumbai | 2 | 3 | 319309 | 2213388 | 2532697 | 16.9 | 12.6 |
| **All India** | **37** | **634** | **1884311** | **26511345** | **28537249** | **100.0** | **6.6** |

## DENSITY OF TELEPHONE
### As on March 31, 2000

| State | Area Sq. Kms (1991) (000) | No. of Telephones (000) | Telephone | | Total Employees | Employees per 1000 DELS |
|---|---|---|---|---|---|---|
| | | | Per Sq. Kms. | Per 100 Population | | |
| 1 Andaman & Nicobar | 8 | 24.46 | 3.1 | 6.3 | 244 | 9.97 |
| 2 Andhra Pradesh | 275 | 2332.96 | 8.5 | 3.1 | 34493 | 15.49 |
| 3 Assam | 78 | 278.89 | 3.6 | 1.1 | 6546 | 23.97 |
| 4 Bihar | 174 | 649.30 | 3.7 | 0.7 | 11525 | 18.37 |
| 5 Gujarath | 197 | 2068.03 | 10.5 | 4.3 | 27874 | 14.50 |
| 6 Haryana | 44 | 667.05 | 15.2 | 3.4 | 6369 | 9.92 |
| 7 Himachal Pradesh | 56 | 290.18 | 5.2 | 4.3 | 3140 | 11.01 |
| 8 Jammu & Kashmir | 222 | 130.02 | 0.6 | 1.3 | 3149 | 24.22 |
| 9 Karnataka | 192 | 1957.37 | 10.2 | 3.8 | 24240 | 13.25 |
| 10 Kerala | 39 | 1811.70 | 46.5 | 5.6 | 21208 | 2.44 |
| 11 Madhya Pradesh | 443 | 1136.50 | 2.8 | 1.4 | 17220 | 15.71 |
| 12 Maharashtra | 312 | 4979.58 | 16.0 | 5.4 | 33804 | 14.50 |
| 13 North-East | 176 | 196.12 | 1.1 | 1.6 | 3275 | 16.76 |
| 14 Orissa | 156 | 432.45 | 2.8 | 1.2 | 6787 | 16.03 |
| 15 Punjab | 50 | 1386.66 | 27.7 | 5.7 | 11235 | 8.69 |
| 16 Rajasthan | 342 | 1129.43 | 3.3 | 2.1 | 14035 | 12.65 |
| 17 Tamil Nadu | 130 | 2840.04 | 21.8 | 4.5 | 31163 | 16.17 |
| 18 Uttar Pradesh (E) | 294 | 2270.12 | 7.7 | 1.3 | 18712 | 16.91 |
| 19 Uttar Pradesh (W) | | | | | 11565 | 11.63 |
| 20 West Bengal | 98 | 1664.27 | 17.0 | 2.1 | 10752 | 19.87 |
| 21 Kolkata | | | | | 14515 | 14.10 |
| 22 Chennai | | | | | 10210 | 13.30 |
| 23 Delhi | 1 | 2150.57 | 2150.6 | 15.4 | 29051 | 15.98 |
| 24 Mumbai | | | | | 31664 | 14.31 |
| All India | 3287 | 28395.66 | 8.7 | 2.9 | 416602 | 15.71 |

Source: Indian Telecommunication Statistics (2000) Ministry of Communication.

## DETAILS OF FOREIGN TOURISTS ARRIVALS 1996-2000

| Tourist Arrival | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Tourists | 176855 | 182427 | 189941 | 202173 | 209933 |
| Percentage of variation over previous year | 23.7 | 3.15 | 4.12 | 6.44 | 3.84 |

## DETAILS OF DOMESTIC TOURISTS ARRIVAL 1996-2000

| Tourist Arrival | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Tourists | 4403002 | 4953401 | 4481714 | 4888287 | 5013221 |
| Percentage of variation over previous year | 12.45 | 11.11 | 9.52 | 9.07 | 2.56 |

## TOURIST INFLOW FROM TOP TEN COUNTRIES 1998, 1999 & 2000

| Country | No. of Tourists 1998 | Proportion to Total | No. of Tourists 1999 | Proportion to Total | No. of Tourists 2000 | Proportion to Total |
|---|---|---|---|---|---|---|
| U.K. | 34510 | 18.17 | 38737 | 19.16 | 37254 | 17.75 |
| Maldives | 18963 | 9.98 | 21048 | 10.41 | 19279 | 9.18 |
| Germany | 17598 | 9.26 | 17569 | 8.39 | 14210 | 6.77 |
| U.S.A | 15301 | 8.06 | 15131 | 7.48 | 21604 | 10.29 |
| France | 11768 | 6.20 | 15.97 | 7.47 | 15375 | 7.32 |
| Sri Lanka | 12276 | 6.46 | 11124 | 5.50 | 14475 | 6.90 |
| Japan | 6757 | 3.56 | 8931 | 4.42 | 6061 | 2.89 |
| Italy | 7741 | 4.08 | 8329 | 4.12 | 6430 | 3.06 |
| Netherlands | 7358 | 3.87 | 6523 | 3.23 | 5611 | 2.67 |
| Australia | 6496 | 3.42 | 6490 | 3.21 | 5785 | 2.76 |
| Total | 138768 | 73.06 | 148979 | 73.69 | 146084 | 69.59 |
| Others | 51173 | 26.94 | 53194 | 26.31 | 63849 | 30.41 |
| Grand Total | 189941 | 100.00 | 202173 | 100.00 | 209933 | 100.00 |

## NO. OF FOREIGN TOURISTS VISITED INDIA & KERALA AND SHARE OF FOREIGN TOURISTS ARRIVALS TO KERALA

| No. | Year | No of Foreigners | | Share of foreign Tourists arrival to Kerala % |
|---|---|---|---|---|
| | | India | Kerala | |
| 1 | 1996 | 227860 | 176855 | 7.73 |
| 2 | 1997 | 2374094 | 182427 | 7.68 |
| 3 | 1998 | 2358629 | 189941 | 8.05 |
| 4 | 1999 | 2481928 | 202173 | 8.15 |
| 5 | 2000 | 262459 | 209933 | 7.99 |

## EARNINGS FROM TOURISM

| Year | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Earnings (Rs. In Cs.) | 28.28 | 59.75 | 105.72 | 116.11 | 158.76 | 196.38 | 273.2 | 302.08 | 416.07 | 525.3 |

*Source: Department of Tourism Government of Kerala*

# IS INDIAN AGRICULTURE APPROACHING THE LIMITS TO GROWTH

*P.D. Jeromi - First published in Prajnan, Vol. XXX, No.3, 2001-02*

*Though Indian Agriculture has made significant progress during the last five decades, deceleration in the growth of production, particularly in foodgrains, during the nineties is raising questions on the future growth of the sector. In this context, the paper explores the evidence on the limits to growth of Indian agriculture, based one estimation of potential output of the sector, and discusses the major factors limiting the growth. The estimate of potential output, by employing Hodrick-Prescott fitter, revealed that till 1993 the actual output has been fluctuating from the potential output. However, since then the actual output has been moving along with the potential output without much variation. It implies that with the existing resource base, capital formation and technology, the prospectus for high growth in the future is very much limited in the sector. Subsequently, the paper has identified four major factors responsible for the lower growth potential,viz,(a) lack of long-term policy, (b) decline of capital formation in the public sector, (c) lagging research and development efforts, and (d) over exploitation of natural resources like land and water. The paper ends by pointing to the need for correcting the policy bias against agriculture,making higher investments, developing new varieties of seeds, conserving natural resources like land and water and providing incentives to the farmers to adopt modernization so as to overcome the limits to growth and put the agricultural sector on an ambitious growth curve.*

Indian agriculture has made significant progress during the last five decades in terms of ensuring food security through higher production, diversification (both in terms of crops and regions), absorption of modern technology, and to a limited extent, reduction of poverty. Du ring the last 50-year period, from 1950-51 to 1999-2000, agricultural production grew at an annual compound growth rate of 2.7 per cent (foodgrains 2.5per cent and non-foodgrains 3 per cent ). As a result, large-scale import of foodgrains or starvation deaths are no more recurring in India. On the contrary, the country could build up a huge buffer stock of foodgrains (now more than the requirement of internal consumption), which is generally considered as a sort of safety net of the economy (along with growth in foreign exchange reserves). Overall, India 's achievement in the agricultural sector is considered as modest or average when compared with the agricultural development in Asia as a whole (ahluwalia, 1992 and Vyas, 1994)

In the new Millennium, Indian agriculture faces daunting challenges like further expansion of production, productivity improvement, weather-roofing international competition, attracting investment,etc..A IFPRI study indicates that by 2020, India may need nearly 300 million tonnes of cereals, including the requirements for feedings the livestock. As the country's production capacity may not exceed 260 million tonnes, there could be a deficit of 36 to 64 millions tonnes of cereals per year (Bhalla, et al, 1999) Further, despite food surplus at the national level, around one-third of the population is still below the poverty line. In recent times, two major developments, namely, (a) deceleration of growth of agricultural production, particularly foodgrains, during the nineties and (b) decline of capital formation in the public sector during the last two decades, without corresponding rise in the private sector, are raising questions about the future growth of the sector during the coming years. In this context, a recent study has indicated that Indian agriculture would be getting close to the limits to growth imposed by its fast depleting natural endowments like land and water (Rao and Jeromi, 2000). The present paper further explores the evidence on the limits to growth of Indian agriculture. The paper also analyses the potential output of the sector and discusses the major factors limiting the growth of .the sector

## Section I

### Limits to Growth : Some Tentative Evidence

There are some tentative indications about the limits to growth of Indian agriculture. First, the extensive margin of cultivation has already reached a plateau in Indian agriculture. Since the beginning of Green Revolution in 1967-68, the area under all crops increased only at a rate of 0.4 per cent per annum as against 1.3 per cent during the period prior to the Green Revolution (1950-51 to 1966-67). In the case of food grains, there was hardly any growth since the beginning of Green Revolution. However, agricultural production has increased by 2.9 er cent per annum. It is improvement in yields (2 per cent per annum) that made the production growth possible (Table 1)

**Table I**

**Annual Compound Growth Rates of Area, Production and Yield of Crops* (% per annum)**

| Crops | Area | | Production | | Yield | |
|---|---|---|---|---|---|---|
| | 1950-66 | 1967-99 | 1950-66 | 1967-99 | 1950-66 | 1967-99 |
| (a) All Crops | 1.3 | 0.4 | 2.5 | 2.9 | 0.8 | 2.0 |
| (b) Food Grains | 1.1 | 0.0 | 2.0 | 2.6 | 0.8 | 2.2 |
| (c) Non-Food Grains | 2.0 | 1.4 | 3.3 | 3.3 | 0.7 | 1.7 |

*Note:* **Estimates based on semi-log regression equation*

**Table II**

**Trend Growth Rate of Area,. Production and Yield of Important Crops*(% per annum)**

| | Crops | Area | | Production | | Yield | |
|---|---|---|---|---|---|---|---|
| | | 80's# | 90's$ | 80's# | 90's$ | 80's# | 90's$ |
| I | All Crops | 0.1 | 0.4 | 3.2 | 2.2 | 2.6 | 1.4 |
| II | a.) Food Grains | -0.2 | -0.1 | 2.9 | 1.8 | 2.7 | 1.4 |
| | b.) Rice | 0.3 | 0.5 | 3.6 | 1.9 | 3.2 | 1.6 |
| | c.) Wheat | 0.5 | 1.7 | 3.6 | 3.1 | 3.1 | 1.6 |
| | d.) Coarse Cereals | -1.4 | -1.8 | 0.4 | 0.2 | 1.7 | 2.0 |
| | e.) Pulses | -0.1 | -0.2 | 1.5 | 1.0 | 1.6 | 1.7 |
| III | Non-Food Grains | 1.1 | 1.5 | 3.8 | 3.3 | 2.3 | 1.4 |
| | a.) Oil seeds | 2.4 | 0.8 | 5.5 | 3.4 | 2.9 | 2.6 |
| | b.) Sugarcane | 1.5 | 1.8 | 2.7 | 2.5 | 1.2 | 0.7 |
| | c.) Cotton | -1.3 | 3.3 | 2.8 | 1.7 | 4.1 | -2.0 |

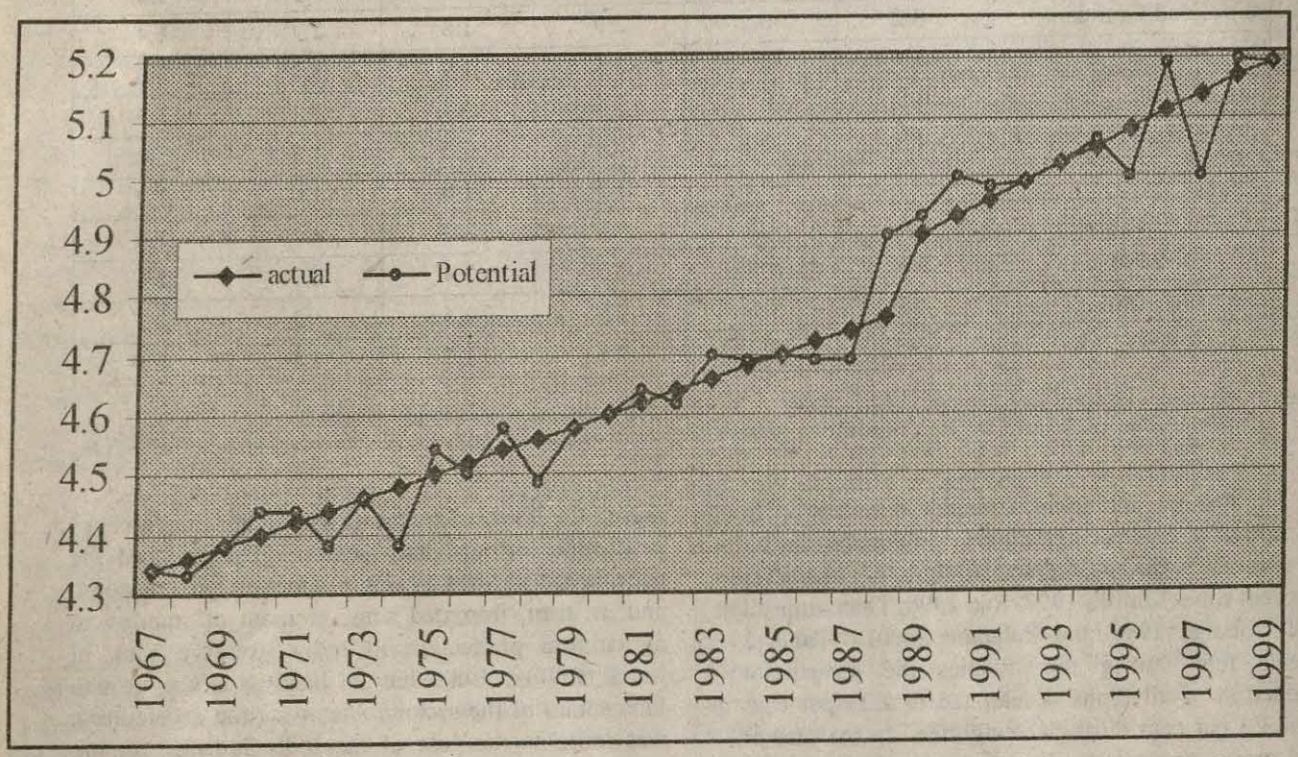
*Note:* ** Estimates based on semi-log regression equation* *# 8's cover the period 1980-81 to 1989-90*
*$ In the case of production, the 90's cover 1990-91 to 1999-2000. In the case of area and yield, the 90's cover the period 1990-91 to 1998-99*

Second, there was a notable deceleration in the rate of growth of agricultural production during the nineties, a fact highlighted by a number of studies in recent time (Mallik, 1997, Rao 1998, Thamarajashi 1999, George 1999 and Pulapare 2000). Table 2 reveals that during the nineties the growth of production of all crops decelerated to 2.23 per cent from 3.2 per cent during the eighties. In the case of food grains production, the trend rate of growth was only 1.8 per cent, which is just about equal to annual population growth. During the nineties there was deceleration in the trend growth of yield of all the major crops, except coarse cereals. In view of the deceleration in the growth of area, production and yield of food grains, doubts have been expressed about the future growth of food grains production. The decline in the growth rates of food grains production during the nieties was felt more in case of *Kharif* crops (on account of decline of both area and yield) than *Rabi* crop (on account of the decline in the yield) (George 1999). Of late, food grains production during the Rabi season as almost equal to the level of production during Kharif season. This reduced the dependence of food grains production on monsoon, and, in turn, imparted some element of stability to agricultural production in India (Reserve bank of India, 1999). But what ;is lacking is the growth momentum of the sector. Area-wise the deceleration was more in the case of the Indo-Gangetic region, consisting of Punjab, Haryana, Uttar Prades, West Bengal and Bihar, which contributed about 61 per cent of the total production of rice and wheat in India. The current rate of growth of agricultural production in India is lower than the targeted growth of agricultural crops in Ninth Five Year Plan (1997-2002) at 3.82 per cent per annum (agriculture and allied activities, 4.5 per cent) (Planning Commission, 1997a) and 4 per cent contemplated by the recent National Agricultural Policy (Government of India, 2000). Thus the growth of agricultural production continues to be a matter of concern.

**Potential Output of Agriculture**

In this context, an attempt has been made to estimate the actual and potential output of the agriculture sector so as to judge the output gap (deviation of actual output from the potential) of the sector, which will provide pointers to the future growth of the sector - given the existing condition prevailing in the sector. In a time-series analysis, the trend in the permanent component (potential) of production series, after filtering out the influences of temporary factor, gives the estimate of potential output of the sector. We have used Hodrick_Prescott (1997) filter to arrive at the permanent component of output. Chart I presents the estimate of actual and potential agricultural production during the period since the Green Revolution in 1967-68. The chart reveals that till 1993, the actual output has been fluctuating from the potential output. However, since then the actual output has been moving along with the potential output without much variations, indicating that there is no output gap.

**Chart 1 - All Crops production: Actual and potential**




Charts 2 and 3 present the actual and potential production food grains and non-food rains, respectively. The inferences from these charts are not very much different from the previous one except the fact that in the case of non-food grains, potential output was lower till 1990-91; however, since then there was a notable increase in potential output. It can be inferred from the estimated results that there is not much unutilized potential (output gap)( in the sector. What is more important to note is that during the nineties, there was only a moderate growth in the potential output, especially after 1995-96. It indicates that with the existing resources base, capital formation and technology, the prospects of high growth is very much limited in the agriculture sector

**Chart 2 - Food grains Production : Actualand Potential**

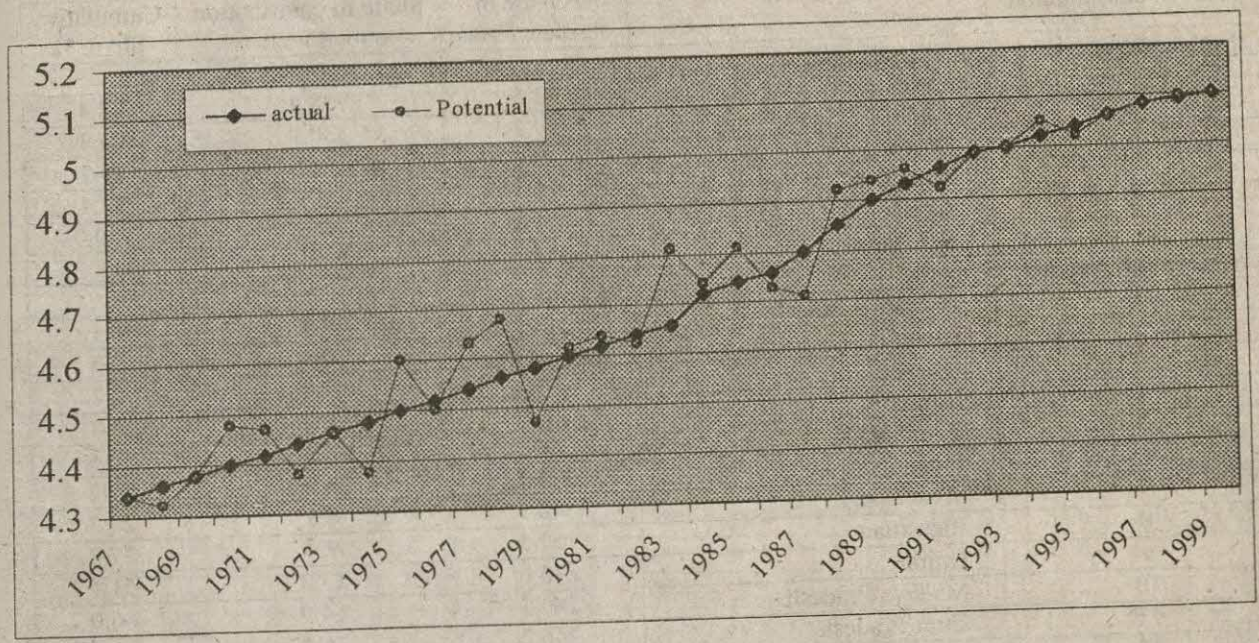
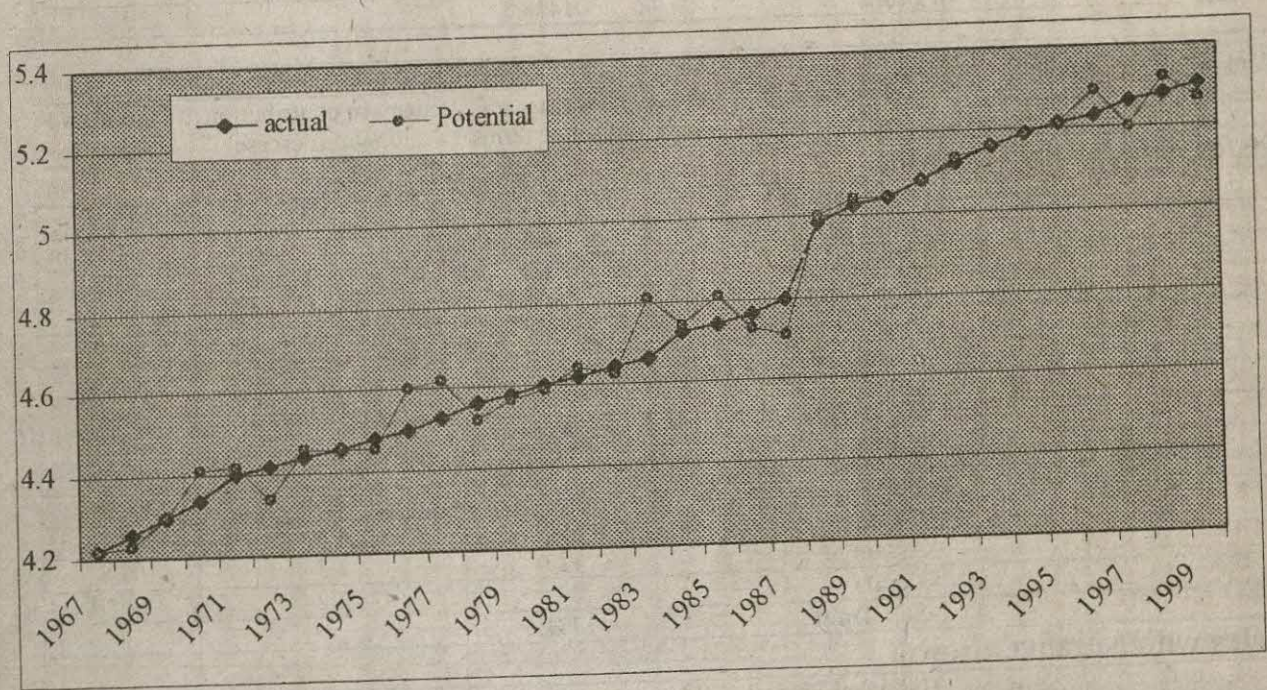



**Chart 3 - Non-Food grains Production : Actual and Potential**




Thus, facts like the limited scope for expansion of area under cultivation, decline in productivity of crops; and indications provided by the estimate of potential output , etc., suggest that India agriculture would be getting closer to the limits to growth in the near future.

*(will be continued in the next issue)*

## CONTRIBUTION TO TOTAL INCREASE IN CONSUMPTION OF (N=P205=K20)

| Ranking in terms of increase in consumption | States | 2000-01 @ over 1999-2000 | | |
|---|---|---|---|---|
| | | Increase in absolute terms | Share in contribution to total increase | Cumulative Share % |
| **States with positive Growth** | | | | |
| 1 | Karnataka | 73.5 | 38.4 | 38.4 |
| 2 | Andhra Pradesh | 59.2 | 30.9 | 69.3 |
| 3 | Haryana | 28.6 | 14.9 | 84.2 |
| 4 | Jammu & Kashmir | 15.7 | 8.2 | 92.4 |
| 5 | Assam | 14.6 | 7.6 | 100.0 |
| | **Sub Total** | **191.6** | | |
| **States with Negative Growth** | | | | |
| 1 | Himachal Pradesh | 1.8 | 0.1 | 0.1 |
| 2 | Bihar | 5.7 | 0.4 | 0.5 |
| 3 | Orissa | 35.5 | 2.2 | 2.7 |
| 4 | Kerala | 38.2 | 2.4 | 5.0 |
| 5 | Tamil Nadu | 95.4 | 5.9 | 10.9 |
| 6 | Punjab | 134.4 | 8.3 | 19.2 |
| 7 | West Bengal | 146.9 | 9.1 | 28.3 |
| 8 | Rajasthan | 152.5 | 9.4 | 37.8 |
| 9 | Gujrat | 215.0 | 13.3 | 51.1 |
| 10 | Madhya Pradesh | 240.3 | 14.9 | 66.0 |
| 11 | Uttar Pradesh | 266.2 | 16.5 | 82.5 |
| 12 | Maharashtra | 283.3 | 17.5 | 100.0 |
| | **Sub Total** | **1615.2** | | |
| | **All India** | **- 1438.3** | | |

| Ranking in terms of increase in consumption | States | 2000-01 @ over 1999-2000 | | |
|---|---|---|---|---|
| | | Increase in absolute terms | Share in contribution to total increase | Cumulative Share % |
| States with Positive Growth | | | | |
| 1 | Maharashtra | 269.4 | 19.5 | 19.5 |
| 2 | Uttar Pradesh | 184.4 | 13.3 | 32.8 |
| 3 | West Bengal | 153.8 | 11.1 | 44.0 |
| 4 | Karnataka | 123.1 | 8.9 | 52.9 |
| 5 | Andhra Pradesh | 110.7 | 8.0 | 60.9 |
| 6 | Tamil Nadu | 101.0 | 7.3 | 68.2 |
| 7 | Bihar | 90.6 | 6.6 | 74.8 |
| 8 | Rajasthan | 90.1 | 6.5 | 81.3 |
| 9 | Punjab | 72.1 | 5.2 | 86.5 |
| 10 | Haryana | 63.4 | 4.6 | 91.1 |
| 11 | Orissa | 60.9 | 4.4 | 95.5 |
| 12 | Assam | 32.0 | 2.3 | 97.8 |
| 13 | Kerala | 29.9 | 2.2 | 100.0 |
| | **Sub Total** | **1381.6** | | |
| States with Negative Growth | | | | |
| 1 | Himachal Pradesh | 1.2 | 1.4 | 1.4 |
| 2 | Jammu & Kashmir | 8.1 | 9.2 | 10.6 |
| 3 | Madhya Pradesh | 24.7 | 28.0 | 38.6 |
| 4 | Gujarat | 54.1 | 61.4 | 100.0 |
| | **Sub Total** | **88.0** | | |
| | **All India** | **1272.2** | | |

## CONSUMPTION OF PLANT NUTRIENTS PER UNIT OF GROSS CROPPED AREA

| Zone/State | 1998-99 | | | | 1999-2000 | | | | 2000-2001 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | P2O5 | K2O | Total | N | P2O5 | K2O | Total | N | P2O5 | K2O | Total |
| **East** | **45.8** | **17.1** | **9.1** | **72.0** | **49.8** | **20.2** | **11.3** | **81.2** | **47.3** | **18.0** | **10.7** | **76.1** |
| Arunachal Pradesh | 1.4 | 0.6 | 0.4 | 2.42.4 | 1.4 | 0.6 | 0.4 | 2.4 | 1.4 | 0.6 | 0.4 | 2.4 |
| Assam | 11.9 | 5.1 | 2.5 | 19.6 | 15.1 | 7.1 | 5.4 | 27.6 | 17.2 | 6.3 | 7.7 | 31.2 |
| Bihar | 66.6 | 17.2 | 5.6 | 89.4 | 71.0 | 21.1 | 6.4 | 98.4 | 71.6 | 20.5 | 5.8 | 97.9 |
| Manipur | 74.3 | 7.2 | 1.0 | 82.6 | 72.2 | 12.1 | 5.8 | 90.2 | 88.9 | 11.1 | 6.4 | 106.5 |
| Meghalaya | 11.2 | 5.5 | 0.6 | 17.3 | 1.4 | 4.7 | 0.7 | 15.8 | 9.6 | 5.3 | 0.5 | 15.3 |
| Misoram | 2.2 | 4.7 | 3.3 | 10.2 | 6.7 | 8.1 | 5.2 | 20.0 | 3.5 | 4.9 | 2.9 | 11.2 |
| Nagaland | 1.5 | 1.3 | 0.2 | 3.1 | 1.8 | 1.4 | 0.2 | 3.4 | 1.2 | 0.8 | 0.1 | 2.1 |
| Orissa | 22.5 | 7.0 | 5.1 | 34.6 | 27.1 | 8.6 | 6.0 | 41.7 | 24.4 | 8.3 | 4.8 | 37.5 |
| Sikkim | 4.0 | 2.1 | 0.4 | 6.5 | 3.4 | 2.3 | 0.6 | 6.3 | 4.4 | 2.7 | 0.4 | 7.6 |
| Tripura | 15.3 | 4.0 | 2.1 | 21.4 | 13.9 | 3.8 | 1.8 | 19.5 | 12.5 | 3.8 | 1.1 | 17.4 |
| West Bengal | 63.0 | 33.2 | 20.9 | 117.1 | 69.4 | 38.6 | 25.8 | 133.8 | 61.0 | 32.2 | 24.6 | 117.8 |
| **North** | **100.1** | **24.0** | **2.7** | **126.8** | **98.8** | **31.8** | **3.5** | **134.2** | **94.7** | **27.6** | **3.1** | **125.5** |
| Haryana | 107.9 | 28.0 | 0.6 | 136.5 | 109.1 | 36.8 | 0.8 | 146.8 | 116.3 | 33.6 | 1.6 | 151.5 |
| Himachal Pradesh | 30.0 | 5.4 | 4.3 | 39.7 | 28.4 | 5.9 | 4.1 | 38.4 | 25.1 | 6.7 | 4.7 | 36.6 |
| Jammu & Kashmir | 47.4 | 16.1 | 2.0 | 65.4 | 42.7 | 14.2 | 1.0 | 57.9 | 53.0 | 18.2 | 1.2 | 72.4 |
| Punjab | 134.4 | 34.3 | 2.3 | 171.0 | 135.1 | 41.6 | 3.3 | 180.0 | 125.4 | 34.1 | 2.9 | 163.3 |
| Uttar Pradesh | 92.3 | 21.0 | 3.2 | 116.6 | 90.0 | 29.2 | 4.3 | 123.5 | 84.7 | 25.2 | 3.6 | 113.5 |
| Chandigarh | 72.5 | - | 2.5 | 75.0 | 60.0 | - | - | 60.0 | 7.5 | - | - | 7.5 |
| Delhi | 241.2 | 23.7 | 6.3 | 271.2 | 268.2 | 70.7 | 4.7 | 343.7 | 82.1 | 7.9 | 0.2 | 90.2 |
| **South** | **75.9** | **34.3** | **18.7** | **128.9** | **79.3** | **37.4** | **23.1** | **139.8** | **81.5** | **37.0** | **21.4** | **139.8** |
| Andhra Pradesh | 105.8 | 46.2 | 13.4 | 165.5 | 108.3 | 49.7 | 16.6 | 174.6 | 112.5 | 49.8 | 17.2 | 179.5 |
| Karnataka | 54.6 | 28.7 | 14.9 | 98.2 | 58.3 | 32.0 | 18.5 | 108.7 | 62.4 | 32.7 | 19.9 | 115.0 |
| Kerala | 29.0 | 14.3 | 17.8 | 61.1 | 29.3 | 14.8 | 27.1 | 71.2 | 24.8 | 12.7 | 20.8 | 58.3 |
| Tamil Nadu | 79.1 | 30.8 | 35.1 | 145.0 | 85.1 | 34.2 | 41.1 | 160.4 | 83.0 | 31.5 | 31.4 | 145.9 |
| Pondicherry | 278.6 | 116.1 | 100.7 | 495.5 | 283.4 | 128.9 | 117.7 | 530.0 | 282.5 | 130.9 | 124.5 | 538.0 |
| A & N Islands | 5.0 | 3.0 | 1.6 | 9.6 | 6.6 | 4.6 | 1.4 | 12.6 | 5.8 | 4.4 | 1.4 | 11.6 |
| Lakshadweep | - | - | - | - | 2.5 | - | - | 2.5 | - | - | - | - |
| **West** | **36.9** | **16.9** | **3.5** | **57.3** | **37.5** | **18.6** | **4.7** | **60.8** | **30.8** | **14.7** | **4.3** | **49.8** |
| Gujarat | 65.1 | 25.2 | 5.8 | 96.1 | 59.6 | 25.0 | 6.5 | 91.0 | 47.0 | 18.4 | 5.3 | 70.8 |
| Madhya Pradesh | 28.3 | 17.2 | 1.5 | 47.0 | 26.5 | 17.0 | 2.6 | 46.1 | 20.4 | 14.4 | 2.0 | 36.9 |
| Maharashtra | 47.1 | 21.1 | 8.2 | 76.4 | 52.6 | 25.4 | 10.8 | 88.8 | 44.4 | 20.6 | 10.7 | 75.8 |
| Rajasthan | 23.9 | 8.4 | 0.3 | 32.6 | 25.3 | 11.1 | 0.3 | 36.6 | 22.2 | 7.4 | 0.2 | 29.8 |
| Goa | 20.1 | 9.5 | 11.4 | 41.0 | 21.5 | 10.6 | 10.9 | 43.1 | 16.4 | 8.5 | 9.6 | 34.6 |
| Daman & Diu | 48.0 | 20.0 | 10.0 | 78.0 | 40.0 | 20.0 | 12.0 | 72.0 | 34.0 | 20.0 | 12.0 | 66.0 |
| Dadra & Nagar Haveli | 24.8 | 14.4 | 0.4 | 39.6 | 26.3 | 15.2 | 0.4 | 41.9 | 21.1 | 13.3 | 1.1 | 35.6 |
| **All India** | **59.5** | **21.6** | **7.0** | **88.1** | **60.8** | **25.2** | **8.8** | **94.7** | **56.9** | **22.1** | **8.2** | **87.2** |

*Note* *1. Consumption of plant nutrients per hectare have been worked out on the basis of gross cropped area available for the year 1997-98*

*2. Due to rounding off horizontal total may not exactly tally.*

*Source: Annual Review of Fertilizer Production and Consumption, The Fertilizer Association of India*

## ESCAP forecasts 6 percent growth

*Hindu 27th April*

India is expected to attain a 6 per cent GDP growth rate during 2002 as compared to 5.4 per cent in the previous year, according to the latest survey by the U.N. Economic and Social Commission for Asia and the Pacific (ESCAP). It has also forecast a moderate inflation rate of 5 per cent, slightly higher than the 4.2 per cent recorded last year.

The 2002 survey views India 's performance in the light of "gentle recovery" in developing economies of Asia and the Pacific with most expected to exceed their growth rate for 2001 though the improvement is likely to be modest.

In the case of India, ESCAP says despite the global economic slowdown, net inflows of external capital have remained stable at $8.5 billion owing in part to the turnaround in foreign direct investment and portfolio investment, India's currency reserves continued to rise and reached $46.6 billion - equivalent to nine months import - at the end of 2001.

As for the debt to -GDP ratio, it continued to fall to an average of 20 per cent of GDP in 2001 compared with 23 per cent in 1998. The ratio of debt servicing to gross receipts on the external current account also fell sharply from 35 to just 10 per cent between 1990 and 2001.

On overall economic performance, the survey notes that the GDP growth in 2001 was 5.4 per cent which was substantially higher than in 2000.

The agriculture sector rebounded with a strong output after contracting in the previous year.

The service sector remained vibrant reflecting the direct and multiplier effects of higher agriculture production and procurement activities.

ESCAP feels that the maintenance of a low 4.2 per cent inflation rate during 2001 was a "remarkable achievement 'realised through a prudent monetary policy while ensuring enough credit availability to the productive sectors.

Regarding trade performance, the survey finds export growth to be "very modest " in 2001 as compared to the previous year.

The export performance was adversely affected across the board while specifically garments and textiles faltered due to economic slow down and demand contraction in the developed countries.

Export demand for IT products was also adversely affected due to the same reasons.

Import spending, the survey notes, generally reflected unfavorable trends. Despite declining imports, current account deficit as a percentage of GDP increased as exports fell sharply.

---

## RBI sees 6.5% growth in 2002-2003 GDP, 4% inflation

*Economic Times, 30th April*

The Reserve Bank of India (RBI) is cautiously optimistic about economic revival. It expects the real GDP to grow at 6-6.5 per cent in 2002-2003 on the back exports and agriculture. And, perhaps for the first time in may years, inflation growth is expected to be slightly lower at 4 er cent during the year, against an average of over 5 per cent in the '90s.

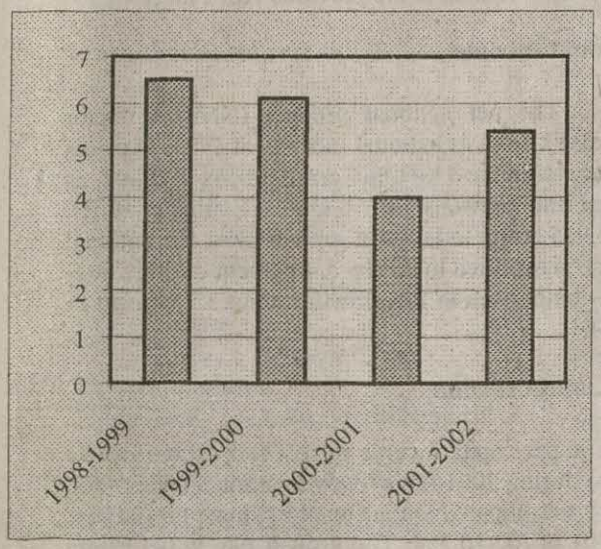
For monetary policy formulation, the RBI has placed the money supply growth at 14 per cent for the year. The growth in non-food credit, adjusted for investments in commercial paper, shares/debentures/bonds of PSUs and the private

corporate sector, is projected to increase at 15 to 15.5 per cent.

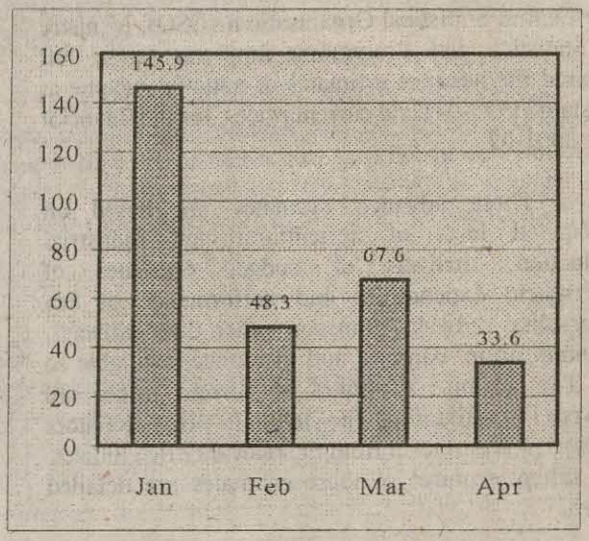
The central bank forecast follows the CSO estimates of GDP growth of 5.4 percent in 2001-02. Though the level of inflation ended up being much lower than expected and the agriculture sector too has done better than in the previous year, the slowdown in the industrial sector still continues to be a cause for concern. According to economists, though the RBI policies have had a softer interest rate bias for quite some time now, there has been little impact on actual credit offtake in this sector. Though there was reasonably good growth in credit offtake last year, it is the retail sector like housing and personal loans that have shown a steep rise in off take.

Overall growth in the industrial sector in 2001-2002 is estimated at 3.3 per cent, much lower than the 6.2 per cent in the previous year. But the services sector is estimated to have outlived expectations with a growth rate of 6.2 per cent, mainly on account of strong growth in trade and transport, finance and business services.

**Real Concerns**
**Growth Rate in GDP (%)**




**Net Investment in Indian Equities and Debt** *(In Million Dollars)*




In 2002 (Jan-Apr) $ 249.4 mn
In 2001 $ 2.34 bn

**Foreign institutional investor in Indian Stocks**

Foreign institutional investors (Fils) were net sellers in Indian equities at Rs. 474mn. while also being net sellers in the debt market at Rs. 692 mn.

| | |
|---|---|
| Buying | Rs. 1.21 bn |
| Selling | Rs. 2.02 bn |
| Net Sales | Rs. 813 bn |

**April 15**

| | |
|---|---|
| Buying | Rs. 1.27 bn |
| Selling | Rs. 1.85 bn |
| Net Sales | Rs. 576 bn |

**April 16**

| | |
|---|---|
| Buying | Rs. 2.40 bn |
| Selling | Rs. 1.92 bn |
| Net Sales | Rs. 480 bn |

**April 17**

## Advance Estimates of National Income, 2001-2002

The Central Statistical Organisatio n (CSO), Ministry of Statistics and Programme Implementation has released the advance estimates of national income at constant (1993-94) and current prices, for the financial year 2001-02.

These advance estimates are based on anticipated level of agricultural and industrial production, analysis of budget estimates of government expenditure and performance of key sectors like railways, transport other than railways, communication, banking and insurance; available so far. The advance estimates at current prices are derived by estimating the implicit price deflators (IPDs) at sectoral level from the relevant price indices. The salient features of these estimates are detailed below.

### *Estimate at constant (1993-94) prices*

**Gross Domestic Product**

Gross Domestic Product (GDP) at factor cost at constant (1993-94) prices in the year 2001-02 is likely to attain a level of Rs. 12,58,808 core as against the quick estimates of GDP for the year 2000-2001 of Rs. 11,93,922 crore, released on 31st January 2002. The growth in GDP during 2001-02 is estimated at 5.4 percent as compared to the growth rate of 4.0 percent during 2000-01.

The growth rate of 5.4 percent in GDP during 2001-02 has mainly been due to the growth rate s of over 5 percent in sectors, 'agriculture, forestry and fishing', 'electricity, gas and water supply', 'trade, hotels, transport and communication', 'financing, insurance, real estate and business services', and 'community, social and personal services'.

***Agriculture***

According to the information furnished by the Department of Agriculture & Cooperation (DAC), the production of food grains is expected to register a growth of 6.8 percent during 2001-02, over the previous year. Among the commercial crops, oilseeds and cotton are expected to show growth rates of 14.5 percent and 23.9 percent, while sugarcane reduction is expected to decline by 1.4 percent during the year 2001-02 over their estimated production in the previous year.

***Industry***

According to the latest estimates available on the Index of Industrial Production (IIP), the index of mining, manufacturing and electricity, registered growth rates of 1.2 percent, 2.3 percent and 2.5 percent, respectively during April-November, 2001-2002 as compared to the growth rates 4.4 percent, 6.4 percent and 4.9 percent in these sectors during April-November 2000-01. Based on the past trends, the GDP for mining, manufacturing and electricity during 2001-02 is expected to show growth rates of 2.3 percent, 3.3 percent and 3.8 percent respectively. The construction sector is expected to show a growth rate of 2.9 percent during 2001-02, mainly on account of growth in production of 6.4 percent in cement. However, the growth in steel was (-) 0.3 percent during April-December 2001-02, over the corresponding period in 2000-01.

***Services***

The estimated growth in GDP for the trade, hotels, transport and communication sectors during 2001-02 is placed at 6.3 percent, which is higher than the previous year's growth rate of 5.3 percent, mainly on account of a growth of 3.9 percent in the gross trading index, 6.7 percent in the combined index of railway net tonne kilometers and passenger kilometers, 2.4 percent in cargo handled at major ports, 4.7 percent in stock of commercial vehicles, and 20.9 percent in outstanding telephone connections. The sector, 'financing, insurance, real estate and business services', is expected to show a growth rate of 7.5 percent during 2001-02, on account of 15.2 percent growth in aggregate deposits and 14.0 percent growth in bank credit during November 2000 to November 2001. The growth rate of 'community, social and personal services' during 2001-02 is estimated to remain at the previous year's level.

**National Income**

The net national product (NNP) at factor cost, also known as national income, at 1993-94 prices is likely to be Rs. 11,01,065 crore during 2001-02, as against the previous year's Quick Estimate of Rs. 10,44,915 crore. In terms of growth rates, the national income is expected to rise by 5.4 percent during 2001-02 in comparison to the growth rate of 3.7 percent in 2000-01.

**Per Capita Income**

1. The per capita income in real terms (at 1993-94 prices) during 2001-02 is likely to attain a level of Rs. 10,618 as compared to the Quick Estimate for the year 2000-01 of Rs. 10,254. The growth rate in per capita income is estimated at 3.5 percent during 2001-02, as against the previous year's estimate of 1.9 percent

*Estimates at Current Prices*

**Gross Domestic Product**

GDP at factor cost at current prices in the year 2001-02 is likely to attain a level of Rs. 20,80,255 crore, showing a growth rate of 9.7 percent over the Quick Estimates of GDP for the year 2000-01 of Rs. 18,95,843 crore.

**National Income**

The NNP at factor cost at current prices is anticipated to be Rs. 18,44,729 crore during 2001-02, as compared to Rs. 16,79,982 crore during 2000-01, showing a rise of 9.8 percent.

**Per Capita Income**

The per capita income at current prices during 2001-02 is estimated to be Rs. 17,789 as compared to Rs. 16,487 during 2000-01, showing a rise of 7.9 percent.

Estimates of gross/ net national product, gross/ net domestic product and per capita income along with GDP at factor cost by kind of economic activity for the years 2000-01 and 2001-02 at constant (1993-94) and current prices are given in statements 1 to 4.

## Statement I

**Advance Estimates of National Income for the year 2001-2002 (At 1993-94 prices)**

| | Item | 1999-00 | 2000-01 (Quick Estimate) | 2001-02 (Advance Estimate) |
|---|---|---|---|---|
| A | **ESTIMATES AT AGGREGATE LEVEL** | | | |
| | **1. National Product (Rs. crore)** | | | |
| | 1.1 Gross National Product (GNP) at factor cost | 1136898 | 1181483 (3.9) | 1245471 (5.4) |
| | 1.2 Net National Product (NNP) at factor cost | 1007743 | 1044915 (3.7) | 1101065 (5.4) |
| | **2. Domestic Product (Rs. crore)** | | | |
| | 2.1 Gross Domestic Product (GDP) at factor cost | 1148500 | 1193922 (4.0) | 1258808 (5.4) |
| | 2.2 Net Domestic Product (NDP) at factor cost | 1019345 | 1057354 (3.7) | 1114401 (5.4) |
| B | **ESTIMATES AT PER CAPITA LEVEL** | | | |
| | Population (million) | 1001 | 1019 (1.8) | 1037 (1.8) |
| | Per capita NNP at factor cost (Rs.) | 10067 | 10254 (1.9) | 10618 (3.5) |

## Statement II

**Advance Estimates of GDP at Factor Cost By Economic Activity (At 1993-94 Prices) Rs. crore**

| | Industry | 1999-00 | 2000-01 (Quick Estimate) | 2001-02 Advance Estimate | Percentage change over previous year | |
|---|---|---|---|---|---|---|
| | | | | | 2000-01 | 2001-02 |
| 1 | Agriculture, Forestry & Fishing | 289842 | 289194 | 305643 | -0.2 | 5.7 |
| 2 | Mining & Quarrying | 26908 | 27796 | 28179 | 3.3 | 1.4 |
| 3 | Manufacturing | 192404 | 205220 | 212083 | 6.7 | 3.3 |
| 4 | Electricity, Gas, & Water supply | 28637 | 30406 | 31982 | 6.2 | 5.2 |
| 5 | Construction | 58815 | 62801 | 64601 | 6.8 | 2.9 |
| 6 | Trade, Hotels, Transport and Communication | 253506 | 266817 | 283648 | 5.3 | 6.3 |
| 7 | Financing, Insurance, Real Estate & Business Services | 145865 | 150051 | 161265 | 2.9 | 7.5 |
| 8 | Community, Social & Personal Services | 152523 | 161637 | 171407 | 6.0 | 6.0 |
| | **GDP at factor cost** | 1148500 | 1193922 | 1258808 | 4.0 | 5.4 |

## Statement III

### Advance Estimates of National Income for the year 2001-2002
### (At current prices)

| | Item | 1999-00 | 2000-01 (Quick Estimate) | 2001-02 (Advance Estimate) |
|---|---|---|---|---|
| A | **ESTIMATES AT AGGREGATE LEVEL** | | | |
| | **1. National Product (Rs. crore)** | | | |
| | 1.1 Gross National Product (GNP) at factor cost | 1740207 | 1878429 (7.9) | 2060604 (9.7) |
| | 1.2 Net National Product (NNP) at factor cost | 1557781 | 1679982 (7.8) | 1844729 (9.8) |
| | **2. Domestic Product (Rs. crore)** | | | |
| | 2.1 Gross Domestic Product (GDP) at factor cost | 1755638 | 1895843 (8.0) | 2080255 (9.7) |
| | 2.2 Net Domestic Product (NDP) at factor cost | 1573212 | 1697396 (7.9) | 1864381 (9.8) |
| B | **ESTIMATES AT PER CAPITA LEVEL** | | | |
| | Population (million) | 1001 | 1019 (1.8) | 1037 (1.8) |
| | Per capita NNP at factor cost (Rs.) | 15562 | 16487 (5.9) | 17789 (7.9) |

## Statement IV

### Advance Estimates of GDP at Factor Cost By Economic Activity
### (At current Prices) Rs. crore

| | Industry | 1999-00 | 2000-01 (Quick Estimate) | 2001-02 Advance Estimate | Percentage change over previous year | |
|---|---|---|---|---|---|---|
| | | | | | 2000-01 | 2001-02 |
| 1 | Agriculture, Forestry & Fishing | 460547 | 471981 | 514638 | 2.5 | 9.0 |
| 2 | Mining & Quarrying | 40520 | 44648 | 47694 | 10.2 | 6.8 |
| 3 | Manufacturing | 266890 | 299753 | 318176 | 12.3 | 6.1 |
| 4 | Electricity, Gas, & Water supply | 43886 | 49526 | 58782 | 12.9 | 18.7 |
| 5 | Construction | 105440 | 116431 | 125263 | 10.4 | 7.6 |
| 6 | Trade, Hotels, Transport and Communication | 365735 | 399623 | 442200 | 9.3 | 10.7 |
| 7 | Financing, Insurance, Real Estate & Business Services | 220561 | 236645 | 265944 | 7.3 | 12.4 |
| 8 | Community, Social & Personal Services | 252059 | 277236 | 307558 | 10.0 | 10.9 |
| | GDP at factor cost | 1755638 | 1895843 | 2080255 | 8.0 | 9.7 |

## Death Certificate

*Dr. P.V. Borkil, M.S, F.I.C.S, D.H.A, B.G.L,*
*Medical Administrator, KEM Hospital, Pune*

*Issuing a death certificate is one of the onerous duties of a General Practitioner, which can have medico-legal implications. This article highlights the pertinent do's and don'ts during the procedure*

A young general practitioner from one of the suburbs of Mumbai had certified the death of a middle aged man. He had examined this patient in a state of unconsciousness and in gasping condition; soon the patient died. The GP had certified the cause of death as "Myocardial Infraction" based on accompanying relative's story of 'Sudden chest pain' and fall on the ground. The patient had a small lacerated wound on the left side of chest wall. Relatives explained this as a small stray nail on the ground causing the wound. The GP had applied a dressing to the wound before the patient died.

Neighbours complained to the police suspecting some foul play before the body was cremated. At postmortem, the wound on the chest wall was found to be a punctured wound caused by a screwdriver during a stab. On investigations, it was found that the son of the deceased had stabbed the patient during a quarrel. The weapon had punctured the aorta causing haemopericardium and death. The concerned GP was prosecuted during the murder trial along with the son of the deceased for abetting the crime. The GP suffered humiliation in the Court during trial and was released with warming.

### Moral of the incident

Verification of all relevant facts before issuing a Death Certificate and not to issue a death certificate under any pressure. A doctor should do his utmost to arrive at the cause of death ot at the probable cause of death. The cause of death is to be based only on clinical findings and not on extraneous factors.

Death certificate is the bugbear of any doctor's practice. There is never a doctor who at one time or the other has not faced a situation where he has been in a dilemma; where or not to issue a death certificate. The relatives of the deceased may plead, persuade, pressurise, even offer a price and at times even threaten the doctor. He may be tempted to issue a death certificate indoubtful situations; purely on humanitarian grounds or for the fear of losing clientele

But the doctor is advised to apply great caution while issuing a death certificate as the final certificate may unwittingly help in destroying evidence of a crime. Once the body is cremated, the evidence is lost. In such a situation the doctor may find himself in trouble with the law as in the case described in the beginning.

### Guidelines

1. D.C. and cause of death to be issued only when treating doctor is fully satisfied as to the clinical diagnosis and corroborative diagnostic test,viz, ECG in AMI,CSF in Meningitis, etc.
   ***Commentary:*** *A doctor may certify death but cause of death to be issued only on verification and satisfying all facts of the case, causing and resulting in death.*
2. A doctor may only certify death and not cause of death and will inform Police for further investigations and postmortem.
3. Before issuing death certificate, the doctor must verify and as certain:

   i) Name
   *ii)* Age
   *iii)* Sex
   *iv)* Religion
   *v)* Address of the deceased.

   ***Commentary:*** *Any correction required later in above points results in a lot tf inconvenience to the next of kin and may cause delay in finalisation of:*

   i) Death claim
   ii) Reimbursement of hospital bills
   iii) Insurance claims
   iv) Obtaining probate or succession certificate
   v) Settlement of property claims
   vi) Release of gratuity and Provident Fund claims.

4. D.C. is to be issued free of charge and not to be withheld for pending fees payment from the relatives and friends of the deceased.
5. Only a single copy of death certificates to be issued.
6. Always maintain a carbon copy of death certificate issued.
7. Never sign a blank death certificate.
8. **ICD**. International Classification of Diseases is an alphanumeric method of classification under which disease is assigned a code; the first part of which is a letter and the second part is a two or three digit combination (A00 for - Cholera). ICD should be used in death certificate wherever possible to maintain uniformity and facilitate fast retrieval of data through computerization.

Death certificates is an important legal document from the point of view of the person (since deceased) and his next of kin. This document, correctly filled and completed is absolutely essential. Pass is obtained from the Municipal Authorities so that cremation and final rites of the deceased person can take place as per his/her religion without loss of time and any inconvenience to relatives and friends.

Proper registration with the local municipal authorities of all the details of the Death Certificate of the deceased person must be done, so that -

i. Life insurance claim and settlement can be processed.
*ii.* All legal use like Gratuity, Provident fund and Family Pension can be settled from the office of the deceased person if he was a salaried person.
*iii.* Distribution of movable and immovable property of the deceased person as per his/her last testament or will can be bequeathed to legal heirs. The executor of the will can obtain a certified copy of the death certificate from local municipal authorities before proceeding to obtain a probate or succession certificate ( as the case may be ) from Civil Court.
*iv.* Legal claim under Personal Accident Benefit Policy can be processed in case of accidental death.

9. Deletion of the deceased person's name in movable or immovable property extract, viz, share, house or flat, etc. will also need a certified copy of the correct death certificate.

International forms are used by various municipal authorities in our country and are available for Doctors. Doctors should necessarily use their rubber stamp after affixing signature to D.C.
The Maharashtra State Government Act, 1976, Sec.5 (2) stipulates that death must be informed within 72 hours to the local municipal authorities. Failure to do so is dealt under the Government of India Act of 1969 relating to registration of birth and death. Printed forms are made available by the municipal authorities to doctors and hospitals for issuing death certificate.

### Death with in 24 hours

Earlier it was a dictum that in case of a patient drying within 24 hrs. after admission to a hospital, postmortem was ordered to establish the exact cause of death. In view of the tremendous advances of technological development in imaging, electronic and laboratory equipment, 4 to 6 hrs. are enough to diagnose most of the cases admitted to a hospital in emergency. Thus, usually diagnosis is established before death and the need of doing postmortem is obviated wherever death is due to diseases or natural illness. However in case of death under suspicious condition, medicolegal postmortem is mandatory to ascertain the exact cause of death.

### Issue of Death Certificate in MLC Patients

It was an earlier practice to send all MLC deaths for medicolegal postmortem. With advancement in technological and scientific knowledge, accurate diagnosis is possible in a given case. So wherever possible, death certificate and cause of death may be issued in a medicolegal case. However it must be noted that the D.C. must be handed over to police along with the dead body for final "Panchanama". The police authorities have the

final say in this matter. If the police authorities still want a postmortem they can order so accordingly.

In cases registered under IPC Sec. 498 A, due precautions must be taken before issuing cause of death.

### Transplantation Act of Human Organs, 1994 (42 of 1994), Sub. Sec. F of Sec. 24.

A person who has met with an accident resulting in brain death is a source of various organs such as kidney, liver, heart etc. as these organs are still in viable condition and can be transplanted to patients suffering from organ failure, e.g. chronic renal failure. Thus such cadaver organ donation is a ray of hope for patients awaiting end of their life due to organ failure. In order to facilitate cadaver organ transplantation, such a body need not be sent for postmortem. Instead, death certificate may be issued and after final "Pandchanama", organs like kidneys can be transplanted.

### GP in Difficulty

A large number of patients are on the roll in a GP's Clinic. Whenever required, patients attend the clinic. If such a patient is suddenly brought to the GP's Clinic and if the GP has not seen him recently, then there is a problem-

- What should the GP do?
- Should the GP issue Death Certificate?

A similar situation is often experienced by a GP when called to attend a serious unknown patient in the house of his regular patient. The patient is a guest and dies in front of the GP before he receives any treatment from him. Often there is social pressure brought on the GP to issue a death certificate in such circumstances.

### Rule to be followed

If the GP has seen and treated the patient in last 14 days, he is justified in issuing the D.C. Other wise he may land up in a problem as cited in the beginning of this article. The GP is advised to properly explain the situations to his family patient or acquaintance and politely decline to yield under pressure. GP is further advised to guide the family on further procedures to obtain the D.C. His patients usually appreciate such steps and there is less chance of losing his clientele.

### D.C. in HIV positive/Seropositive cases

Code of Medical Ethics permits overriding the rule of confidentiality and disclosure of the fact that the deceased was suffering from AIDS/HIV infection. This exception to the code of ethics is permitted in public interest and overrides confidentiality. The Supreme Court of India has quoted with the approval from guidelines on the HIV infection and AIDS of the General Medical Council of Great Britain.

### Correction in Documents

It is often notices that some correction in death certificate is required. If any such irregularity is noticed in D.C. by relatives of the deceased; it is possible to correct it by the doctor issuing the D.C and before cremation Pass is obtained from the Municipal Authorities. But correction later in the extract of D.C involves a long legal process. It is therefore advisable that the doctor be very careful in filling up details in D.C like name, age, sex., religion and address and the cause of death. The next of kin has to struggle a lot to get even minor corrections done in D.C from the Court and for want these correction, LIC or Insurance claims, gratuity, provident fund, etc., remain unsettled, causing a lot of inconvenience to members of the bereaved family.

To conclude, death is an inevitable event in every person's life. However, structure of the modern society has necessitated death to be authenticated by the medical profession. Therefore the doctors have to bear and carry out his responsibility with all fairness and pragmatism.

*Source: QPMPA Journal of Medical Science Mar/Apr 02*

## Country - Wise Export of Coir Products (December 2001)

*Quantity in Tonnes* — *Value in Rs. Million*

| Sl. No. | Name of Country | Quantity | Value |
|---|---|---|---|
| **I. COIR FIBRE** | | | |
| 1 | France | 14.00 | 0.187 |
| 2 | Netherlands | 42.00 | 0.428 |
| 3 | South Korea | 50.00 | 0.742 |
| 4 | UAE | 3.66 | 0.334 |
| | **Total for the Item** | **109.66** | **1.693** |
| **II. COIR YARN** | | | |
| 1 | Brazil | 11.50 | 0.331 |
| 2 | Belgium | 54.51 | 1.671 |
| 3 | France | 142.09 | 4.222 |
| 4 | Greece | 6.25 | 0.166 |
| 5 | Germany | 63.27 | 1.830 |
| 6 | Italy | 248.03 | 7.656 |
| 7 | Kuwait | 23.00 | 0.598 |
| 8 | Malive Islands | 4.00 | 0.005 |
| 9 | Netherlands | 67.72 | 1.832 |
| 10 | Pakistan | 39.50 | 0.945 |
| 11 | Portugal | 25.50 | 0.888 |
| 12 | Spain | 40.90 | 1.134 |
| 13 | USA | 167.72 | 4.404 |
| 14 | UAE | 11.20 | 0.249 |
| | **Total for the Item** | **905.19** | **25.932** |
| **III. HANDLOOM MAT** | | | |
| 1 | Australia | 41.30 | 2.444 |
| 2 | Brazil | 17.44 | 1.068 |
| 3 | Belgium | 11.53 | 1.335 |
| 4 | Canada | 34.53 | 2.614 |
| 5 | Denmark | 15.01 | 1.139 |
| 6 | France | 59.64 | 3.823 |
| 7 | Greece | 27.09 | 1.427 |
| 8 | Germany | 153.84 | 8.321 |
| 9 | Hongkong | 0.03 | 0.003 |
| 10 | Israel | 10.20 | 0.527 |
| 11 | Italy | 86.73 | 4.152 |
| 12 | Jordan | 2.21 | 0.094 |
| 13 | New Zealand | 13.65 | 0.851 |
| 14 | Netherlands | 57.66 | 3.330 |

| Sl. No. | Name of Country | Quantity | Value |
|---|---|---|---|
| *Handloom Mat (Contd..)* | | | |
| 15 | Poland | 3.10 | 0.093 |
| 16 | Saudi Arabia | 2.79 | 0.171 |
| 17 | Spain | 77.78 | 4.420 |
| 18 | Sweden | 3.30 | 0.221 |
| 19 | South Africa | 3.65 | 0.126 |
| 20 | Taiwan | 0.15 | 0.002 |
| 21 | Turkey | 31.62 | 2.031 |
| 22 | USA | 519.14 | 38.357 |
| 23 | UAE | 13.44 | 0.823 |
| 24 | UK | 199.36 | 11.085 |
| 25 | Yugoslavia | 10.78 | 0.966 |
| | **Total for the Item** | **1395.96** | **89.421** |
| **IV. POWERLOOM MAT** | | | |
| 1 | Belgium | 33.90 | 2.006 |
| 2 | Canada | 7.57 | 0.465 |
| 3 | Germany | 52.09 | 3.186 |
| 4 | Japan | 11.26 | 1.617 |
| 5 | Sweden | 65.79 | 3.911 |
| 6 | USA | 7.41 | 0.455 |
| | **Total for the Item** | **178.01** | **11.640** |
| **V. TUFTED MAT** | | | |
| 1 | Germany | 13.47 | 0.639 |
| 2 | Israel | 11.39 | 0.514 |
| 3 | Italy | 31.05 | 1.351 |
| 4 | Netherlands | 2.59 | 0.170 |
| 5 | USA | 388.09 | 24.758 |
| 6 | UK | 9.63 | 0.554 |
| | **Total for the Item** | **456.23** | **27.985** |
| **VI. HANDLOOM MATTING** | | | |
| 1 | Denmark | 0.34 | 0.031 |
| 2 | France | 0.76 | 0.088 |
| 3 | Greece | 13.25 | 0.959 |
| 4 | Germany | 7.38 | 0.476 |

*Country - Wise Export of Coir Products (December 2001) - Contd..*

*Quantity in Tonnes* — *Value in Rs. Million*

| Sl. No. | Name of Country | Quantity | Value |
|---|---|---|---|
| *Handloom Matting (Contd..)* | | | |
| 5 | Hongkong | 1.21 | 0.073 |
| 6 | Israel | 2.90 | 0.141 |
| 7 | Japan | 4.77 | 0.370 |
| 8 | Netherlands | 57.17 | 3.125 |
| 9 | Portugal | 15.23 | 0.862 |
| 10 | South Korea | 5.03 | 0.304 |
| 11 | Sweden | 3.01 | 0.130 |
| 12 | South Africa | 2.56 | 0.158 |
| 13 | UK | 33.71 | 2.412 |
| **Total for the Item** | | **147.31** | **9.129** |
| **VII.. POWERLOOM MATTING No Exports** | | | |
| **VIII. GEO TEXTILE** | | | |
| 1 | Belgium | 7.93 | 0.328 |
| 2 | France | 9.45 | 0.262 |
| 3 | Germany | 5.30 | 0.200 |
| 4 | Hongkong | 6.00 | 0.209 |
| 5 | Japan | 19.70 | 0.881 |
| 6 | Netherlands | 5.10 | 0.252 |
| 7 | Oman | 13.14 | 0.674 |
| 8 | USA | 18.68 | 0.923 |
| **Total for the Item** | | **85.29** | **3.730** |
| **IX. COIR RUGS & CARPET** | | | |
| 1 | Belgium | 5.88 | 0.469 |
| 2 | Canada | 1.93 | 0.154 |
| 3 | France | 5.41 | 0.434 |
| 4 | Israel | 5.06 | 0.306 |
| 5 | Italy | 3.98 | 0.264 |
| 6 | Spain | 3.83 | 0.248 |
| 7 | UK | 56.80 | 4.924 |
| **Total for the Item** | | **82.90** | **6.799** |
| **X. COIR ROPE** | | | |
| 1 | France | 44.19 | 1.527 |

| Sl. No. | Name of Country | Quantity | Value |
|---|---|---|---|
| *Coir Rope (Contd..)* | | | |
| 2 | UAE | 12.21 | 0.223 |
| **Total for the Item** | | **56.40** | **1.750** |
| **XI. CURLED COIR** | | | |
| 1 | Ghana | 38.80 | 0.155 |
| 2 | Russia | 57.00 | 0.908 |
| **Total for the Item** | | **95.80** | **1.063** |
| **XII. RUBBERISED COIR** | | | |
| 1 | Belgium | 1.52 | 0.111 |
| 2 | France | 2.25 | 0.125 |
| 3 | Greece | 11.27 | 0.727 |
| 4 | Hongkong | 6.84 | 0.477 |
| 5 | Maldive *Islands* | 14.51 | 1.257 |
| **Total for the Item** | | **36.40** | **2.696** |
| **XIII. COIR PITH** | | | |
| 1 | Australia | 62.30 | 0.406 |
| 2 | Canada | 2.00 | 0.013 |
| 3 | Italy | 21.78 | 0.366 |
| 4 | Kenya | 132.5 | 0.822 |
| 5 | Netherlands | 762.48 | 5.055 |
| 6 | Spain | 25.97 | 0.180 |
| 7 | South Africa | 10.00 | 0.078 |
| 8 | USA | 114.60 | 1.082 |
| 9 | UAE | 36.00 | 0.231 |
| 10 | UK | 25.50 | 0.200 |
| **Total for the item** | | **1193.13** | **8.434** |
| **XIV. COIR OTHER SORTS** | | | |
| 1 | Germany | 18.62 | 0.699 |
| 2 | Japan | 7.20 | 0.167 |
| 3 | Netherlands | 0.60 | 0.076 |
| 4 | USA | 7.35 | 0.361 |
| **Total for the Item** | | **33.77** | **1.303** |
| **TOTAL FOR ALL ITEMS** | | **4776.05** | **191.575** |

## Consumer Price Index for Industrial Workers

(Base 1982 = 100)

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 01 | Apr 01 | May 01 | Jun 01 | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 448 | 449 | 456 | 462 | 466 | 457 | 458 | 465 | 464 | 469 | 471 | 468 |
| | 2. Mundakayam | 448 | 445 | 449 | 456 | 453 | 453 | 447 | 449 | 455 | 460 | 456 | 454 |
| | 3. Kollam | 463 | 448 | 445 | 460 | 456 | 452 | 457 | 456 | 460 | 469 | 464 | 463 |
| | 4. Thiruvananthapuram | 503 | 503 | 496 | 498 | 504 | 506 | 505 | 509 | 507 | 516 | 523 | 529 |
| | Average | 466 | 461 | 462 | 469 | 470 | 467 | 467 | 470 | 472 | 479 | 479 | 479 |
| Tamilnadu | 1. Chennai | 470 | 472 | 479 | 488 | 492 | 496 | 491 | 497 | 502 | 502 | 500 | 503 |
| | 2. Coimbatore | 432 | 436 | 437 | 443 | 440 | 445 | 442 | 446 | 452 | 453 | 449 | 451 |
| | 3. Coonoor | 429 | 430 | 441 | 455 | 454 | 451 | 448 | 453 | 458 | 464 | 458 | 458 |
| | 4. Madurai | 441 | 443 | 449 | 448 | 440 | 442 | 436 | 446 | 461 | 458 | 454 | 451 |
| | 5. Salem | 431 | 428 | 436 | 446 | 444 | 446 | 444 | 450 | 457 | 461 | 454 | 454 |
| | 6.Tiruchirappalli | 464 | 462 | 464 | 480 | 501 | 500 | 500 | 511 | 515 | 515 | 515 | 512 |
| | Average | 445 | 445 | 451 | 460 | 462 | 463 | 460 | 467 | 474 | 476 | 472 | 472 |
| Andra Pradesh | 1. Gudur | 436 | 426 | 435 | 447 | 452 | 460 | 446 | 446 | 455 | 447 | 447 | 438 |
| | 2. Gundur | 423 | 426 | 425 | 438 | 442 | 447 | 451 | 456 | 459 | 460 | 466 | 465 |
| | 3. Hyderabad | 426 | 427 | 437 | 441 | 441 | 442 | 443 | 446 | 447 | 455 | 460 | 459 |
| | 4. Visakhapatanam | 439 | 436 | 437 | 442 | 444 | 447 | 446 | 454 | 458 | 456 | 460 | 456 |
| | 5. Warangal | 446 | 449 | 456 | 465 | 472 | 473 | 468 | 479 | 486 | 483 | 496 | 489 |
| | Average | 434 | 433 | 438 | 447 | 450 | 454 | 451 | 456 | 461 | 460 | 466 | 461 |
| 4. Karnataka | 1. Bangalore | 429 | 433 | 432 | 436 | 442 | 441 | 440 | 443 | 448 | 448 | 448 | 445 |
| | 2. Belgaum | 465 | 469 | 477 | 486 | 494 | 500 | 495 | 499 | 502 | 502 | 502 | 503 |
| | 3. Hubli Dhanwar | 441 | 442 | 448 | 454 | 456 | 456 | 455 | 457 | 469 | 462 | 462 | 459 |
| | 4. Meccara | 451 | 450 | 452 | 460 | 461 | 462 | 458 | 459 | 456 | 453 | 453 | 452 |
| | Average | 447 | 449 | 452 | 459 | 463 | 465 | 462 | 465 | 469 | 466 | 466 | 465 |
| Pndicherry | 1. Pndicherry | 473 | 464 | 468 | 480 | 484 | 478 | 482 | 496 | 496 | 493 | 494 | 493 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 01 | Apr 01 | May 01 | Jun 01 | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 518 | 526 | 527 | 533 | 536 | 536 | 534 | 540 | 541 | 533 | 530 | 529 |
| Maharastra | 1. Mumbai | 517 | 521 | 524 | 530 | 535 | 534 | 534 | 536 | 539 | 536 | 543 | 550 |
| | 2. Nagpur | 467 | 476 | 478 | 483 | 490 | 496 | 488 | 490 | 495 | 487 | 486 | 589 |
| | 3. Nasik | 489 | 488 | 494 | 497 | 504 | 504 | 503 | 505 | 505 | 504 | 511 | 507 |
| | 4. Pune | 504 | 507 | 514 | 518 | 522 | 525 | 518 | 520 | 526 | 522 | 514 | 517 |
| | 5. Solapur | 457 | 458 | 461 | 470 | 483 | 487 | 480 | 479 | 484 | 482 | 481 | 479 |
| | Average | 487 | 490 | 494 | 500 | 507 | 509 | 505 | 506 | 510 | 506 | 507 | 528 |
| Haryana | 1. Faridabad | 455 | 463 | 468 | 471 | 483 | 483 | 480 | 478 | 478 | 471 | 469 | 464 |
| | 2. Yamuna Nagar | 420 | 422 | 425 | 427 | 432 | 437 | 433 | 433 | 438 | 430 | 431 | 427 |
| | Average | 438 | 443 | 447 | 449 | 458 | 460 | 457 | 456 | 458 | 451 | 450 | 446 |
| West Bengal | 1. Asansol | 407 | 413 | 418 | 421 | 429 | 453 | 453 | 458 | 460 | 456 | 449 | 443 |
| | 2. Darjeeling | 380 | 383 | 385 | 393 | 395 | 396 | 396 | 404 | 410 | 402 | 394 | 387 |
| | 3. Durgapur | 486 | 491 | 498 | 497 | 507 | 527 | 531 | 540 | 536 | 532 | 540 | 536 |
| | 4. Haldia | 491 | 491 | 490 | 492 | 572 | 576 | 575 | 577 | 586 | 580 | 573 | 571 |
| | 5. Howrah | 501 | 509 | 507 | 514 | 517 | 533 | 528 | 536 | 547 | 538 | 526 | 528 |
| | 6. Jalpaiguri | 395 | 402 | 404 | 408 | 410 | 410 | 415 | 421 | 418 | 416 | 413 | 406 |
| | 7. Kolkata | 461 | 465 | 465 | 472 | 502 | 516 | 518 | 531 | 540 | 526 | 517 | 514 |
| | 8. Raniganj | 384 | 390 | 392 | 399 | 402 | 404 | 404 | 413 | 417 | 415 | 402 | 404 |
| | Average | 438 | 443 | 445 | 450 | 467 | 477 | 478 | 485 | 489 | 483 | 477 | 474 |
| Chandigarh | 1. Chandigarh | 474 | 481 | 484 | 485 | 492 | 497 | 501 | 496 | 498 | 497 | 513 | 513 |
| Uttar Pradesh | 1. Agra | 408 | 416 | 417 | 415 | 421 | 427 | 421 | 427 | 432 | 424 | 422 | 423 |
| | 2. Ghaziabad | 462 | 465 | 468 | 469 | 471 | 474 | 473 | 470 | 472 | 465 | 463 | 459 |
| | 3. Kanpur | 440 | 442 | 443 | 449 | 454 | 454 | 454 | 457 | 461 | 449 | 444 | 452 |
| | 4. Saharaupur | 406 | 410 | 416 | 422 | 426 | 432 | 431 | 431 | 430 | 426 | 428 | 432 |
| | 5. Varanasi | 466 | 470 | 474 | 477 | 485 | 490 | 486 | 493 | 493 | 482 | 474 | 474 |
| | Average | 436 | 441 | 444 | 446 | 451 | 455 | 453 | 456 | 458 | 449 | 446 | 448 |
| Madhya Pradesh | 1. Balaghat | 395 | 397 | 405 | 410 | 414 | 422 | 420 | 422 | 422 | 421 | 412 | 408 |
| | 2. Bhopal | 468 | 470 | 475 | 482 | 502 | 506 | 503 | 506 | 510 | 507 | 507 | 501 |
| | 3. Indore | 455 | 468 | 469 | 472 | 474 | 477 | 475 | 477 | 482 | 480 | 477 | 475 |
| | 4. Jabalpur | 446 | 446 | 450 | 455 | 462 | 469 | 466 | 471 | 471 | 467 | 461 | 459 |
| | Average | 441 | 445 | 450 | 455 | 463 | 469 | 466 | 469 | 471 | 469 | 464 | 461 |
| | **All India** | 445 | 448 | 451 | 457 | 463 | 466 | 465 | 468 | 472 | 472 | 472 | 472 |

## Consumer Price Index and % Variations of Index for Industrial Workers

| State | Centre | CPI for the month of | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Dec 00 | Dec 01 | % variation | Jan 01 | Jan 02 | % variation | Feb 01 | Feb 02 | % variation |
| **Southern States** | | | | | | | | | | |
| 1. Kerala | 1. Aluva | 445 | 469 | 5.39 | 448 | 471 | 5.13 | 449 | 468 | 4.23 |
| | 2. Mundakayam | 452 | 460 | 1.77 | 451 | 456 | 1.11 | 450 | 454 | 0.89 |
| | 3. Kollam | 452 | 469 | 3.76 | 456 | 464 | 1.75 | 464 | 463 | -0.22 |
| | 4. Thiruvananthapuram | 490 | 516 | 5.31 | 499 | 523 | 4.81 | 500 | 529 | 5.80 |
| | Average | 460 | 479 | 4.08 | 464 | 479 | 3.24 | 466 | 479 | 2.74 |
| 2. Tamilnadu | 1. Chennai | 483 | 502 | 3.93 | 479 | 500 | 4.38 | 471 | 503 | 6.79 |
| | 2. Coimbatore | 440 | 453 | 2.95 | 436 | 449 | 2.98 | 432 | 451 | 4.40 |
| | 3. Coonoor | 434 | 464 | 6.91 | 431 | 458 | 6.26 | 430 | 458 | 6.51 |
| | 4. Madurai | 456 | 458 | 0.44 | 446 | 454 | 1.79 | 445 | 451 | 1.35 |
| | 5. Salem | 442 | 461 | 4.30 | 441 | 454 | 2.95 | 435 | 454 | 4.37 |
| | 6.Tiruchirappalli | 478 | 515 | 7.74 | 475 | 515 | 8.42 | 467 | 512 | 9.64 |
| | Average | 456 | 476 | 4.39 | 451 | 472 | 4.51 | 447 | 472 | 5.56 |
| 3. Andra Pradesh | 1. Gudur | 442 | 447 | 1.13 | 437 | 447 | 2.29 | 434 | 438 | 0.92 |
| | 2. Gundur | 420 | 460 | 9.52 | 415 | 466 | 12.29 | 416 | 465 | 11.78 |
| | 3. Hyderabad | 426 | 455 | 6.81 | 427 | 460 | 7.73 | 424 | 459 | 8.25 |
| | 4. Visakhapatanam | 431 | 456 | 5.80 | 433 | 460 | 6.24 | 430 | 456 | 6.05 |
| | 5. Warangal | 443 | 483 | 9.03 | 444 | 496 | 11.71 | 444 | 489 | 10.14 |
| | Average | 432 | 460 | 6.43 | 431 | 466 | 8.02 | 430 | 461 | 7.40 |
| 4. Karnataka | 1. Bangalore | 431 | 448 | 3.94 | 431 | 448 | 3.94 | 430 | 445 | 3.49 |
| | 2. Belgaum | 471 | 502 | 6.58 | 473 | 502 | 6.13 | 466 | 503 | 7.94 |
| | 3. Hubli Dhanwar | 436 | 462 | 5.96 | 437 | 462 | 5.72 | 436 | 459 | 5.28 |
| | 4. Meccara | 460 | 453 | -1.52 | 456 | 453 | -0.66 | 453 | 452 | -0.22 |
| | Average | 450 | 466 | 3.73 | 449 | 466 | 3.78 | 446 | 465 | 4.15 |
| 5. Pndicherry | 1. Pndicherry | 495 | 493 | -0.40 | 491 | 494 | 0.61 | 480 | 493 | 2.71 |

*Contd..*

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Dec 00 | Dec 01 | % variation | Jan 01 | Jan 02 | % variation | Feb 01 | Feb 02 | % variation |
| **Northern States** | | | | | | | | | | |
| 1. Delhi | 1. Delhi | 513 | 533 | 3.90 | 513 | 530 | 3.31 | 513 | 529 | 3.12 |
| 2. Maharastra | 1. Mumbai | 512 | 536 | 4.69 | 517 | 543 | 5.03 | 515 | 550 | 6.80 |
| | 2. Nagpur | 476 | 487 | 2.31 | 477 | 486 | 1.89 | 470 | 589 | 25.32 |
| | 3. Nasik | 489 | 504 | 3.07 | 496 | 511 | 3.02 | 487 | 507 | 4.11 |
| | 4. Pune | 511 | 522 | 2.15 | 511 | 514 | 0.59 | 505 | 517 | 2.38 |
| | 5. Solapur | 460 | 482 | 4.78 | 459 | 481 | 4.79 | 455 | 479 | 5.27 |
| | Average | 490 | 506 | 3.39 | 492 | 507 | 3.05 | 486 | 528 | 8.63 |
| 3. Haryana | 1. Faridabad | 442 | 471 | 6.56 | 444 | 469 | 5.63 | 448 | 464 | 3.57 |
| | 2. Yamuna Nagar | 419 | 430 | 2.63 | 419 | 431 | 2.86 | 418 | 427 | 2.15 |
| | Average | 431 | 451 | 4.65 | 432 | 450 | 4.29 | 433 | 446 | 2.89 |
| 4. West Bengal | 1. Asansol | 416 | 456 | 9.62 | 406 | 449 | 10.59 | 401 | 443 | 10.47 |
| | 2. Darjeeling | 386 | 402 | 4.15 | 386 | 394 | 2.07 | 384 | 387 | 0.78 |
| | 3. Durgapur | 489 | 532 | 8.79 | 481 | 540 | 12.27 | 476 | 536 | 12.61 |
| | 4. Haldia | 485 | 580 | 19.59 | 481 | 573 | 19.13 | 480 | 571 | 18.96 |
| | 5. Howrah | 510 | 538 | 5.49 | 500 | 526 | 5.20 | 498 | 528 | 6.02 |
| | 6. Jalpaiguri | 400 | 416 | 4.00 | 393 | 413 | 5.09 | 390 | 406 | 4.10 |
| | 7. Kolkata | 461 | 526 | 14.10 | 456 | 517 | 13.38 | 450 | 514 | 14.22 |
| | 8. Raniganj | 388 | 415 | 6.96 | 386 | 402 | 4.15 | 381 | 404 | 6.04 |
| | Average | 442 | 483 | 9.34 | 436 | 477 | 9.31 | 433 | 474 | 9.51 |
| 5. Chandigarh | 1. Chandigarh | 471 | 497 | 5.52 | 472 | 513 | 8.69 | 473 | 513 | 8.46 |
| 6. Uttar Pradesh | 1. Agra | 404 | 424 | 4.95 | 403 | 422 | 4.71 | 403 | 423 | 4.96 |
| | 2. Ghaziabad | 450 | 465 | 3.33 | 457 | 463 | 1.31 | 455 | 459 | 0.88 |
| | 3. Kanpur | 428 | 449 | 4.91 | 430 | 444 | 3.26 | 435 | 452 | 3.91 |
| | 4. Saharaupur | 405 | 426 | 5.19 | 403 | 428 | 6.20 | 403 | 432 | 7.20 |
| | 5. Varanasi | 457 | 482 | 5.47 | 451 | 474 | 5.10 | 457 | 474 | 3.72 |
| | Average | 429 | 449 | 4.76 | 429 | 446 | 4.06 | 431 | 448 | 4.04 |
| 7. Madhya Pradesh | 1. Balaghat | 390 | 421 | 7.95 | 393 | 412 | 4.83 | 392 | 408 | 4.08 |
| | 2. Bhopal | 457 | 507 | 10.94 | 461 | 507 | 9.98 | 469 | 501 | 6.82 |
| | 3. Indore | 456 | 480 | 5.26 | 453 | 477 | 5.30 | 453 | 475 | 4.86 |
| | 4. Jabalpur | 453 | 467 | 3.09 | 449 | 461 | 2.67 | 446 | 459 | 2.91 |
| | Average | 439 | 469 | 6.78 | 439 | 464 | 5.75 | 440 | 461 | 4.72 |
| | **All India** | 446 | 472 | 5.83 | 445 | 472 | 6.07 | 443 | 472 | 6.55 |

## Consumer Price Index for Agricultural Labourers

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 01 | Apr 01 | May 01 | Jun 01 | Jul 01 | Aug 01 | Sept 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 319 | 320 | 323 | 326 | 325 | 323 | 316 | 317 | 318 | 322 | 319 | 322 |
| 2 | Tamilnadu | 295 | 295 | 300 | 302 | 304 | 304 | 304 | 306 | 311 | 316 | 314 | 313 |
| 3 | Anthrapradesh | 311 | 309 | 312 | 318 | 320 | 326 | 327 | 332 | 331 | 327 | 324 | 325 |
| 4 | Karnataka | 293 | 294 | 299 | 302 | 304 | 307 | 307 | 308 | 311 | 312 | 308 | 308 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 298 | 295 | 298 | 302 | 304 | 309 | 305 | 307 | 305 | 304 | 303 | 303 |
| 6 | Haryana | 312 | 316 | 318 | 319 | 320 | 322 | 324 | 324 | 325 | 323 | 320 | 321 |
| 7 | West Bengal | 288 | 295 | 296 | 295 | 302 | 305 | 306 | 311 | 311 | 307 | 301 | 299 |
| 8 | Uttar Pradesh | 302 | 303 | 303 | 307 | 312 | 313 | 314 | 316 | 315 | 311 | 309 | 312 |
| 9 | Madhya Pradesh | 307 | 308 | 309 | 313 | 313 | 316 | 315 | 313 | 312 | 310 | 304 | 304 |
| 10 | Assam | 318 | 321 | 323 | 325 | 321 | 318 | 319 | 322 | 323 | 324 | 319 | 317 |
| 11 | Bihar | 277 | 278 | 278 | 281 | 283 | 285 | 287 | 294 | 296 | 296 | 291 | 290 |
| 12 | Gujarat | 312 | 315 | 320 | 325 | 328 | 329 | 324 | 319 | 320 | 315 | 312 | 313 |
| 13 | Himachalpradesh | 290 | 292 | 289 | 289 | 295 | 303 | 299 | 297 | 299 | 296 | 297 | 299 |
| 14 | Jammu & Kashmir | 325 | 326 | 330 | 331 | 333 | 332 | 329 | 330 | 329 | 326 | 329 | 330 |
| 15 | Manipur | 316 | 312 | 312 | 313 | 311 | 312 | 308 | 305 | 304 | 307 | 300 | 299 |
| 16 | Meghalaya | 343 | 345 | 344 | 345 | 346 | 348 | 350 | 354 | 359 | 356 | 351 | 350 |
| 17 | Orissa | 299 | 299 | 298 | 300 | 308 | 313 | 312 | 310 | 307 | 303 | 294 | 286 |
| 18 | Punjab | 311 | 314 | 318 | 319 | 325 | 331 | 329 | 328 | 328 | 324 | 322 | 322 |
| 19 | Rajastan | 309 | 310 | 312 | 311 | 311 | 311 | 308 | 305 | 306 | 305 | 306 | 308 |
| 20 | Tripura | 307 | 309 | 315 | 315 | 317 | 323 | 324 | 328 | 334 | 315 | 313 | 315 |
| | **All India** | **300** | **301** | **303** | **306** | **309** | **312** | **311** | **313** | **313** | **312** | **308** | **308** |

## Consumer Price Index for Industrial & Agricultural Workers - (Kerala State)

| Centre | Base 1970=100 | | | | | | Base 1998-99=100 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Apr 01 | May 01 | Jun 01 | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 |
| Thiruvananthapuram | 1143 | 1139 | 1144 | 1148 | 1150 | 1153 | 113 | 114 | 114 | 115 | 114 | 114 |
| Kollam | 1140 | 1137 | 1144 | 1149 | 1152 | 1155 | 114 | 115 | 115 | 115 | 114 | 115 |
| Pathanamthitta | - | - | - | - | - | - | 112 | 113 | 113 | 113 | 112 | 112 |
| Punalur | 1091 | 1088 | 1093 | 1096 | 1098 | 1101 | 113 | 114 | 114 | 114 | 113 | 112 |
| Alappuzha | 1146 | 1142 | 1149 | 1153 | 1155 | 1157 | 112 | 114 | 114 | 114 | 113 | 113 |
| Kottayam | 1146 | 1146 | 1152 | 1157 | 1161 | 1163 | 114 | 115 | 115 | 115 | 114 | 114 |
| Mundakkayam | 1106 | 1106 | 1111 | 1113 | 1114 | 1116 | 112 | 113 | 113 | 113 | 112 | 111 |
| Munnar | 1110 | 1112 | 1117 | 1121 | 1124 | 1127 | 114 | 115 | 115 | 115 | 114 | 114 |
| Ernakulam | 1095 | 1097 | 1104 | 1107 | 1109 | 1112 | 114 | 115 | 115 | 115 | 114 | 114 |
| Chalakkudy | 1160 | 1162 | 1170 | 1174 | 1177 | 1180 | 113 | 114 | 114 | 114 | 113 | 113 |
| Thrissur | 1114 | 1116 | 1124 | 1128 | 1129 | 1132 | 114 | 115 | 115 | 115 | 114 | 114 |
| Palakkad | 1128 | 1130 | 1136 | 1141 | 1142 | 1145 | 111 | 112 | 112 | 112 | 111 | 111 |
| Malappuram | 1117 | 1120 | 1125 | 1126 | 1128 | 1131 | 112 | 113 | 113 | 114 | 113 | 112 |
| Kozhikkode | 1114 | 1115 | 1123 | 1128 | 1130 | 1134 | 114 | 115 | 115 | 115 | 114 | 113 |
| Meppady | 1187 | 1189 | 1195 | 1197 | 1199 | 1201 | 114 | 115 | 115 | 115 | 114 | 114 |
| Kannur | 1115 | 1118 | 1124 | 1129 | 1132 | 1135 | 114 | 115 | 115 | 115 | 114 | 114 |
| Kasargod | - | - | - | - | - | - | 113 | 114 | 114 | 114 | 113 | 112 |
| **State** | **1127** | **1128** | **1134** | **1138** | **1140** | **1143** | **113** | **114** | **114** | **114** | **113** | **113** |

## Consumer Price Index and % Variations for Agricultural Labourers

Base 1986-87 = 100]

| Sl. No. | Centre | Index for | | % | Index for | | % | Index for | | % |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Dec-00 | Dec-01 | Variation | Jant-01 | Jan-02 | Variation | Feb-01 | Feb-02 | Variation |
| **Southern States** | | | | | | | | | | |
| 1 | Kerala | 322 | 322 | 0.00 | 324 | 319 | -1.54 | 319 | 322 | 0.94 |
| 2 | Tamilnadu | 301 | 316 | 4.98 | 298 | 314 | 5.37 | 295 | 313 | 6.10 |
| 3 | Anthrapradesh | 318 | 327 | 2.83 | 314 | 324 | 3.18 | 310 | 325 | 4.84 |
| 4 | Karnataka | 300 | 312 | 4.00 | 300 | 308 | 2.67 | 295 | 308 | 4.41 |
| **Northern States** | | | | | | | | | | |
| 5 | Maharashtra | 304 | 304 | 0.00 | 301 | 303 | 0.66 | 299 | 303 | 1.34 |
| 6 | Haryana | 310 | 323 | 4.19 | 310 | 320 | 3.23 | 310 | 321 | 3.55 |
| 7 | West Bengal | 291 | 307 | 5.50 | 284 | 301 | 5.99 | 284 | 299 | 5.28 |
| 8 | Uttar Pradesh | 295 | 311 | 5.42 | 296 | 309 | 4.39 | 297 | 312 | 5.05 |
| 9 | Madhya Pradesh | 310 | 310 | 0.00 | 306 | 304 | -0.65 | 306 | 304 | -0.65 |
| 10 | Assam | 320 | 324 | 1.25 | 317 | 319 | 0.63 | 315 | 317 | 0.63 |
| 11 | Bihar | 281 | 296 | 5.34 | 276 | 291 | 5.43 | 274 | 290 | 5.84 |
| 12 | Gujarat | 313 | 315 | 0.64 | 311 | 312 | 0.32 | 313 | 313 | 0.00 |
| 13 | Himachalpradesh | 290 | 296 | 2.07 | 289 | 297 | 2.77 | 290 | 299 | 3.10 |
| 14 | Jammu & Kashmir | 321 | 326 | 1.56 | 321 | 329 | 2.49 | 323 | 330 | 2.17 |
| 15 | Manipur | 320 | 307 | -4.06 | 314 | 300 | -4.46 | 313 | 299 | -4.47 |
| 16 | Meghalaya | 346 | 356 | 2.89 | 342 | 351 | 2.63 | 341 | 350 | 2.64 |
| 17 | Orissa | 305 | 303 | -0.66 | 301 | 294 | -2.33 | 300 | 286 | -4.67 |
| 18 | Punjab | 314 | 324 | 3.18 | 313 | 322 | 2.88 | 312 | 322 | 3.21 |
| 19 | Rajastan | 312 | 305 | -2.24 | 311 | 306 | -1.61 | 310 | 308 | -0.65 |
| 20 | Tripura | 326 | 315 | -3.37 | 321 | 313 | -2.49 | 313 | 315 | 0.64 |
| | **All India** | **303** | **312** | 2.97 | **301** | **308** | 2.33 | **299** | **308** | 3.01 |

## Indices (All India) for the last 12 months

| Base Year | Indices | Mar-01 | Apr-01 | May-01 | Jun-01 | Jul-01 | Aug-01 |
|---|---|---|---|---|---|---|---|
| 1 | 2 | | | 5 | 6 | 7 | 8 |
| 1982 = 100 | Industrial Workers | 445 | 448 | 451 | 457 | 463 | 466 |
| 84-85 = 100 | Non urban manual workers | 377 | 379 | 382 | 386 | 391 | 393 |
| 86-87 = 100 | Agricultural labourers | 300 | 301 | 303 | 306 | 309 | 312 |
| 86-87 = 100 | Rural labourers | 302 | 303 | 306 | 309 | 311 | 314 |

| Base Year | Indices | Sep-01 | Oct-01 | Nov-01 | Dec-01 | Jan-02 | Feb-02 |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 9 | 10 | 11 | 12 | 13 | 13 |
| 1982 = 100 | Industrial Workers | 465 | 468 | 472 | 469 | 467 | 466 |
| 84-85 = 100 | Non urban manual workers | 392 | 393 | 395 | 394 | 393 | 395 |
| 86-87 = 100 | Agricultural labourers | 311 | 313 | 313 | 312 | 308 | 308 |
| 86-87 = 100 | Rural labourers | 313 | 315 | 316 | 314 | 311 | 311 |

## Consumer Price Index Numbers of certain centres for urban non-manual employees

[Base 1984-85=100]

| Sl.No | Centre | State | Index for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mar 01 | Apr 01 | May 01 | Jun 01 | Jul-01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 02 | Jan 02 | Feb 02 |
| **Southern Centres** | | | | | | | | | | | | | | |
| 1 | Trivandrum | Kerala | 369 | 370 | 374 | 377 | 382 | 384 | 385 | 384 | 386 | 386 | 391 | 392 |
| 2 | Calicut | Kerala | 369 | 369 | 371 | 374 | 375 | 371 | 370 | 371 | 374 | 374 | 375 | 376 |
| 3 | Chennai | Tamilnadu | 431 | 432 | 436 | 440 | 453 | 454 | 454 | 458 | 462 | 466 | 471 | 472 |
| 4 | Coimbatore | Tamilnadu | 442 | 443 | 447 | 447 | 451 | 456 | 454 | 452 | 455 | 462 | 460 | 460 |
| 5 | Madurai | Tamilnadu | 427 | 429 | 433 | 438 | 438 | 439 | 438 | 439 | 448 | 448 | 447 | 448 |
| 6 | Salem | Tamilnadu | 416 | 417 | 419 | 424 | 428 | 427 | 426 | 428 | 434 | 434 | 434 | 433 |
| 7 | Tiruchirapalli | Tamilnadu | 398 | 396 | 400 | 404 | 409 | 410 | 407 | 411 | 418 | 421 | 426 | 429 |
| 8 | Hydrabad | Andrapradesh | 390 | 396 | 404 | 405 | 412 | 413 | 410 | 414 | 413 | 411 | 412 | 411 |
| 9 | Kurnool | Andrapradesh | 386 | 389 | 390 | 396 | 400 | 403 | 406 | 409 | 411 | 408 | 413 | 411 |
| 10 | Vijayawada | Andrapradesh | 403 | 404 | 407 | 411 | 418 | 424 | 424 | 430 | 434 | 431 | 434 | 433 |
| 11 | Vishakapattanam | Andrapradesh | 382 | 385 | 388 | 390 | 396 | 399 | 400 | 403 | 406 | 406 | 404 | 402 |
| 12 | Warangal | Andrapradesh | 399 | 399 | 404 | 414 | 415 | 418 | 417 | 423 | 426 | 427 | 424 | 420 |
| 13 | Bangalore | Karnataka | 397 | 399 | 403 | 409 | 413 | 414 | 413 | 413 | 416 | 415 | 415 | 416 |
| 14 | Gulbarga | Karnataka | 356 | 361 | 367 | 369 | 376 | 380 | 379 | 382 | 385 | 386 | 386 | 389 |
| 15 | Hubli | Karnataka | 384 | 385 | 385 | 391 | 394 | 398 | 400 | 399 | 402 | 403 | 400 | 400 |
| 16 | Mangalore | Karnataka | 371 | 372 | 374 | 376 | 382 | 387 | 383 | 384 | 387 | 387 | 389 | 389 |
| **Northern Centres** | | | | | | | | | | | | | | |
| 1 | Delhi | Delhi | 386 | 388 | 388 | 394 | 399 | 402 | 401 | 402 | 405 | 402 | 399 | 399 |
| 2 | Mumbai | Maharashtra | 385 | 384 | 387 | 392 | 396 | 396 | 394 | 396 | 397 | 396 | 397 | 396 |
| 3 | Aurangabad | Maharashtra | 401 | 403 | 407 | 412 | 413 | 422 | 422 | 423 | 423 | 425 | 430 | 428 |
| 4 | Nagpur | Maharashtra | 365 | 369 | 373 | 375 | 377 | 378 | 376 | 379 | 379 | 376 | 375 | 372 |
| 5 | Pune | Maharashtra | 394 | 397 | 400 | 404 | 406 | 406 | 406 | 407 | 406 | 404 | 405 | 404 |
| 6 | Solapur | Maharashtra | 357 | 358 | 362 | 366 | 367 | 370 | 369 | 371 | 374 | 373 | 371 | 370 |
| 7 | Chandigarh | Punjab | 454 | 455 | 454 | 459 | 463 | 467 | 472 | 465 | 465 | 463 | 466 | 469 |
| 8 | Kolkatta | West Bengal | 346 | 349 | 352 | 359 | 360 | 357 | 355 | 358 | 359 | 356 | 352 | 352 |
| 9 | Asansol | West Bengal | 379 | 384 | 389 | 394 | 407 | 402 | 402 | 402 | 403 | 401 | 396 | 398 |
| 10 | Kharagpur | West Bengal | 360 | 364 | 365 | 371 | 375 | 378 | 378 | 383 | 382 | 382 | 374 | 374 |
| 11 | Siliguri | West Bengal | 408 | 411 | 414 | 413 | 416 | 417 | 418 | 420 | 424 | 420 | 421 | 418 |
| 12 | Lucknow | Uttarpradesh | 346 | 351 | 357 | 360 | 368 | 368 | 367 | 369 | 373 | 366 | 365 | 362 |
| 13 | Agra | Uttarpradesh | 362 | 365 | 371 | 371 | 384 | 393 | 388 | 389 | 389 | 384 | 385 | 382 |
| 14 | Allahabad | Uttarpradesh | 390 | 390 | 389 | 395 | 414 | 415 | 413 | 415 | 415 | 410 | 411 | 414 |
| 15 | Kanpur | Uttarpradesh | 342 | 345 | 347 | 353 | 358 | 360 | 359 | 363 | 365 | 360 | 357 | 358 |
| 16 | Meerut | Uttarpradesh | 331 | 333 | 335 | 335 | 349 | 351 | 348 | 347 | 347 | 345 | 354 | 355 |
| | | | | | | | | | | | | | | |
| | **All India** | | **377** | **379** | **382** | **386** | **391** | **393** | **392** | **393** | **395** | **394** | **393** | **392** |

## Consumer Price Index Numbers and % Variations of certain centres for Urban non-manual employees

[Base 1984-85=100

| Sl. No | Centre | State | Index for | | % Increase | Index for | | % Increase | Index for | | % Increase |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dect-00 | Dect-01 | | Jan-01 | Jan-02 | | Feb-01 | Feb-02 | |
| **Southern State** | | | | | | | | | | | |
| 1 | Trivandrum | Kerala | 366 | 386 | 5.46 | 371 | 391 | 5.39 | 370 | 392 | 5.95 |
| 2 | Calicut | Kerala | 370 | 374 | 1.08 | 370 | 375 | 1.35 | 369 | 376 | 1.90 |
| 3 | Chennai | Tamilnadu | 424 | 466 | 9.91 | 433 | 471 | 8.78 | 431 | 472 | 9.51 |
| 4 | Coimbatore | Tamilnadu | 434 | 462 | 6.45 | 441 | 460 | 4.31 | 441 | 460 | 4.31 |
| 5 | Madurai | Tamilnadu | 432 | 448 | 3.70 | 432 | 447 | 3.47 | 429 | 448 | 4.43 |
| 6 | Salem | Tamilnadu | 416 | 434 | 4.33 | 421 | 434 | 3.09 | 418 | 433 | 3.59 |
| 7 | Tiruchirapalli | Tamilnadu | 403 | 421 | 4.47 | 401 | 426 | 6.23 | 400 | 429 | 7.25 |
| 8 | Hydrabad | Andrapradesh | 386 | 411 | 6.48 | 387 | 412 | 6.46 | 388 | 411 | 5.93 |
| 9 | Kurnool | Andrapradesh | 383 | 408 | 6.53 | 382 | 413 | 8.12 | 383 | 411 | 7.31 |
| 10 | Vijayawada | Andrapradesh | 405 | 431 | 6.42 | 403 | 434 | 7.69 | 402 | 433 | 7.71 |
| 11 | Vishakapattana | Andrapradesh | 379 | 406 | 7.12 | 382 | 404 | 5.76 | 382 | 402 | 5.24 |
| 12 | Warangal | Andrapradesh | 400 | 427 | 6.75 | 395 | 424 | 7.34 | 399 | 420 | 5.26 |
| 13 | Bangalore | Karnataka | 393 | 415 | 5.60 | 396 | 415 | 4.80 | 397 | 416 | 4.79 |
| 14 | Gulbarga | Karnataka | 360 | 386 | 7.22 | 358 | 386 | 7.82 | 356 | 389 | 9.27 |
| 15 | Hubli | Karnataka | 373 | 403 | 8.04 | 380 | 400 | 5.26 | 379 | 400 | 5.54 |
| 16 | Mangalore | Karnataka | 368 | 387 | 5.16 | 371 | 389 | 4.85 | 371 | 389 | 4.85 |
| **Northern State** | | | | | | | | | | | |
| 1 | Delhi | Delhi | 382 | 402 | 5.24 | 382 | 399 | 4.45 | 385 | 399 | 3.64 |
| 2 | Mumbai | Maharashtra | 378 | 396 | 4.76 | 379 | 397 | 4.75 | 379 | 396 | 4.49 |
| 3 | Aurangabad | Maharashtra | 399 | 425 | 6.52 | 403 | 430 | 6.70 | 403 | 428 | 6.20 |
| 4 | Nagpur | Maharashtra | 363 | 376 | 3.58 | 364 | 375 | 3.02 | 364 | 372 | 2.20 |
| 5 | Pune | Maharashtra | 389 | 404 | 3.86 | 391 | 405 | 3.58 | 391 | 404 | 3.32 |
| 6 | Solapur | Maharashtra | 361 | 373 | 3.32 | 358 | 371 | 3.63 | 357 | 370 | 3.64 |
| 7 | Chandigarh | Punjab | 447 | 463 | 3.58 | 448 | 466 | 4.02 | 452 | 469 | 3.76 |
| 8 | Kolkatta | West Bengal | 345 | 356 | 3.19 | 344 | 352 | 2.33 | 345 | 352 | 2.03 |
| 9 | Asansol | West Bengal | 382 | 401 | 4.97 | 379 | 396 | 4.49 | 377 | 398 | 5.57 |
| 10 | Kharagpur | West Bengal | 360 | 382 | 6.11 | 359 | 374 | 4.18 | 360 | 374 | 3.89 |
| 11 | Siliguri | West Bengal | 404 | 420 | 3.96 | 405 | 421 | 3.95 | 408 | 418 | 2.45 |
| 12 | Lucknow | Uttarpradesh | 342 | 366 | 7.02 | 344 | 365 | 6.10 | 345 | 362 | 4.93 |
| 13 | Agra | Uttarpradesh | 356 | 384 | 7.87 | 356 | 385 | 8.15 | 356 | 382 | 7.30 |
| 14 | Allahabad | Uttarpradesh | 382 | 410 | 7.33 | 384 | 411 | 7.03 | 387 | 414 | 6.98 |
| 15 | Kanpur | Uttarpradesh | 338 | 360 | 6.51 | 337 | 357 | 5.93 | 340 | 358 | 5.29 |
| 16 | Meerut | Uttarpradesh | 322 | 345 | 7.14 | 325 | 354 | 8.92 | 330 | 355 | 7.58 |
| | **All India** | | **375** | **394** | 5.07 | **376** | **393** | 4.52 | **376** | **392** | 4.26 |

## Monthly retail prices of certain essential commodities for the last one year

| Sl. No | Name of Commodity | Unit | May 01 | Jun 01 | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **A. RICE - Open Market** | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 12.33 | 12.50 | 12.43 | 12.25 | 12.16 | 12.25 | 12.16 | 12.20 | 12.20 | 12.23 | 11.96 | 11.91 |
| 2 | Red - Chamba | Kg | 11.96 | 12.10 | 11.96 | 12.15 | 12.27 | 12.27 | 12.13 | 12.30 | 12.25 | 12.15 | 12.29 | 12.36 |
| 3 | White Andra Vella | Kg | 11.89 | 12.00 | 12.04 | 12.08 | 12.17 | 12.27 | 12.05 | 12.15 | 12.29 | 12.34 | 11.70 | 11.91 |
| | **B. PULSES** | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 30.36 | 30.89 | 31.86 | 33.86 | 32.14 | 30.68 | 30.93 | 30.43 | 30.57 | 30.18 | 30.07 | 30.93 |
| 5 | Black gram split w/o husk | Kg | 39.43 | 39.21 | 39.82 | 39.93 | 39.07 | 37.43 | 36.46 | 35.00 | 34.71 | 34.04 | 32.75 | 32.68 |
| 6 | Dhall(Tur) | Kg | 28.08 | 28.54 | 29.15 | 30.04 | 29.92 | 30.04 | 30.15 | 29.69 | 29.12 | 28.81 | 28.88 | 28.92 |
| | **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 15.73 | 15.67 | 15.55 | 14.94 | 15.39 | 15.43 | 15.25 | 15.18 | 15.26 | 15.25 | 15.30 | 15.24 |
| 8 | Milk (Cow's) | Ltr. | 12.96 | 12.96 | 12.93 | 12.93 | 12.93 | 12.93 | 12.96 | 12.96 | 13.04 | 13.04 | 13.04 | 13.07 |
| 9 | Egg Hen's (White lagon) | Dozen | 16.53 | 18.75 | 17.64 | 16.60 | 16.05 | 15.48 | 16.20 | 16.00 | 16.95 | 16.46 | 16.00 | 15.04 |
| 10 | Mutton with bones | Kg | 113.57 | 113.57 | 114.29 | 114.29 | 115.00 | 115.00 | 115.00 | 115.00 | 116.43 | 116.43 | 116.43 | 116.43 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 67.64 | 68.61 | 69.21 | 69.46 | 69.39 | 69.68 | 69.96 | 71.21 | 70.68 | 70.68 | 70.68 | 70.68 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.36 | 69.38 | 69.38 | 69.38 | 69.32 | 69.21 | 69.30 | 69.20 | 69.25 | 69.25 | 69.25 | 69.25 |
| | **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 33.21 | 37.25 | 36.00 | 37.89 | 36.61 | 35.93 | 36.54 | 48.61 | 43.61 | 41.79 | 40.04 | 44.64 |
| 14 | Groundnut oil | Kg | 47.17 | 48.68 | 49.78 | 50.48 | 50.28 | 50.48 | 49.87 | 50.31 | 50.87 | 50.42 | 49.87 | 51.50 |
| 15 | Refined oil(Postman) | Kg. | 61.29 | 60.85 | 60.85 | 60.31 | 60.22 | 60.22 | 60.18 | 60.33 | 60.33 | 59.55 | 59.40 | 61.50 |
| 16 | Gingelly oil | Kg. | 49.68 | 49.43 | 49.86 | 51.21 | 50.00 | 50.36 | 50.29 | 50.14 | 51.00 | 50.36 | 51.18 | 53.29 |
| 17 | Coconut without husk | 100 nos | 342.14 | 363.57 | 368.21 | 376.43 | 372.50 | 366.43 | 386.07 | 474.64 | 461.07 | 442.86 | 429.64 | 443.93 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | May 01 | Jun 01 | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 35.68 | 39.50 | 40.93 | 42.43 | 41.93 | 40.71 | 40.86 | 39.57 | 37.79 | 35.71 | 33.57 | 33.64 |
| 19 | Chillies dry | Kg. | 37.68 | 37.21 | 42.93 | 49.36 | 49.64 | 49.64 | 48.00 | 45.00 | 43.07 | 41.64 | 39.36 | 38.86 |
| 20 | Onion small | Kg. | 12.74 | 11.29 | 11.81 | 11.40 | 11.33 | 14.20 | 17.31 | 16.89 | 12.26 | 10.61 | 10.74 | 10.61 |
| 21 | Tamarind without seeds loose | Kg. | 24.50 | 23.79 | 23.50 | 23.07 | 23.29 | 23.43 | 24.50 | 24.71 | 24.57 | 24.07 | 23.21 | 22.07 |
| | **F. TUBERS** | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 6.89 | 7.86 | 8.29 | 8.43 | 7.29 | 7.29 | 7.29 | 7.86 | 7.21 | 7.43 | 8.07 | 9.86 |
| 23 | Tapioca Raw | Kg. | 5.11 | 4.96 | 4.93 | 4.79 | 4.96 | 5.04 | 4.84 | 4.71 | 4.68 | 4.93 | 4.89 | 5.21 |
| 24 | Potato | Kg. | 10.87 | 12.24 | 11.73 | 12.09 | 9.00 | 8.82 | 12.29 | 13.27 | 11.77 | 9.21 | 8.63 | 9.64 |
| 25 | Colocassia | Kg. | 13.14 | 15.00 | 16.46 | 14.17 | 15.14 | 14.71 | 13.57 | 13.07 | 11.71 | 12.36 | 13.00 | 13.82 |
| | **G. VEGETABLES** | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 6.18 | 6.44 | 7.13 | 9.44 | 8.38 | 8.62 | 11.49 | 9.94 | 7.39 | 6.69 | 5.90 | 5.51 |
| 27 | Brinjal | Kg. | 10.36 | 11.00 | 10.71 | 9.86 | 9.43 | 9.43 | 10.71 | 11.00 | 10.46 | 11.00 | 10.29 | 10.93 |
| 28 | Cucumber | Kg. | 7.64 | 8.21 | 7.07 | 7.21 | 6.50 | 6.50 | 7.21 | 8.36 | 8.36 | 7.86 | 6.14 | 6.21 |
| 29 | Ladies Finger | Kg. | 11.64 | 14.29 | 10.43 | 10.29 | 9.50 | 10.29 | 11.71 | 10.71 | 9.64 | 11.36 | 12.14 | 11.43 |
| 30 | Cabbage | Kg | 7.43 | 10.71 | 10.86 | 11.57 | 9.86 | 9.00 | 8.71 | 9.07 | 8.43 | 9.21 | 8.71 | 8.36 |
| 31 | Bittergourd | Kg. | 14.07 | 15.57 | 17.57 | 15.14 | 12.00 | 15.71 | 12.29 | 12.79 | 11.29 | 11.21 | 11.86 | 13.50 |
| 32 | Tomatto | Kg. | 11.43 | 11.00 | 14.57 | 12.36 | 8.00 | 8.64 | 10.64 | 19.21 | 8.71 | 8.14 | 7.71 | 8.07 |
| 33 | Chillies green | Kg. | 15.71 | 23.07 | 18.21 | 15.07 | 13.07 | 14.79 | 13.14 | 16.57 | 13.00 | 12.21 | 14.00 | 14.29 |
| 34 | Banana green | Kg. | 12.86 | 12.86 | 11.32 | 12.21 | 13.64 | 13.54 | 13.04 | 11.14 | 10.18 | 10.32 | 10.11 | 11.61 |
| 35 | Plantain green | Kg. | 7.93 | 8.25 | 8.14 | 8.86 | 9.79 | 9.36 | 8.68 | 8.86 | 8.54 | 8.89 | 8.54 | 8.61 |
| | **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 6.70 | 7.30 | 7.70 | 7.68 | 7.71 | 7.73 | 7.73 | 7.73 | 7.70 | 7.70 | 7.71 | 7.73 |
| 37 | Toilet Soap Lux | 100 gm | 10.54 | 10.82 | 10.96 | 11.00 | 11.00 | 11.00 | 11.00 | 11.00 | 10.96 | 10.96 | 11.07 | 11.32 |
| 38 | Toothpaste Colgate | 100 gm | 28.43 | 28.64 | 28.89 | 28.68 | 27.54 | 27.79 | 27.50 | 28.93 | 28.75 | 29.11 | 29.07 | 29.79 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 200.83 | 193.91 | 187.42 | 181.55 | 153.50 | 177.18 | 183.68 | 182.95 | 187.46 | 189.21 | 173.69 | 168.96 |

Printed and Published by Department of Economics & Statistics, Government of Kerala

# EcoStat News

June 2002
Volume - 2 Issue - 3

*For Official Use only*

## Inside the Issue

National Income

Airport Performance

Agriculture

Poverty

Doha Declaration

Statistics

Industry

Rates

Indices

Price

Department of Economics & Statistics
Government of Kerala

## FROM EDITORS DESK

*Planning and Development, Implementation and Evaluation are major components of a circular system for which statistics takes a lead roll. Updation through continuous efforts is the only possibility to collect error free data. In this context, spade work have been started to launch next round of ongoing surveys such as EAKAS, National Sample Survey, Wage Structure Survey, Annual Survey of Industries etc. etc.*

*Environment, an emerging subject, is to be handled with much importance, in the present scenario . Environmental accounting has gained its strength globally and as a part of it officers from this department attended a national workshop at Kolkatta .*

*On the basis of the report of National Statistics Commission, a workshop held at New Delhi was attended by the Director. Another National Workshop "On the improvements of Agricultural Statistics" was also held at New Delhi in which state was represented.*

***A.Meera Sahib,***
***Director & Chief Editor***



Edited printed & published for Department of Economics and Statistics, Government of Kerala.

# Contents


| | Page Nos |
|---|---|
| National Income | 3 |
| Airport Performance | 6 |
| Agriculture | 7 |
| Poverty | 15 |
| Doha Declaration | 18 |
| Statistics | 20 |
| Industry | 21 |
| Rates | 23 |
| Indices | 24 |
| Price | 32 |

# EXPLORING GAPS IN STATISTICS – A PARTIAL AGENDA FOR ACTION

*TARLOK SINGH*

This paper has been prepared under the stimulus of a recent collection of papers brought and edited by the eminent statistician and economist, Professor B. S. MINHAS, under the title NATIONAL INCOME ACCOUNTS AND DATA SYSTEMS, with the REPORT OF THE NATIONAL STATISTICAL COMMISSION serving as a backdrop.

## I

The collection of papers edited by Minhas came about as a result of the Commemorative International Conference jointly arranged in Delhi in November, 1998, by the International Association for Research in Income and Wealth, the Indian Association of Research in Income and Wealth and the Central Statistical Organisation. Participants included Indian scholars as well as several from abroad. The agenda of the Conference was set in broad terms -to review the development indices of the Indian economy since Independence. Writers were left to choose their own themes. It was left to the editor provide a semblance of unity.

The themes covered include a study by the late Professor P. N. Visaria under the title *Labour and Employment in India*, 1961 -1994, a critical examination of certain weakness observed in the existing *Agricultural and Industrial Statistics*, a Statistical exercise on *Counting the poor*, a study of *inflation in India* over a period of some 50 years, and [illegible] *in Indian Industry*. The volume also includes an account of recent work in the United States on developing the poverty line, and a case study for Canada of the practical application of the International System of National Accounts, 1993. A paper on the East Asian Crisis provides interesting insights, but falls outside the scope of the subject of the book. A paper by the editor and another by a specialist from the World Bank focus on the critical importance of developing statistical information for decentralised development at the local level.

## II

Papers included in the volume could be considered from three different angles, *First*, where they draw attention to important divergences and inadequacies in statistics which call for further work. *Second*, where they answer from the statistical angle questions which are vital for public policy, and specially for economic policy. *Third*, whether they call for new and serious for building up operational data systems essential to future planning and developing.

Three considerations need to be stressed. While it is for skilled statisticians to provide the data and evolve the underlying concepts, the data needed are largely determined by votaries of other disciplines such as planners, administrators, policy-makers, and those concerned with technical development in different fields. In other words, at each step, inter-disciplinary cooperation is essential. Secondly, in building up data systems, the requirements of formulation, presentation, and monitoring and evaluation have to be met at the same time and at each level of the functioning economy. Thirdly, in all fields of statistical presentation, there are imperfections and inadequacies which will take time to remove or diminish. It is important that users of statistics, whether planners, policy-makers, media, or public representatives, should remain constantly aware of weaknesses inherent in the statistics in use. Statistics have the power both to inform and guide and, in the manner they are employed, to confuse and mislead.

The existing statistical systems in different areas have developed over long periods in response to problems as perceived at an earlier stage. While improving the quality of existing data, there is a growing number of new needs and challenges to be met. These will call for new categories of data for which the available building blocks may be inadequate in concept and content. The efforts called for will be multidisciplinary in nature. The data presently available must be continuously reviewed from the [illegible] of the future in terms of concepts, mode of [illegible] use for policy and action and for public collection, and [illegible] Statistical Commission information. The Nation[illegible] proposed in the Rangarajan Report should be closely concerned to evolve a continuously developing perspective plan not only for strengthening existing data systems, but also for creating and laying the foundations for data systems designed to meet the requirements of the future through periods of rapid structural and institutional change.

While, in the nature of things, we become more and more aware of existing weaknesses, both administrative and technical, in the area of statistics, it is important to take a fair measure of the progress which has in fact been made both at the Centres and in the States. The role of Professor P. C. Mahalanobis and the Indian Statistical Institute, with all the support given to them has been fundamental in the formative period. The state of statistical information available in 1941, strengthened to an extent by 1951, bears no

comparison to the statistical capacities now available both at the Centres and in the States, reaching further down to districts, in addition to statistical information developed by public agencies in major areas of development. It is not an accident that India has come to be such and impressive pool of statistical skill and innovation. Given the requisite leadership and resources, the potential goes much beyond present reckoning. It is in this context that the proposal to set up a National Commission on Statistics as an apex body merits early consideration. Such a body could come into being by a Resolution of the Government of India as did the Planning Commission itself in March 1950.

### III

Comments on individual contributions in the volume edited by Minhas have to be necessarily brief and suggestive.

Pravin Visaria's contribution on Workforce and Employment in India 1961-94, based as it is on a lifetime of dedicated work on population, employment and manpower, makes a proposal which needs further consideration. He has observed that census-based estimates relating to the growth and composition of the work force have involved under estimation, particularly in respect of rural females. On other hand, NSS estimates made every five years have shown greater stability. Perhaps concepts and procedures employed in decennial censuses require further scrutiny. The census alone can provide data individually for all territorial entities. This is indispensable for many policy and planning objectives. The NSS can supplement and perhaps partially correct national and state data but can scarcely be expected to replace the census. This of course has not been suggested by Visaria, but the points he has made merit serious examination.

The contribution of *Counting the Poor* by Dubey and Gangopadhyaya has involved a prodigious amount of labour, but the tables constructed do not seem to suggest any working propositions relevant for policy and action. As a matter of general approach, data help best when they are presented as a means of answering specific question which bear on action.

Information provided by Garnier and short in Chapter 4 on the studies and methodologies being followed in the U.S. are of much interest by way of background for work in India. It is known that in the U.S. the problem of poverty - once described as the war on poverty - has been put on the backburner for several years. Interest has now revived, as witnessed by some recent publications from the U.S.[2] The point to emphasise is that poverty in U.S. is in nature and structure different from poverty in India, specially in rural areas. Moreover, collection of data on poverty in the US in intended to serve as a basis of policy and legislation by the President and the Congress. Data have a practical social purpose. It would seems that in India thanks to the valuable data gathered by the NSs, the numerology of poverty has come to receive greater attention from planners and policy-makers than the sociology, economic and politics of action needed to diminish the range and depth of poverty. Much of the administrative efforts presently built around assisting those below the poverty line calls for fresh approaches.

The contribution by Barman and Nag on *Inflation in India. A multidimensional view through various Price Indices* has little to say about the nature, causes and impact of inflation on different sections of the population and consequently on further development. Inflation is not continous, unbroken phenomenon which can be studied for several decades together. Each period of inflation has its distinct character, causation and consequences. The study of inflation calls for combined work by economists and statisticians. Attention has also to be given to different measures of inflation, the factors entering into each of the series currently under preparation. The trends, and implications have to be studied critically. Currently, public statements on the very low level of inflation now prevailing seem to be somewhat simplistic in nature, and the underlying factors are not examined with the attention they deserve.

The contribution by Golkar and Mitra on *Total Productivity Growth in Indian Industry* is essentially a review of studies which have been undertaken over several years. It seems difficult in one sweep to speak of Indian industry as a whole. Each segment of industry, both organised and unorganised calls for separate study. The various factors involved have to be isolated and studied by themselves and in relation to one another. Studies undertaken by the National Productivity Council and Management Institutes, focusing on specifics, would provide more relevant guidance for policies calculated to enhance the productivity of Indian industry in relation to the use of domestic capital, foreign, and labour inputs.

### IV

In some ways, the issues raised by Minhas in Chapter 9 on *Decentralised Database for Local Government*, supplemented to an extent by Michael Ward's paper in Chapter 10 on *Decentralisation and Development. Defining the Data Requirements* have a political immediacy of their own. The stage at the policy level for rural areas has already been set by Pari

IX A of the Constitution read with Schedule XI which lists the areas of responsibility assigned to Panchayats. In the manner in which effect has been given so far to this part of the Constitution as it now stands, there is room for much criticism. However, from the angle of statistical information, an effective beginning has still to be made. For local planning at each level we need what might be described as "horizontal" data continuously updated and used for planning, programming, and monitoring performance. Within the existing system, in each field, data are presented so as to serve the purpose of vertical aggregation from the village to block, the district, the state and eventually for the country as a whole. Presented thus, such statistical data are not of much use operationally for planning at levels closer to the community.

The task in building up of data base for decentralised development in every part of the country, with variations demanded by local conditions, is of enormous importance and urgency. Minhas has specially stressed that

> "the problem of decentralizing the data system is evolutionary in nature with a strong institutional content. It might turn out to be costly mistake if its solution is sought mainly through investments in modern information technology (IT) at the local community levels. We suggest a path that should preserve the continuity of the existing data flows while the system evolves in harmony and friendship with modern information technology. The old and the new arrangements for collection and processing of data at the local level should be fused together to support and strengthen the process of democratic decentralization and local planning"

A few carefully prepared Type studies under realistic conditions could be helpful in preparing *Preliminary Guidelines* for building up data for local development and planning. These Guidelines could then be discussed and tested more widely, and further refined.

## V

This paper has been given the subtitle '*A Partial Agenda for Action*'. This has been done to draw attention to two areas of statistical development which have considerable importance for India's economic progress.

Though the NSS have done much to obtain data on unemployment in categories defined originally by the Dantwala Committee, we really know too little about the *structure of employment and unemployment.* Data concerning skill and education profiles, earnings, periods of unemployment and underemployment for different categories of workers (male and female) in different branches of the national economy and in terms of regions and areas are exceedingly important action. Such data are essential to a comprehensive and effective policy for enlarging employment and raising productivity.[3]

The second area which calls for critical study is the actual application in India of the International System of National Accounts, 1993 and the practical and policy uses to which the information collected and published from year to year are being actually put. As the paper on Canada shows, even in that advanced country several adaptations have to be made. In India, several components of national accounts tables have a weak information base. These elements need to be identified closely and steps continuously taken to make the National Accounts more dependable for policy and planning. In fact, there are several areas in which adaptation and innovation are called for[4]

1. *B.S. Minhas ed. Natinal Income Accounts and Data Systems (Oxford University Press. 2002).*
   *Report of the National Statistics Commission Vols. I and II, August 2001 (Chairman C. Rangarajan), Ministry of Statistics and Programme Implementation*

2. *Contribution by Robert Horseman on Poverty and the Distribution of Well-being since the 1960's in George L. Perry and James Tobin in Economic Events, Ideas and Policies (1998).*

   *Daniel W. Weingberg: It takes a Nation, A New Agenda for fighting Poverty (1997).*
   *Dale W. Jorgensen, Did we lose thr war om Poverty? Journal of Economic Perspectives, 1998).*

3. *Attention may be invited to an early paper published in the Indian Journal of Economics, Vol 22, No. 4, April-June 1976, pp 319-363. Tarlok Singh, Employment and Planning - Assessment and strategies in India.*

4. *All too frequently percentages of GDP are cited in public statements in several varied contexts. These in fact throw little light on the actual quantities and dimensions involved. Inter-country are also frequently made and used in doubtful ways*

*Source: IASSI Vol 19 No.4*

## AIRPORT PERFORMANCE : APRIL- MARCH 2001-02

| | Passenger traffic ('000) | Passenger traffic (% chg) | Share of dom. (%) | Share of int. (%) |
|---|---|---|---|---|
| Bombay | 11471.4 | -5.8 | 56.9 | 43.1 |
| Delhi | 8499.2 | -4.9 | 56.3 | 43.7 |
| Madras | 3784.2 | -6.9 | 54.0 | 46.0 |
| Calcutta | 2561.3 | -4.7 | 76.9 | 23.1 |
| Bangalore | 2267.8 | -7.2 | 91.1 | 8.9 |
| Hyderabad | 1677.2 | 4.2 | 80.2 | 19.8 |
| Trivandrum | 958.6 | -5.1 | 23.3 | 76.7 |
| Cochin | 832.9 | 7.9 | 49.7 | 50.3 |
| Goa | 820.6 | -6.4 | 75.6 | 24.4 |
| Ahmedabad | 768.1 | -9.3 | 77.6 | 22.4 |
| Calicut | 522.0 | 7.5 | 36.9 | 63.1 |
| Guwahati | 433.6 | -3.8 | 100.0 | 0.0 |
| Pune | 372.5 | -10.3 | 100.0 | 0.0 |
| Lucknow | 296.3 | -1.9 | 93.5 | 6.5 |
| Srinagar | 243.6 | -3.8 | 100.0 | 0.0 |
| Vadodara | 238.8 | 12.8 | 100.0 | 0.0 |
| Coimbatore | 238.6 | -9.4 | 98.4 | 1.6 |
| Jaipur | 227.1 | -16.9 | 100.0 | 0.0 |
| Mangalore | 205.8 | -3.9 | 100.0 | 0.0 |
| Jammu | 190.2 | -17.3 | 100.0 | 0.0 |
| Nagpur | 187.2 | -5.8 | 100.0 | 0.0 |
| Varanasi | 166.2 | -24.5 | 81.9 | 18.1 |
| Amritsar | 129.4 | -14.9 | 9.5 | 90.5 |
| Tiruchchirappalli | 69.1 | -11.8 | 20.8 | 79.2 |
| All airports | 40003.1 | -4.8 | 66.0 | 34.0 |

Source: CMIE July issue

# IS INDIAN AGRICULTURE APPROACHING THE LIMITS TO GROWTH ?

**P.D. Jeromi** - (*Continuation from previous issue*)

## Section II

### Major Factors Affecting the Growth Potential

A number of factors are constraining the growth potential of the sector. Here, we identify four major factors responsible for limiting the growth potential of the sector. They are: (a) Lack of long-term policy perspective, (b) Decline of public sector capital formation, (c) inadequate research and development efforts, and more importantly (d) Inefficient management of natural resources like land and water.

### (a) Lack of Long-term Policy Perspective

On the policy front, there was a lack of long-term strategy for agricultural development. One will be surprised to find that only recently the government has come out with a national agricultural policy. From the very beginning of the planning process in India, especially from the Second Five Year Plan on wards with the sectoral priorities of Mahalanobis model favouring industry, the emphasis has been placed on industry relative to agriculture (Bhide,et al, 1998). Broadly, the two basic objectives of agricultural policies have been (a) self-sufficiency in production, and (b) stability in price. As the objective of higher production and thereby achieving self-sufficiency in production (which required incentives through higher prices) is inherently inconsistent with the objective of achieving stability in prices, there was a policy dilemma. The policies followed for agricultural development suffer from a number of weakness. First, though there was no significant direct taxation of the sector, agricultural sector has suffered from a typical anti-agricultural bias due to the nature of policies followed in other sectors like industry, trade, exchange rate, etc. (Gulati, 1998). Agricultural policies provided little incentives for the farmers, as the agricultural prices were depressed (Indian farmers received lower price than international prices). As there were numerous controls and restrictions, the sector was unprotected vis-à-vis other sectors of the economy. The restrictions on agricultural exports were believed to be one of the prime reasons for the unprotection of the sector as compared to the Industrial sector (Gulati and Pursell, 1990, Singh, 1995, *Economic Survey* 1996 -97,Parikh, 1999). Second, the nature of the policies was inward-looking as it was driven less by comparative advantage. In general, agricultural policies gave little emphasis on agricultural exports as a means of stimulating domestic production (Jeromi, 1997). Third, it has excessive price-based focus than non-price factors like water, infrastructure, research and development (R&D), extension services, etc.., which are important determinants of agricultural production in India, a fact highlighted more than three decades ago by Dantwala (1967) and recently by Pulapare (2000) and Vaidhyanathan (2000). These weaknesses of agricultural policies *inter alia*. Affected the faster growth of the sector and in creating a sound infrastructure base for future growth

### (b) Neglect of Capital Formation

Lack of long-term perspectives on the development of the sector is clearly reflected in the poor state of capital formation in the sector, which is likely to affect the future growth. In fact, one of the most disquieting developments in the agricultural sector during the last two decades has been the neglect of capital formation, particularly in the public sector. Gross capital Formation (GCF) in agriculture as per cent of total gross capital formation in the economy, after rising during the 70's declined during the eighties and nineties. In 1999-2000 it was just 5.8 per cent as against 16.3 per cent in 1980-81. Further, GCF in agricultural as per cent GDP in agriculture also declined during the last two decades from 10.9 per cent in 1980-81 to 7 per cent in 1999-2000. What is more disturbing is the fact that GCF in the agricultural sector by the public sector declined at annual average rate of 4 per cent during 1980's. The average annual growth was just 1 per cent during the 1990's. As a result, the share of public sector in total capital formation in the sector declined to around 23 per cent during the nineties as against 32 per cent during seventies. However. In the private sector, the decline was only marginal during the eighties (-0.1 per cent) and it picked up at a moderate rate of 6.7 per cent in the nineties (Table 3).

**Table 3**
**Gross Capital Formation in Agriculture**

| Year | GCF in Agriculture | | | GCF as % of GDP in Agriculture | GCF as % of Total GCF in Economy* |
|---|---|---|---|---|---|
| | Public | Private | Total | | |
| | At 1980-81 Prices | | | | |
| 1970-71 | 789 | 1996 | 2785 | 7.8 | 14.7 |
| 1980-81 | 1796 | 2840 | 4636 | 10.9 | 16.3 |
| 1990-91 | 1154 | 3440 | 4594 | 7.5 | 8.1 |
| | At 1993-94 Prices | | | | |
| 1995-96 | 4848 | 10842 | 15690 | 6.8 | 5.9 |
| 1996-97 | 4668 | 11508 | 16176 | 6.4 | 6.7 |
| 1997-98 | 3979 | 11974 | 15953 | 6.5 | 5.9 |
| 1998-99** | 3846 | 12538 | 16384 | 6.2 | 5.9 |
| 1999-00** | 4668 | 13988 | 18656 | 7.0 | 5.8 |
| | Annual Average Growth % | | | | |
| 1971-79 | 10.0 | 7.2 | 7.9 | | |
| 1980-89 | -4.0 | -0.1 | -1.5 | | |
| 1990-99 | 1.0 | 6.7 | 5.0 | | |

Note: * Gross Capital Formation adjusted for errors and omissions
** Provisional

During the Ninth Plan (1997-2002), investment requirement in the agricultural sector is estimated at 1,54,900 crore, of which around 82,200 crore or 42 per cent is expected to come from the public sector (centre and states). Given the current trends inn the public sector capital formation, it is doubtful whether the target will be achieved at the end of the plan period (RAO AND Jeromi, 2000). There is lively debate in the literature on complimentarity between public and private sector capital formation in agricultural sector. Here we take the view that public sector investment has crucial role to play in creating infrastructure inn terms of irrigation, roads, markets, storage facilities, rural electrification and technology development. Private sector capital formation is hard to come in these areas. The experience shows that private sector capital formation is essentially taking place for short-term asset building and it is mainly in the areas of mechanization, ground levelling, private irrigation, etc. Therefore, public sector capital formation needed to be augmented with a definite content and targeted focus, especially in the case of rain-fed areas, which lack not only in irrigation facilities but also in other infrastructural facilities. Here it may be mentioned that public spending in agriculture is a common feature in both the developed and developing countries. In a World Bank study, Blarcom, et al, (1993) found that in the case 40 developing countries, the total central government expenditure during 1972 to 1988 formed around 10 per cent of net value of agricultural production. In the case of the group of 15 developed countries. It formed around 20 per cent of their net value of agricultural production. The comparative figure for India is far too low.

There is a view among the agricultural economists that the lagged effect of decline of capital formation during the eighties has been one of the major reasons for the decelerated growth of the sector during the n ineties (Mahendra Dev. 1998). Therefore, the subdued level of capital formation during the nineties can have an impact on agriculture production in the coming years.

**(c) Lagging Research and Development Efforts**

Another important factor limiting the growth potential of the sector is the lack of break-through in research and development after the Green Revolution. Perhaps, it may be one of the reasons for the decline of productivity in the nineties. India compares poorly with the productivity levels in major producing countries. Though India is one among the major producers of agricultural commodities in the world, the yield levels, here, for a number of commodities like paddy, wheat, groundnut, cotton, jute, etc., were far lower than the yield levels in major producing countries and in case of some crops it was even lower than the world average (Table 4).

**Table 4**
**Yield of Important Crops in Major Producing Countries in 1997 (Kg./ha)**

| Paddy | | Wheat | | Groundnut | |
|---|---|---|---|---|---|
| Country | Yield | Country | Yield | Country | Yield |
| China | 6331 | China | 4087 | China | 2574 |
| Indonesia | 4561 | France | 6530 | Nigeria | 1124 |
| Pakistan | 2827 | USA | 2673 | USA | 2828 |
| Philippines | 2933 | Australia | 1712 | Indonesia | 1519 |
| Thailand | 2143 | Canada | 2128 | Sudan | 762 |
| India | 2915 | India | 2654 | India | 988 |
| World | 3827 | World | 2686 | World | 1273 |
| India % of World | 76.2 | India % of World | 98.8 | India % of World | 77.6 |

| Sugarcane | | Cotton | | Jute | |
|---|---|---|---|---|---|
| Country | Yield | Country | Yield | Country | Yield |
| Brazil | 69021 | China | 943 | Bangladesh | 1577 |
| China | 75982 | USA | 769 | China | 2517 |
| Thailand | 55878 | Pakistan | 552 | Thailand | 3548 |
| Mexico | 72734 | Turkey | 1065 | Myanmar | 939 |
| Australia | 97337 | Argentina | 368 | Brazil | 1714 |
| India | 69737 | India | 321 | India | 1830 |
| World | 63324 | World | 584 | World | 1734 |
| India % of World | 110.1 | India % of World | 55.0 | India % of World | 105.5 |

India is considered as having the largest public agricultural research establishments in the world (Evenson, et, 1999). Indian Council of Agricultural Research (ICAR) and agricultural universities constitute the main parts of governmental agencies. However, agricultural research in India suffers from several weakness like (I) uneven progress of varietal improvement across crops and regions; (ii) neglect of crop system research; (iii) unimpressive results of local adaptive research; (iv) inadequacy of collaborative multi- disciplinary research; (v) weak interaction between researchers, extension workers and farmers; (vi) excessive centralization of planning and monitoring; (vii) lack of accountability for performance, etc. (Vaidyanathan, 2000). Compared to other countries. India's efforts in research and development, in terms of provision of resources, is insufficient. India is investing only around 0.3 per cent of GDP in agriculture for agricultural research as against 0.7 per cent in the developing countries and 2-3 per cent in the case of developed countries (Evenson, et al, 1999). Expenditure on agricultural research and education accelerated during the post-green revolution period of the 1970's, but slowed down since the mid-80's and it hovered around 0.49 per cent of agricultural GDP in the early 1990s, which was lower than the requirement of 1 per cent projected by the ICAR. Further, the level of research expenditure was sub-optimal or significantly lower than desired in states like Bihar, Orissa, Madhya Pradesh, Uttar Pradesh and West Bengal where productivity is low. Crop-wise, research expenditure was low in the case of rice, certain coarse cereals, pulses and oilseeds (Pal, et al, 1997).

Since there is hardly any scope for further expansion of area under cultivation, the future production prospects depends largely on the improvements in yield levels. Here what we need is to break the yield barrier and bridge the gap between the potential and actual yield through research and development (R & D) efforts. ICAR studies reveal that there is vast unexplored technological potential for improvement in the yield of crops. In this context, Swaminathan (1999) noted that the " low yield phenomena" in India should be considered as a "yield reservoir" and it should be treated as an asset for future development of the sector. Exploiting the "yield

reservoir" inter alia, requires substantial investment, development and development of high yielding seed varieties. So far the emphasis has been use of HYV seeds, but it loses it vigour with time. Therefore, new varieties need to be developed periodically to expand production possibilities. However, agricultural research establishments could not come up with improved varieties of seeds. Which are suited to different regions of the country, especially in drought prone areas. Therefore, it is imperative for the country to build up a sound agricultural research system, which is responsive to the changing needs and circumstances. As the agricultural growth reduces rural poverty directly, and it fosters the conditions for pro- poor growth in the non-farm sectors. It is imperative to overcome the limits to growth by increase in productivity of the sector.

**(d)Rising Soil Degradation and Over - Exploitation of Ground Water**

Large -scale soil degradation and over-exploitation of ground water are other important factors putting limits on growth of the sector. Around 40 per cent of India's total geographical area is officially estimated as degraded (some other estimates put the figure at 50 per cent). Using the guidelines of the Global Assessment of Soil Degradation (GLASOD), Sehgal and Abrol (1994_) estimated

The extent of soil degradation in India. Table 5 reveals that the total area under degradation is quite large and severity is high with significant loss of yield in case of around 68 per cent of the total area degraded.

**Table 5**
**Extend of Soil Degradation Severity in India**

| Type of Degradation | | Extent of Degradation | | | | |
|---|---|---|---|---|---|---|
| | | Low[1] | Medium[2] | High[3] | Very High[4] | Total Area |
| 1 | Water Erosion | 5.0 | 24.3 | 107.2 | 12.4 | 148.9 |
| 2 | Loss of Top Soil | | - | 6.2 | - | 6.2 |
| 3 | Loss of Top Soil or Terrain Deformation | | - | 4.6 | - | 4.6 |
| 4 | Loss of Soil due to Terrain Deformation or due to over -blowing | | - | | 2.7 | 2.7 |
| 5 | Loss of Nutrients | | - | 3.7 | - | 3.7 |
| 6 | Salinization | 2.8 | 2.0 | 5.3 | - | 10.1 |
| 7 | Water Logging | 6.4 | 5.2 | - | - | 11.6 |
| 8 | Total area | 14.2 | 31.5 | 127.0 | 15.1 | 187.7 |

*Note:* *1. Negligible loss (upto 15 %) of yield, easily manageable*
*2. Moderate loss (15 to 33 percent) in yield, soil can be managed at the farm level*
*3. Significant loss (33 to 67 percent) of yield, affected area not economical to cultivate*
*4. Unmanageable loss of yield and uneconomical to use*

The emergence of rice-wheat crops system instates like Punjab and Haryana, on account of continuous increase in procurement prices, has resulted over-exploitation of natural resource base. An ICAR (1998) study found that soil health is deteriorating in Punjab and Haryana, and this is a major cause of decline or stagnation in productivity of cereals, particularly of rice and wheat. The study revealed that the organic carbon content in the soils in Punjab and Haryana has declined to 0.2 per cent in 1995 from 0.5 per cent in the sixties. Soils with low phosphorous content have also increased to 73 per cent from only 3.5 per cent in 1975 in Haryana. Similarly, soils with high potash category have scaled down from 91 per cent in 1975 to 62 per cent in 1995. . Further, consequent to the decontrol of prices of phosphorous and potash, there was decline in the application of these fertilizers. These caused nutrient imbalance in the soils. Now farmers have to apply more fertilizers to get the same .yield as they were getting with less fertilizer 20-30 years ago. In the case of ground water, the study found that the rapid increase in the number of tube-wells during last three decades in the region has resulted in over-exploitation

of ground water. This decline forces the farmers to lower the pumps further deeper in the wells, which results in the use of irrigation with saline water ( a detailed discussion on the emerging crisis in the agricultural sector of Punjab can be found in Chand, 1999).

The irrigation potential in the country has been estimated at 85 million hectares, of which76 million hectares have been already utilized by 1993-94. The average cost per hectare of irrigation potential created has risen sharply from Rs. 8,620 during the First Five Year Plan to Rs. 29,587 in the Seventh Five Year Plan at 1980-81 prices. This acts as a constraint to further argument the irrigation potential. Even after full utilization of the irrigation potential, nearly 45 per cent of the net cultivated area will have to depend on rainfall. As the present agricultural development strategy in India is centered mainly on the irrigated areas and the yield levels of crops in many irrigated area are plateauing, there is a growing realization that agricultural production cannot be increased beyond a point (Planning Commission, 1997b).

## Section III

### Concluding Observation

To conclude, the indications provided by the deceleration in growth of area, production and productivity, over-use of water resources, degradation of soil, decline of capital formation in the public sector, etc.., tend to suggest that Indian agriculture is approaching the limits to growth in the near future. The estimation of potential output also suggests that the scope for higher growth is limited. To overcome the limits to growth and put the agricultural sector on an ambitious growth curve, there is a need to correct the policy bias against agriculture, make higher investments, develop new varieties of seeds, conserve natural resources like land and water, and provide incentives to the farmers to adopt modernization.

*Source: Prajnan, Vol. XXX, No.3, 2001-02*

## Kerala Parched as rainfall 37% short of normal

The monsoon this year has had a quirky run in its first 40 days. Though the national average has been around 99% causing floods in some areas, elsewhere there have been dry runs.

There have been floods in Maharashtra and Assam, but others like Kerala and Lakshadweep which are traditional beneficiaries of the monsoon bounty have received rainfall way below average levels.

The situation in Kerala has been so abnormal that water tankers can be seen plying in the capital city in what should be a time when incessant rains bring the town to a standstill.

Meteorological Department Director M. D. Ramachandran told ET that Kerala had a shortage of as much as 37% until July 10, compared to its long-term average, while Lakshadweep recorded a dip of 31%.

Interestingly, the national monsoon rainfall in the first 40 days this year, beginning June 1, has been 99% of the average. Of the 36 meteorological sub divisions in the country, 24 received excess or normal rainfall, while 11 recorded below par rainfall. Of the latter, Kerala and Lakshadweep are the two that have recorded a significant drop.

In the period from June 1 to July 10, Kerala has received only 573 mm of rainfall, as against the normal rainfall of 917 mm, representing a 37% drop.

The situation has been grave enough for the state to seek more electricity from the Central pool because its hydel reservoirs are drying up.

Kerala relies heavily on hydel power, and the storage in reservoirs in the state is capable of generating power required for another 20 days only.

Of the state's annual average rainfall of 292 cm, as much as 203 cm is received during the monsoon period in a normal year.

## AREA PRODUCTION AND YIELD OF RICE DURING 1999-2000 AND 2000-2001

**In respect of major rice producing states along with coverage under irrigation**

Area: Million Hectares, Production: Million Tones, Yield: Kg/Hectare **2000-2001**

| State | Area | % of Total Area | Production | % of Total Production | Cumulative % of Total Production | Yield |
|---|---|---|---|---|---|---|
| West Bengal | 5.44 | 12.26 | 12.43 | 14.65 | 14.65 | 2287 |
| Uttar Pradesh | 5.84 | 13.17 | 11.54 | 13.60 | 28.24 | 1976 |
| Andhra Pradesh | 4.03 | 9.08 | 11.45 | 13.49 | 41.73 | 2842 |
| Punjab | 2.61 | 5.88 | 9.15 | 10.78 | 52.52 | 3506 |
| Tamil Nadu | 2.11 | 4.76 | 7.22 | 8.51 | 61.02 | 3415 |
| Bihar | 3.67 | 8.27 | 5.42 | 6.39 | 67.41 | 1475 |
| Orissa | 4.43 | 9.99 | 4.61 | 5.43 | 72.84 | 1041 |
| Assam | 2.67 | 6.02 | 4.00 | 4.71 | 77.55 | 1495 |
| Karnataka | 1.48 | 3.34 | 3.73 | 4.39 | 81.95 | 2520 |
| Chhattisgarh | 3.60 | 8.12 | 3.24 | 3.82 | 85.77 | 900 |
| Haryana | 1.05 | 2.37 | 2.68 | 3.16 | 88.92 | 2559 |
| Maharashtra | 1.51 | 3.40 | 1.95 | 2.30 | 91.22 | 1285 |
| Jharkhand | 1.48 | 3.34 | 1.64 | 1.93 | 93.15 | 1111 |
| Gujarat | 0.65 | 1.47 | 1.01 | 1.19 | 94.34 | 1553 |
| Madhya Pradesh | 1.67 | 3.76 | 0.96 | 1.13 | 95.48 | 574 |
| Kerala | 0.35 | 0.79 | 0.75 | 0.88 | 96.36 | 2162 |
| Others | 1.77 | 3.99 | 3.09 | 3.64 | 100.00 | @ |
| **All India** | **44.36** | **100.00** | **84.87** | **100.00** | | **1913** |

Area: Million Hectares, Production: Million Tones, Yield: Kg/Hectare **1999-2000**

| State | Area | % of Total Area | Production | % of Total Production | Cumulative % of Total Production | Yield | % Coverage Under Irrigation during 1998-99 |
|---|---|---|---|---|---|---|---|
| West Bengal | 6.15 | 13.62 | 13.76 | 15.34 | 15.34 | 2237 | 25.9 |
| Uttar Pradesh | 6.08 | 13.46 | 13.23 | 14.75 | 30.10 | 2176 | 66.2 |
| Andhra Pradesh | 4.01 | 8.88 | 10.64 | 11.86 | 41.96 | 2650 | 95.9 |
| Punjab | 2.60 | 5.76 | 8.72 | 9.72 | 51.68 | 3347 | 89.8 |
| Tamil Nadu | 2.16 | 4.78 | 7.53 | 8.40 | 60.08 | 3481 | 93.5 |
| Bihar | 5.00 | 11.07 | 7.25 | 8.08 | 68.16 | 1450 | 41.1 |
| Orissa | 4.60 | 10.19 | 5.19 | 5.79 | 73.95 | 1127 | 38.0 |
| Assam | 2.65 | 5.87 | 3.86 | 4.30 | 78.26 | 1459 | 21.7 |
| Karnataka | 1.45 | 3.21 | 3.72 | 4.15 | 82.40 | 2564 | 70.9 |
| Chhattisgarh | * | * | * | * | * | * | * |
| Haryana | 1.08 | 2.39 | 2.58 | 2.88 | 85.28 | 2385 | 99.8 |
| Maharashtra | 1.52 | 3.37 | 2.56 | 2.85 | 88.14 | 1684 | 28.7 |
| Jharkhand | * | * | * | * | * | * | * |
| Gujarat | 0.66 | 1.46 | 0.98 | 1.09 | 89.23 | 1482 | 70.6 |
| Madhya Pradesh | 5.35 | 11.85 | 6.38 | 7.11 | 96.34 | 1191 | 23.3 |
| Kerala | 0.35 | 0.78 | 0.77 | 0.86 | 97.20 | 2204 | 55.8 |
| Others | 1.50 | 3.32 | 2.51 | 2.80 | 100.00 | @ | |
| **All India** | **45.16** | **100.00** | **39.68** | **100.00** | | **1986** | **52.3** |

@: Since Area/Production is low, yield rate is not worked out

*: The relevant estimates are included in their respective parent states from where these states were carved out

Note: States have been arranged in descending order of percentage share of production during 2000-2001

*Source: Agriculture Statistics, Dept. of Agriculture & Co-operation Ministry of Agriculture, Government of India.*

# AREA PRODUCTION AND YIELD OF COCONUT DURING 1999-2000 AND 2000-2001

**In respect of major COCONUT producing states**

Area: Million Hectares, Production: '00' Million Nuts, Yield: Nuts/Hectare **2000-2001**

| State | Area | % of Total Area | Production | % of Total Production | Cumulative % of Total Production | Yield |
|---|---|---|---|---|---|---|
| Kerala | 0.94 | 51.09 | 54.96 | 43.63 | 43.63 | 5870 |
| Tamil Nadu | 0.32 | 17.39 | 31.58 | 25.07 | 68.70 | 9763 |
| Karnataka | 0.33 | 17.93 | 17.54 | 13.92 | 82.62 | 5255 |
| Andhra Pradesh | 0.10 | 5.43 | 10.93 | 8.68 | 91.30 | 10660 |
| West Bengal | 0.02 | 1.09 | 3.31 | 2.63 | 93.93 | 13490 |
| Maharasshtra | 0.02 | 1.09 | 2.44 | 1.94 | 95.86 | 14548 |
| Assam | 0.02 | 1.09 | 1.36 | 1.08 | 96.94 | 6502 |
| Goa | 0.03 | 1.63 | 1.25 | 0.99 | 97.94 | 5004 |
| Orissa | 0.02 | 1.09 | 1.10 | 0.87 | 98.81 | 6209 |
| Others | 0.04 | 2.17 | 1.50 | 1.19 | 100.00 | @ |
| All India | 1.84 | 100.00 | 125.97 | 100.00 | | 6847 |

Area: Million Hectares, Production: '00' Million Nuts, Yield: Nuts/Hectare **1999-2000**

| State | Area | % of Total Area | Production | % of Total Production | Cumulative % of Total Production | Yield |
|---|---|---|---|---|---|---|
| Kerala | 0.90 | 50.85 | 51.67 | 42.60 | 42.60 | 5747 |
| Tamil Nadu | 0.30 | 16.95 | 32.22 | 26.56 | 69.16 | 10599 |
| Karnataka | 0.32 | 18.08 | 16.72 | 13.79 | 82.95 | 5205 |
| Andhra Pradesh | 0.10 | 5.65 | 10.52 | 8.67 | 91.62 | 10342 |
| West Bengal | 0.02 | 1.13 | 3.24 | 2.67 | 94.29 | 13401 |
| Maharashtra | 0.02 | 1.13 | 2.18 | 1.80 | 96.09 | 13810 |
| Assam | 0.02 | 1.13 | 1.50 | 1.24 | 97.33 | 7426 |
| Goa | 0.03 | 1.69 | 1.22 | 1.01 | 98.33 | 4864 |
| Orissa | 0.02 | 1.13 | 0.51 | 0.42 | 98.76 | 2837 |
| Others | 0.04 | 2.26 | 1.51 | 1.24 | 100.00 | @ |
| All India | 1.77 | 100.00 | 121.29 | 100.00 | | 6860 |

@: Since Area/Production is low, yield rate is not worked out

Note: States have been arranged in descending order of percentage share of production during 2000-2001

*Source: Agriculture Statistics, Dept. of Agriculture & Co-operation Ministry of Agriculture, Government of India*

# PRODUCTIVE AREA, PRODUCTION AND YIELD OF CASHEWNUT DURING 1998-99 AND 1999-2000 IN RESPECT OF MAJOR CASHEWNUT PRODUCING STATES

Area - In '000 Hectares  Production -In '000 Tonnes  Yield - Nuts/ Hectare

| State | 1999-2000 | | | | | |
|---|---|---|---|---|---|---|
| | Productive Area | % of Total Area | Production | % of Total Production | Cumulative % of Total Production | Yield |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Maharashtra | 85 | 14.14 | 125 | 24.04 | 24.04 | 1470 |
| Kerala | 118 | 19.63 | 100 | 19.23 | 43.27 | 850 |
| Andhra Pradesh | 90 | 14.98 | 100 | 19.23 | 62.50 | 1100 |
| Karnataka | 86 | 14.31 | 60 | 11.54 | 74.04 | 700 |
| Tamil Nadu | 84 | 13.98 | 45 | 8.65 | 82.69 | 540 |
| Orissa | 65 | 10.82 | 40 | 7.69 | 90.38 | 670 |
| Goa | 49 | 8.15 | 30 | 5.77 | 96.15 | 610 |
| West Bengal | 9 | 1.50 | 8 | 1.54 | 97.69 | 900 |
| Others | 15 | 2.50 | 12 | 2.31 | 100.00 | 800 |
| All India | 601 | 100.00 | 520 | 100.00 | | 865 |

| State | 1998-1999 | | | | | |
|---|---|---|---|---|---|---|
| | Productive Area | % of Total Area | Production | % of Total Production | Cumulative % of Total Production | Yield |
| | 8 | 9 | 10 | 11 | 12 | 13 |
| Maharashtra | 58 | 10.12 | 85 | 18.48 | 18.48 | 1500 |
| Kerala | 118 | 20.59 | 130 | 28.26 | 46.74 | 1100 |
| Andhra Pradesh | 100 | 17.45 | 80 | 17.39 | 64.13 | 800 |
| Karnataka | 83 | 14.49 | 40 | 8.70 | 72.83 | 500 |
| Tamil Nadu | 76 | 13.26 | 35 | 7.61 | 80.43 | 460 |
| Orissa | 67 | 11.69 | 50 | 10.87 | 91.30 | 750 |
| Goa | 48 | 8.38 | 20 | 4.35 | 95.65 | 420 |
| West Bengal | 9 | 1.57 | 8 | 1.74 | 97.39 | 890 |
| Others | 14 | 2.44 | 12 | 2.61 | 100.00 | 860 |
| All India | 573 | 100.00 | 460 | 100.00 | | 803 |

Note : States have been arranged in descending order of percentage share of production during 2000-01.

*Source: The Directorate of Cashewnut & Cocoa Development, Cochin, Kerala.*

## POVERTY

High poverty levels are synonymous with poor quality of life, deprivation, malnutrition, illiteracy and low human resource development. The eradication of poverty has been an integral component of the strategy for economic development in India. The Planning Commission has been estimating the incidence of poverty at the national and state level using the methodology contained in the report of the Expert Group on Estimation of Proportion and Number of poor (Lakdawala Committee) and applying it to consumption expenditure data from the large sample surveys on consumer expenditure conducted by the NSSO at an interval of approximately five years. On the basis, comparable estimates of poverty are available at national and state level from 1973-74 to 1999-2000.

According to the latest large sample survey data on consumer expenditure made available by the National Sample Survey Organisation (NSSO) from its 55th Round Survey (July 1999- June 2000), the poverty ratio on a 30 day recall basis, is estimated at 27.09 percent in rural areas, 23.62 percent in urban areas and 26.10 percent for the country as a whole. The incidence of poverty expressed as a percentage of people living below the poverty line has witnessed a steady decline from 55 percent in 1973-74 to 36 percent in 1993-94 and 26 percent in 1999-2000.(Table 1). Though the poverty ratio declined, the number of poor remained stable at around 320 million for a fairly long period of two decades, (1973-1993), due to a countervailing growth in population. The latest estimates for 1999-2000 reveal a significantly reduced number of poor, at about 260 million out of a total population of 997 million.

**TABLE 1**
**Estimates of Poverty**

| Year | All India Number (Million) | Poverty Ratio (percent) | Rural Number (Million) | Poverty Ratio (percent) | Urban Number (Million) | Poverty Ratio (percent) |
|---|---|---|---|---|---|---|
| 1973-74 | 321 | 54.9 | 261 | 56.4 | 60 | 49.0 |
| 1977-78 | 329 | 51.3 | 264 | 53.1 | 65 | 45.2 |
| 1983 | 323 | 44.5 | 252 | 45.7 | 71 | 40.8 |
| 1987-88 | 307 | 38.9 | 232 | 39.1 | 75 | 38.2 |
| 1993-94 | 320 | 36.0 | 244 | 37.3 | 76 | 32.4 |
| 1999-2000 | 260 | 26.1 | 193 | 27.1 | 67 | 23.6 |

*Source : Planning Commission*

Poverty at the national level is estimated as the weighted average of state-wise poverty levels. The poverty ratio is estimated from the state-specific poverty lines and the distribution of persons by expenditure groups obtained from the NSS data on consumption expenditure. The state specific poverty ratios at the national and state levels are listed at Table 2. State-wise poverty ratios have witnessed a secular decline from 1973-74 to 1999-2000. Though poverty has declined at the macro level, rural-urban and inter-state disparities are visible. The rural poverty ratio is still relatively high in Orissa, Bihar and the North Eastern States. In Orissa, Madhya Pradesh, Bihar and Uttar Pradesh, the urban poverty ratios were in the range of 30.89 to 42.83 percent in 1999-2000. The combined rural and urban poor make up 47.15 percent of Orissa and 42.60 percent of Bihar. For the states of Madhya Pradesh, Sikkim, Arunachal Pradesh and Assam the combined poverty ratios in 1999-2000 were in the range of 33.47 to 37.43 percent. There has been a significant reduction in poverty during the period in Kerala, Jammu & Kashmir, Goa, Lakshdweep, Delhi, Andhra Pradesh, Gujarat, Tamil Nadu, Karnataka, West Bengal and Andaman & Nicobar Islands. Thus, while some states such as Punjab and Haryana have succeeded in reducing poverty by following the path of high agricultural growth, others have focussed on particular areas of development e.g. Kerala has focussed on human resource development, West Bengal on vigorous implementation of land reform measures and empowerment of Panchayats, and Andhra Pradesh on direct public intervention in the form of public distribution of foodgrains.

**Table 2**
**Poverty Ratio at the State Level**

(Percent)

| Sl no | State | Rural | | | Urban | | | Combined | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1973-74 | 1993-94 | 1999-00 | 1973-74 | 1993-94 | 1999-00 | 1973-74 | 1993-94 | 1999-00 |
| 1 | Andhra Pradesh | 48.41 | 15.92 | 11.05 | 50.61 | 38.33 | 26.63 | 48.86 | 22.19 | 15.77 |
| 2 | Arunachal Pradesh | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 51.93 | 39.35 | 33.47 |
| 3 | Assam | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 51.21 | 40.86 | 36.09 |
| 4 | Bihar | 62.99 | 58.21 | 44.30 | 52.96 | 34.50 | 32.91 | 61.91 | 54.96 | 42.60 |
| 5 | Goa | 46.85 | 5.34 | 1.35 | 37.69 | 27.03 | 7.52 | 44.26 | 14.92 | 4.40 |
| 6 | Gujarat | 46.35 | 22.18 | 13.17 | 52.57 | 27.89 | 15.59 | 48.15 | 24.21 | 14.07 |
| 7 | Haryana | 34.23 | 28.02 | 8.27 | 40.18 | 16.38 | 9.99 | 35.36 | 25.05 | 8.74 |
| 8 | Himachal Pradesh | 27.42 | 30.34 | 7.94 | 13.17 | 9.18 | 4.63 | 26.39 | 28.44 | 7.63 |
| 9 | Jammu & Kashmir | 45.51 | 30.34 | 3.97 | 21.32 | 9.18 | 1.98 | 40.83 | 25.17 | 3.48 |
| 10 | Karnataka | 55.14 | 29.88 | 17.38 | 52.53 | 40.14 | 25.25 | 54.47 | 33.16 | 20.04 |
| 11 | Kerala | 59.19 | 25.76 | 9.38 | 62.74 | 24.55 | 20.27 | 59.79 | 25.43 | 12.72 |
| 12 | Madhya Pradesh | 62.66 | 40.64 | 37.06 | 57.65 | 48.38 | 38.44 | 61.78 | 42.52 | 37.43 |
| 13 | Maharashtra | 57.71 | 37.93 | 23.72 | 43.87 | 35.15 | 26.81 | 53.24 | 36.86 | 25.02 |
| 14 | Manipur | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 49.96 | 33.78 | 28.54 |
| 15 | Meghalaya | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 50.20 | 37.92 | 33.87 |
| 16 | Mizoram | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 50.32 | 25.66 | 19.47 |
| 17 | Nagaland | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 50.81 | 37.92 | 32.67 |
| 18 | Orissa | 67.28 | 49.72 | 48.01 | 55.62 | 41.64 | 42.83 | 66.18 | 48.56 | 47.15 |
| 19 | Punjab | 28.21 | 11.95 | 6.35 | 27.96 | 11.35 | 5.75 | 28.15 | 11.77 | 6.16 |
| 20 | Rajasthan | 44.76 | 26.46 | 13.74 | 52.13 | 30.49 | 19.85 | 46.14 | 27.41 | 15.28 |
| 21 | Sikkim | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 50.86 | 41.43 | 36.55 |
| 22 | Tamil Nadu | 57.43 | 32.48 | 20.55 | 49.40 | 39.77 | 22.11 | 54.94 | 35.03 | 21.12 |
| 23 | Tripura | 52.67 | 45.01 | 40.04 | 36.92 | 7.73 | 7.47 | 51.00 | 39.01 | 34.44 |
| 24 | Uttar Pradesh | 56.53 | 42.28 | 31.22 | 60.09 | 35.39 | 30.89 | 57.07 | 40.85 | 31.15 |
| 25 | West Bengal | 73.16 | 40.80 | 31.85 | 34.67 | 22.41 | 14.86 | 63.43 | 35.66 | 27.02 |
| 26 | A & N Islands | 57.43 | 32.48 | 20.55 | 49.40 | 39.77 | 22.11 | 55.56 | 34.47 | 20.99 |
| 27 | Chandigarh | 27.96 | 11.35 | 5.75 | 27.96 | 11.35 | 5.75 | 27.96 | 11.35 | 5.75 |
| 28 | Dadra & Nagar | 46.85 | 51.95 | 17.57 | 37.69 | 39.93 | 13.52 | 46.55 | 50.84 | 17.14 |
| 29 | Daman & Diu | NA | 5.34 | 1.35 | NA | 27.03 | 7.52 | NA | 15.80 | 4.44 |
| 30 | Delhi | 24.44 | 1.90 | 0.40 | 52.23 | 16.03 | 9.42 | 49.61 | 14.69 | 8.23 |
| 31 | Lakshadweep | 59.19 | 25.76 | 9.38 | 62.74 | 24.55 | 20.27 | 59.68 | 25.04 | 15.60 |
| 32 | Pondicherry | 57.43 | 32.48 | 20.55 | 49.40 | 39.77 | 22.11 | 53.82 | 37.40 | 21.67 |
| | **All India** | **56.44** | **37.27** | **27.09** | **49.01** | **32.36** | **23.62** | **54.88** | **35.97** | **26.10** |

*N.A. Not Available*

1. Poverty *Ratio of Assam is used for Sikkim., Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura*
2. *Poverty Line of Maharashtra and expenditure distribution of Goa is used to estimate poverty ratio to Goa*
3. *Poverty Line of Himachal Pradesh and expenditure distribution of Jammu & Kashmir is used to estimate poverty ratio of Jammu & Kashmir.*
4. *Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island*
5. *Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.*
6. *Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra & Nagar Haveli.*
7. *Poverty Ratio of Goa is used for Daman & Diu.*
8. *Poverty Ratio of Kerala is used for Lakshadweep*
9. *Urban Poverty Ratio of Rajasthan may be treated as tentative.*
10. *Estimates on a 30-day recall basis for 1999-2000.*

*Source: Economic Survey 2001-2001, Government of India*

# STATE WISE POPULATION BELOW POVERTY LINE - 1999-2000

**(Based on 30 days recall period)**

| Sl. No. | States/Uts | Rural | | Urban | | Combained | |
|---|---|---|---|---|---|---|---|
| | | No. of | % of | No. of | % of | No. of | % of |
| 1 | Andhra Pradesh | 58.13 | 11.05 | 60.88 | 26.63 | 119.01 | 15.77 |
| 2 | Arunachal Pradesh | 3.80 | 40.04 | 0.18 | 7.47 | 3.98 | 33.47 |
| 3 | Assam | 92.17 | 40.04 | 2.38 | 7.47 | 94.55 | 36.09 |
| 4 | Bihar | 376.51 | 44.30 | 49.13 | 32.91 | 425.64 | 42.60 |
| 5 | Goa | 0.11 | 1.35 | 0.59 | 7.52 | 0.70 | 4.40 |
| 6 | Gujarat | 39.80 | 13.17 | 28.09 | 15.59 | 67.89 | 14.07 |
| 7 | Haryana | 11.94 | 8.27 | 5.39 | 9.99 | 17.34 | 8.74 |
| 8 | Himachal Pradesh | 4.84 | 7.94 | 0.29 | 4.63 | 5.12 | 7.63 |
| 9 | Jammu & Kashmir | 2.97 | 3.97 | 0.49 | 1.98 | 3.46 | 3.48 |
| 10 | Karnataka | 59.91 | 17.38 | 44.49 | 25.25 | 104.40 | 20.04 |
| 11 | Kerala | 20.97 | 9.38 | 20.07 | 20.27 | 41.04 | 12.72 |
| 12 | Madhya Pradesh | 217.32 | 37.06 | 81.22 | 38.44 | 298.54 | 37.43 |
| 13 | Maharashtra | 125.12 | 23.72 | 102.87 | 26.81 | 227.99 | 25.02 |
| 14 | Manipur | 6.53 | 40.04 | 0.66 | 7.47 | 7.19 | 28.54 |
| 15 | Meghalaya | 7.89 | 40.04 | 0.34 | 7.47 | 8.23 | 33.87 |
| 16 | Mizoram | 1.40 | 40.04 | 0.45 | 7.47 | 1.85 | 19.47 |
| 17 | Nagaland | 5.21 | 40.04 | 0.28 | 7.47 | 5.49 | 32.67 |
| 18 | Orissa | 143.69 | 48.01 | 25.40 | 42.83 | 169.09 | 47.15 |
| 19 | Punjab | 10.20 | 6.35 | 4.29 | 5.75 | 14.49 | 6.16 |
| 20 | Rajasthan | 55.06 | 13.74 | 26.78 | 19.85 | 81.83 | 15.28 |
| 21 | Sikkim | 2.00 | 40.04 | 0.04 | 7.47 | 2.05 | 36.55 |
| 22 | Tamilnadu | 80.51 | 20.55 | 49.97 | 22.11 | 130.48 | 21.12 |
| 23 | Tripura | 12.53 | 40.04 | 0.49 | 7.47 | 13.02 | 34.44 |
| 24 | Uttar Pradesh | 412.01 | 31.22 | 117.88 | 30.89 | 529.89 | 31.15 |
| 25 | West Bengal | 180.11 | 31.85 | 33.38 | 14.86 | 213.49 | 27.02 |
| 26 | A & N Islands | 0.58 | 20.55 | 0.24 | 22.11 | 0.82 | 20.99 |
| 27 | Chandigarh | 0.06 | 5.75 | 0.45 | 5.75 | 0.51 | 5.75 |
| 28 | Dadra & Nagar Haveli | 0.30 | 17.57 | 0.03 | 13.52 | 0.33 | 17.14 |
| 29 | Daman & Diu | 0.01 | 1.35 | 0.05 | 7.52 | 0.06 | 4.44 |
| 30 | Delhi | 0.07 | 0.40 | 11.42 | 9.42 | 11.49 | 8.30 |
| 31 | Lakshadweep | 0.03 | 9.38 | 0.08 | 20.27 | 0.11 | 15.60 |
| 32 | Pondicherry | 0.64 | 20.55 | 1.77 | 22.11 | 2.41 | 21.67 |
| | All India | 1932.43 | 27.09 | 670.07 | 23.62 | 2602.50 | 26.10 |

*N.A. Not Available*

1. Poverty *Ratio of Assam is used for Sikkim., Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura*
2. *Poverty Line of Maharashtra and expenditure distribution of Goa is used to estimate poverty ratio to Goa*
3. *Poverty Line of Himachal Pradesh and expenditure distribution of Jammu & Kashmir is used to estimate poverty ratio of Jammu & Kashmir.*
4. *Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island*
5. *Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.*
6. *Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra & Nagar Haveli.*
7. *Poverty Ratio of Goa is used for Daman & Diu.*
8. *Poverty Ratio of Kerala is used for Lakshadweep*
9. *Urban Poverty Ratio of Rajasthan may be treated as tentative.*
10. *Estimates on a 30-*day recall basis for 1999-2000.

*Source: Agricultural Statistics at a Glance - Ministry of Agriculture Government of India*

# THE DOHA DECLARATION - CAP

The Doha Declaration –comprising of a main Declaration, a Declaration on TRIPS Agreement and Public Health and a decision on implementation related issues and concerns- launches the future work programme of the WTO and includes elaboration and timetables for the current negotiations in agriculture and services and negotiations/ possible negotiations in a range of other issues.

**Implementation Issues** : A number of implementation issues have been addressed in the Decision on implementation related issues and concerns including longer time frame (of six months) for compliance with new SPS and TBT measures, moratorium of two years on non-violation complaints under the TRIPS Agreement, need for special care for initiation of back to back antidumping investigations within a year and co-operation and assistance by members in investigations relating to declared values. The declaration agrees that negotiations on all other outstanding implementation issues shall be an integral part of the work programme. Where specific negotiations are mandated, relevant implementation issues shall be addressed under the mandate and other outstanding implementation issues shall be addressed as a matter of priority by the relevant WTO bodies, which shall report to the Trade Negotiating Committee by the end of 2002 for appropriate action.

**Agriculture** : The Declaration commits to comprehensive negotiations aimed at: substantial improvements in market access for developing countries, reduction of with a view of phasing out, all forms export subsidies, & substantial reduction in trade distorting domestic support being given by the developed countries. It also takes note of non-trade concerns of developing countries and their development needs including food security and rural development. Special and different treatment for developing countries would be an integral part of the negotiations.

**Services** : The Negotiating Guidelines and Procedure adopted by the Council for Trade in services would form the basis for continuing negotiations in services with a view to achieving the objectives of GATS. The declaration recognises the larger number of proposals submitted by the members on various sectors including on movement of natural persons.

**Industrial tariffs** : The negotiations under industrial tariffs would aim at reducing or as appropriate eliminating tariffs, including the reduction of tariff peaks, high tariffs and tariff escalations, as well as non tariff barriers, in particular on products of export interest to developing ccountries. Product coverage shall be comprehensive and without a priori exclusions with negotiations taking into account the needs and interests of the developing countries including through less than full reciprocity in reduction commitments.

**TRIPS** : The work programme mandates negotiations on establishment of a multilateral system of notification and registration of geographical indications for wines and spirits by the 5th session of the Ministerial Conference. The issues related to extension of the higher level of protection of geographical indications to products other than wines and spirits, examination of relationship between the TRIPS Agreement and the Convention on Biological Diversity (CBD), the protection of traditional knowledge and folklore and other relevant new developments would be addressed by the TRIPS Council as part of the Implementation issues.Further, the Declaration on **TRIPS and Public Health** is one of the most significance outcomes of the Doha Conference. It recognises that the TRIPS Agreement can should be interpreted and implemented in a manner supportive of WTO members right ot protect public health and to promote access to medicines for all.

**WTO Rules** : The Declaration mandates negotiations aimed at clarifying and improving disciplines under the Agreement on Implementation and Subsidies and Countervailing. Measures while preserving the basic concepts, principles and effectiveness of these Agreements and taking into account the needs of developing countries. It also includes negotiations aimed at clarifying and improving disciplines and procedure under the existing WTO provisions applying to regional trade agreement (keeping into view the developmental aspects of these Agreements). Negotiations are further mandated on improvements and clarifications of the Dispute Settlement Understanding. Addressing outstanding implementation issues on these subjects would be an integral part of these negotiations.

**Special and Differential Treatment (S & D)** : The negotiations shall fully take into account the principle of special and differential treatment for developing countries. It has also been agreed to review all special and differential treatment provisions with a view to strengthening them & making them more precise, effective and operational.

**Electronic Commerce** : The Work Programme declares that Members will maintain their current practice of not imposing customs duties on electronic transmissions until the Fifth Mi nisterial Session.

**Singapore issues** : The issues relating to Trade and Investment, interaction between Trade and Competition, Transparency in Government Procurement and Trade Facilitation will continued to be pursued in the Working Group Study process. Negotiation on these subjects, according to the Work Programme, will take place after the Fifth session of the Ministerial Conference on the basis of a decision to be taken, by explicit consensus, at that session on modalities of negotiations.

**Environment** : Negotiations on limited aspects of trade and environment (relationship between existing WTO rules and specific trade obligations set out in Multilateral Environmental Agreements, procedures for regular information exchange between MEA and WTO and reduction/ elimination of tariff and non-tariff barriers to environmental goods and services) has been mandated, along with instructions to the committee on Trade and Environment to pursue its work on all items on its agenda, giving particiular attention to the issues of market acess, the relevant provisions of the TRIPS Agreement and labeling.

**Labour** : The Declaration recognises that ILO is the appropriate forum to address the issue of core labour standards.

**Working Groups** : The work Programme has also set up two Working Groups. One to examine the relationship between Trade, Debt and Finance for suggesting solutions, within the WTO mandate, to the problem of external indebtedness of developing countries and to strengthen the coherence of international trade and financial policies, with a view to safeguarding the multilateral trading system from the effects of financial and monetary instability. The other Working group will examine the relationship between Trade and transfer of Techonology and to facilitate, within the WTO mandate, increased flow of technology to developing countries.

Negotiations under the Work Programme are to be concluded not later than 1 January 2005 (except negotiation on improving and clarifying the Dispute Settlement Understanding which is to be conducted by end of may 2003). The conduct, conclusion and entry into force of the outcome of negotiations will be treated as parts of a single undertaking (except for Dsu). The overall conduct of the negotiations is to be supervised by a Trade Negotiations Committee under the authority of the General Council.

*Source: Economic Survey 2001-2001, Government of India*

## HABITATION STATUS AS ON 01.04.2001 AND 29.01.2002

| Sl No | States/ Uts | Status as on 01.04.2001 (Provisional) | | | | Status as on 29.01.2002 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | NC | PC | FC | Total | NC | PC | FC | Total |
| 1 | Andhra Pradesh | 0 | 18583 | 51149 | 69732 | 0 | 16907 | 52825 | 69732 |
| 2 | Arunachal Pradesh | 403 | 995 | 2900 | 4298 | 402 | 993 | 2903 | 4298 |
| 3 | Assam | 801 | 22314 | 47554 | 70669 | 759 | 21890 | 48020 | 70669 |
| 4 | Bihar | 2 | 2 | 105336 | 105340 | 0 | 0 | 105340 | 105340 |
| 5 | Chhattisgarh | 402 | 817 | 49160 | 50379 | 0 | 10 | 50369 | 50379 |
| 6 | Goa | 11 | 46 | 339 | 396 | 11 | 46 | 339 | 396 |
| 7 | Gujarat | 190 | 2235 | 27844 | 30269 | 147 | 1990 | 28132 | 30269 |
| 8 | Haryana | 0 | 193 | 6552 | 6745 | 0 | 140 | 6605 | 6745 |
| 9 | Himachal Pradesh | 1593 | 11658 | 32116 | 45367 | 1307 | 10848 | 33212 | 45367 |
| 10 | Jammu & Kashmir | 2074 | 3688 | 5422 | 11184 | 2074 | 3688 | 5422 | 11184 |
| 11 | Jharkhand | 497 | 119 | 99480 | 100096 | 5 | 20617 | 36060 | 56682 |
| 12 | Karnataka | 10 | 21148 | 35524 | 56682 | 5 | 20617 | 36060 | 56682 |
| 13 | Kerala | 805 | 6956 | 2002 | 9763 | 796 | 6965 | 2002 | 9763 |
| 14 | Madhya Pradesh | 127 | 0 | 109362 | 109489 | 70 | 0 | 109419 | 109489 |
| 15 | Maharashtra | 2256 | 26120 | 57554 | 85930 | 2121 | 25321 | 58488 | 85930 |
| 16 | Manipur | 30 | 302 | 2459 | 2791 | 30 | 282 | 2479 | 2791 |
| 17 | Meghalaya | 549 | 920 | 7170 | 8639 | 495 | 912 | 7232 | 8639 |
| 18 | Mizoram | 0 | 525 | 386 | 911 | 0 | 524 | 387 | 911 |
| 19 | Nagaland | 393 | 596 | 536 | 1525 | 371 | 585 | 569 | 1525 |
| 20 | Orissa | 34 | 119 | 113946 | 114099 | 15 | 50 | 114034 | 114099 |
| 21 | Punjab | 1792 | 3123 | 8534 | 13449 | 1748 | 3123 | 8578 | 13449 |
| 22 | Rajasthan | 6908 | 19545 | 67493 | 93946 | 6491 | 13832 | 73623 | 93946 |
| 23 | Sikkim | 0 | 472 | 1207 | 1679 | 0 | 396 | 1283 | 1679 |
| 24 | Tamil Nadu | 0 | 4934 | 61697 | 66631 | 0 | 1895 | 64736 | 66631 |
| 25 | Tripura | 287 | 711 | 6414 | 7412 | 287 | 581 | 6544 | 7412 |
| 26 | Uttar Pradesh | 32 | 126 | 243475 | 243633 | 30 | 97 | 243506 | 243633 |
| 27 | Uttaranchal | 262 | 1188 | 29558 | 31008 | 181 | 1095 | 20732 | 31008 |
| 28 | West Bengal | 0 | 17809 | 61227 | 79036 | 0 | 14416 | 64620 | 79036 |
| 29 | A & N Islands | 0 | 141 | 363 | 504 | 0 | 136 | 368 | 504 |
| 30 | Dadra Nagar Haveli | 46 | 243 | 227 | 516 | 40 | 241 | 235 | 516 |
| 31 | Daman & Diu | 0 | 0 | 32 | 32 | 0 | 0 | 32 | 32 |
| 32 | Delhi | 0 | 0 | 219 | 219 | 0 | 0 | 219 | 219 |
| 33 | Lakshadweep | 0 | 10 | 0 | 10 | 0 | 8 | 2 | 10 |
| 34 | Pondicherry | 40 | 84 | 143 | 267 | 40 | 84 | 143 | 267 |
| 35 | Chandigarh | 0 | 0 | 18 | 18 | 0 | 0 | 18 | 18 |
| | **Total** | **19544** | **165722** | **1237398** | **1422664** | **17917** | **147791** | **1256956** | **1422664** |

NC : Not Covered PC : Partially Covered FC : Fully Covered

*Source : Annual Report, Ministry of Rural Development.*

## REVIVAL IN PRODUCTION EXPECTED IN 2002-03 : CII

The confederation of Indian Industry (CII) has forecast a revival in production growth in the current fiscal as a result of higher domestic and export market demand in most sectors. It highlights signs of a global recovery led by the U.S. after the global slow down in 2001 as the primary reason for optimism on the export front. As for the domestic sector, it cites the steady growth in consumer durables and signs of a recovery in some basic goods sectors as factors for the brighter forecast.

According to the CII-Ascon survey for 2001-02 released today, there are many lessons from last year's industry performance for converting the optimistic outlook into a better growth scenario in 2002-03. The survey has found seven sectors recording excellent production growth rate while 20 registered high growth. Another 34 sectors have registered a negative growth and the number of sectors that achieved a moderate growth is 69. The survey covered 118 manufacturing sectors and 12 services sectors.

According to the survey, the down trend is mainly due to the slowdown in some items in the auto sectors as well as in basic goods such as crude oil and cold rolled steel along with some items in the electrical equipment industry, consumer durables, machine tools and textile machinery. In all 90 of the 118 segments have recorded a growth rate of less than 10 percent. This is a decline over the earlier situation where 95 of the 116 segments had shown a moderate growth.

Some sectors such as cement, lead and lead alloy, electirc cables and wire, forging transformers, medium and heavy commercial vehicles, cars, refrigerators and colour televisions moved from negative to positive growth in 2001-02. Others such as mopeds, textile machinery, machine tools, rubber footwear and malted food recorded negative as compared to positive growth in 2000-01.

While over 23 percent of sectors have reported a negative growth in 20001-02, more than 56 percent of the sectors have shown moderate growth rate of 0-10 percent as compared to 51 percent at the end of the last quarter in 2000-01. Many sectors, according to the survey, have suffered because of free imports due to the Indo-Nepal treaty, absence of a clear captive power policy thread of Chinese imports competition from unorganised sector, duplication of brands and manufacture of sales and spurious products at cheaper prices in the absence of harmonisation of specifications and standards.

The survey has underlined the need for the early implementation of VAT. To make products more competitive and export-oriented, the cascading effect of Central and State duties also needs to be reviewed. It has also suggested that the high excise duty on cement, automobiles and machine tools be removed, the agriculture sector be given a boost and the infrastructure status be accorded to the health care sector.

The slowdown in the global economy resulted in exports suffering a setback from the momentum of growth achieved in 2000-01. The main segments which moved into the negative growth list include ball and roller bearing, earth moving construction and mining equipment, textile machinery, medium and heavy commercial vehicles, refrigerators and black and white televisions.

Cars electric cables and wires, diesel engines and phosphate fertilizer are the four segments, which have recorded positive growth in exports as compared to negative growth in 2000-01. While electronic component exports achieved excellent growth rates from high growth rate last year, the increase in the auto tyre exports is mainly due to excellent export growth in passenger car segment

## IIP RISES 3.8% IN MAY WITH GAINS IN SELECT SECTORS

After failing to reflect other recovery signals in the last few months, growth in the index of Industrial production (IIP) has finally risen to 3.8% in May from the sub 3% levels earlier. As the revised data now indicates, growth was also fairly respectable at 3.9% in April 2002. However, the distribution of growth reveals that the recovery is still not on firm ground and gains have accrued to select sectors.

Industries comprising 35% of the index have registered negative growth in May, up quite sharply from only 15% in April. The proportion of industries showing positive growth with accelerating trend (over a nine-month period) has also fallen from 58% of the IIP in April to 51% in May. While there were 11 such segments in April, the number has fallen to nine in May, as non-metallic minerals, and wood and wood products fell out of this league.

Three out of 17 industry groups registered double-digit growth in May. These include the heavy weight category of basic chemicals and chemical products (12.4%), wool, silk and man made fibres (11.6%), and beverages and tobacco (13.5%). But growth was pulled down by some of other segments, like miscellaneous manufacturing industries (-10.2%), leather and leather products (-6.6%), and non-metallic minerals (-3.4%).

In terms of use-based classification, basic goods recorded growth of 4.7% (y-o-y), which is an improvement over the growth of 3.8% in April. Though the capital goods segment has seen a reversal of the negative growth seen in April, the subdued investment activity is still reflected in the 0.6% growth in May 2002. The consumer goods segment continued on the positive note struck in April, growing by 8.4%. But the composition of growth within the consumer goods industries has changed.

While the growth in consumer goods in 2001-02 was largely pulled up by durables, the non-durables segment is leading growth this year. Consumer durables production declined by 1.2% in May – its first fall in 14 months. In January 2002, this category had recorded very strong growth of more than 14%. But from the next month onwards, growth has been largely below 7%, until the negative growth in May.

On the other hand, consumer non-durables presented a sunnier picture with the growth rate firming up in May to 12.3% over about 9% in April. Food products, which have a larger weight in non-durables, have declined, while beverages and tobacco have grown, but they have a smaller weight. Also, sales of branded FMCG goods have not done well in the first quarter, indicating that the non-branded category of the non-durables sector could have done well.

## Stock Exchange Indices January to may - 2002

| Date | Bombay Stock Exchange | National Stock Exchange |
|---|---|---|
| 02-01-02 | 3246.15 | 1552.87 |
| 08-01-02 | 3401.80 | 1632.11 |
| 16-01-02 | 3352.52 | 1604.66 |
| 22-01-02 | 3382.29 | 1613.50 |
| 30-01-02 | 3313.28 | 1581.83 |
| 09-02-02 | 3493.92 | 199.32 |
| 16-02-02 | 3602.02 | 1753.67 |
| 21-02-02 | 3358.21 | 1721.47 |
| 09-03-02 | 3656.77 | 1780.37 |
| 21-03-02 | 3581.32 | 1746.18 |
| 29-03-02 | 3469.35 | 1716.28 |
| 05-04-02 | 3512.55 | 1748.31 |
| 12-04-02 | 3497.67 | 1749.16 |
| 20-04-02 | 3364.40 | 1685.64 |
| 27-04-02 | 3371.70 | 1679.75 |
| 04-05-02 | 3380.61 | 1686.91 |
| 11-05-02 | 3431.32 | 1711.73 |
| 22-05-02 | 3186.53 | - |
| 30-05-02 | 3160.24 | - |

## Wholesale Price Index and Inflation Rate - January to April - 2002.

| Date | Index | Inflation Rate % |
|---|---|---|
| 05-01-02 | 161.5 | 1.96 |
| 12-01-02 | 161.3 | 1.57 |
| 19-01-02 | 160.7 | 1.32 |
| 26-01-02 | 160.6 | 1.26 |
| 02-02-02 | 160.6 | 1.13 |
| 09-02-02 | 160.5 | 1.13 |
| 16-03-02 | 161.5 | 1.44 |
| 23-03-02 | 161.6 | 1.44 |
| 30-03-02 | 161.4 | 1.38 |
| 06-04-02 | 161.7 | 1.25 |
| 13-04-02 | 162.0 | 1.25 |
| 20-04-02 | 162.4 | 1.44 |

## Rupee against Dollar (R.B.I Rate) - January to May - 2002.

| Date | Value (in Rs) |
|---|---|
| 02-01-02 | 48.24 |
| 08-01-02 | 48.28 |
| 16-01-02 | 48.29 |
| 22-01-02 | 48.24 |
| 30-01-02 | 48.37 |
| 09-02-02 | 48.67 |
| 16-02-02 | 48.71 |
| 21-02-02 | 48.63 |
| 09-03-02 | 48.75 |
| 21-03-02 | 48.73 |
| 29-03-02 | 48.80 |
| 04-04-02 | 48.88 |
| 13-04-02 | 48.92 |
| 20-04-02 | 48.89 |
| 27-04-02 | 48.99 |
| 04-05-02 | 48.98 |
| 11-05-02 | 48.98 |
| 24-05-02 | 49.06 |
| 31-05-02 | 49.01 |

## Gold Price - January to may - 2002

| Date | London (Dollar/ OZ) | Mumbai (Rs/ 10 gm) | Alappuzha (Rs/ 10 gm) |
|---|---|---|---|
| 02-01-02 | 279.20 | 4630.00 | 4270.00 |
| 08-01-02 | 280.30 | 4660.00 | 4270.00 |
| 16-01-02 | 284.50 | 4725.00 | 4370.00 |
| 22-01-02 | 283.00 | 4720.00 | 4370.00 |
| 30-01-02 | 278.30 | 4660.00 | 4330.00 |
| 02-02-02 | 282.50 | 4695.00 | 4350.00 |
| 09-02-02 | 304.75 | 4960.00 | 4540.00 |
| 16-02-02 | 301.10 | 4970.00 | 4540.00 |
| 21-02-02 | 294.20 | 4890.00 | 4540.00 |
| 09-03-02 | 289.50 | 4855.00 | 4510.00 |
| 21-03-02 | 292.85 | 4890.00 | 4510.00 |
| 29-03-02 | 304.30 | 5010.00 | 4550.00 |
| 04-04-02 | 305.40 | 5060.00 | 4690.00 |
| 10-04-02 | 300.10 | 5000.00 | 4640.00 |
| 20-04-02 | 304.00 | 5050.00 | 4690.00 |
| 27-04-02 | 307.75 | 5135.00 | 4730.00 |
| 04-05-02 | 310.00 | 5150.00 | 4820.00 |
| 11-05-02 | 310.65 | 5180.00 | 4820.00 |

## Consumer Price Index for Industrial Workers

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 466 | 457 | 458 | 465 | 464 | 469 | 471 | 468 | 461 | 463 | 471 | 479 |
| | 2. Mundakayam | 453 | 453 | 447 | 449 | 455 | 460 | 456 | 454 | 454 | 454 | 457 | 464 |
| | 3. Kollam | 456 | 452 | 457 | 456 | 460 | 469 | 464 | 463 | 466 | 495 | 459 | 496 |
| | 4. Thiruvananthapuram | 504 | 506 | 505 | 509 | 507 | 516 | 523 | 529 | 528 | 532 | 530 | 546 |
| | Average | 470 | 467 | 467 | 470 | 472 | 479 | 479 | 479 | 477 | 486 | 479 | 496 |
| Tamilnadu | 1. Chennai | 492 | 496 | 491 | 497 | 502 | 502 | 500 | 503 | 502 | 501 | 508 | 512 |
| | 2. Coimbatore | 440 | 445 | 442 | 446 | 452 | 453 | 449 | 451 | 455 | 465 | 471 | 480 |
| | 3. Coonoor | 454 | 451 | 448 | 453 | 458 | 464 | 458 | 458 | 460 | 466 | 469 | 474 |
| | 4. Madurai | 440 | 442 | 436 | 446 | 461 | 458 | 454 | 451 | 443 | 445 | 454 | 458 |
| | 5. Salem | 444 | 446 | 444 | 450 | 457 | 461 | 454 | 454 | 453 | 453 | 461 | 470 |
| | 6.Tiruchirappalli | 501 | 500 | 500 | 511 | 515 | 515 | 515 | 512 | 512 | 515 | 507 | 522 |
| | Average | 462 | 463 | 460 | 467 | 474 | 476 | 472 | 472 | 471 | 474 | 478 | 486 |
| Andra Pradesh | 1. Gudur | 452 | 460 | 446 | 446 | 455 | 447 | 447 | 438 | 431 | 430 | 440 | 453 |
| | 2. Gundur | 442 | 447 | 451 | 456 | 459 | 460 | 466 | 465 | 451 | 453 | 463 | 468 |
| | 3. Hyderabad | 441 | 442 | 443 | 446 | 447 | 455 | 460 | 459 | 462 | 462 | 466 | 469 |
| | 4. Visakhapatanam | 444 | 447 | 446 | 454 | 458 | 456 | 460 | 456 | 460 | 462 | 466 | 468 |
| | 5. Warangal | 472 | 473 | 468 | 479 | 486 | 483 | 496 | 489 | 486 | 487 | 496 | 496 |
| | Average | 450 | 454 | 451 | 456 | 461 | 460 | 466 | 461 | 458 | 459 | 466 | 471 |
| 4. Karnataka | 1. Bangalore | 442 | 441 | 440 | 443 | 448 | 448 | 448 | 445 | 445 | 445 | 445 | 450 |
| | 2. Belgaum | 494 | 500 | 495 | 499 | 502 | 502 | 502 | 503 | 505 | 507 | 509 | 511 |
| | 3. Hubli Dhanwar | 456 | 456 | 455 | 457 | 469 | 462 | 462 | 459 | 460 | 460 | 462 | 469 |
| | 4. Meccara | 461 | 462 | 458 | 459 | 456 | 453 | 453 | 452 | 453 | 452 | 456 | 461 |
| | Average | 463 | 465 | 462 | 465 | 469 | 466 | 466 | 465 | 466 | 466 | 468 | 473 |
| Pndicherry | 1. Pndicherry | 484 | 478 | 482 | 496 | 496 | 493 | 494 | 493 | 494 | 507 | 502 | 505 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 536 | 536 | 534 | 540 | 541 | 533 | 530 | 529 | 537 | 539 | 545 | 555 |
| Maharastra | 1. Mumbai | 535 | 534 | 534 | 536 | 539 | 536 | 543 | 550 | 553 | 554 | 555 | 558 |
| | 2. Nagpur | 490 | 496 | 488 | 490 | 495 | 487 | 486 | 589 | 491 | 491 | 495 | 499 |
| | 3. Nasik | 504 | 504 | 503 | 505 | 505 | 504 | 511 | 507 | 511 | 508 | 508 | 511 |
| | 4. Pune | 522 | 525 | 518 | 520 | 526 | 522 | 514 | 517 | 520 | 521 | 530 | 531 |
| | 5. Solapur | 483 | 487 | 480 | 479 | 484 | 482 | 481 | 479 | 476 | 477 | 485 | 484 |
| | Average | 507 | 509 | 505 | 506 | 510 | 506 | 507 | 528 | 510 | 510 | 515 | 517 |
| Haryana | 1. Faridabad | 483 | 483 | 480 | 478 | 478 | 471 | 469 | 464 | 468 | 472 | 475 | 480 |
| | 2. Yamuna Nagar | 432 | 437 | 433 | 433 | 438 | 430 | 431 | 427 | 428 | 434 | 434 | 441 |
| | Average | 458 | 460 | 457 | 456 | 458 | 451 | 450 | 446 | | | | |
| West Bengal | 1. Asansol | 429 | 453 | 453 | 458 | 460 | 456 | 449 | 443 | 449 | 452 | 451 | 452 |
| | 2. Darjeeling | 395 | 396 | 396 | 404 | 410 | 402 | 394 | 387 | 388 | 387 | 388 | 390 |
| | 3. Durgapur | 507 | 527 | 531 | 540 | 536 | 532 | 540 | 536 | 540 | 544 | 549 | 552 |
| | 4. Haldia | 572 | 576 | 575 | 577 | 586 | 580 | 573 | 571 | 579 | 578 | 577 | 579 |
| | 5. Howrah | 517 | 533 | 528 | 536 | 547 | 538 | 526 | 528 | 535 | 536 | 541 | 542 |
| | 6. Jalpaiguri | 410 | 410 | 415 | 421 | 418 | 416 | 413 | 406 | 410 | 408 | 409 | 416 |
| | 7. Kolkata | 502 | 516 | 518 | 531 | 540 | 526 | 517 | 514 | 522 | 523 | 528 | 528 |
| | 8. Raniganj | 402 | 404 | 404 | 413 | 417 | 415 | 402 | 404 | 411 | 414 | 416 | 410 |
| | Average | 467 | 477 | 478 | 485 | 489 | 483 | 477 | 474 | 479 | 480 | 482 | 484 |
| Chandigarh | 1. Chandigarh | 492 | 497 | 501 | 496 | 498 | 497 | 513 | 513 | 505 | 505 | 505 | 509 |
| Uttar Pradesh | 1. Agra | 421 | 427 | 421 | 427 | 432 | 424 | 422 | 423 | 426 | 429 | 428 | 434 |
| | 2. Ghaziabad | 471 | 474 | 473 | 470 | 472 | 465 | 463 | 459 | 464 | 466 | 473 | 478 |
| | 3. Kanpur | 454 | 454 | 454 | 457 | 461 | 449 | 444 | 452 | 455 | 448 | 450 | 461 |
| | 4. Saharaupur | 426 | 432 | 431 | 431 | 430 | 426 | 428 | 432 | 434 | 434 | 433 | 434 |
| | 5. Varanasi | 485 | 490 | 486 | 493 | 493 | 482 | 474 | 474 | 478 | 474 | 481 | 482 |
| | Average | 451 | 455 | 453 | 456 | 458 | 449 | 446 | 448 | 451 | 450 | 453 | 458 |
| Madhya Pradesh | 1. Balaghat | 414 | 422 | 420 | 422 | 422 | 421 | 412 | 408 | 409 | 410 | 413 | 417 |
| | 2. Bhopal | 502 | 506 | 503 | 506 | 510 | 507 | 507 | 501 | 503 | 503 | 504 | 512 |
| | 3. Indore | 474 | 477 | 475 | 477 | 482 | 480 | 477 | 475 | 482 | 484 | 486 | 492 |
| | 4. Jabalpur | 462 | 469 | 466 | 471 | 471 | 467 | 461 | 459 | 462 | 459 | 460 | 462 |
| | Average | 463 | 469 | 466 | 469 | 471 | 469 | 464 | 461 | 464 | 464 | 466 | 471 |
| | **All India** | 463 | 466 | 465 | 468 | 472 | 472 | 472 | 472 | 468 | 469 | 472 | 476 |

## Consumer Price Index and % Variations of Index for Industrial Workers

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | May-01 | May-02 | | Jun-01 | Jun-02 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 456 | 471 | 3.29 | 462 | 479 | 3.68 |
| | 2. Mundakayam | 449 | 457 | 1.78 | 456 | 464 | 1.75 |
| | 3. Kollam | 445 | 459 | 3.15 | 460 | 496 | 7.83 |
| | 4. Thiruvananthapuram | 496 | 530 | 6.85 | 498 | 546 | 9.64 |
| | Average | 462 | 479 | 3.85 | 469 | 496 | 5.81 |
| 2. Tamilnadu | 1. Chennai | 479 | 508 | 6.05 | 488 | 512 | 4.92 |
| | 2. Coimbatore | 437 | 471 | 7.78 | 443 | 480 | 8.35 |
| | 3. Coonoor | 441 | 469 | 6.35 | 455 | 474 | 4.18 |
| | 4. Madurai | 449 | 454 | 1.11 | 448 | 458 | 2.23 |
| | 5. Salem | 436 | 461 | 5.73 | 446 | 470 | 5.38 |
| | 6.Tiruchirappalli | 464 | 507 | 9.27 | 480 | 522 | 8.75 |
| | Average | 451 | 478 | 6.06 | 460 | 486 | 5.65 |
| 3. Andra Pradesh | 1. Gudur | 435 | 440 | 1.15 | 447 | 453 | 1.34 |
| | 2. Gundur | 425 | 463 | 8.94 | 438 | 468 | 6.85 |
| | 3. Hyderabad | 437 | 466 | 6.64 | 441 | 469 | 6.35 |
| | 4. Visakhapatanam | 437 | 466 | 6.64 | 442 | 468 | 5.88 |
| | 5. Warangal | 456 | 496 | 8.77 | 465 | 496 | 6.67 |
| | Average | 438 | 466 | 6.44 | 447 | 471 | 5.42 |
| 4. Karnataka | 1. Bangalore | 432 | 445 | 3.01 | 436 | 450 | 3.21 |
| | 2. Belgaum | 477 | 509 | 6.71 | 486 | 511 | 5.14 |
| | 3. Hubli Dhanwar | 448 | 462 | 3.13 | 454 | 469 | 3.30 |
| | 4. Meccara | 452 | 456 | 0.88 | 460 | 461 | 0.22 |
| | Average | 452 | 468 | 3.48 | 459 | 473 | 3.00 |
| 5. Pndicherry | 1. Pndicherry | 468 | 502 | 7.26 | 480 | 505 | 5.21 |

*Contd..*

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | May-01 | May-02 | | Jun-01 | Jun-02 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 527 | 545 | 3.42 | 533 | 555 | 4.13 |
| 2. Maharastra | 1. Mumbai | 524 | 555 | 5.92 | 530 | 558 | 5.28 |
| | 2. Nagpur | 478 | 495 | 3.56 | 483 | 499 | 3.31 |
| | 3. Nasik | 494 | 508 | 2.83 | 497 | 511 | 2.82 |
| | 4. Pune | 514 | 530 | 3.11 | 518 | 531 | 2.51 |
| | 5. Solapur | 461 | 485 | 5.21 | 470 | 484 | 2.98 |
| | Average | 494 | 515 | 4.13 | 500 | 517 | 3.40 |
| 3. Haryana | 1. Faridabad | 468 | 475 | 1.50 | 471 | 480 | 1.91 |
| | 2. Yamuna Nagar | 425 | 434 | 2.12 | 427 | 441 | 3.28 |
| | Average | 447 | | -100.00 | 449 | | -100.00 |
| 4. West Bengal | 1. Asansol | 418 | 451 | 7.89 | 421 | 452 | 7.36 |
| | 2. Darjeeling | 385 | 388 | 0.78 | 393 | 390 | -0.76 |
| | 3. Durgapur | 498 | 549 | 10.24 | 497 | 552 | 11.07 |
| | 4. Haldia | 490 | 577 | 17.76 | 492 | 579 | 17.68 |
| | 5. Howrah | 507 | 541 | 6.71 | 514 | 542 | 5.45 |
| | 6. Jalpaiguri | 404 | 409 | 1.24 | 408 | 416 | 1.96 |
| | 7. Kolkata | 465 | 528 | 13.55 | 472 | 528 | 11.86 |
| | 8. Raniganj | 392 | 416 | 6.12 | 399 | 410 | 2.76 |
| | Average | 445 | 482 | 8.43 | 450 | 484 | 7.59 |
| 5. Chandigarh | 1. Chandigarh | 484 | 505 | 4.34 | 485 | 509 | 4.95 |
| 6. Uttar Pradesh | 1. Agra | 417 | 428 | 2.64 | 415 | 434 | 4.58 |
| | 2. Ghaziabad | 468 | 473 | 1.07 | 469 | 478 | 1.92 |
| | 3. Kanpur | 443 | 450 | 1.58 | 449 | 461 | 2.67 |
| | 4. Saharaupur | 416 | 433 | 4.09 | 422 | 434 | 2.84 |
| | 5. Varanasi | 474 | 481 | 1.48 | 477 | 482 | 1.05 |
| | Average | 444 | 453 | 2.12 | 446 | 458 | 2.55 |
| 7. Madhya Pradesh | 1. Balaghat | 405 | 413 | 1.98 | 410 | 417 | 1.71 |
| | 2. Bhopal | 475 | 504 | 6.11 | 482 | 512 | 6.22 |
| | 3. Indore | 469 | 486 | 3.62 | 472 | 492 | 4.24 |
| | 4. Jabalpur | 450 | 460 | 2.22 | 455 | 462 | 1.54 |
| | Average | 450 | 466 | 3.56 | 455 | 471 | 3.52 |
| | **All India** | 451 | 472 | 4.66 | 457 | 476 | 4.16 |

## Consumer Price Index for Agricultural Labourers

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 01 | Aug 01 | Sept 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 325 | 323 | 316 | 317 | 318 | 322 | 319 | 322 | 321 | 321 | 321 | 325 |
| 2 | Tamilnadu | 304 | 304 | 304 | 306 | 311 | 316 | 314 | 313 | 311 | 313 | 316 | 319 |
| 3 | Anthrapradesh | 320 | 326 | 327 | 332 | 331 | 327 | 324 | 325 | 326 | 329 | 331 | 334 |
| 4 | [illegible]nataka | 304 | 307 | 307 | 308 | 311 | 312 | 308 | 308 | 309 | 309 | 314 | 314 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 304 | 309 | [illegible] | [illegible] | [illegible] | 304 | 303 | 303 | 303 | 303 | 308 | 314 |
| 6 | Haryana | 320 | 322 | 324 | 324 | [illegible] | [illegible] | 320 | 321 | 320 | 320 | 322 | 323 |
| 7 | West Bengal | 302 | 305 | 306 | 311 | 311 | 307 | 301 | [illegible] | 301 | 299 | 297 | 299 |
| 8 | Uttar Pradesh | 312 | 313 | 314 | 316 | 315 | 311 | [illegible] | [illegible] | 312 | [illegible] | 309 | 315 |
| 9 | Madhya Pradesh | 313 | 316 | 315 | 313 | 312 | 310 | 304 | 304 | 305 | [illegible] | [illegible] | [illegible] |
| 10 | Assam | 321 | 318 | 319 | 322 | 323 | 324 | 319 | 317 | 319 | 319 | 320 | 322 |
| 11 | Bihar | 283 | 285 | 287 | 294 | 296 | 296 | 291 | 290 | 291 | 292 | 288 | 290 |
| 12 | Gujarat | 328 | 329 | 324 | 319 | 320 | 315 | 312 | 313 | 316 | 219 | 321 | 325 |
| 13 | Himachalpradesh | 295 | 303 | 299 | 297 | 299 | 296 | 297 | 299 | 296 | 295 | 300 | 301 |
| 14 | Jammu & Kashmir | 333 | 332 | 329 | 330 | 329 | 326 | 329 | 330 | 330 | 231 | 338 | 333 |
| 15 | Manipur | 311 | 312 | 308 | 305 | 304 | 307 | 300 | 299 | 302 | 299 | 297 | 298 |
| 16 | Meghalaya | 346 | 348 | 350 | 354 | 359 | 356 | 351 | 350 | 354 | 354 | 348 | 344 |
| 17 | Orissa | 308 | 313 | 312 | 310 | 307 | 303 | 294 | 286 | 287 | 290 | 293 | 295 |
| 18 | Punjab | 325 | 331 | 329 | 328 | 328 | 324 | 322 | 322 | 320 | 325 | 325 | 328 |
| 19 | Rajastan | 311 | 311 | 308 | 305 | 306 | 305 | 306 | 308 | 310 | 311 | 313 | 318 |
| 20 | Tripura | 317 | 323 | 324 | 328 | 334 | 315 | 313 | 315 | 319 | 327 | 321 | 323 |
| | **All India** | **309** | **312** | **311** | **313** | **313** | **312** | **308** | **308** | 309 | 309 | 311 | 314 |

## Consumer Price Index for Industrial & Agricultural Workers - (Kerala State)

| Centre | Base 1970=100 | | | Base 1998-99=100 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 |
| Thiruvananthapuram | 1148 | 1150 | 1153 | 113 | 114 | 114 | 115 | 114 | 114 | 114 | 114 | 115 |
| Kollam | 1149 | 1152 | 1155 | 114 | 115 | 115 | 115 | 114 | 115 | 115 | 116 | 117 |
| Pathanamthitta | - | - | - | 112 | 113 | 113 | 113 | 112 | 112 | 112 | 113 | 113 |
| Punalur | 1096 | 1098 | 1101 | 113 | 114 | 114 | 114 | 113 | 112 | 112 | 113 | 113 |
| Alappuzha | 1153 | 1155 | 1157 | 112 | 114 | 114 | 114 | 113 | 113 | 112 | 113 | 113 |
| Kottayam | 1157 | 1161 | 1163 | 114 | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 |
| Mundakkayam | 1113 | 1114 | 1116 | 112 | 113 | 113 | 113 | 112 | 111 | 111 | 111 | 112 |
| Munnar | 1121 | 1124 | 1127 | 114 | 115 | 115 | 115 | 114 | 114 | 114 | 114 | 115 |
| Ernakulam | 1107 | 1109 | 1112 | 114 | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 |
| Chalakkudy | 1174 | 1177 | 1180 | 113 | 114 | 114 | 114 | 113 | 113 | 112 | 113 | 113 |
| Thrissur | 1128 | 1129 | 1132 | 114 | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 |
| Palakkad | 1141 | 1142 | 1145 | 111 | 112 | 112 | 112 | 111 | 111 | 111 | 111 | 112 |
| Malappuram | 1126 | 1128 | 1131 | 112 | 113 | 113 | 114 | 113 | 112 | 112 | 112 | 113 |
| Kozhikkode | 1128 | 1130 | 1134 | 114 | 115 | 115 | 115 | 114 | 113 | 112 | 113 | 113 |
| Meppady | 1197 | 1199 | 1201 | 114 | 115 | 115 | 115 | 114 | 114 | 114 | 114 | 115 |
| Kannur | 1129 | 1132 | 1135 | 114 | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 |
| Kasargod | - | - | - | 113 | 114 | 114 | 114 | 113 | 112 | 112 | 113 | 113 |
| **State** | **1138** | **1140** | **1143** | **113** | **114** | **114** | **114** | **113** | **113** | **113** | **113** | **114** |

## Consumer Price Index and % Variations for Agricultural Labourers

**Base 1986-87 = 100]**

| Sl. No. | Centre | Index for May-01 | Index for May-02 | % Variation | Index for Jun-01 | Index for Jun-02 | % Variation |
|---|---|---|---|---|---|---|---|
| | **Southern States** | | | | | | |
| 1 | Kerala | 323 | 321 | -0.62 | 326 | 325 | -0.31 |
| 2 | Tamilnadu | 300 | 316 | 5.33 | 302 | 319 | 5.63 |
| 3 | Anthrapradesh | 312 | 331 | 6.09 | 318 | 334 | 5.03 |
| 4 | Karnataka | 299 | 314 | 5.02 | 302 | 314 | 3.97 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 298 | 308 | 3.36 | 302 | 314 | 3.97 |
| 6 | Haryana | 318 | 322 | 1.26 | 319 | 323 | 1.25 |
| 7 | West Bengal | 296 | 297 | 0.34 | 295 | 299 | 1.36 |
| 8 | Uttar Pradesh | 303 | 309 | 1.98 | 307 | 315 | 2.61 |
| 9 | Madhya Pradesh | 309 | 311 | 0.65 | 313 | 314 | 0.32 |
| 10 | Assam | 323 | 320 | -0.93 | 325 | 322 | -0.92 |
| 11 | Bihar | 278 | 288 | 3.60 | 281 | 290 | 3.20 |
| 12 | Gujarat | 320 | 321 | 0.31 | 325 | 325 | 0.00 |
| 13 | Himachalpradesh | 289 | 300 | 3.81 | 289 | 301 | 4.15 |
| 14 | Jammu & Kashmir | 330 | 338 | 2.42 | 331 | 333 | 0.60 |
| 15 | Manipur | 312 | 297 | -4.81 | 313 | 298 | -4.79 |
| 16 | Meghalaya | 344 | 348 | 1.16 | 345 | 344 | -0.29 |
| 17 | Orissa | 298 | 293 | -1.68 | 300 | 295 | -1.67 |
| 18 | Punjab | 318 | 325 | 2.20 | 319 | 328 | 2.82 |
| 19 | Rajastan | 312 | 313 | 0.32 | 311 | 318 | 2.25 |
| 20 | Tripura | 315 | 321 | 1.90 | 315 | 323 | 2.54 |
| | **All India** | **303** | **311** | 2.64 | **306** | **314** | 2.61 |

## Consumer Price Index Numbers of certain centres for urban non-manual employees

[Base 1984-85=100]

| Sl.No | Centre | State | Index for the month of | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Jul-01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 02 | Jan 02 | Feb 02 | Apr-02 | May-02 | Jun-02 |
| **Southern Centres** | | | | | | | | | | | | | |
| 1 | Trivandrum | Kerala | 382 | 384 | 385 | 384 | 386 | 386 | 391 | 392 | 395 | 400 | 402 |
| 2 | Calicut | Kerala | 375 | 371 | 370 | 371 | 374 | 374 | 375 | 376 | 375 | 376 | 378 |
| 3 | Chennai | Tamilnadu | 453 | 454 | 454 | 458 | 462 | 466 | 471 | 472 | 475 | 478 | 482 |
| 4 | Coimbatore | Tamilnadu | 451 | 456 | 454 | 452 | 455 | 462 | 460 | 460 | 462 | 463 | 466 |
| 5 | Madurai | Tamilnadu | 438 | 439 | 438 | 439 | 448 | 448 | 447 | 448 | 449 | 452 | 455 |
| 6 | Salem | Tamilnadu | 428 | 427 | 426 | 428 | 434 | 434 | 434 | 433 | 438 | 440 | 444 |
| 7 | Tiruchirapalli | Tamilnadu | 409 | 410 | 407 | 411 | 418 | 421 | 426 | 429 | 431 | 432 | 434 |
| 8 | Hydrabad | Andrapradesh | 412 | 413 | 410 | 414 | 413 | 411 | 412 | 411 | 417 | 420 | 425 |
| 9 | Kurnool | Andrapradesh | 400 | 403 | 406 | 409 | 411 | 408 | 413 | 411 | 408 | 409 | 410 |
| 10 | Vijayawada | Andrapradesh | 418 | 424 | 424 | 430 | 434 | 431 | 434 | 433 | 438 | 442 | 447 |
| 11 | Vishakapattanam | Andrapradesh | 396 | 399 | 400 | 403 | 406 | 406 | 404 | 402 | 406 | 408 | 412 |
| 12 | Warangal | Andrapradesh | 415 | 418 | 417 | 423 | 426 | 427 | 424 | 420 | 417 | 420 | 428 |
| 13 | Bangalore | Karnataka | 413 | 414 | 413 | 413 | 416 | 415 | 415 | 416 | 416 | 419 | 421 |
| 14 | Gulbarga | Karnataka | 376 | 380 | 379 | 382 | 385 | 386 | 386 | 389 | 387 | 389 | 392 |
| 15 | Hubli | Karnataka | 394 | 398 | 400 | 399 | 402 | 403 | 400 | 400 | 402 | 404 | 407 |
| 16 | Mangalore | Karnataka | 382 | 387 | 383 | 384 | 387 | 387 | 389 | 389 | 391 | 395 | 397 |
| **Northern Centres** | | | | | | | | | | | | | |
| 1 | Delhi | Delhi | 399 | 402 | 401 | 402 | 405 | 402 | 399 | 399 | 399 | 401 | 405 |
| 2 | Mumbai | Maharashtra | 396 | 396 | 394 | 396 | 397 | 396 | 397 | 396 | 402 | 405 | 406 |
| 3 | Aurangabad | Maharashtra | 413 | 422 | 422 | 423 | 423 | 425 | 430 | 428 | 428 | 431 | 433 |
| 4 | Nagpur | Maharashtra | 377 | 378 | 376 | 379 | 379 | 376 | 375 | 372 | 378 | 381 | 386 |
| 5 | Pune | Maharashtra | 406 | 406 | 406 | 407 | 406 | 404 | 405 | 404 | 409 | 413 | 419 |
| 6 | Solapur | Maharashtra | 367 | 370 | 369 | 371 | 374 | 373 | 371 | 370 | 373 | 377 | 379 |
| 7 | Chandigarh | Punjab | 463 | 467 | 472 | 465 | 465 | 463 | 466 | 469 | 335 | 337 | 341 |
| 8 | Kolkatta | West Bengal | 360 | 357 | 355 | 358 | 359 | 356 | 352 | 352 | 356 | 358 | 363 |
| 9 | Asansol | West Bengal | 407 | 402 | 402 | 402 | 403 | 401 | 396 | 398 | 406 | 412 | 414 |
| 10 | Kharagpur | West Bengal | 375 | 378 | 378 | 383 | 382 | 382 | 374 | 374 | 381 | 384 | 391 |
| 11 | Siliguri | West Bengal | 416 | 417 | 418 | 420 | 424 | 420 | 421 | 418 | 422 | 424 | 425 |
| 12 | Lucknow | Uttarpradesh | 368 | 368 | 367 | 369 | 373 | 366 | 365 | 362 | 370 | 373 | 374 |
| 13 | Agra | Uttarpradesh | 384 | 393 | 388 | 389 | 389 | 384 | 385 | 382 | 387 | 393 | 395 |
| 14 | Allahabad | Uttarpradesh | 414 | 415 | 413 | 415 | 415 | 410 | 411 | 414 | 416 | 414 | 418 |
| 15 | Kanpur | Uttarpradesh | 358 | 360 | 359 | 363 | 365 | 360 | 357 | 358 | 360 | 364 | 372 |
| 16 | Meerut | Uttarpradesh | 349 | 351 | 348 | 347 | 347 | 345 | 354 | 355 | 360 | 360 | 366 |
| | **All India** | | **391** | **393** | **392** | **393** | **395** | **394** | **393** | **392** | **396** | **398** | **402** |

## Consumer Price Index Numbers and % Variations of certain centres for Urban non-manual employees

[Base 1984-85=100

| Sl. No | Centre | State State | Index for May-01 | Index for May-02 | % Increase | Index for Jun-01 | Index for Jun-02 | % Increase |
|---|---|---|---|---|---|---|---|---|
| | **Southern State** | | | | | | | |
| 1 | Trivandrum | Kerala | 374 | 400 | 6.95 | 377 | 402 | 6.63 |
| 2 | Calicut | Kerala | 371 | 376 | 1.35 | 374 | 378 | 1.07 |
| 3 | Chennai | Tamilnadu | 436 | 478 | 9.63 | 440 | 482 | 9.55 |
| 4 | Coimbatore | Tamilnadu | 447 | 463 | 3.58 | 447 | 466 | 4.25 |
| 5 | Madurai | Tamilnadu | 433 | 452 | 4.39 | 438 | 455 | 3.88 |
| 6 | Salem | Tamilnadu | 419 | 440 | 5.01 | 424 | 444 | 4.72 |
| 7 | Tiruchirapalli | Tamilnadu | 400 | 432 | 8.00 | 404 | 434 | 7.43 |
| 8 | Hydrabad | Andrapradesh | 404 | 420 | 3.96 | 405 | 425 | 4.94 |
| 9 | Kurnool | Andrapradesh | 390 | 409 | 4.87 | 396 | 410 | 3.54 |
| 10 | Vijayawada | Andrapradesh | 407 | 442 | 8.60 | 411 | 447 | 8.76 |
| 11 | Vishakapattanam | Andrapradesh | 388 | 408 | 5.15 | 390 | 412 | 5.64 |
| 12 | Warangal | Andrapradesh | 404 | 420 | 3.96 | 414 | 428 | 3.38 |
| 13 | Bangalore | Karnataka | 403 | 419 | 3.97 | 409 | 421 | 2.93 |
| 14 | Gulbarga | Karnataka | 367 | 389 | 5.99 | 369 | 392 | 6.23 |
| 15 | Hubli | Karnataka | 385 | 404 | 4.94 | 391 | 407 | 4.09 |
| 16 | Mangalore | Karnataka | 374 | 395 | 5.61 | 376 | 397 | 5.59 |
| | **Northern State** | | | | #DIV/0! | | | #DIV/0! |
| 1 | Delhi | Delhi | 388 | 401 | 3.35 | 394 | 405 | 2.79 |
| 2 | Mumbai | Maharashtra | 387 | 405 | 4.65 | 392 | 406 | 3.57 |
| 3 | Aurangabad | Maharashtra | 407 | 431 | 5.90 | 412 | 433 | 5.10 |
| 4 | Nagpur | Maharashtra | 373 | 381 | 2.14 | 375 | 386 | 2.93 |
| 5 | Pune | Maharashtra | 400 | 413 | 3.25 | 404 | 419 | 3.71 |
| 6 | Solapur | Maharashtra | 362 | 377 | 4.14 | 366 | 379 | 3.55 |
| 7 | Chandigarh | Punjab | 454 | 337 | -25.77 | 459 | 341 | -25.71 |
| 8 | Kolkatta | West Bengal | 352 | 358 | 1.70 | 359 | 363 | 1.11 |
| 9 | Asansol | West Bengal | 389 | 412 | 5.91 | 394 | 414 | 5.08 |
| 10 | Kharagpur | West Bengal | 365 | 384 | 5.21 | 371 | 391 | 5.39 |
| 11 | Siliguri | West Bengal | 414 | 424 | 2.42 | 413 | 425 | 2.91 |
| 12 | Lucknow | Uttarpradesh | 357 | 373 | 4.48 | 360 | 374 | 3.89 |
| 13 | Agra | Uttarpradesh | 371 | 393 | 5.93 | 371 | 395 | 6.47 |
| 14 | Allahabad | Uttarpradesh | 389 | 414 | 6.43 | 395 | 418 | 5.82 |
| 15 | Kanpur | Uttarpradesh | 347 | 364 | 4.90 | 353 | 372 | 5.38 |
| 16 | Meerut | Uttarpradesh | 335 | 360 | 7.46 | 335 | 366 | 9.25 |
| | **All India** | | **382** | **398** | 4.19 | **386** | **402** | 4.15 |

## Monthly retail prices of certain essential commodities for the last one year

| Sl. No | Name of Commodity | Unit | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **A. RICE - Open Market** | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 12.43 | 12.25 | 12.16 | 12.25 | 12.16 | 12.20 | 12.20 | 12.23 | 11.96 | 11.91 | 11.89 | 11.91 |
| 2 | Red - Chamba | Kg | 11.96 | 12.15 | 12.27 | 12.27 | 12.13 | 12.30 | 12.25 | 12.15 | 12.29 | 12.36 | 12.36 | 11.81 |
| 3 | White Andra Vella | Kg | 12.04 | 12.08 | 12.17 | 12.27 | 12.05 | 12.15 | 12.29 | 12.34 | 11.70 | 11.91 | 11.82 | 11.93 |
| | **B. PULSES** | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 31.86 | 33.86 | 32.14 | 30.68 | 30.93 | 30.43 | 30.57 | 30.18 | 30.07 | 30.93 | 31.29 | 31.32 |
| 5 | Black gram split w/o husk | Kg | 39.82 | 39.93 | 39.07 | 37.43 | 36.46 | 35.00 | 34.71 | 34.04 | 32.75 | 32.68 | 34.25 | 34.96 |
| 6 | Dhall(Tur) | Kg | 29.15 | 30.04 | 29.92 | 30.04 | 30.15 | 29.69 | 29.12 | 28.81 | 28.88 | 28.92 | 29.69 | 30.00 |
| | **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 15.55 | 14.94 | 15.39 | 15.43 | 15.25 | 15.18 | 15.26 | 15.25 | 15.30 | 15.24 | 15.07 | 14.74 |
| 8 | Milk (Cow's) | Ltr. | 12.93 | 12.93 | 12.93 | 12.93 | 12.96 | 12.96 | 13.04 | 13.04 | 13.04 | 13.07 | 13.18 | 13.00 |
| 9 | Egg Hen's (White lagon) | Dozen | 17.64 | 16.60 | 16.05 | 15.48 | 16.20 | 16.00 | 16.95 | 16.46 | 16.00 | 15.04 | 14.92 | 17.14 |
| 10 | Mutton with bones | Kg | 114.29 | 114.29 | 115.00 | 115.00 | 115.00 | 115.00 | 116.43 | 116.43 | 116.43 | 116.43 | 120.71 | 120.71 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 69.21 | 69.46 | 69.39 | 69.68 | 69.96 | 71.21 | 70.68 | 70.68 | 70.68 | 70.68 | 71.21 | 71.14 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.38 | 69.38 | 69.32 | 69.21 | 69.30 | 69.20 | 69.25 | 69.25 | 69.25 | 69.25 | 69.13 | 69.13 |
| | **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 36.00 | 37.89 | 36.61 | 35.93 | 36.54 | 48.61 | 43.61 | 41.79 | 40.04 | 44.64 | 43.86 | 45.79 |
| 14 | Groundnut oil | Kg | 49.78 | 50.48 | 50.28 | 50.48 | 49.87 | 50.31 | 50.87 | 50.42 | 49.87 | 51.50 | 52.50 | 51.48 |
| 15 | Refined oil(Postman) | Kg. | 60.85 | 60.31 | 60.22 | 60.22 | 60.18 | 60.33 | 60.33 | 59.55 | 59.40 | 61.50 | 62.10 | 62.74 |
| 16 | Gingelly oil | Kg. | 49.86 | 51.21 | 50.00 | 50.36 | 50.29 | 50.14 | 51.00 | 50.36 | 51.18 | 53.29 | 53.57 | 54.79 |
| 17 | Coconut without husk | 100 nos | 368.21 | 376.43 | 372.50 | 366.43 | 386.07 | 474.64 | 461.07 | 442.86 | 429.64 | 443.93 | 440.71 | 452.50 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | Jul 01 | Aug 01 | Sep 01 | Oct 01 | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr-02 | May 02 | Jun 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 40.93 | 42.43 | 41.93 | 40.71 | 40.86 | 39.57 | 37.79 | 35.71 | 33.57 | 33.64 | 33.14 | 33.21 |
| 19 | Chillies dry | Kg. | 42.93 | 49.36 | 49.64 | 49.64 | 48.00 | 45.00 | 43.07 | 41.64 | 39.36 | 38.86 | 39.71 | 42.07 |
| 20 | Onion small | Kg. | 11.81 | 11.40 | 11.33 | 14.20 | 17.31 | 16.89 | 12.26 | 10.61 | 10.74 | 10.61 | 11.60 | 13.85 |
| 21 | Tamarind without seeds loose | Kg. | 23.50 | 23.07 | 23.29 | 23.43 | 24.50 | 24.71 | 24.57 | 24.07 | 23.21 | 22.07 | 22.71 | 22.36 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 8.29 | 8.43 | 7.29 | 7.29 | 7.29 | 7.86 | 7.21 | 7.43 | 8.07 | 9.86 | 10.00 | 12.14 |
| 23 | Tapioca Raw | Kg. | 4.93 | 4.79 | 4.96 | 5.04 | 4.84 | 4.71 | 4.68 | 4.93 | 4.89 | 5.21 | 5.07 | 4.96 |
| 24 | Potato | Kg. | 11.73 | 12.09 | 9.00 | 8.82 | 12.29 | 13.27 | 11.77 | 9.21 | 8.63 | 9.64 | 10.44 | 11.57 |
| 25 | Colocassia | Kg. | 16.46 | 14.17 | 15.14 | 14.71 | 13.57 | 13.07 | 11.71 | 12.36 | 13.00 | 13.82 | 15.18 | 14.30 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 7.13 | 9.44 | 8.38 | 8.62 | 11.49 | 9.94 | 7.39 | 6.69 | 5.90 | 5.51 | 5.36 | 6.19 |
| 27 | Brinjal | Kg. | 10.71 | 9.86 | 9.43 | 9.43 | 10.71 | 11.00 | 10.46 | 11.00 | 10.29 | 10.93 | 10.21 | 10.43 |
| 28 | Cucumber | Kg. | 7.07 | 7.21 | 6.50 | 6.50 | 7.21 | 8.36 | 8.36 | 7.86 | 6.14 | 6.21 | 5.93 | 7.93 |
| 29 | Ladies Finger | Kg. | 10.43 | 10.29 | 9.50 | 10.29 | 11.71 | 10.71 | 9.64 | 11.36 | 12.14 | 11.43 | 10.36 | 10.43 |
| 30 | Cabbage | Kg | 10.86 | 11.57 | 9.86 | 9.00 | 8.71 | 9.07 | 8.43 | 9.21 | 8.71 | 8.36 | 9.14 | 8.71 |
| 31 | Bittergourd | Kg. | 17.57 | 15.14 | 12.00 | 15.71 | 12.29 | 12.79 | 11.29 | 11.21 | 11.86 | 13.50 | 12.79 | 14.46 |
| 32 | Tomatto | Kg. | 14.57 | 12.36 | 8.00 | 8.64 | 10.64 | 19.21 | 8.71 | 8.14 | 7.71 | 8.07 | 8.64 | 11.36 |
| 33 | Chillies green | Kg. | 18.21 | 15.07 | 13.07 | 14.79 | 13.14 | 16.57 | 13.00 | 12.21 | 14.00 | 14.29 | 12.86 | 17.43 |
| 34 | Banana green | Kg. | 11.32 | 12.21 | 13.64 | 13.54 | 13.04 | 11.14 | 10.18 | 10.32 | 10.11 | 11.61 | 12.00 | 11.18 |
| 35 | Plantain green | Kg. | 8.14 | 8.86 | 9.79 | 9.36 | 8.68 | 8.86 | 8.54 | 8.89 | 8.54 | 8.61 | 8.43 | 8.46 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.70 | 7.68 | 7.71 | 7.73 | 7.73 | 7.73 | 7.70 | 7.70 | 7.71 | 7.73 | 7.73 | 7.71 |
| 37 | Toilet Soap Lux | 100 gm | 10.96 | 11.00 | 11.00 | 11.00 | 11.00 | 11.00 | 10.96 | 10.96 | 11.07 | 11.32 | 11.32 | 11.29 |
| 38 | Toothpaste Colgate | 100 gm | 28.89 | 28.68 | 27.54 | 27.79 | 27.50 | 28.93 | 28.75 | 29.11 | 29.07 | 29.79 | 29.79 | 29.64 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 187.42 | 181.55 | 153.50 | 177.18 | 183.68 | 182.95 | 187.46 | 189.21 | 173.69 | 168.96 | 164.32 | 154.77 |

## PRICE SITUATION

The annual rate of inflation, measured on the basis of point-to-point variations in the whole sale price index (WPI), fell from above 5.0 percent upto August 2001 to touch a low of 1.1 percent on February 2.2002, before ending the financial year 2001-02 at 1.4 percent as compared with 4.9 percent at the end of the previous year (Chart 36). On an average basis, WPI inflation ebbed during the year and stood at 3.6 percent during 2001-02. At the retail level, the rate of inflation, as indicated by the consumer price index for industrial workers (CPI-IW), stood at 4.1 percent during February 2002, on an annual average basis, close to that of the previous year.

## WHOLE SALE PRICE INFLATION

On April 6, 2002, the annual point-to-point inflation rate was 1.3 percent as compared with 5.1 percent during the corresponding period of the previous year. An analysis of disaggregated data for the financial year 2001-02 indicates that, on a point-to-point basis, the annual fuel group inflation fell to 3.8 percent in 2001-02 from 15.0 percent during the previous year while manufacturing inflation turned negative (-0.4 percent) as against an increase of 3.8 percent a year ago. The primary articles inflation accelerated to 3.8 percent from a decline of 0.4 percent during the same period (Chart 37).

Within the primary articles group, many commodities experienced moderation in inflation or even declines in prices; 'fruits and vegetables' were a notable exception with inflation increasing to 14. 7 percent in 2001-02 from a decline of 2.9 percent a year ago. Within the fuel group, mineral oils inflation fell to 1.1 percent from 17.0 percent during the previous year, while that of electricity fell to 9.2 percent from 11.5 percent over the same period.

In terms of analysis of commodity-wise inflation within the manufactures category, cement, electrical machinery, cotton textiles and man-made textiles witnessed negative inflation, on a point-to-point basis, of 4.3 percent, 1.1 percent, 6.6 percent and 6.5 percent, respectively, during 2001-02 as against price rises of 20.3 percent, 11.8 percent, 6.3 percent and 2.0 percent, respectively, during 2000-01. Sugar, khandsari and gur also recorded negative inflation of 3.2 percent during 2001-02 on the top of a negative inflation of 6.1 percent during 2000-01. Other items in the manufacturing group which experienced deceleration in inflation were fertilizers, chemical and chemical products, transport equipment and parts, non-electrical machinery and iron and steel. On the other hand, edible oils experienced increase in the inflation rate of 12.8 percent during 2001-02 from that of (-) 4.8 percent during the previous year (Table 12).

Inflation, measured on the basis of variation in the average wholesale price index - an indicator of underlying inflation conditions - persistently declined during 2001-02 (Chart 38).

**Table 12 : Commodity-Wise WPI Inflation**

(Point-to-point basis)

| Commodity | Weight | Annual Variation | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 | 2001-02 P |
| **All Commodities** | **100.0** | **4.4** | **5.4** | **4.5** | **5.3** | **6.5** | **4.9** | **1.4** |
| ***I) Primary Articles*** | ***22.0*** | **3.1** | **9.2** | ***4.6*** | **7.6** | **4.00** | **-0.4** | **3.8** |
| i) Cereals | 4.4 | 5.2 | 15.9 | -4.7 | 22.7 | 4.7 | -5.5 | 0.8 |
| ii) Pulses | 0.6 | 18.3 | -1.3 | 5.2 | 0.1 | 10.7 | 7.1 | -1.6 |
| iii) Fruits & Vegetables | 2.9 | 18.5 | 9.1 | 5.8 | 2.6 | -0.7 | -2.9 | 14.7 |
| iv ) Milk | 4.4 | 2.7 | 6.4 | 7.0 | 8.1 | 15.8 | 0.4 | 2.8 |
| v) Eggs, Fish & Meat | 2.2 | 4.2 | 23.2 | 3.6 | 4.1 | 10.1 | -2.1 | 9.1 |
| vi) Condiments & Spices | 0.7 | 22.1 | -1.7 | 28.8 | 6.2 | 1.0 | -13.8 | 2.5 |
| vii) Fibres | 1.5 | -16.6 | -3.0 | 18.2 | -6.3 | -3.6 | 7.4 | -17.6 |
| ix) Oil seeds | 2.7 | -4.7 | 4.4 | 3.7 | 4.9 | -8.0 | 2.8 | 7.3 |
| **II) Fuel, Power, Light & Lubricants** | **14.2** | **5.1** | **13.3** | **13.7** | **3.3** | **26.7** | **15.0** | **3.8** |
| i) Mineral Oils | 7.00 | 0.2 | 20.8 | 13.5 | -1.1 | 41.6 | 17.0 | 1.1 |
| ii) Electricity | 5.5 | 12.5 | 4.5 | 13.7 | 9.6 | 15.1 | 11.5 | 9.2 |
| iii) Coal Mining | 1.8 | 0.5 | 17.4 | 14.6 | 0.0 | 8.8 | 18.1 | -1.6 |
| **III) Manufactured Products** | **63.8** | **4.7** | **2.4** | **2.3** | **4.9** | **2.4** | **3.8** | **-0.4** |
| i) Sugar, Khandsari & Gur | 3.9 | 3.7 | 11.2 | 6.3 | 14.6 | 2.9 | -6.1 | -3.2 |
| ii) Edible Oils | 2.8 | -6.0 | 1.0 | 6.9 | 12.7 | -17.9 | -4.8 | 12.8 |
| iii) Food Products | 11.5 | 3.8 | 10.6 | 5.8 | 9.2 | 0.4 | -3.7 | 0.5 |
| iv) Cotton Textiles | 4.2 | -5.1 | -2.0 | 4.5 | 1.2 | -1.9 | 6.3 | -6.6 |
| v) Man-made Textiles | 4.7 | -1.4 | -18.6 | -2.7 | -7.8 | 6.6 | 2.0 | -6.5 |
| vi) Chemicals & Chemical products | 11.9 | 6.6 | 4.9 | 0.7 | 11.0 | 5.5 | 4.0 | 1.3 |
| vii) Fertilisers | 3.7 | 7.1 | 4.9 | 0.0 | 4.0 | 8.7 | 3.4 | 1.8 |
| viii) Urea-N-Content | 2.2 | 0.0 | 10.3 | 0.0 | 9.0 | 12.8 | 1.8 | 1.3 |
| ix) Cement | 1.7 | 10.0 | -6.9 | -7.0 | 5.6 | -0.7 | 20.3 | -4.3 |
| x) Iron & Steel | 3.6 | 5.2 | 7.0 | 4.6 | 0.9 | 1.4 | 1.3 | 0.0 |
| xi) Non-electrical Machinery | 3.4 | 6.9 | 8.8 | 1.0 | 3.9 | 1.1 | 6.9 | 4.9 |
| xii) Electrical Machinery | 5.0 | 2.0 | -1.4 | -3.5 | -1.3 | -1.9 | 11.8 | -1.1 |
| xiii) Transport Equipment and Parts | 4.3 | 8.0 | 5.0 | 3.1 | 2.3 | 4.7 | 5.8 | 1.3 |

P - Provisional

On an average basis, the WPI inflation rate was 3.6 percent during 2001-02 as against 7.2 percent during the previous year. The deceleration in the overall inflation was due to that of the fuel group and manufactured products groups which decelerated to 9.1 percent and 1.8 percent from 28.5 percent and 3.3 percent respectively, during the previous year. The primary articles inflation, on the other hand, increased to 3.6 percent from 2.9 percent during the previous year. The weighted contribution of the fuel group in overall inflation decreased to 48.0 percent from 63.1 percent during the previous year; on other hand, the contribution of the manufactured products groups increased marginally to 28.5 percent from 27.6 percent while that of the primary articles group increased to 23.2 percent from 9.7 percent in the previous year (Chart 39)

## CONSUMER PRICE INFLATION

At the retail level, consumer price inflation as measured by the annual variation in the consumer price index for industrial workers (CCP-IW), on a point -to-point basis, increased to 5.2 per cent in February 2002 from 3.0 percent in February 2001. On an average basis, the annual CPI inflation rate at 4.1 per cent in February 2002 was almost the same as that of 4.0 percent in February 2001 (Chart 40)

The average CPI -W inflation at 4.1 percent during 2001-02 (up to February) closely tracked the movements in the average WPI (4.0 per cent up to February). This is in contrast to the second half of the 1990s when CPI and WPI inflation often displayed divergent trends. During the first half of the 1990s, the three indicators of inflation -WPI; CPI and GDP deflator indicated strong co-movement averaging 11.0 per cent , 10.5 per cent and 10.4 per cent, respectively. On the other hand, during the second half of the 1990s (1995-96 to 1999-2000), the WPI inflation fell significantly to an average of 5.3 per cent while the CPI inflation averaged 8.6 per cent, leading to a wedge between the two indicators. The inflation rate based on GDP deflator averaged 7.0 per cent during 1995-2000 ruling between inflation rates reflected by the CPI and WPI. During 2000-01, the pattern was reversed as WPI inflation exceeded the inflation rate based on the CPI as well as the GDP deflator (Chart 41).

## CORE INFLATION

Headline measures of inflation are susceptible to exogenous influences like supply shocks/ energy price shocks and may not fully reflect the changing /shifting domestic demand conditions. Since formulation of forward-looking monetary policy requires a proper assessment of the future inflationary outlook, central banks in recent period have been focusing on various measurers of inflation excluding such exogenous shocks. These measures of inflation, called core inflation, can be constructed using alternative methodologies.

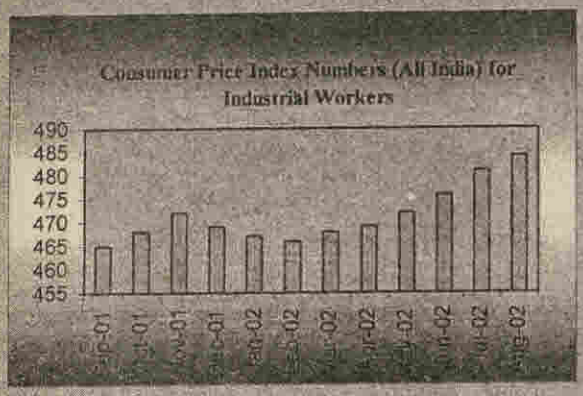
In India, a measure of core inflation can be obtained by excluding the impact of price changes of items vulnerable to exogenous shocks whose price are administered. Such administered items like fuel, mineral oils, electricity, coal mining and urea-N-content have a weightage of 16.4 percent in the overall WPI. The inflation rate excluding such administered items remained below the headline point-to point WPI inflation during the first half of 2001-02 on the account of the base effects of price revisions in the administered prices of petroleum products effected during September 2000. In the second half of 2001-02, core inflation converged to the headline. WPI inflation reflecting the correction in the base effect. The core inflation, as defined above, was 0.8 per cent during 2001-02, on a point - to point basis, as against the corresponding headline rate of 1.4 per cent (Chart 42). The loss of information content in the construction of such core inflation measures and the relatively greater public acceptability of headline measures make the former useful only as indicators of underlying inflationary process in the medium-term under normal output conditions rather than as policy targets.

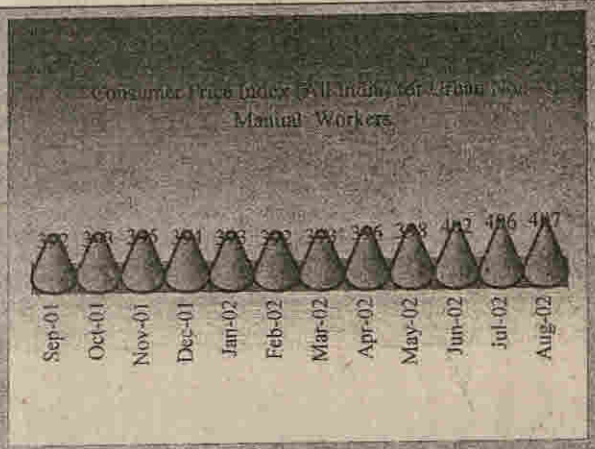
Printed and Published by Department of Economics & Statistics, Government of Kerala

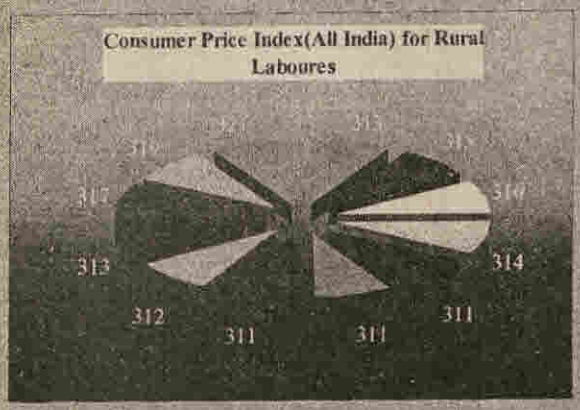
# EcoStat News

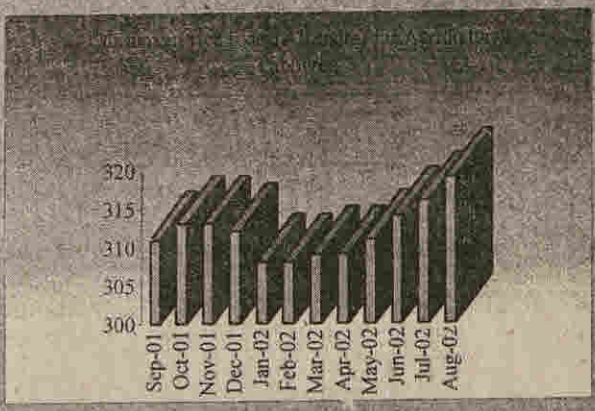
August/ October 2002
Volume - 2 Issue – 4 & 5

*For Official Use only*




## Inside this issue

Workers in Census 2001 ❐
Employment & Unemployment Situation ❐
Indices ❐
Prices ❐

**Department of Economics & Statistics**
**Government of Kerala**

# 4&5



*Edited printed & published for Department of Economics and Statistics, Government of Kerala.*

# Contents


| | Page |
|---|---|
| Workers in Census 2001 | 3 |
| Employment & Unemployment Situation | 7 |
| Indices | 17 |
| Prices | 28 |

# WORKERS IN CENSUS 2001

Sanjay Kumar, N.K. Sharma -

## Some Pertinent Issues

The recently released Census 2001 data on the number of workers has thrown up several issues which impinge on the estimation of the workforce in the country and its structure.. While the growth of all workers overall is quite close to the approximations of the Planning Commission for the Ninth Plan, disaggregated for main and marginal workers, the data show startling variations.

As per the census 2001, the total number of workers was 402.51 million, consisting of 313.17 million main workers and 89.34 million marginal workers whereas in census 1991, the corresponding numbers were 314.13 million, 285.93 million and 28.20 million, respectively, giving an annual growth of 2.51 percent (total), 0.91 percent (main) and 12.22 percent (marginal). Table 1 gives the inter census annual growth rates of main and marginal workers in rural/ urban sectors:-

From Table 1, it may be seen that the main contributor to the overall growth in workforce is the significantly higher growth in the marginal workers, particularly males in both rural as well as urban areas. The issue is whether the growth rate of marginal workers is real or it is due to underreporting/ omission of workers in 1991 Census.

**Table 1: Intercensus (1991-2001)**

**Growth Rate of Workers**

| Sector | Annual Growth during 1991-2001 in workers | | |
|---|---|---|---|
| | Total | Main | Marginal |
| Total | | | |
| Persons | 2.51 | 0.91 | 12.22 |
| Males | 2.07 | 0.82 | 29.16 |
| Females | 3.53 | 1.23 | 7.87 |
| Rural | | | |
| Persons | 2.24 | 0.33 | 11.72 |
| Males | 1.68 | 0.18 | 29.20 |
| Females | 3.32 | 0.75 | 7.66 |
| Urban | | | |
| Persons | 3.50 | 2.75 | 19.06 |
| Males | 3.18 | 2.55 | 28.93 |
| Females | 5.26 | 4.05 | 11.96 |

Visaria (1998) had observed that the probability of undercount of female workers in 1991 Census, particularly in rural areas could not be ruled out; in view of the fact that in 1991, in 7.5 percent villages, no female was listed either as main or as marginal worker. But, the Census 2001 results indicate the growth is higher in males in comparison to females in both areas. Also, the overall growth of marginal

workers is more in urban areas which are predominantly non-agriculture. Further, if it is assumed that the coverage of workers was better in Census 2001 than that in 1991, due to intensive training of enumerators and more stress on capturing the marginal workers in the Census schedule itself, then the actual growth of workers should be lower than 2.5 percent shown.

However, the assumption of higher growth rate of marginal workers (i.e, under implicit assumption that absolute number of marginal workers in Census 2001 is correct) in 2001 due to better coverage (i.e, in comparison to 1991) gets diluted when the results of 2001 Census are compared with other concurrent trends. From Table 2, it may be seen that the relative shares of marginal workers in the 1991 census was compatible, albeit slightly lower, with the 43rd round results (pertaining to 1987-88). The share of marginal workers in Census 1991 may have been slightly lower on account of the perceived omission underreporting. The overall share of marginal workers was almost same in 43rd (1987-88) and 50th round (7993-94); but the declining trend of share of marginal workers during 1993-94 to 1999-2000 has been observed in respect of both the urban and rural sectors for male as well as female. Therefore, the share of marginal workers in Census 2001 is comparable neither with Census 1991 nor with the NSS surveys pertaining to almost same time frame. The trends indicated by the two data sets are also diametrically opposite. The implication of these trends shall be discussed later.

**Table 2: Percentage Share of Marginal Workers from different Surveys/ Censuses**

| Sector | Share of Marginal Workers* in Total in | | | | |
|---|---|---|---|---|---|
| | Census | | NSS Rounds** (using the WPRs) | | |
| | 2001 | 1991 | 43rd (1987-88) | 50th (1993-94) | 55th (1999-2000) |
| Total | | | | | |
| Persons | 22.20 | 8.97 | 10.32 (10.46) | 10.58 (10.71) | 7.66 (7.87) |
| Males | 12.69 | 1.20 | 3.66 (3.71) | 2.34 (2.36) | 1.44 (1.46) |
| Females | 42.81 | 28.42 | 23.83 (23.85) | 27.69 (27.77) | 21.52 (21.66) |
| Rural | | | | | |
| Persons | 26.07 | 10.71 | 11.33 (11.36) | 11.96 (12.00) | 8.88 (8.98) |
| Males | 14.99 | 1.36 | 4.15 (4.15) | 2.65 (2.65) | 1.64 (1.64) |
| Females | 45.86 | 30.38 | 24.03 (24.03) | 28.70 (28.70) | 22.58 (22.58) |
| Urban | | | | | |
| Persons | 9.10 | 2.25 | 6.44 (6.53) | 5.70 (5.72) | 3.85 (3.85) |
| Males | 6.66 | 0.72 | 2.14 (2.14) | 1.45 (1.45) | 0.93 (0.93) |
| Females | 21.03 | 11.43 | 22.49 (22.49) | 21.62 (21.62) | 15.71 (15.71) |

Notes * Due to definitional differences in classifying a worker as main/ marginal in census and principal/ subsidiary in NSS, the share of subsidiary workers in NSS should be slightly lower than marginal workers in Census (though in this paper these two terms are being used interchangeably). Also, some persons (e.g. engaged in production of agriculture produce for own consumption including forestry, gathering of uncultivated crops, hunting, fishing, collection of firewood, etc.) are treated as workers wheras in census, such persons are not treated as workers. Therefore, the shares of marginal workers in census are not strictly comparable with those of NSS; the two data sets may differ marginally - either side. Yet, the broad conclusions would not be effected by such differences in concept and coverage.

** Figures within the parentheses are those based on NSS published results.

Earlier, there was a prominent opinion that the number of workers in census was lower than that of NSS quinquennial rounds on account of incomplete capturing of workers in the census round and particularly in the case of females. It is important to note that these comparisons were not based on the workers as published by NSS. The comparisons were made by estimating the workers by applying the WPRs from NSS on the population figures from RGI, the implicit assumption being that the level of underestimation of workers as well as population in the NSS was uniform.

Now, the estimate of workers (based on WPRs of 55th round and the annual growth) as on April 1, 2001 at 395.64 million was quite close to the Census 2001 figures of 402.51 million. However, the variations in the two data sets in different sectors are seen to be varying significantly (Table 3). In 1993-94, the estimates of main workers from RGI data were lower by 9.84 percent (5.08 percent among male and 23.19 percent among female) than NSS, the difference has increased to 14.74 percent (11.11 percent among male and 24.91 percent among female) in 2001, even though the overall difference had narrowed down to a mere 1.74 percent in Census 2001 as against -11.49 percent in 1993-94. The inference that though the difference of total workers in the census is increasing in positive direction the difference in main workers has increased in opposite direction, is seen to hold true even if the published NSS estimates are used (without any adjustment for population). This indicates that the gap between these two data sets has substantially narrowed down as far as absolute number of workers in the Census and NSS (adjusted for population) are concerned; but may have further widened if we see from the point of view of man days worked.

**Table 3: Percent Difference in Workers in NSS vis-à-vis RG**

| | Adjusted for Population | | | Crude (i.e, NSS Published Results) | | |
|---|---|---|---|---|---|---|
| | Total | Main/ Principal | Marginal/ Subsidiary | Total | Main/ Principal | Marginal/ Subsidiary |
| **In 1993-94** | | | | | | |
| Persons | -11.49 | -9.84 | -25.42 | 1.52 | 3.57 | -15.56 |
| Males | -6.17 | -5.08 | -51.86 | 8.24 | 9.52 | -44.94 |
| Females | -22.52 | -23.19 | -20.78 | -12.19 | -12.86 | -10.46 |
| | | | **In 2001** | | | |
| Persons | 1.74 | -14.74 | 215.54 | 7.61 | -9.71 | 223.51 |
| Males | 0.48 | -11.11 | 880.57 | 7.53 | -4.90 | 934.03 |
| Females | 4.56 | -24.91 | 119.79 | 7.76 | -22.66 | 124.32 |

As all the subsidiary workers within the labour force are unemployed as per the usual status concept of NSS, therefore to examine the implications of the increased share of marginal workers in Census, we have analysed the relationship of the subsidiary workers with the unemployment based on various NSS quinquennial rounds. These results (Table 4) indicate that quite a significant share of marginal workers, particularly males, is in the labour force.

**Table 4: Percentage of subsidiary Workers in NSS 43rd, 50th and 55th Rounds**

| Sector | Item | 55th (1999-2000) | | 50th (1993-94) | | 43rd (1987-88) | |
|---|---|---|---|---|---|---|---|
| | | Male | Female | Male | Female | Male | Female |
| Rural | Share of marginal workers included in labour force to total marginal workers | 21.60 | 0.57 | 18.66 | 0.75 | 23.66 | 1.86 |
| | Share of marginal workers included in labour force to total unemployed | 16.85 | 10.98 | 25.39 | 21.42 | 34.68 | 16.16 |
| Urban | Share of marginal workers included in labour force to total marginal workers | 31.25 | 2.19 | 2.62 | 1.64 | 41.47 | 5.12 |
| | Share of marginal workers included in labour force to total unemployed | 5.83 | 5.39 | 10.09 | 5.06 | 14.06 | 15.46 |

To have an idea of the unemployment scenario on the basis of the Census 2001 marginal workers, we have estimated the unemployment rates by using the ratio of 55th round. The unemployment rate is seen to be 22.13 percent, 4.35 percent, 36.42 and 10.07 percent in rural-male, rural-female, urban-male, urban-female respectively. All these figures are much much higher than the NSS results and totally in contrast to the generally accepted overall unemployment rate of around 2-3 percent. It may be reiterated that this is not an attempt to provide estimates of unemployment. However, it does give a broad idea of the extent of unemployment.

In spite of the fact that the absolute number of workers as per Census 2001 and estimated by NSS are quite close, the structure of workforce and growth rate of workers is quite different. Further, as estimates based on WPRs of NSS itself may not be considered as reliable (Kumar and Sharma 2001), users should be very cautious before drawing any inference about the impact of economic policies on the unemployment levels as well as on growth of workers.

This enigma may be explained if at the time of detailed results it is found that the growth in number of marginal workers came about due to phenomenal increase in the marginal workers outside the labour force. However, the probability of such a result is quite remote in a developing country like ours. Till RGI comes out with some plausible explanations about the increased share of marginal workers, the problem in the interpretation of these result will persist.

*Economic and Political Weekly 04/10/2002*

# EMPLOYMENT AND UNEMPLOYMENTSITUATION IN 1990S

Indira Hirway

## How Good Are NSS Data

The concepts and methods used by NSSO to net work and workers are not able to capture the work of the poor, particularly of women, satisfactorily. Since that part of the workforce which is not captured by the NSS survey is not likely to remain stagnant and is subject to increases and declines, depending on the specific situation, it is possible that an increase in this part of the workforce may explain the decline in the worker-population ratio (WPR) in the neneties. The Work force in these 'difficult to measure sectors', such as subsistence work, home-based work or informal work, can be better captured through time use surveys. Using data from the pilot time use survey (1998-99), this paper shows that (a) this survey technique is capable of getting more realistic estimates of workforce and (b) some of the work not captured in the NSS surveys but captured in the itme use surveys is likely to explain the changes in the employment situation in the nineties to a considerable extent.

1

## Background

The results of the employment and unemployment survey,1999-2000 have generated considerable debate among scholars and policy-makers with regard to the trends in employment and unemployment in the nineties. The survey results show that (a) there has been considerable de cline in the crude worker polulation ratios (WPRs) in all the four segments of the population, namely, males and females in rural and urban areas, during 1993-94 and 1999-2000 and (b) this decline has been much steeper in the case of women than in the case of men. Since the decline has been experienced by all the age groups, it is clear that the decline is not due to the shifts in the age structure of the population. This decline in the growth of employment also has been accompanied by any significant increase in unemployment rates, which implies that there has been a decline in the labour force population ratio during the nineties. That is, the percentage of the population offering for work, successfully or other wise, or is willing to take up work or extra work has also declined in the nineties.

What could be reasons for this decline in both WPRs and LPRs ? Sundaram (2001 a and 2001 b) has the following explanations;

(1) To a significant extent, the reduction in WPRS reflects a beneficial rise in the student population ratios - not only in the 5-9 and 10-14 age groups covering the primary and the middle school system, but also in the 15-19 and 20-24 age groups indicating a rising participation in secondary and higher level education.

(2) In respect of the decline in WPRs in the age groups 25 years and above, where there are not offsetting increase in participation in education, at least for rural women the decline in the WPRs on the usual principal plus subsidiary status categorization in the 25 and above age groups (except 50-54) is due entirely to declines in WPRs on the subsidiary status.

(3) The decline in the WRPs in the 1990s is getting exaggerated by the fact that in a number of cases, the 1993-94 levels are outliers when seen against WRPs from the earlier quinquennial surveys (Sundaram 2001b). That is, the long-term decline in the employment levels is not that significant.

Though the above arguments do seem to explain, to an extent, the decline in the WPRs during the nineties, they do not explain the entire decline. To start with, the arguments that the rising student population ratios up to the age group 20-24 explain, to a significant extent, the decline in the WPRs does not seem to be fully valid.

The table shows that the highest decline has been experienced by rural women in the age groups 15-19 (by 60 points ) and 20-24 (by 47 points).If this decline is due to an increase in the student population ratio, it means that (a) rural women have experienced the highest growth rates in the post-higher secondary education (in the age group 20-24) than rural males, urban males and urban females: (b) rural women have shown a higher growth rate in higher secondary education (in the age group 15-19) than urban males and urban females : and (c) rural females have experienced higher growth rates in higher secondary and post -higher secondary education than in primary and secondary education

**Table 1 Age Specific Usual Status (PS+SS) Worker Population Ratios (up to 24 Years ) by Residence, 1991 and 2001**

| Age Group change | Rural males | | | Rural Females | | | Urban males | | | Urban Females | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50th | 55th | Points change | 50th | 55th | Points change | 50th | 55th | Points change | 50th | 55th | Points change |
| 5-9 | 11 | 6 | -5 | 14 | 7 | -7 | 5 | 3 | -2 | 5 | 2 | -3 |
| 10-14 | 138 | 91 | -47 | 141 | 96 | -45 | 66 | 49 | -17 | 45 | 36 | -9 |
| 15-19 | 577 | 503 | -74 | 364 | 304 | -60 | 356 | 314 | -40 | 123 | 105 | -18 |
| 20-24 | 859 | 844 | -15 | 456 | 409 | -47 | 674 | 658 | -16 | 180 | 155 | -25 |

Source : Provisional Population Total, National Survey Organization .

These implications are do not seem to be acceptable if we consider the fact that the female literacy rate in India is 45.84 (Census of population 2001) and about 90 percent of literate women in the late nineties are educated up to less than secondary level (28 percent are literate without any formal education, 60 percent up to primary education) [Hirway and Mahendra Dev 2001]

The WPR of urban women has shown higher decline in the group 20-24 than in the younger age groups, 5-9 10-14 and 15-19. Once again this does not seem to be entirely due to increased student population ratio of urban women as the rates of increase are like ly to be higher in lower age groups, and lower in higher age groups at this level of female literacy. Empirical evidence shows that the student population ratio increases faster in the younger age groups particularly up to age 14 at a low level of literacy

In other words, the decline in the WPRs in the age groups 15-19 and 20-24, particularly for women, can be only partly explained by the rising student population ratios. One has to look for other explanations to understand the entire decline in the RPRs.

The other explanation given by Sundaram for the decline in the WPR above the age groups 25 and above, at least for rural women is the decline in WPRs on the subsidiary status. However, the fact remains that this explanation is not applicable to urban females or to rural and urban males. That is even though there is an explanation for the decline in the WPR of rural women , we do not have any suitable explanation for urban women and for rural and urban men. One has to look for some other explanation.

The third explanation by Sundaram is that the 1993-94 levels are outlies when seen against WPRs of the earlier surveys, and therefore the long-term decline in employment level is not that significant. Table 2 which presents the age specific WPRs for the past four quinquennial surveys as well as the Charts 1-4 that depict the movements of the male and female WPRs in rural and urban areas in these past four surveys shows that :

(1) In the case of rural and urban males 1993-94 is an outlier. In the case of rural males , the decline in the WPR is much less (by 8 points) if measured from 1983 than if measured from 1993-94 (21 points). Similarly, the case of urban males, the long term WPR shows an increasing trend which is not seen well if viewed only from 1993-94

(2) In the case of rural women , however the year 1993-94 WPR is not really an outlier. If one views the long-term trend from 1983 (we ignore the WPR of 1987-88 as it was an abnormal year), the decline is much more (41 points) than viewed from 1993-94.

(3) In case of urban female also the 1993-94 WPR is not much of an outlier. The long -term decline (from 1983) in the WPR is only marginally lower (by 12 points) than the same from 1993-94 (by 15 points). In fact, in the case of the urban female WPR, the declining trend is observed from 1977-78 wherefrom the rate declined by 17 points up to 1999-2001.

In short, the argument of the "the outlier 1993-94" is not applicable to all the segments of the workforce, particularly in the case of women and specially rural women.

To sum up, though the explanations given by Sundaram are valid, they are not adequate to explain the decline in the WPRs in the nineties. There is a need for further investigation in this area.

In this context, we would like to argue that part of the explanation lies in the limited ability of the NSS surveys to capture the work and workers in the economy. It seems to us that the concepts and methods used by NSSO to net work and workers are not able to capture the work of the poor, and particularly of women, satisfactorily. Since the part of the workforce, which is not netted by the NSS surveys is not likely to remain stagnanet and is likely to increases and declines depending on the specific situation, it is possible that an increase in this part of the workforce may result a decline in NSS-based WPRs. It is therefor possible that the decline in the WPRs in the nineties is due to the expansion of non-reported (by the NSSO)part of the workforce which is employed in what if known as "difficult to measure sectors" (such as subsistence work, home-based work or informal work) of the economy.

It is possible to capture the workforce in these "difficult to measure sectors" through time use surveys. In Section II we argue that the time use survey technique, as has been developed in the recent years, can capture paid and unpaid work of men and women fairly accurately. Using the recent data of the pilot time use surveys of India (1998-99), the paper shows that (a) this survey technique is capable of getting more realistic estimates of workforce, and (b) some of the work not captured in the NSS surveys, but captured in the time use surveys is likely to explain the changes in the employment situation in the nineties to a considerable extent.

Section II discusses the advantages of the time use survey technique over the conventional surveys and presents the relevant results of the time use survey, while Section III explain the implications of the time use data for understanding changes in the size of the workforce. It also infers implications of the discussion for improving workforce data in India

**Time Use Studies and Workforce Estimates**

Conceptually speaking, the total workforce in any economy covers all those who contribute to the gross domestic product (GDP) of the economy. That is, there is always a correspondence between the GDP generated in the economy and the total workforce that contributes to its generation. One major function of the workforce statistics therefore is to net comprehensively all the workers who participate in the production of goods and services covered under the national product statistics. Somehow, this simple looking task is not performed satisfactorily, particularly in developing countries, due to various conceptual and methodological problems.

One important aspects of the history of labour statistics in India is the continuous efforts made for netting comprehensively the workforce and labour force in the country. As is well known, there are two major sources of workforce/ labourforce statistics in India, the decennial Census of population and the quinquennial Surveys of the NSSO. In the case of Census of Population, the term 'work' has been defined as "any productive work for which remuneration is paid and is market oriented ", and 'worker' is a person engaged in 'work',. If a person has worked for a major part of the reference year, he /she is a 'main worker', and if a person has worked for less than half a year he/she is a marginal worker. In the case of the NSSO surveys a person is a worker if he/she is engaged in any 'economically meaningful activity'. This also includes general activities of women done within the sphere of house- hold activities, such as, looking after live-stock, fodder collection, foodgrains processing etc. A census investigator is expected to ask a respondent whether he is worker or not, while the NSS investigator asks about the activity that the person is engaged in. The NSSO is therefore known to be capturing 'workers' in a much better way than the census, and the size of the workforce as well as the workforce participation rates under the NSSO are higher than the same under the Census of population.

The census authorities made special attempts to capture work and workers in the 1991 Census as also in the 2001 Census. The 2001 Census data on workforce are not yet out, but the 1991 Census data were examined carefully by scholars to s ee whether they provided better/more realistic estimates of the workforce [ Premi and Raju 1993; Hirway 1993] These studies revealed that in spite of the changes introduced in the census enumeration as well as the training and extension work undertaken by the central and state governments and NGOs, the census failed to provide better or more comprehensive estimates of the workforce in the country. Through some pockets/regions showed a jump in the female WPR, the macro-data could not show any significant increase. This was because:

(1) It was difficult to raise awareness among 400 m and odd women about their work status- the efforts made were not adequate.

(2) It was also difficult to change the biases of investigators/enumerators (about 1m in number) regarding women's work.

The NSSO also has tried persistently to collect accurate data on workforce/labour force in the country.A major landmark in this context was 1972-73 when the NSSO introduced the three concepts of usual status, current weekly status and daily status of employment along with four rounds of employment surveys to capture seasonal changes. IN the 32nd Round (1977-78), the NSSO introduced probing question for the first time for all those respondents who reported activity status code 92 (domestic work) and 93 (domestic work with free collection) as their main activity. These questions tried to find out women's productive activities as well as their accurate labour market status. In the later rounds also the NSSO continued these efforts and even included collection of time use data. However, these time use data were not somehow analysed by the NSSO.

In order to capture the data on the strength of the informal sector and the workers engaged in it, Economic Census was conducted for the first time in 1977. This census attempted to capture details of small non-agricultural enterprises in the non-agricultural sector. This first Economic Census was followed by (a) Survey on Unorganised Manufacturing Enterprises 1978-79 (NSS 33rd) Round) and (b) Survey of

Enterprises covering Trade, Hotels and Restaurants, Transport and Services Sector (1979-80). The Second Economic Census was carried out in 1980, and the third in 1990. Both these census were followed by Enterprise Surveys in manufacturing, trade hotels, mining etc.

This Economic Census has been conducted during 1998-99 independently by the CSO in collaboration with Directorate of Economics and Statistics of States and Union Territories. It has been delinked from the Population Census mainly with a view to building up a time series with shorter intervals, which is suitable for unorganised activities. The fourth Economic Census is expected to generate frames separately for different types of membership, viz, private non-profit institutions, private, others and cooperatives giving activity wise information on number of enterprises as well as employment for each primary unit i.e., village and UFS block.

The 55th Round of the NSSO is another important survey on employment, unemployment. This Round collected data on informal sector using (1) employment, unemployment survey and (2) enterprise surveys. All unincorporated enterprises, which operate on either proprietary or partnership basis, are considered to contribute to' informal sector'. This survey is expected to provide more realistic estimates of workforce/labour force than before. The results of the survey show that somehow this has not happened, and as Sundaram states, there seems to be an unresolved puzzle behind it

Why is there an underestimation of workforce/labour force in India? There seems to be three major factors responsible for this: Firstly, work in India is frequently seasonal, intermittent and uncertain. Also, household work and economic work frequently get mixed with the result that it is difficult to demarcate between the two at the conceptual level as well as at the operational level (for example, cooking for family and cooking for hired workers). The available methods fail to net this type of work and workers. Secondly, under the prevailing socio-cultural values, many times women are not expected to get engaged in paid

employment outside the home and working women are held in low esteem in the society. The highest prestige is assigned to conventional domestic work for the family and the lowest to women's manual work outside home. As a result, women tend to under report their work. Thirdly, women themselves believe many times that their work is not important enough to be recorded as 'work'. For example, a weaver may report himself as a worker, but the female members of the household, who starch the yarn, prepare the loom, etc, may not report as a workers. And fourthly investigators also tend to be biased while reporting women's work. They tend to view women's work as household work and thereby underestimate women's work [Hirway 1999].

In short the conventional surveys like the Census of Population or NSSO surveys tend to fail to net work of the poor, and particularly of (poor) women. It has been observed that the major problem sectors are subsistence sector, informal work and home-based work. Though the 1993 UN Systems of National Accounts includes production of goods for self-consumption (i.e. subsistence sector) under the purview of national income, the workers (and some time output) of this sector are excluded from the official workforce data. In the same way workers in the informal sector and home based workers are also sometimes excluded from the conventional estimates of the workforce. In addition the activities like collection of fuel wood, fetching water, etc. which are recognised as a part of national accounts system and are now included in the NSS definition of work are also frequently excluded from the official data on work force.

Table 2: Age Specific Usual Status (PS+SS) Worker Population Ratios by Rural-Urban Residence and Gender, 1983 to 1999-2000

**Table 2. Age specific usual status (ps+ss) worker population Ratios by Rural - Urban Residence and Gender, 1983 to 1999 - 2000**

| Age | Rural Males | | | | Rural Females | | | |
|---|---|---|---|---|---|---|---|---|
| Group | 1983 | 1987-88 | 1993-94 | 1999-00 | 1983 | 1987-88 | 1993-94 | 1999-00 |
| 5-9 | 25 | 23 | 11 | 6 | 23 | 24 | 14 | 7 |
| 10-14 | 238 | 140 | 138 | 91 | 224 | 182 | 141 | 96 |
| 15-19 | 644 | 600 | 577 | 503 | 433 | 399 | 364 | 304 |
| 20-24 | 884 | 872 | 859 | 844 | 483 | 465 | 456 | 409 |
| 25-29 | 963 | 959 | 957 | 950 | 540 | 523 | 525 | 491 |
| 30-34 | 985 | 982 | 983 | 979 | 577 | 57 | 585 | 555 |
| 35-39 | 987 | 986 | 989 | 984 | 606 | 595 | 608 | 579 |
| 40-45 | 982 | 979 | 987 | 983 | 611 | 610 | 606 | 586 |
| 45-49 | 980 | 978 | 983 | 980 | 589 | 580 | 594 | 566 |
| 50-54 | 957 | 959 | 970 | 953 | 526 | 523 | 542 | 515 |
| 55-59 | 921 | 928 | 942 | 929 | 476 | 459 | 467 | 450 |
| 60+ | 662 | 668 | 699 | 639 | 227 | 218 | 241 | 218 |
| All | 543 | 539 | 553 | | 330 | 323 | 328 | |
| (564) | (546) | | | (346) | (333) | | | |

*Table 2. Age specific usual status (ps+ss) worker population Ratios by Rural - Urban Residence and Gender,* **1983 to 1999 - 2000 (Contd..)**

| Age Group | Urban Males | | | | Urban Females | | | |
|---|---|---|---|---|---|---|---|---|
| | 1983 | 1987-88 | 1993-94 | 1999-00 | 1983 | 1987-88 | 1993-94 | 1999-00 |
| 5-9 | 7 | 5 | 5 | 3 | 7 | 3 | 5 | 2 |
| 10-14 | 106 | 85 | 66 | 49 | 64 | 65 | 45 | 36 |
| 15-19 | 398 | 355 | 356 | 314 | 144 | 146 | 123 | 105 |
| 20-24 | 710 | 674 | 674 | 658 | 182 | 185 | 180 | 155 |
| 25-29 | 913 | 914 | 904 | 883 | 222 | 223 | 224 | 194 |
| 30-34 | 964 | 696 | 964 | 960 | 290 | 309 | 301 | 235 |
| 35-39 | 981 | 981 | 983 | 975 | 290 | 309 | 301 | 285 |
| 40-45 | 978 | 983 | 981 | 974 | 305 | 308 | 320 | 283 |
| 45-49 | 972 | 973 | 973 | 969 | 283 | 306 | 317 | 267 |
| 50-54 | 939 | 938 | 942 | 935 | 269 | 268 | 286 | 262 |
| 55-59 | 837 | 845 | 856 | 809 | 230 | 234 | 226 | 207 |
| 60+ | 508 | 480 | 442 | 402 | 124 | 123 | 113 | 94 |
| All | 510 | 506 | 521 | | 146 | 152 | 155 | |
| (564) | (538) | (526) | | | (155) | (159) | | |

Note: Figures in parentheses shows the crude WPRS' that would have been observed if the age distribution of the surveyed population in 1983 and 1987-88 had been the same as was reported by the 1993-94 'survey.

For 1983, 1987-88 and 1993 -94 Surveys: P Visaria, 'Employment and Workforce in India: Implications for National Income Estimates,' mimeo, July 1998.

For 1999-2000: NSSO, Employment and Unemployment in India 1999-2000 Key Results, NSS 55th Round July 1999-June 2000, December 2000

**Time Use Survey for Better Estimates of Workforce**

Time use surveys is a relatively new survey tool being used by several developed and a few developing countries to get better measures of well-being as well as workforce. Historically speaking, the time use survey technique was first used in the early years of the 20th century as a means of understanding lifestyle of people, including their social life. These surveys were thus designed to understand that part of life of people for which no information was available from conventional data sources, such as national income statistics, labour and employment statistics, population statistics, etc. In the second part of the 20th century, and particularly during the last few decades of the century, however, a need was felt to measure the invisible unpaid work of men and women to estimate the contribution of unpaid work to human welfare. Since the need was first expressed by some feminist groups in industrialized countries in the north, several of these countries like Finland, Canada, Norway, Australia, the US, Japan etc, started conducting these surveys to make invisible domestic work of women in these countries visible [Ironmonger 1999; Harvey 1996; Goldschmidt 1995].

With the emergence of developing countries on the scene in the last decade of the 20th century, however, time use surveys have acquired a new focus as these countries have seen several additional uses of time use surveys- in netting economic work of women and thereby improving workforce statistics and natural income statistics. It is now gradually getting accepted that time use survey is a survey technique (in fact, the only survey technique that is available to us at present) that provides a comprehensive information on how

individuals spend their time on a daily and weekly basis, and reveals the details of an individual's daily life with a combination of specificity and comprehensiveness not achieved in any other social survey. Data collection under a time use survey does not have any socio-cultural bias as the information collected refers only to how individuals spend their time. Since the information is collected about all the 24 hours, no activity is likely to be missed out. As a result, a proper coding and a suitable system of classification of activities can generate fairly accurate data on workforce. In other words, the time use method can remove the methodological hurdles in data collection and with a proper classification of time use activities; it can also remove conceptual hurdles and as a result can generate reliable estimates of workforce [Hirway 1999].

Time use studies provide data on the following.

(1) Allocation of time by men and women between SNA2 extended SNA3 and non SNA activities;4

(2) Detailed classification of these activities (up to 3 digits) that provide details about participation of men and women in these activities and time spent on them [Indira Hirway 1999 op cit for details];

(3) Context variables in time use surveys provide additional details regarding the time spent on different activities : These variable could be (a) paid and unpaid activities, (b)location (inside or outside home of activities, (c) for whom is the activities conducted, and (d) with whom the activities are conducted: and

(4) Background schedules provide useful details about about individual and household characteristics of the persons whose time use is reported. Individual characteristics like age, sex, education, occupation, etc, amd household characteristics like income and consumption expenditure, cast/race, ;main occupation', etc can be related to time use patterns.

The first pilot Indian time use survey was conducted in 1998-99 in six major states selected from the six major regions of the country[5]. The objective behind selecting the six states was to test the concepts and methods in these six different socio-economic situations. Though the results of the combined state are not strictly representative of the entire country, the broadly represent the all-India situation, We have therefore used the combined states data as well as state data for the purpose of presenting WPRs.

It needs to be added that the activity classification classifies the time use activities in the SNA framework. That is the activities are classified into in SNA activities-activities covered under the national accounts system, and falling within the SNA Production Boundary; extended SNA activities- activities that fall outside the SNA production Boundary, but fall within the General production Boundary, consisting mainly of unpaid services , and Non SNA activities or personal services which cannot be delegated to others, like sleeping , eating etc. there are further classified into broad sectors (1st digit), sub sectors (2nd digit ) and actual activities (3rd digit).6 the data collected in the survey provide information about howmany people spent time on each of the activities during the reference day and how much time did they spend on these activities.

**Computation of WPRS Using Time Use Data and Their Comparability with NSS WPRs**

The time use survey collected data on how people spent the last 24 hours of a normal (working) day and of the weekly variant day during the last week.7 This information was collected using one day recall method

according to which the investigator asked the respondent the details by minutes, in an hourly timeslot, on how he/she spend the day before. The details of the time use activities were then classified as per the activity classification to arrive at the data on the time spent by respondents on different SNA, extended SNA and non-SNA activities.

The selection of the normal day for the survey was done randomly, implying each week day of the reference week had an equal chance of getting selected. The total selected days, thus do represent the reference week. Also the inclusion of weekly variant day gave information on how the respondents spent the weekly variant day. However, it was observed that the concept of weekly holiday does not exist in most places (people work throughout the week), with the result of the weekly estimates of the time use pattern were made by using 6.5 normal days and 0.5 weekly variant day in the reference week.

In the case of the NSSO, on the other hand, there are three reference periods, namely, one year, one week and each day of the week, and workforce estimates are made for each of the reference period. For classification of persons according to current weekly status approach, they are assigned a unique activity status with reference to a period of seven days proceeding the date of the survey. This is easily done in the case of persons having only one status during the reference week. But for the persons pursuing more than one activity, a priority-cum -major time rule is applied to obtain a unique activity status. Under the priority rule, the status of working gets a priority over the status of not working but seeking/available for work. Within the broad category of working and non-working, the detailed activity category assigned by major time spent criterion Using this procedure in the current weekly status, a person is considered working or employed if the person was engaged for at least one hour a day on any one day of the previous week in any economic activity. A person who has not worked for even one hour on any day of the week, but had been seeking or had been available for work any time for at least one hour during the week was considered seeking/available for work. Others were considered 'not available for work' or' out of labour force' (see NSSO 2000).

One can thus say that both the NSSO and the TUS had a common reference period of one week. In order to make the TUS work force data comparable to the NSSO weekly status data, those who spent at least one hour on work during the reference week under the TUS were estimated, and using these estimates comparable WPRs (with the NSS-based WPRs) were computed.

Table 3 presents data on WPRS as per the TUS (1998-99) and the NSSO current weekly status (1993-94 and 1999-2000). The table shows that:

| States | NSSO,1993-94 | | | NSSO 1999-2000 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Rural | | | Urban | | |
| | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| Haryana | 45.6 | 18.8 | 33.1 | 46.2 | 17.7 | 32.8 | 50.2 | 10 | 31.3 |
| MP | 52.5 | 27.17 | 40.42 | 51.2 | 30.7 | 41.3 | 47.3 | 12.1 | 30.5 |
| Gujarat | 54.6 | 26.39 | 41.1 | 57.1 | 35.5 | 46.4 | 52.9 | 12.5 | 33.6 |
| Orissa | 52.9 | 20.48 | 36.86 | 52.7 | 23.3 | 37.9 | 45.7 | 11.6 | 29.3 |
| TamilNadu | 56.6 | 34.2 | 45.38 | 56.6 | 38.1 | 47.4 | 55.2 | 20.1 | 38.1 |
| Meghalaya | 59.1 | 42.88 | 51.17 | 55.6 | 42 | 48.7 | 39.3 | 19.7 | 29.7 |
| Combinated states/all India states/all -india | 52.6 | 23.41 | 38.53 | 51 | 25.3 | 38.4 | 50.9 | 12.8 | 32.7 |

| State | TUS 1998-99 | | | Difference between TUS-WPR and NSS-WPR (1993-94) | | | Difference between TUS-WPR and NSS-WPR (1999-2000 Rural) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| Haryana | 57.3 | 56.16 | 59.79 | 11.7 | 37.36 | 26.69 | 11.1 | 38.46 | 26.99 |
| MP | 60.5 | 49.43 | 55.28 | 7.96 | 22.26 | 14.86 | 9.27 | 18.73 | 13.98 |
| Gujarat | 60 | 44.17 | 52.5 | 5.42 | 17.78 | 11.4 | 2.92 | 8.67 | 6.1 |
| Orissa | 59.9 | 55.47 | 57.67 | 7 | 34.99 | 20.81 | 7.18 | 32.17 | 19.77 |
| TamilNadu | 66.1 | 50.25 | 58.18 | 9.47 | 16.05 | 12.8 | 9.5 | 12.15 | 10.78 |
| Meghalaya | 56.2 | 52.45 | 54.34 | -2.83 | 9.57 | 3.17 | 0.62 | 10.45 | 5.64 |
| Combinated states/all India states/all -india | 61.3 | 50.32 | 56.01 | 8.73 | 26.91 | 17.48 | 10.32 | 25.02 | 17.61 |

Note * The data refer to current weekly status of workers.

**The data refer to the WPRs computed using the time use data the reference period is one week.

Source : NSSO Rounds, RN Pandey, Estimating Workforce Participation Rates Using Time Use Survey Data and its comparison with the Usual Labour Force

Survey - Indian Experience: NSSO Rounds, National Sample Survey Organisation, New Delhi.

The table shows that

(1) The WPRs based on the TUS are higher than the same of the NSS, for males and females both, which implies that the TUS has been able to get better estimates of workforce for men as well as women.

(2) The differences between the two sets of WPRs are higher in the case of women than in the case of men. While differences between the male WPRs go up to 11.7 per cent points (in the case of Haryana), the differences between the female WPRs go up to 38.4 percent points (again in the case of Haryana). This indicates that women's economic work is more underestimated in the NSSO than that of men. This seems to be due to the fact that women predominate as unpaid workers or subsistence workers in 'difficult to measure' sectors.

(3) The difference in the NSSo base WPRs and TUS-based WPRs are the largest in the case of Haryana (26.99 points for persons, 11.1 points for men and 38.46 for women) and the lowest in Meghalaya (5.64 points for persons, 0.82 points for men and 10.45 points for women), followed by Gujarat (6.1 points for persons, 2.92 points for men and 8.67 points for women). This

indicates that the extent of underestimation of the workforce under NSS rounds is not the same across all the states. The underestimation does not seem to be related to the level of economic growth either, as Haryana and Gujarat both fall in the top five richest states in India, but the extent of underestimation in Haryana seems to be much more than the same in Gujarat. The underestimation of workforce under the NSSO therefore needs a careful investigation.

The higher WPRS under the time use survey raises a basic question regarding the validity and accuracy of the WPRs of the conventional surveys. The conventional estimates of workforce seem to leave out a significant portion due to the inadequacies of the concepts and methods used. The time use surveys results show that the part of the workforce underestimated under the NSSO is not the same in all the states, implying that the extent of underestimation is likely to change from situation to situation.

It is therefore possible that the decline in the NSSO-based WPRs between 1993

-94 and 1999-2000 is due to the expansion of the 'difficult to measure' sectors like subsistence sector, home-based work or other informal sector activities.

**Table 4: State wise Distribution of Time Spend (in Hours) in SNA Activities by Mode of Payment and Sex (Participants)**

| States | Male | | | Female | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Paid | Unpaid | PerCent Time on Unpaid Activities | Paid | Unpaid | PerCent Time on Unpaid Activities | Paid | Unpaid | PerCent Time on Unpaid Activities |
| Haryana | 33.09 (1152) | 18.12 (1347) | 35.38 | 4.13 (215) | 25.34 (1494) | 85.99 | 20.06 (1367) | 21.37 (2841) | 51.58 |
| Madhya Predesh | 29.41 (5247) | 23.34 (6311) | 44.25 | 14.31 (3072) | 15.75 (4391) | 52.40 | 22.99 (8319) | 20.12 (10702) | 46.67 |
| Gujarat | 44.37 (3959) | 14.17 (3897) | 24.21 | 17.18 (1747) | 13.87 (2541) | 44.67 | 33.26 (5706) | 14.05 (6438) | 29.70 |
| Orissa | 31.25 (2103) | 22.42 (2589) | 41.77 | 8.00 (583) | 18.18 (32.35) | 69.44 | 20.55 (26.86) | 20.47 (5824) | 49.90 |
| Tamil Nadu | 41.42 (5633) | 13.36 (4863) | 24.39 | 21.8 (3034) | 10.32 (4280) | 32.45 | 32.74 (8667) | 12.04 (9143) | 26.89 |
| Mehalaya | 17.34 (374) | 35.39 (740) | 67.12 | 7.83 (196) | 25.34 (692) | 76.39 | 12.65 (570) | 30.44 (1432) | 70.64 |
| Combined states | 36.54 (18468) | 18.12 (19747) | 33.15 | 14.87 (8847) | 15.18 (16633) | 50.52 | 27.16 (27315) | 16.85 (36380) | 38.29 |

Source : Report of the Time use survey, Central Statistical Organisation, Government of India (2000)

*(will be continued on next issue)*

## Consumer Price Index for Industrial Workers

(Base 1982 = 100)

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 464 | 469 | 471 | 468 | 461 | 463 | 471 | 479 | 489 | 492 | 483 | 486 |
| | 2. Mundakayam | 455 | 460 | 456 | 454 | 454 | 454 | 457 | 464 | 476 | 476 | 486 | 482 |
| | 3. Kollam | 460 | 469 | 464 | 463 | 466 | 495 | 459 | 496 | 504 | 502 | 498 | 501 |
| | 4. Thiruvananthapuram | 507 | 516 | 523 | 529 | 528 | 532 | 530 | 546 | 557 | 552 | 544 | 545 |
| | Average | 472 | 479 | 479 | 479 | 477 | 486 | 479 | 496 | 507 | 506 | 503 | 504 |
| Tamilnadu | 1. Chennai | 502 | 502 | 500 | 503 | 502 | 501 | 508 | 512 | 515 | 520 | 523 | 526 |
| | 2. Coimbatore | 452 | 453 | 449 | 451 | 455 | 465 | 471 | 480 | 477 | 482 | 481 | 479 |
| | 3. Coonoor | 458 | 464 | 458 | 458 | 460 | 466 | 469 | 474 | 477 | 473 | 478 | 488 |
| | 4. Madurai | 461 | 458 | 454 | 451 | 443 | 445 | 454 | 458 | 457 | 464 | 464 | 470 |
| | 5. Salem | 457 | 461 | 454 | 454 | 453 | 453 | 461 | 470 | 470 | 467 | 464 | 472 |
| | 6.Tiruchirappalli | 515 | 515 | 515 | 512 | 512 | 515 | 507 | 522 | 530 | 548 | 548 | 550 |
| | Average | 474 | 476 | 472 | 472 | 471 | 474 | 478 | 486 | 488 | 492 | 493 | 498 |
| Andra Pradesh | 1. Gudur | 455 | 447 | 447 | 438 | 431 | 430 | 440 | 453 | 457 | 458 | 458 | 463 |
| | 2. Gundur | 459 | 460 | 466 | 465 | 451 | 453 | 463 | 468 | 480 | 480 | 481 | 484 |
| | 3. Hyderabad | 447 | 455 | 460 | 459 | 462 | 462 | 466 | 469 | 468 | 470 | 471 | 476 |
| | 4. Visakhapatanam | 458 | 456 | 460 | 456 | 460 | 462 | 466 | 468 | 470 | 475 | 473 | 475 |
| | 5. Warangal | 486 | 483 | 496 | 489 | 486 | 487 | 496 | 496 | 503 | 509 | 506 | 514 |
| | Average | 461 | 460 | 466 | 461 | 458 | 459 | 466 | 471 | 476 | 478 | 478 | 482 |
| 4. Karnataka | 1. Bangalore | 448 | 448 | 448 | 445 | 445 | 445 | 445 | 450 | 455 | 456 | 458 | 457 |
| | 2. Belgaum | 502 | 502 | 502 | 503 | 505 | 507 | 509 | 511 | 519 | 521 | 524 | 523 |
| | 3. Hubli Dhanwar | 469 | 462 | 462 | 459 | 460 | 460 | 462 | 469 | 477 | 477 | 480 | 481 |
| | 4. Meccara | 456 | 453 | 453 | 452 | 453 | 452 | 456 | 461 | 462 | 463 | 463 | 459 |
| | Average | 469 | 466 | 466 | 465 | 466 | 466 | 468 | 473 | 478 | 479 | 481 | 480 |
| Pondicherry | 1. Pondicherry | 496 | 493 | 494 | 493 | 494 | 507 | 502 | 505 | 516 | 512 | 516 | 521 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 541 | 533 | 530 | 529 | 537 | 539 | 545 | 555 | 561 | 563 | 562 | 563 |
| Maharastra | 1. Mumbai | 539 | 536 | 543 | 550 | 553 | 554 | 555 | 558 | 560 | 562 | 563 | 563 |
| | 2. Nagpur | 495 | 487 | 486 | 589 | 491 | 491 | 495 | 499 | 493 | 496 | 499 | 500 |
| | 3. Nasik | 505 | 504 | 511 | 507 | 511 | 508 | 508 | 511 | 514 | 519 | 518 | 518 |
| | 4. Pune | 526 | 522 | 514 | 517 | 520 | 521 | 530 | 531 | 532 | 534 | 532 | 534 |
| | 5. Solapur | 484 | 482 | 481 | 479 | 476 | 477 | 485 | 484 | 486 | 490 | 499 | 497 |
| | Average | 510 | 506 | 507 | 528 | 510 | 510 | 515 | 517 | 517 | 520 | 522 | 522 |
| Haryana | 1. Faridabad | 478 | 471 | 469 | 464 | 468 | 472 | 475 | 480 | 487 | 491 | 492 | 491 |
| | 2. Yamuna Nagar | 438 | 430 | 431 | 427 | 428 | 434 | 434 | 441 | 452 | 458 | 459 | 456 |
| | Average | 458 | 451 | 450 | 446 | 448 | 453 | 455 | 461 | 470 | 475 | 476 | 474 |
| West Bengal | 1. Asansol | 460 | 456 | 449 | 443 | 449 | 452 | 451 | 452 | 459 | 463 | 463 | 465 |
| | 2. Darjeeling | 410 | 402 | 394 | 387 | 388 | 387 | 388 | 390 | 393 | 412 | 420 | 411 |
| | 3. Durgapur | 536 | 532 | 540 | 536 | 540 | 544 | 549 | 552 | 558 | 564 | 567 | 571 |
| | 4. Haldia | 586 | 580 | 573 | 571 | 579 | 578 | 577 | 579 | 584 | 589 | 590 | 592 |
| | 5. Howrah | 547 | 538 | 526 | 528 | 535 | 536 | 541 | 542 | 545 | 548 | 550 | 554 |
| | 6. Jalpaiguri | 418 | 416 | 413 | 406 | 410 | 408 | 409 | 416 | 421 | 425 | 427 | 429 |
| | 7. Kolkata | 540 | 526 | 517 | 514 | 522 | 523 | 528 | 528 | 537 | 536 | 538 | 543 |
| | 8. Raniganj | 417 | 415 | 402 | 404 | 411 | 414 | 416 | 410 | 419 | 423 | 425 | 424 |
| | Average | 489 | 483 | 477 | 474 | 479 | 480 | 482 | 484 | 490 | 495 | 498 | 499 |
| Chandigarh | 1. Chandigarh | 498 | 497 | 513 | 513 | 505 | 505 | 505 | 509 | 514 | 521 | 525 | 522 |
| Uttar Pradesh | 1. Agra | 432 | 424 | 422 | 423 | 426 | 429 | 428 | 434 | 442 | 447 | 447 | 444 |
| | 2. Ghaziabad | 472 | 465 | 463 | 459 | 464 | 466 | 473 | 478 | 483 | 486 | 489 | 483 |
| | 3. Kanpur | 461 | 449 | 444 | 452 | 455 | 448 | 450 | 461 | 465 | 470 | 471 | 467 |
| | 4. Saharaupur | 430 | 426 | 428 | 432 | 434 | 434 | 433 | 434 | 436 | 438 | 439 | 446 |
| | 5. Varanasi | 493 | 482 | 474 | 474 | 478 | 474 | 481 | 482 | 491 | 495 | 499 | 498 |
| | Average | 458 | 449 | 446 | 448 | 451 | 450 | 453 | 458 | 463 | 467 | 469 | 468 |
| Madhya Pradesh | 1. Balaghat | 422 | 421 | 412 | 408 | 409 | 410 | 413 | 417 | 428 | 431 | 432 | 445 |
| | 2. Bhopal | 510 | 507 | 507 | 501 | 503 | 503 | 504 | 512 | 512 | 515 | 516 | 517 |
| | 3. Indore | 482 | 480 | 477 | 475 | 482 | 484 | 486 | 492 | 496 | 493 | 491 | 491 |
| | 4. Jabalpur | 471 | 467 | 461 | 459 | 462 | 459 | 460 | 462 | 468 | 470 | 472 | 488 |
| | Average | 471 | 469 | 464 | 461 | 464 | 464 | 466 | 471 | 476 | 477 | 478 | 485 |
| | **All India** | 472 | 472 | 472 | 472 | 468 | 469 | 472 | 476 | 481 | 484 | 485 | 487 |

## Consumer Price Index and % Variations of Index for Industrial Workers

| State | Centre | CPI for the month of | | variatio | CPI for the month of | | variatio |
|---|---|---|---|---|---|---|---|
| | | Sept-01 | Sept-02 | | Oct-01 | Oct-02 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 458 | 483 | 5.46 | 465 | 486 | 4.52 |
| | 2. Mundakayam | 447 | 486 | 8.72 | 449 | 482 | 7.35 |
| | 3. Kollam | 457 | 498 | 8.97 | 456 | 501 | 9.87 |
| | 4. Thiruvananthapuram | 505 | 544 | 7.72 | 509 | 545 | 7.07 |
| | Average | 467 | 503 | 7.71 | 470 | 504 | 7.18 |
| 2. Tamilnadu | 1. Chennai | 491 | 523 | 6.52 | 497 | 526 | 5.84 |
| | 2. Coimbatore | 442 | 481 | 8.82 | 446 | 479 | 7.40 |
| | 3. Coonoor | 448 | 478 | 6.70 | 453 | 488 | 7.73 |
| | 4. Madurai | 436 | 464 | 6.42 | 446 | 470 | 5.38 |
| | 5. Salem | 444 | 464 | 4.50 | 450 | 472 | 4.89 |
| | 6.Tiruchirappalli | 500 | 548 | 9.60 | 511 | 550 | 7.63 |
| | Average | 460 | 493 | 7.14 | 467 | 498 | 6.49 |
| 3. Andra Pradesh | 1. Gudur | 446 | 458 | 2.69 | 446 | 463 | 3.81 |
| | 2. Gundur | 451 | 481 | 6.65 | 456 | 484 | 6.14 |
| | 3. Hyderabad | 443 | 471 | 6.32 | 446 | 476 | 6.73 |
| | 4. Visakhapatanam | 446 | 473 | 6.05 | 454 | 475 | 4.63 |
| | 5. Warangal | 468 | 506 | 8.12 | 479 | 514 | 7.31 |
| | Average | 451 | 478 | 5.99 | 456 | 482 | 5.74 |
| 4. Karnataka | 1. Bangalore | 440 | 458 | 4.09 | 443 | 457 | 3.16 |
| | 2. Belgaum | 495 | 524 | 5.86 | 499 | 523 | 4.81 |
| | 3. Hubli Dhanwar | 455 | 480 | 5.49 | 457 | 481 | 5.25 |
| | 4. Meccara | 458 | 463 | 1.09 | 459 | 459 | 0.00 |
| | Average | 462 | 481 | 4.17 | 465 | 480 | 3.34 |
| 5. Pndicherry | 1. Pndicherry | 482 | 516 | 7.05 | 496 | 521 | 5.04 |

*Contd..*

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | % variatio | CPI for the month of | | % variatio |
|---|---|---|---|---|---|---|---|
| | | Sept-01 | Sept-02 | | Oct-01 | Oct-02 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 534 | 562 | 5.24 | 540 | 563 | 4.26 |
| 2. Maharastra | 1. Mumbai | 534 | 563 | 5.43 | 536 | 563 | 5.04 |
| | 2. Nagpur | 488 | 499 | 2.25 | 490 | 500 | 2.04 |
| | 3. Nasik | 503 | 518 | 2.98 | 505 | 518 | 2.57 |
| | 4. Pune | 518 | 532 | 2.70 | 520 | 534 | 2.69 |
| | 5. Solapur | 480 | 499 | 3.96 | 479 | 497 | 3.76 |
| | Average | 505 | 522 | 3.49 | 506 | 522 | 3.24 |
| 3. Haryana | 1. Faridabad | 480 | 492 | 2.50 | 478 | 491 | 2.72 |
| | 2. Yamuna Nagar | 433 | 459 | 6.00 | 433 | 456 | 5.31 |
| | Average | 457 | 476 | 4.16 | 456 | 474 | 3.95 |
| 4. West Bengal | 1. Asansol | 453 | 463 | 2.21 | 458 | 465 | 1.53 |
| | 2. Darjeeling | 396 | 420 | 6.06 | 404 | 411 | 1.73 |
| | 3. Durgapur | 531 | 567 | 6.78 | 540 | 571 | 5.74 |
| | 4. Haldia | 575 | 590 | 2.61 | 577 | 592 | 2.60 |
| | 5. Howrah | 528 | 550 | 4.17 | 536 | 554 | 3.36 |
| | 6. Jalpaiguri | 415 | 427 | 2.89 | 421 | 429 | 1.90 |
| | 7. Kolkata | 518 | 538 | 3.86 | 531 | 543 | 2.26 |
| | 8. Raniganj | 404 | 425 | 5.20 | 413 | 424 | 2.66 |
| | Average | 478 | 498 | 4.19 | 485 | 499 | 2.81 |
| 5. Chandigarh | 1. Chandigarh | 501 | 525 | 4.79 | 496 | 522 | 5.24 |
| 6. Uttar Pradesh | 1. Agra | 421 | 447 | 6.18 | 427 | 444 | 3.98 |
| | 2. Ghaziabad | 473 | 489 | 3.38 | 470 | 483 | 2.77 |
| | 3. Kanpur | 454 | 471 | 3.74 | 457 | 467 | 2.19 |
| | 4. Saharaupur | 431 | 439 | 1.86 | 431 | 446 | 3.48 |
| | 5. Varanasi | 486 | 499 | 2.67 | 493 | 498 | 1.01 |
| | Average | 453 | 469 | 3.53 | 456 | 468 | 2.63 |
| 7. Madhya Pradesh | 1. Balaghat | 420 | 432 | 2.86 | 422 | 445 | 5.45 |
| | 2. Bhopal | 503 | 516 | 2.58 | 506 | 517 | 2.17 |
| | 3. Indore | 475 | 491 | 3.37 | 477 | 491 | 2.94 |
| | 4. Jabalpur | 466 | 472 | 1.29 | 471 | 488 | 3.61 |
| | Average | 466 | 478 | 2.52 | 469 | 485 | 3.46 |
| | **All India** | 465 | 485 | 4.30 | 468 | 487 | 4.06 |

## Consumer Price Index for Agricultural Labourers

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sept 02 | Oct 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 318 | 322 | 319 | 322 | 321 | 321 | 321 | 325 | 328 | 328 | 325 | NA |
| 2 | Tamilnadu | 311 | 316 | 314 | 313 | 311 | 313 | 316 | 319 | 320 | 321 | 324 | NA |
| 3 | Anthrapradesh | 331 | 327 | 324 | 325 | 326 | 329 | 331 | 334 | 335 | 337 | 338 | NA |
| 4 | Karnataka | 311 | 312 | 308 | 308 | 309 | 309 | 314 | 314 | 315 | 316 | 320 | NA |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 305 | 304 | 303 | 303 | 303 | 303 | 308 | 314 | 315 | 319 | 321 | NA |
| 6 | Haryana | 325 | 323 | 320 | 321 | 320 | 320 | 322 | 323 | 328 | 331 | 333 | NA |
| 7 | West Bengal | 311 | 307 | 301 | 299 | 301 | 299 | 297 | 299 | 300 | 305 | 309 | NA |
| 8 | Uttar Pradesh | 315 | 311 | 309 | 312 | 312 | 308 | 309 | 315 | 320 | 323 | 326 | NA |
| 9 - | Madhya Pradesh | 312 | 310 | 304 | 304 | 305 | 307 | 311 | 314 | 317 | 320 | 320 | NA |
| NA | NA | 323 | 324 | 319 | 317 | 319 | 319 | 320 | 322 | 323 | 328 | 331 | NA |
| NA | NA | 296 | 296 | 291 | 290 | 291 | 292 | 288 | 290 | 293 | 296 | 298 | NA |
| NA | NA | 320 | 315 | 312 | 313 | 316 | 219 | 321 | 325 | 229 | 332 | 334 | NA |
| NA | NA | 299 | 296 | 297 | 299 | 296 | 295 | 300 | 301 | 298 | 303 | 303 | NA |
| 14 | Jammu & Kashmir | 329 | 326 | 329 | 330 | 330 | 231 | 338 | 333 | 334 | 335 | 337 | NA |
| 15 | Manipur | 304 | 307 | 300 | 299 | 302 | 299 | 297 | 298 | 295 | 295 | 299 | NA |
| 16 | Meghalaya | 359 | 356 | 351 | 350 | 354 | 354 | 348 | 344 | 341 | 345 | 343 | NA |
| 17 | Orissa | 307 | 303 | 294 | 286 | 287 | 290 | 293 | 295 | 297 | 300 | 301 | NA |
| 18 | Punjab | 328 | 324 | 322 | 322 | 320 | 325 | 325 | 328 | 332 | 335 | 335 | NA |
| 19 | Rajastan | 306 | 305 | 306 | 308 | 310 | 311 | 313 | 318 | 320 | 323 | 327 | NA |
| 20 | Tripura | 334 | 315 | 313 | 315 | 319 | 327 | 321 | 323 | 327 | 326 | 328 | NA |
| | **All India** | **313** | **312** | **308** | **308** | **309** | **309** | **311** | **314** | **316** | **319** | **321** | **322** |

## Consumer Price Index and % Variations for Agricultural Labourers

Base 1986-87 = 100]

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Aug-01 | Aug-02 | | Sept-01 | Sept-02 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 323 | 328 | 1.55 | 316 | 325 | 2.85 |
| 2 | Tamilnadu | 304 | 321 | 5.59 | 304 | 324 | 6.58 |
| 3 | Anthrapradesh | 326 | 337 | 3.37 | 327 | 338 | 3.36 |
| 4 | Karnataka | 307 | 316 | 2.93 | 307 | 320 | 4.23 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 309 | 319 | 3.24 | 305 | 321 | 5.25 |
| 6 | Haryana | 322 | 331 | 2.80 | 324 | 333 | 2.78 |
| 7 | West Bengal | 305 | 305 | 0.00 | 306 | 309 | 0.98 |
| 8 | Uttar Pradesh | 313 | 323 | 3.19 | 314 | 326 | 3.82 |
| 9 | Madhya Pradesh | 316 | 320 | 1.27 | 315 | 320 | 1.59 |
| 10 | Assam | 318 | 328 | 3.14 | 319 | 331 | 3.76 |
| 11 | Bihar | 285 | 296 | 3.86 | 287 | 298 | 3.83 |
| 12 | Gujarat | 329 | 332 | 0.91 | 324 | 334 | 3.09 |
| 13 | Himachalpradesh | 303 | 303 | 0.00 | 299 | 303 | 1.34 |
| 14 | Jammu & Kashmir | 332 | 335 | 0.90 | 329 | 337 | 2.43 |
| 15 | Manipur | 312 | 295 | -5.45 | 308 | 299 | -2.92 |
| 16 | Meghalaya | 348 | 345 | -0.86 | 350 | 343 | -2.00 |
| 17 | Orissa | 313 | 300 | -4.15 | 312 | 301 | -3.53 |
| 18 | Punjab | 331 | 335 | 1.21 | 329 | 335 | 1.82 |
| 19 | Rajastan | 311 | 323 | 3.86 | 308 | 327 | 6.17 |
| 20 | Tripura | 323 | 326 | 0.93 | 324 | 328 | 1.23 |
| | **All India** | **312** | **319** | **2.24** | **311** | **321** | **3.22** |

## Consumer Price Index for Rural Labourers

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sept 02 | Oct 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 321 | 326 | 322 | 325 | 324 | 323 | 324 | 328 | 331 | 331 | 327 | NA |
| 2 | Tamilnadu | 312 | 316 | 314 | 313 | 312 | 313 | 316 | 319 | 320 | 322 | 324 | NA |
| 3 | Anthrapradesh | 332 | 327 | 325 | 325 | 327 | 330 | 332 | 335 | 335 | 337 | 338 | NA |
| 4 | Karnataka | 312 | 316 | 309 | 309 | 311 | 311 | 315 | 315 | 316 | 317 | 321 | NA |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 306 | 306 | 305 | 304 | 304 | 304 | 309 | 314 | 316 | 319 | 321 | NA |
| 6 | Haryana | 325 | 323 | 321 | 322 | 321 | 321 | 323 | 325 | 330 | 333 | 334 | NA |
| 7 | West Bengal | 313 | 310 | 303 | 301 | 303 | 302 | 300 | 302 | 303 | 308 | 312 | NA |
| 8 | Uttar Pradesh | 319 | 315 | 313 | 315 | 316 | 312 | 312 | 319 | 324 | 327 | 330 | NA |
| 9 | Madhya Pradesh | 317 | 314 | 309 | 308 | 310 | 312 | 315 | 318 | 322 | 325 | 325 | NA |
| 10 | Assam | 324 | 324 | 319 | 317 | 319 | 320 | 320 | 322 | 323 | 328 | 331 | NA |
| 11 | Bihar | 298 | 298 | 292 | 292 | 292 | 294 | 290 | 293 | 295 | 298 | 300 | NA |
| 12 | Gujarat | 321 | 317 | 313 | 315 | 317 | 320 | 323 | 326 | 331 | 334 | 335 | NA |
| 13 | Himachalpradesh | 305 | 302 | 301 | 304 | 302 | 302 | 306 | 308 | 305 | 310 | 310 | NA |
| 14 | Jammu & Kashmir | 323 | 320 | 321 | 323 | 324 | 325 | 331 | 326 | 326 | 328 | 329 | NA |
| 15 | Manipur | 305 | 308 | 300 | 300 | 303 | 299 | 297 | 298 | 296 | 296 | 300 | NA |
| 16 | Meghalaya | 356 | 354 | 348 | 347 | 350 | 350 | 345 | 341 | 338 | 342 | 340 | NA |
| 17 | Orissa | 307 | 303 | 294 | 286 | 287 | 290 | 293 | 295 | 297 | 300 | 301 | NA |
| 18 | Punjab | 332 | 329 | 327 | 327 | 215 | 330 | 330 | 332 | 336 | 339 | 340 | NA |
| 19 | Rajastan | 309 | 307 | 308 | 310 | 312 | 313 | 315 | 319 | 320 | 324 | 328 | NA |
| 20 | Tripura | 328 | 308 | 307 | 309 | 313 | 321 | 315 | 317 | 321 | 319 | 321 | NA |
| | **All India** | **316** | **314** | **311** | **311** | **311** | **312** | **313** | **317** | **319** | **321** | **323** | **324** |

## Consumer Price Index and % Variations for Rural Labourers

Base 1986-87 = 100

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Aug-01 | Aug-02 | | Sept-01 | Sept-02 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 326 | 331 | 1.53 | 320 | 327 | 2.19 |
| 2 | Tamilnadu | 305 | 322 | 5.57 | 304 | 324 | 6.58 |
| 3 | Anthrapradesh | 327 | 337 | 3.06 | 327 | 338 | 3.36 |
| 4 | Karnataka | 309 | 317 | 2.59 | 309 | 321 | 3.88 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 310 | 319 | 2.90 | 306 | 321 | 4.90 |
| 6 | Haryana | 323 | 333 | 3.10 | 325 | 334 | 2.77 |
| 7 | West Bengal | 307 | 308 | 0.33 | 308 | 312 | 1.30 |
| 8 | Uttar Pradesh | 316 | 327 | 3.48 | 318 | 330 | 3.77 |
| 9 | Madhya Pradesh | 319 | 325 | 1.88 | 318 | 325 | 2.20 |
| 10 | Assam | 318 | 328 | 3.14 | 319 | 331 | 3.76 |
| 11 | Bihar | 287 | 298 | 3.83 | 289 | 300 | 3.81 |
| 12 | Gujarat | 330 | 334 | 1.21 | 326 | 335 | 2.76 |
| 13 | Himachalpradesh | 309 | 310 | 0.32 | 305 | 310 | 1.64 |
| 14 | Jammu & Kashmir | 326 | 328 | 0.61 | 323 | 329 | 1.86 |
| 15 | Manipur | 312 | 296 | -5.13 | 309 | 300 | -2.91 |
| 16 | Meghalaya | 346 | 342 | -1.16 | 347 | 340 | -2.02 |
| 17 | Orissa | 313 | 300 | -4.15 | 312 | 301 | -3.53 |
| 18 | Punjab | 334 | 339 | 1.50 | 333 | 340 | 2.10 |
| 19 | Rajastan | 311 | 324 | 4.18 | 309 | 328 | 6.15 |
| 20 | Tripura | 319 | 319 | 0.00 | 319 | 321 | 0.63 |
| | **All India** | **314** | **321** | **2.23** | **313** | **323** | **3.19** |

## Consumer Price Index for Industrial & Agricultural Workers

### (Kerala State)

| Centre | 1970=100 | Base 1998-99=100 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 |
| Thiruvananthapuram | 114 | 114 | 115 | 114 | 114 | 114 | 114 | 115 | 116 | 117 | 117 | 117 |
| Kollam | 115 | 115 | 115 | 114 | 115 | 115 | 116 | 117 | 117 | 118 | 118 | 118 |
| Pathanamthitta | 113 | 113 | 113 | 112 | 112 | 112 | 113 | 113 | 114 | 115 | 113 | 113 |
| Punalur | 114 | 114 | 114 | 113 | 112 | 112 | 113 | 113 | 113 | 113 | 115 | 115 |
| Alappuzha | 114 | 114 | 114 | 113 | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 |
| Kottayam | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 |
| Mundakkayam | 113 | 113 | 113 | 112 | 111 | 111 | 111 | 112 | 113 | 114 | 114 | 114 |
| Munnar | 115 | 115 | 115 | 114 | 114 | 114 | 114 | 115 | 116 | 116 | 115 | 115 |
| Ernakulam | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 |
| Chalakkudy | 114 | 114 | 114 | 113 | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 |
| Thrissur | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 | 114 | 114 | 114 | 114 |
| Palakkad | 112 | 112 | 112 | 111 | 111 | 111 | 111 | 112 | 113 | 114 | 114 | 114 |
| Malappuram | 113 | 113 | 114 | 113 | 112 | 112 | 112 | 113 | 114 | 115 | 114 | 114 |
| Kozhikkode | 115 | 115 | 115 | 114 | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 |
| Meppady | 115 | 115 | 115 | 114 | 114 | 114 | 114 | 115 | 115 | 116 | 115 | 115 |
| Kannur | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 | 114 | 115 | 114 | 114 |
| Kasargod | 114 | 114 | 114 | 113 | 112 | 112 | 113 | 113 | 113 | 113 | 113 | 114 |
| **State** | **114** | **114** | **114** | **113** | **113** | **113** | **113** | **114** | **114** | **115** | **114** | **114** |

## Consumer Price Index Numbers of certain centres for urban non-manual employees

[Base 1984-85=100]

| Sl.No | Centre | State | Index for the month of | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nov 01 | Dec 02 | Jan 02 | Feb 02 | Apr-02 | May-02 | Jun-02 | Jul-02 | Aug 02 | Sep 02 | Oct 02 |
| **Southern Centres** | | | | | | | | | | | | | |
| 1 | Trivandrum | Kerala | 386 | 386 | 391 | 392 | 395 | 400 | 402 | 406 | 408 | 405 | NA |
| 2 | Calicut | Kerala | 374 | 374 | 375 | 376 | 375 | 376 | 378 | 380 | 383 | 383 | NA |
| 3 | Chennai | Tamilnadu | 462 | 466 | 471 | 472 | 475 | 478 | 482 | 487 | 486 | 485 | NA |
| 4 | Coimbatore | Tamilnadu | 455 | 462 | 460 | 460 | 462 | 463 | 466 | 471 | 473 | 474 | NA |
| 5 | Madurai | Tamilnadu | 448 | 448 | 447 | 448 | 449 | 452 | 455 | 453 | 453 | 454 | NA |
| 6 | Salem | Tamilnadu | 434 | 434 | 434 | 433 | 438 | 440 | 444 | 445 | 449 | 448 | NA |
| 7 | Tiruchirapalli | Tamilnadu | 418 | 421 | 426 | 429 | 431 | 432 | 434 | 439 | 441 | 441 | NA |
| 8 | Hydrabad | Andrapradesh | 413 | 411 | 412 | 411 | 417 | 420 | 425 | 427 | 426 | 429 | NA |
| 9 | Kurnool | Andrapradesh | 411 | 408 | 413 | 411 | 408 | 409 | 410 | 412 | 413 | 414 | NA |
| 10 | Vijayawada | Andrapradesh | 434 | 431 | 434 | 433 | 438 | 442 | 447 | 454 | 457 | 456 | NA |
| 11 | Vishakapattanam | Andrapradesh | 406 | 406 | 404 | 402 | 406 | 408 | 412 | 416 | 416 | 416 | NA |
| 12 | Warangal | Andrapradesh | 426 | 427 | 424 | 420 | 417 | 420 | 428 | 426 | 426 | 426 | NA |
| 13 | Bangalore | Karnataka | 416 | 415 | 415 | 416 | 416 | 419 | 421 | 421 | 422 | 424 | NA |
| 14 | Gulbarga | Karnataka | 385 | 386 | 386 | 389 | 387 | 389 | 392 | 392 | 392 | 395 | NA |
| 15 | Hubli | Karnataka | 402 | 403 | 400 | 400 | 402 | 404 | 407 | 410 | 413 | 415 | NA |
| 16 | Mangalore | Karnataka | 387 | 387 | 389 | 389 | 391 | 395 | 397 | 400 | 407 | 410 | NA |
| **Northern Centres** | | | | | | | | | | | | | |
| 1 | Delhi | Delhi | 405 | 402 | 399 | 399 | 399 | 401 | 405 | 411 | 413 | 419 | NA |
| 2 | Mumbai | Maharashtra | 397 | 396 | 397 | 396 | 402 | 405 | 406 | 408 | 407 | 407 | NA |
| 3 | Aurangabad | Maharashtra | 423 | 425 | 430 | 428 | 428 | 431 | 433 | 442 | 440 | 442 | NA |
| 4 | Nagpur | Maharashtra | 379 | 376 | 375 | 372 | 378 | 381 | 386 | 386 | 388 | 389 | NA |
| 5 | Pune | Maharashtra | 406 | 404 | 405 | 404 | 409 | 413 | 419 | 421 | 421 | 421 | NA |
| 6 | Solapur | Maharashtra | 374 | 373 | 371 | 370 | 373 | 377 | 379 | 384 | 386 | 389 | NA |
| 7 | Chandigarh | Punjab | 465 | 463 | 466 | 469 | 335 | 337 | 341 | 478 | 481 | 482 | NA |
| 8 | Kolkatta | West Bengal | 359 | 356 | 352 | 352 | 356 | 358 | 363 | 366 | 367 | 367 | NA |
| 9 | Asansol | West Bengal | 403 | 401 | 396 | 398 | 406 | 412 | 414 | 408 | 410 | 415 | NA |
| 10 | Kharagpur | West Bengal | 382 | 382 | 374 | 374 | 381 | 384 | 391 | 396 | 400 | 400 | NA |
| 11 | Siliguri | West Bengal | 424 | 420 | 421 | 418 | 422 | 424 | 425 | 430 | 430 | 432 | NA |
| 12 | Lucknow | Uttarpradesh | 373 | 366 | 365 | 362 | 370 | 373 | 374 | 386 | 388 | 390 | NA |
| 13 | Agra | Uttarpradesh | 389 | 384 | 385 | 382 | 387 | 393 | 395 | 403 | 405 | 406 | NA |
| 14 | Allahabad | Uttarpradesh | 415 | 410 | 411 | 414 | 416 | 414 | 418 | 429 | 433 | 435 | NA |
| 15 | Kanpur | Uttarpradesh | 365 | 360 | 357 | 358 | 360 | 364 | 372 | 374 | 381 | 378 | NA |
| 16 | Meerut | Uttarpradesh | 347 | 345 | 354 | 355 | 360 | 360 | 366 | 370 | 373 | 371 | NA |
| | **All India** | | **395** | **394** | **393** | **392** | **396** | **398** | **402** | **406** | **407** | **408** | **408** |

## Consumer Price Index Numbers and % Variations of certain centres for Urban non-manual employees

[Base 1984-85=100

| Sl. No | Centre | State State | Index for Jul-02 | Index for Aug-02 | % Increase | Index for Aug-02 | Index for Sept-02 | % Increase |
|---|---|---|---|---|---|---|---|---|
| | **Southern State** | | | | | | | |
| 1 | Trivandrum | Kerala | 406 | 408 | 0.49 | 408 | 405 | -0.74 |
| 2 | Calicut | Kerala | 380 | 383 | 0.79 | 383 | 383 | 0.00 |
| 3 | Chennai | Tamilnadu | 487 | 486 | -0.21 | 486 | 485 | -0.21 |
| 4 | Coimbatore | Tamilnadu | 471 | 473 | 0.42 | 473 | 474 | 0.21 |
| 5 | Madurai | Tamilnadu | 453 | 453 | 0.00 | 453 | 454 | 0.22 |
| 6 | Salem | Tamilnadu | 445 | 449 | 0.90 | 449 | 448 | -0.22 |
| 7 | Tiruchirapalli | Tamilnadu | 439 | 441 | 0.46 | 441 | 441 | 0.00 |
| 8 | Hydrabad | Andrapradesh | 427 | 426 | -0.23 | 426 | 429 | 0.70 |
| 9 | Kurnool | Andrapradesh | 412 | 413 | 0.24 | 413 | 414 | 0.24 |
| 10 | Vijayawada | Andrapradesh | 454 | 457 | 0.66 | 457 | 456 | -0.22 |
| 11 | Vishakapattanam | Andrapradesh | 416 | 416 | 0.00 | 416 | 416 | 0.00 |
| 12 | Warangal | Andrapradesh | 426 | 426 | 0.00 | 426 | 426 | 0.00 |
| 13 | Bangalore | Karnataka | 421 | 422 | 0.24 | 422 | 424 | 0.47 |
| 14 | Gulbarga | Karnataka | 392 | 392 | 0.00 | 392 | 395 | 0.77 |
| 15 | Hubli | Karnataka | 410 | 413 | 0.73 | 413 | 415 | 0.48 |
| 16 | Mangalore | Karnataka | 400 | 407 | 1.75 | 407 | 410 | 0.74 |
| | **Northern State** | | | | | | | |
| 1 | Delhi | Delhi | 411 | 413 | 0.49 | 413 | 419 | 1.45 |
| 2 | Mumbai | Maharashtra | 408 | 407 | -0.25 | 407 | 407 | 0.00 |
| 3 | Aurangabad | Maharashtra | 442 | 440 | -0.45 | 440 | 442 | 0.45 |
| 4 | Nagpur | Maharashtra | 386 | 388 | 0.52 | 388 | 389 | 0.26 |
| 5 | Pune | Maharashtra | 421 | 421 | 0.00 | 421 | 421 | 0.00 |
| 6 | Solapur | Maharashtra | 384 | 386 | 0.52 | 386 | 389 | 0.78 |
| 7 | Chandigarh | Punjab | 478 | 481 | 0.63 | 481 | 482 | 0.21 |
| 8 | Kolkatta | West Bengal | 366 | 367 | 0.27 | 367 | 367 | 0.00 |
| 9 | Asansol | West Bengal | 408 | 410 | 0.49 | 410 | 415 | 1.22 |
| 10 | Kharagpur | West Bengal | 396 | 400 | 1.01 | 400 | 400 | 0.00 |
| 11 | Siliguri | West Bengal | 430 | 430 | 0.00 | 430 | 432 | 0.47 |
| 12 | Lucknow | Uttarpradesh | 386 | 388 | 0.52 | 388 | 390 | 0.52 |
| 13 | Agra | Uttarpradesh | 403 | 405 | 0.50 | 405 | 406 | 0.25 |
| 14 | Allahabad | Uttarpradesh | 429 | 433 | 0.93 | 433 | 435 | 0.46 |
| 15 | Kanpur | Uttarpradesh | 374 | 381 | 1.87 | 381 | 378 | -0.79 |
| 16 | Meerut | Uttarpradesh | 370 | 373 | 0.81 | 373 | 371 | -0.54 |
| | **All India** | | **406** | **407** | **0.25** | **407** | **408** | **0.25** |

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

| Sl. No | Name of Commodity | Unit | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. RICE - Open Market** | | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 12.16 | 12.20 | 12.20 | 12.23 | 11.96 | 11.91 | 11.89 | 11.91 | 12.32 | 12.80 | 12.95 | 12.93 |
| 2 | Red - Chamba | Kg | 12.13 | 12.30 | 12.25 | 12.15 | 12.29 | 12.36 | 12.36 | 11.81 | 12.20 | 12.88 | 13.39 | 12.96 |
| 3 | White Andra Vella | Kg | 12.05 | 12.15 | 12.29 | 12.34 | 11.70 | 11.91 | 11.82 | 11.93 | 12.16 | 12.15 | 12.03 | 11.95 |
| | **B. PULSES** | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 30.93 | 30.43 | 30.57 | 30.18 | 30.07 | 30.93 | 31.29 | 31.32 | 31.14 | 30.54 | 30.96 | 30.21 |
| 5 | Black gram split w/o husk | Kg | 36.46 | 35.00 | 34.71 | 34.04 | 32.75 | 32.68 | 34.25 | 34.96 | 34.04 | 33.32 | 33.13 | 32.32 |
| 6 | Dhall(Tur) | Kg | 30.15 | 29.69 | 29.12 | 28.81 | 28.88 | 28.92 | 29.69 | 30.00 | 30.31 | 30.73 | 31.13 | 31.15 |
| **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 15.25 | 15.18 | 15.26 | 15.25 | 15.30 | 15.24 | 15.07 | 14.74 | 14.59 | 14.52 | 14.69 | 14.49 |
| 8 | Milk (Cow's) | Ltr. | 12.96 | 12.96 | 13.04 | 13.04 | 13.04 | 13.07 | 13.18 | 13.00 | 13.00 | 12.50 | 13.00 | 13.04 |
| 9 | Egg Hen's (White lagon) | Dozen | 16.20 | 16.00 | 16.95 | 16.46 | 16.00 | 15.04 | 14.92 | 17.14 | 17.04 | 14.89 | 15.23 | 14.38 |
| 10 | Mutton with bones | Kg | 115.00 | 115.00 | 116.43 | 116.43 | 116.43 | 116.43 | 120.71 | 120.71 | 120.00 | 121.79 | 121.43 | 122.14 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 69.96 | 71.21 | 70.68 | 70.68 | 70.68 | 70.68 | 71.21 | 71.14 | 71.14 | 71.07 | 71.00 | 71.07 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.30 | 69.20 | 69.25 | 69.25 | 69.25 | 69.25 | 69.13 | 69.13 | 69.20 | 69.20 | 69.20 | 69.20 |
| **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 36.54 | 48.61 | 43.61 | 41.79 | 40.04 | 44.64 | 43.86 | 45.79 | 52.14 | 52.64 | 51.04 | 49.57 |
| 14 | Groundnut oil | Kg | 49.87 | 50.31 | 50.87 | 50.42 | 49.87 | 51.50 | 52.50 | 51.48 | 53.48 | 53.38 | 56.20 | 56.38 |
| 15 | Refined oil(Postman) | Kg. | 60.18 | 60.33 | 60.33 | 59.55 | 59.40 | 61.50 | 62.10 | 62.74 | 64.93 | 65.83 | 65.65 | 63.87 |
| 16 | Gingelly oil | Kg. | 50.29 | 50.14 | 51.00 | 50.36 | 51.18 | 53.29 | 53.57 | 54.79 | 54.79 | 54.46 | 56.85 | 58.05 |
| 17 | Coconut without husk | 100 nos | 386.07 | 474.64 | 461.07 | 442.86 | 429.64 | 443.93 | 440.71 | 452.50 | 480.36 | 482.14 | 480.77 | 469.64 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

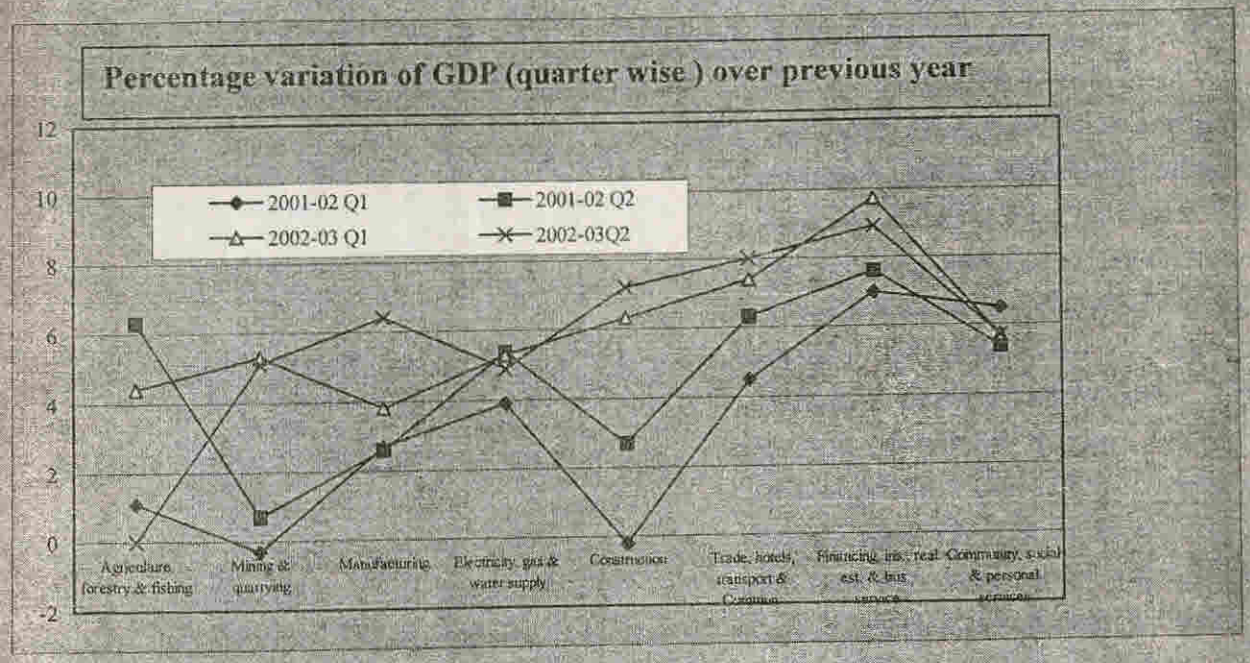
| Sl. No | Name of Commodity | Unit | Nov 01 | Dec 01 | Jan 02 | Feb 02 | Mar 02 | Apr-02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 40.86 | 39.57 | 37.79 | 35.71 | 33.57 | 33.64 | 33.14 | 33.21 | 33.29 | 32.93 | 35.00 | 34.29 |
| 19 | Chillies dry | Kg. | 48.00 | 45.00 | 43.07 | 41.64 | 39.36 | 38.86 | 39.71 | 42.07 | 43.00 | 43.07 | 45.00 | 51.93 |
| 20 | Onion small | Kg. | 17.31 | 16.89 | 12.26 | 10.61 | 10.74 | 10.61 | 11.60 | 13.85 | 18.15 | 15.38 | 16.02 | 19.27 |
| 21 | Tamarind without seeds loose | Kg. | 24.50 | 24.71 | 24.57 | 24.07 | 23.21 | 22.07 | 22.71 | 22.36 | 22.64 | 22.79 | 23.69 | 24.29 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 7.29 | 7.86 | 7.21 | 7.43 | 8.07 | 9.86 | 10.00 | 12.14 | 12.00 | 10.36 | 9.15 | 8.29 |
| 23 | Tapioca Raw | Kg. | 4.84 | 4.71 | 4.68 | 4.93 | 4.89 | 5.21 | 5.07 | 4.96 | 5.32 | 5.54 | 5.62 | 5.82 |
| 24 | Potato | Kg. | 12.29 | 13.27 | 11.77 | 9.21 | 8.63 | 9.64 | 10.44 | 11.57 | 11.59 | 11.98 | 11.09 | 11.99 |
| 25 | Colocassia | Kg. | 13.57 | 13.07 | 11.71 | 12.36 | 13.00 | 13.82 | 15.18 | 14.30 | 14.00 | 14.08 | 14.69 | 13.29 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 11.49 | 9.94 | 7.39 | 6.69 | 5.90 | 5.51 | 5.36 | 6.19 | 6.85 | 7.96 | 8.40 | 8.54 |
| 27 | Brinjal | Kg. | 10.71 | 11.00 | 10.46 | 11.00 | 10.29 | 10.93 | 10.21 | 10.43 | 10.29 | 10.00 | 9.85 | 9.64 |
| 28 | Cucumber | Kg. | 7.21 | 8.36 | 8.36 | 7.86 | 6.14 | 6.21 | 5.93 | 7.93 | 8.14 | 6.79 | 8.23 | 7.93 |
| 29 | Ladies Finger | Kg. | 11.71 | 10.71 | 9.64 | 11.36 | 12.14 | 11.43 | 10.36 | 10.43 | 11.14 | 11.21 | 11.15 | 10.93 |
| 30 | Cabbage | Kg | 8.71 | 9.07 | 8.43 | 9.21 | 8.71 | 8.36 | 9.14 | 8.71 | 9.00 | 9.50 | 7.69 | 8.64 |
| 31 | Bittergourd | Kg. | 12.29 | 12.79 | 11.29 | 11.21 | 11.86 | 13.50 | 12.79 | 14.46 | 14.00 | 12.14 | 12.85 | 14.43 |
| 32 | Tomatto | Kg. | 10.64 | 19.21 | 8.71 | 8.14 | 7.71 | 8.07 | 8.64 | 11.36 | 9.57 | 10.71 | 8.54 | 9.14 |
| 33 | Chillies green | Kg. | 13.14 | 16.57 | 13.00 | 12.21 | 14.00 | 14.29 | 12.86 | 17.43 | 14.57 | 16.21 | 14.69 | 15.00 |
| 34 | Banana green | Kg. | 13.04 | 11.14 | 10.18 | 10.32 | 10.11 | 11.61 | 12.00 | 11.18 | 11.61 | 12.32 | 11.85 | 10.96 |
| 35 | Plantain green | Kg. | 8.68 | 8.86 | 8.54 | 8.89 | 8.54 | 8.61 | 8.43 | 8.46 | 8.71 | 8.71 | 9.46 | 8.89 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.73 | 7.73 | 7.70 | 7.70 | 7.71 | 7.73 | 7.73 | 7.71 | 7.80 | 7.86 | 7.88 | 7.91 |
| 37 | Toilet Soap Lux | 100 gm | 11.00 | 11.00 | 10.96 | 10.96 | 11.07 | 11.32 | 11.32 | 11.29 | 11.46 | 11.57 | 11.71 | 11.86 |
| 38 | Toothpaste Colgate | 100 gm | 27.50 | 28.93 | 28.75 | 29.11 | 29.07 | 29.79 | 29.79 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 183.68 | 182.95 | 187.46 | 189.21 | 173.69 | 168.96 | 164.32 | 154.77 | 149.95 | 151.68 | 138.67 | 130.21 |

Printed and Published by Department of Economics & Statistics, Government of Kerala

# EcoStat News

December 2002
Volume - 2 Issue – 6

*For Official Use only*




## Inside this issue

**Monetary Policy** ❑
**Agriculture & Coir Electricity** ❑
**Report Data – Cashew** ❑
**News – Tea** ❑
**Consumption of fertilizer** ❑
**Airport Performance** ❑
**Economy** ❑
**Indices** ❑
**Prices** ❑
**Cyber Corner** ❑

**Department of Economics & Statistics**
**Government of Kerala**

6

## From Editors Desk

*National Statistical Commission (NSC) under the chairmanship of Dr.C.Rangarajan had critically examined the system of Agricultural Statistics in our country and recommended measures for strengthening the system. Some important recommendations pertaining to Crop Statistics are:*

*(a) A statistical study should be carried out to explore the feasibility of using the Improvement of Crop Statistics (ICS) data for working out a correction or adjustment factor to be applied to official statistics of crop area to generate alternative estimates of the same. Given the past experience of Land Utilisation Surveys of the NSS and the controversies they created, the Commission is of the view that the objective of redesigning of the ICS, at present, should be restricted to working out a correction factor.*

*(b) Crop estimates below the level of district are required to meet several needs including those of the National Agricultural Insurance Scheme (NAIS). Special studies should be taken up by the National Statistical Office to develop appropriate "small area estimation" techniques for this purpose.*

*(c) The two series of experiments conducted under the National Agricultural Insurance Scheme (NAIS) and the General Crop Estimation Survey (GCES)*



*Edited printed & published for Department of Economics and Statistics, Government of Kerala.*

*should not be combined for deriving estimates of production as the objectives of the two series are different and their merger will affect the quality of general crop estimates.*

*In pursuance of the National Statistical Commission's (NSC) recommendations on Agricultural Statistics an Expert Committee under the Chairmanship of DG&CEO, NSSO has been constituted by Government of India to finalise the technical details for estimating correction factors based on ICS data for improving the official estimates of area and also to formulate suitable methodology for deriving yield estimates below the district level. Eminent Statisticians, Economists & Professors, NSSO officials and State Directors are members in this Committee DES, Kerala is one of the members.*

*The terms of reference of the Committee will be as follows:-*

*i) To review the sampling scheme and other technical details of the ICS scheme for assessing its suitability for estimating correction factor for improving the official estimates of crop area and production in respect of principal crops.*

*ii) To suggest modifications in sampling design and sample size if found necessary and the methodology to estimate the correction factor in each season.*

*iii) To formulate suitable methodologies for deriving crop estimates for geographical areas below the district level by using small area estimation techniques.*

*The first meeting of Expert Committee was held under the chairmanship of Dr.S.Ray, DG & CEO NSSO in Mahalanobis Bhavan, Kolkatta on 30.10.2002. Among other things, committee has decided to examine the results of Farmers Appraisal Survey being conducted on plot basis in six States for taking a firm view on the methodology being tested.*

*Eventhough one of the objectives of the pilot study is to see the feasibility of estimating the yield at Gram Panchayat level in the long run following the methodology being tested, I hope that the recommendation evolved by this committee would be of immense use for Crop estimates below the level of district to meet the needs of National Agricultural Insurance Scheme (NAIS) etc.*

*Our editor in charge Sri.C.C.Cherian Kunju, has retired from service yesterday. On behalf of the editorial board and all members of this department, I would like to extend our wholehearted and profound thanks for the yeoman service rendered by him in bringing out this publication regularly. Wish him a happy and prosperous retired life.*

*Happy New Year to all readers.*

*Thiruvananthapuram* **A. Meera Sahib**
01-01-2003 **Chief Editor**

# Contents


| | Page |
|---|---|
| Monetary Policy | 4 |
| Agriculture & Coir | 9 |
| Electricity | 10 |
| Report | 11 |
| Data – Cashew | 13 |
| News – Tea | 16 |
| Consumption of fertilizer | 17 |
| Airport Performance | 20 |
| Economy | 21 |
| Indices | 22 |
| Prices | 31 |
| Cyber Corner | 34 |

# DOES MONETARY POLICY HAVE DIFFERENTIAL STATE-LEVEL EFFECTS? AN EMPIRICAL EVALUATION

*D M Nachane, Partha Ray, Saibal Ghosh*

*The paper examines whether monetary policy has similar effects across major states in the Indian polity. Impulse response functions from an estimated Structural Vector Auto Regression (SVAR) reveal two sets of states; a core of states that respond to monetary policy in a significant fashion vis-à-vis others whose response is less significant. The paper attempts to trace the reasons for the differential response of these two sets of states in terms of financial deepening and differential industry mix.*

## I Introduction

The prevailing paradigm of monetary policy predicates a uniform undifferentiated effect of such policy on the national economy. Such a view ignores the fact that in reality, any nation is composed of diverse albeit interlinked regions, which might respond differently to identical macroeconomic stimuli. For example, the effect of a change in the price of foodgrains might be quite different for a region, which is a dominant producer of that commodity vis-à-vis another region, which is an important consumer. Likewise, a rise in the energy price (for example, fuel) might impact different regions unevenly, in view of differential importance of fuel in the consumption basket of various regions. The idea that monetary policy can likewise have varied effects across regions is a short and logical next step.

In large federal structures like the US, Canada and India, an additional dimension is introduced by the existence of component federal states with their own governments and a measure of policy autonomy. While the concept of an economic region is logically quite distinct from that of a federal state, the latter provides a convenient anchor for studying regional dimensions of macroeconomic policy. This is so because in most countries, data is organized state wise rather than according to economic regions and also over a historical period, states develop distinct economic characteristics (partly due to inherent geographical and environmental features and partly owing to differing economic policies pursued). In the Indian context, although there have been several studies as to the impact of monetary policy on the national economy, there has been little investigation of the interrelationships among sub-national economies and associated feedbacks from policy shocks[1]. Consequently, no comprehensive look at state level response to a policy change is available. Also lacking is a systematic analysis of why state economies may respond differently to monetary policy shocks. This is surprising, since state-level data offer a rich avenue for exploring the empirical significance of possible transmission mechanism for monetary policy. The present paper attempts to address this lacuna by presenting a state-level analysis of monetary policy effects. Rather than confining itself to merely identifying differential responses, it also seeks to investigate the reasons for such differential responses. We follow the SVAR methodology that claims as a major advantage its ability to identify monetary policy shocks adjusted for the influences of other concurrent developments.

Our analysis reveals that the response of different states to monetary policy shocks is, in fact, quite distinct. The size of a state response to a monetary policy shock is positively related to the share of manufacturing in the NSDP (net state domestic product), which may be viewed as evidence favouring an 'interest rate channel'. The analysis also provides support for the fact that certain states, containing a relatively larger concentration of smaller firms, tend to be more responsive to monetary policy shocks than states with a smaller concentration of the same, which, in essence, is testimony to the existence of a 'broad credit channel'.

## II Differential Impact of Monetary Policy: *Issues and Empirics*

The literature on the monetary transmission mechanism suggests several reasons why the actions of the authorities might have differential state-level effects. These include, among others (i) state wise differences in the mix of interest sensitive industries, (ii) differences in the mixture of large versus small firms across states, and (iii) the differential financial deepening across states.

### *Differential Industry Mix*

It is, acknowledged that the interest rate elasticities of credit demand differ across industries. These differential elasticities, in conjuction ewith differing industry mixes across states, may account for differential sib-national effects of monetary policy. It is also a stylized fact that industry is more credit-dependent than either agriculture or services and therefore, relatively industralised states are likely to be more effected bu monetary policy shocks than their less industralised counterparts.

### *Differential Mix of Firms*

State-level differences in the composition and concentration of industry and sources of credit available to each could also lead to dissimilar responses to monetary policy. The credit view of monetary policy, enunciated by Bernanke and Blinder (1988), contends that monetary policy affects banks by directly affecting their ability to provide loans. Moreover, information costs and transaction costs

require small firms to deal with financial intermediaries, primarily banks, to meet their credit needs. In contrast, large firms usually have greater and varies access to external, non-bank sources of funds. Consequently, activity in a state that has a high concentration of small firms could be especially sensitive to the policy of the monetary authorities.

*Differential Financial Deepening*

Recent theoretical work on possible credit channels for the transmission of monetary policy actions to economic activity suggests that the mix of large versus small firms and large versus small banks is a crucial determinant of responses to monetary policy. Kashyap and Stein (1997) have pointed out that monetary policy is likely to have a relatively larger impact on countries having comparatively bank-dependent firms and a relatively large percentage of small banks. The credit channel will be weakest in countries with a relatively low percentage of small banks and comparatively few bank-dependent customers. Dornbusch et al (1998) observe that, with exception of the UK, the credit channel is more likely to be important in Europe, where banks provide the bulk of firms' credit. In contrast, financing in the US (and in the UK) is much less bank-centeric because capital markets play a central role in the financing of firms. In the Indian context, the process of financial deepening has not been uniform across states. Some states have experienced a significant growth of banking and insurance activities vis-à-vis certain other states which have remained relatively under-banked. It might therefore be possible to envisage a situation wherein adequately banked states are more prone to the effects of a monetary policy shock as compared with those which are not.

*Differential Regional Impact of Monetary Policy: The Empirics*

Some of the earlier literature in this area had investigated the effects of monetary policy on inter-regional banking flows, as opposed to economic activity. In one of the earliest regional studies for the US, Miller (1978) found that Fed policy actions do not affect regional banking flows differently. Typical of these studies is the use of a reduced form equation that regresses personal income, earning or employment on the federal government revenues and the national money supply. These models are applied at the regional level to test the proposition that monetary policy has an important impact on nominal income. An important study in this context is Garrison and Chang (1979), which examines the effect of monetary policy on income variables in the eight regions[2] of the US. Their study finds that monetary policy has differential effects across regions, with an especially large impact in the Rocky Mountain region. In contrast, Garrison and Kort (1983) investigate the impact of monetary policy on state-level employment for the 1960-78 period and find that states comprising the Great Lakes region are relatively more responsive to money supply changes, while states in the Rocky Mountain were the least responsive to such changes.

A major shortcoming of such studies is their attempt to measure monetary policy impact region-by-region, without accounting for feedback effects among regions. More recently, Taylor and Yucel (1996) have attempted to rectify this drawback by using a VAR to incorporate the inter-regional linkages, but their study is confined to a small time period (1982-95) and considers only for four states, which, in a way, limits the empirical appeal of the model. Subsequently, Carlino and Defina (1998, 1999) have attempted to rectify this shortcoming by examining how monetary policy affects real personal income in the each of the 48 contiguous states of the US. The analysis employs SVAR models estimated over the period 1958:1 to 1992:4; these models explicitly allowed for feedback among regions. Impulse response functions from the estimated SVARs revealed a broad pattern in which state real personal income tended to fall after an unanticipated increase of one percentage point in the federal funds rate. Nonetheless, the differences in the state responses are evident, and in some cases, substantial.

In the European context, Ramaswamy and Sloek (1997) found that the full effect of an unanticipated contraction in monetary policy on output in Austria, Belgium, Finland, Germany, Netherlands and UK takes roughly twice as long to occur is twice as deep as in Denmark, France, Italy, Portugal, Spain and Sweden. Using VAR techniques, Gerlach ans Smets (1996) found that while the effects of monetary policy shocks were not vastly different across countries in their study, they were somewhat larger in Germany than in France or Italy. Dornbusch et al (1998) have also employed a small model of six European countries and found that the impact effect of a monetary policy shock (changes in short-term interest rates) has a lag of eight months in Italy, Spain, Sweden and UK, nine months in Germany and 12 months in France. In sum, while these studies tend to disagree on an individual country's responsiveness to monetary policy shocks, they are broadly in consonance with the fact that sensitivity to these shocks will differ across European countries.

Similar problems have come to the fore in the context of the European Monetary Union (EMU). Under the EMU, member countries will subject to combo monetary policy shocks. Given the diversities in economic and financial structure across the EMU economies, these common monetary shocks can be

reasonably expected to have differential effects. However, little is known about what differences might arise, given the absence of any historical experience in Europe with a common currency. In a pioneering study, Bayoumi and Eichergreen (1992), using a SVAR approach, demonstrated that the incidence of supply disturbances was very different for the countries at the center of the European community (the 'core' countries comprising of Germany, France, Belgium, Netherlands and Denmark) vis-à-vis the other EC members (UK, Italy, Spain, Portugal and Greece). In particular, supply shocks to the 'core' countries were both smaller and correlated across neighboring countries as compared with supply shocks to 'non-core' (or periphery) countries. This would seem to suggest that a uniform monetary policy might not necessarily produce the desired results under an EMU.

*Some Indian Issues*

The majority of the regional studies in the Indian situation have focused on examining the issue of state finances (Venketaraman 1967; Bagchi et al 1992), widening interstate disparities (Kurian 2000), their macroeconomic performance and differential interstate inequalities (Ahluwalia 2000), the sources of differences in per capita state domestic product (Dasgupta et al 2000), variations in size, income and structural characteristics of states (Shand and Bhide 2000), and dispersion of per capita incomes of states vis-à-vis the national average (Chaudhuri 2000). The Reserve Bank of India has also been bringing out the status of state finances annually since 1950. Since the nation comprises of several states with not only differential growth patterns (Ahluwalia 2000). But also differential abilities to respond to monetary policy shocks. it would be of interest to understand the extent of such reactions at the state-level and this aspect is the predominant concern of our study.

## III Some Stylised Facts on Indian States

We have confined our attention to 14 major Indian states, viz, Haryana, Punjab, Rajasthan, Bihar, Orissa, West Bengal (WB), Madhya Pradesh (MP), Uttar Pradesh (UP), Gujarat, Maharashtra, Andhra Pradesh (AP), Karnataka, Kerala and Tamil Nadu. However, the sample contains all the major states of India and it is also in line with the standard practice in comparing the economic performance of Indian states that treats smaller or northern states differently[3]. The sample period for the study is the 30-year period 1969-70 through 1988-99. As our interest is primarily on regional impact of monetary policy, we did not consider the pre 1970s (that is, pre bank nationalization) in our sample period.

How far do these states differ structurally? Table I provides an overview of the structure of net state domestic product (NSDP) at four representative time points encompassing the time period under study (1969-1999). As is evident from the table, at the all-India level, while the degree of industralisation has increased over the period, certain states have witnessed a greater degree of industralisation vis-à-vis the all-India average. Illustratively, during 1969-70, while the industralisation at the all-India level as per cent of NDP was 21.3 per cent, the same for Orissa was merely 12.5 per cent as compared to Maharashtra at 33.8 per cent. Although the extent of industralisation went up during 1989-90 to 24.7 per cent at the all-India level, states like Orissa and Rajasthan continued to lag behind their more developed counterparts like Maharashtra and Gujarat.

This apart, various state have differing degree of formalism in their economic activity. As regards the role of industry mix, Table 2 shows the share of unregistered manufacturing in NSDP in the concerned states at the four benchmark time points mentioned above. Without loss of generality, unregistered manufacturing would indicate the dominance of small units in a particular state. As compared with the all-India average of 5.5-6.0 percent over the entire time span covered, certain states have a relatively high proportion of such firms. Notable among these include Haryana and West Bengal (especially in the latter half of 1980s and 1990s); among others, Maharashtra and Tamil Nadu have had a significant proportion of unregistered manufacturing in NSDP, although for the latter, the proportion has declined in the latter half of the eighties. The same for Karnataka has also remained at a high level, albeit with a significant fall in 1989-90.

The evidence is corroborated when we consider the penetration of banking and insurance in the sample states (Table 3). States like Maharashtra, Gujarat and to a lesser extent, Kerala, Tamil Nadu and West Bengal have a significant presence in banking and insurance as evidenced from the share of these sectors in NSDP vis-à-vis the all-India average. For instance, during 1998-99, while the share of banking and insurance in NSDP for Maharashtra was 12.0 per cent, the same for Gujarat, Kerala and Tamil Nadu was 7.2, 7.4 and 9.4 per cent, respectively. As compared to this, the penetration of banking and insurance in states like Rajasthan, Bihar, Madhya Pradesh and Uttar Pradesh witnessed a declining trend over the period.

**Table 1: Structure of NSDP in Different States**
*(as per cent of statewise NSDP)*

| State | Activity | 1969-70 | 1979-80 | 1989-90 | 1998-99 |
|---|---|---|---|---|---|
| Haryana | Agriculture and Allied | 66.3 | 48.0 | 45.2 | 35.5 |
| | Industry | 14.4 | 21.6 | 23.1 | 24.8 |
| | Services | 19.3 | 30.3 | 31.7 | 39.7 |
| Punjab | Agriculture and Allied | 59.4 | 51.6 | 49.8 | 42.5 |
| | Industry | 15.2 | 17.1 | 21.3 | 21.8 |
| | Services | 25.4 | 31.3 | 28.9 | 35.7 |
| Rajasthan | Agriculture and Allied | 49.6 | 47.2 | 44.8 | 33.1 |
| | Industry | 16.9 | 19.1 | 19.8 | 23.4 |
| | Services | 33.6 | 33.8 | 35.4 | 43.4 |
| Bihar | Agriculture and Allied | 54.4 | 44.9 | 39.3 | 33.0 |
| | Industry | 25.4 | 25.1 | 29.6 | 24.7 |
| | Services | 20.2 | 30.0 | 31.0 | 42.3 |
| Orissa | Agriculture and Allied | 65.3 | 55.1 | 47.2 | 36.1 |
| | Industry | 12.5 | 18.1 | 19.5 | 20.0 |
| | Services | 22.2 | 26.8 | 33.3 | 43.9 |
| West Bengal | Agriculture and Allied | 42.4 | 32.3 | 33.4 | 32.5 |
| | Industry | 25.3 | 18.7 | 26.8 | 22.4 |
| | Services | 32.2 | 49.0 | 39.8 | 45.1 |
| Madhya Pradesh | Agriculture and Allied | 59.0 | 41.2 | 43.5 | 35.1 |
| | Industry | 17.0 | 26.1 | 24.5 | 26.2 |
| | Services | 24.1 | 32.8 | 32.0 | 38.6 |
| Uttar Pradesh | Agriculture and Allied | 60.6 | 48.1 | 42.2 | 35.7 |
| | Industry | 14.3 | 21.6 | 20.2 | 21.3 |
| | Services | 25.1 | 30.3 | 37.6 | 43.0 |
| Gujarat | Agriculture and Allied | 41.7 | 38.1 | 29.1 | 22.5 |
| | Industry | 25.8 | 26.6 | 32.0 | 34.7 |
| | Services | 32.5 | 35.3 | 38.9 | 42.8 |
| Maharashtra | Agriculture and Allied | 30.1 | 27.6 | 24.8 | 18.2 |
| | Industry | 33.8 | 35.4 | 34.4 | 31.5 |
| | Services | 36.1 | 37.0 | 40.8 | 50.2 |
| Andhra Pradesh | Agriculture and Allied | 54.6 | 48.6 | 41.1 | 30.9 |
| | Industry | 15.0 | 17.4 | 17.6 | 22.7 |
| | Services | 30.3 | 34.0 | 41.4 | 46.4 |
| Karnataka | Agriculture and Allied | 53.3 | 46.1 | 37.2 | 29.5 |
| | Industry | 24.4 | 29.4 | 23.2 | 28.1 |
| | Services | 22.4 | 24.5 | 39.6 | 42.4 |
| Kerala | Agriculture and Allied | 53.8 | 41.8 | 33.4 | 26.8 |
| | Industry | 14.3 | 19.9 | 25.8 | 21.3 |
| | Services | 31.9 | 38.3 | 40.8 | 51.9 |
| Tamil Nadu | Agriculture and Allied | 38.7 | 29.9 | 24.0 | 21.2 |
| | Industry | 26.7 | 34.4 | 30.6 | 27.1 |
| | Services | 34.6 | 35.7 | 45.5 | 51.6 |
| All India (as per cent of NDP) | Agriculture and Allied | 47.6 | 39.8 | 34.5 | 28.5 |
| | Industry | 21.3 | 22.9 | 24.7 | 23.7 |
| | Services | 31.1 | 37.3 | 40.8 | 47.8 |

**Table 2: Share of Unregistered manufacturing in NSDP in Different States**
*(as per cent of statewise NSDP)*

| State/ Year | 1969-70 | 1979-80 | 1989-90 | 1998-99 |
|---|---|---|---|---|
| Haryana | 3.2 | 4.0 | 7.7 | 6.6 |
| Punjab | 4.0 | 5.4 | 6.6 | 5.2 |
| Rajasthan | 6.7 | 5.3 | 5.1 | 4.8 |
| Bihar | 14.1 | 3.2 | 7.1 | 1.9 |
| Orissa | 2.8 | 3.3 | 4.4 | 4.8 |
| West Bengal | 4.5 | 3.5 | 8.4 | 8.6 |
| Madhya Pradesh | 4.5 | 5.1 | 5.6 | 6.6 |
| Uttar Pradesh | 4.7 | 6.7 | 5.6 | 5.5 |
| Gujarat | 4.4 | 4.2 | 6.0 | 9.2 |
| Maharashtra | 5.9 | 5.7 | 7.4 | 8.7 |
| Andhra Pradesh | 5.6 | 5.2 | 4.1 | 5.6 |
| Karnataka | 7.7 | 9.5 | 4.3 | 9.7 |
| Kerala | 3.8 | 6.9 | 5.6 | 6.5 |
| Tamil Nadu | NA | 11.8 | 7.1 | 7.8 |
| All India (as per cent of NDP) | 5.4 | 6.0 | 5.9 | 5.7 |

**Table 3: Share of Banking and Insurance in NSDP in Different States**
*(as per cent of statewise NSDP)*

| State/ Year | 1969-70 | 1979-80 | 1989-90 | 1998-99 |
|---|---|---|---|---|
| Haryana | 1.1 | 2.1 | 3.3 | 4.5 |
| Punjab | 1.5 | 2.4 | 4.3 | 5.9 |
| Rajasthan | 1.3 | 2.6 | 4.1 | 5.4 |
| Bihar | 0.8 | 1.4 | 3.2 | 4.2 |
| Orissa | 0.7 | 1.5 | 3.0 | 4.7 |
| West Bengal | 2.2 | 3.1 | 6.7 | 6.8 |
| Madhya Pradesh | 1.2 | 2.8 | 5.3 | 3.9 |
| Uttar Pradesh | 1.1 | 2.2 | 5.1 | 4.6 |
| Gujarat | 2.4 | 3.2 | 7.4 | 7.2 |
| Maharashtra | 2.8 | 4.4 | 8.8 | 12.0 |
| Andhra Pradesh | 1.5 | 2.5 | 5.9 | 5.5 |
| Karnataka | 1.6 | 2.3 | 6.2 | 6.4 |
| Kerala | 1.2 | 2.6 | 7.3 | 7.4 |
| Tamil Nadu | 2.1 | 2.9 | 5.4 | 9.4 |
| All India (as per cent of NDP) | 1.8 | 2.7 | 4.5 | 7.1 |

*(Will be Contd.. in February Issue)*

## AREA, PRODUCTION AND PRODUCTIVITY OF PADDY AUTUMN (KHARIFF) FOR THE YEAR - 2002-2003

| Sl No | Name of Districts | Area | Production (Tonnes) | Productivity (Kg/ Ha) |
|---|---|---|---|---|
| 1 | Thiruvananthapuram | 3189 | 11028 | 3458 |
| 2 | Kollam | 4626 | 15405 | 3330 |
| 3 | Pathanamthitta | 815 | 2495 | 3061 |
| 4 | Alappuzha | 3721 | 14408 | 3872 |
| 5 | Kottayam | 2497 | 9943 | 3982 |
| 6 | Iddukki | 1294 | 4735 | 3659 |
| 7 | Eranakulam | 12016 | 36312 | 3022 |
| 8 | Thrissur | 9740 | 30476 | 3129 |
| 9 | Palakkad | 57583 | 178565 | 3101 |
| 10 | Malappuram | 5781 | 17210 | 2977 |
| 11 | Kozhikode | 399 | 884 | 2216 |
| 12 | Wayanadu | - | - | - |
| 13 | Kannur | 6369 | 18133 | 2847 |
| 14 | Kasaragod | 4408 | 15362 | 3485 |
| | **State** | **112438** | **354956** | **3157** |

## EXPORT OF COIR PRODUCTS FROM INDIA\

*Q = Quantity in M tones* *V= Value in Rs. lakhs*

| ITEM | Sept. 2002 * | | Sept. 2001 | | Apr. 2002-Sept. 2002 | | Apr. 2001.-Sept. 2001 | |
|---|---|---|---|---|---|---|---|---|
| | Q | V | Q | V | Q | V | Q | V |
| Coir fibre | 239 | 23.93 | 149 | 20.07 | 691 | 68.13 | 565 | 70.06 |
| Coir yam | 650 | 194.86 | 1041 | 293.58 | 4443 | 1200.14 | 6185 | 1803.47 |
| Coir mats | 3918 | 2625.09 | 3134 | 1916.34 | 19964 | 12965.80 | 15790 | 9951.03 |
| Coir matting | 421 | 286.49 | 444 | 314.59 | 2423 | 1601.92 | 2724 | 1861.85 |
| Coir rugs & carpet | 52 | 39.08 | 51 | 41.32 | 769 | 522.54 | 542 | 421.25 |
| Coir rope | 0 | 0 | 0 | 0 | 53 | 12.40 | 104 | 28.20 |
| Rubberised coir | 22 | 17.83 | 17 | 15.86 | 202 | 162.13 | 181 | 140.31 |
| Curled coir | 0 | 0 | 9 | 1.37 | 262 | 42.79 | 256 | 37.28 |
| Coir geotextiles | 181 | 81.31 | 117 | 53.67 | 689 | 337.41 | 843 | 376.98 |
| Coir other sorts | 152 | 68.38 | 12 | 6.75 | 327 | 341.62 | 98 | 43.56 |
| Coirpith | 1969 | 157.53 | 1042 | 86.64 | 11025 | 872.19 | 6590 | 477.69 |
| **Total** | **7604** | **3494.50** | **6016** | **2750.19** | **40848** | **17927.07** | **33878** | **15211.68** |

* Provisional, value estimated

*Source: Coir News, October issue.*

# STATEWISE/ MONTHWISE ELECTRICITY GENERATION (in MU) DURING OCTOBER & NOVEMBER 2002

| Sl No. | State/ UT | Month | |
|---|---|---|---|
| | | Oct-02 | Nov-02 |
| 1 | Delhi | 778 | 711 |
| 2 | Jammu & Kashmir | 329 | 186 |
| 3 | Himachal Pradesh | 531 | 416 |
| 4 | Haryana | 773 | 749 |
| 5 | Rajasthan | 1852 | 2016 |
| 6 | Punjab | 2043 | 1860 |
| 7 | Uttar Pradesh | 6207 | 6139 |
| 8 | Uttaranchal | 373 | 234 |
| 9 | Gujarat | 4615 | 4322 |
| 10 | Maharashtra | 5867 | 5657 |
| 11 | Madhya Pradesh | 3187 | 3172 |
| 12 | Chhatisgarh | 2230 | 2186 |
| 13 | Andhra Pradesh | 4868 | 4728 |
| 14 | Karnataka | 1890 | 1844 |
| 15 | Kerala | 610 | 549 |
| 16 | Tamil Nadu | 3557 | 3716 |
| 17 | Pondicherry | 23 | 19 |
| 18 | Bihar | 395 | 499 |
| 19 | Jharkhand | 569 | 591 |
| 20 | Orissa | 1436 | 1297 |
| 21 | West Bengal | 3012 | 2754 |
| 22 | Sikkim | 46 | 29 |
| 23 | Andoman & Nicobar Island | 0 | 0 |
| 24 | Assam | 226 | 202 |
| 25 | Meghalaya | 92 | 73 |
| 26 | Tripura | 79 | 83 |
| 27 | Manipur | 63 | 57 |
| 28 | Nagaland | 19 | 9 |
| 29 | Arunachal Pradesh | 3 | 0 |

# STATISTICS IN INDUSTRY AND BUSINESS

*[A brief report on the International Conference Held in Kochi*
*Reported by Sri. M. A. Ravendran, Additional District Officer (E & S), Palakkad]*

A three day International Conference on the prospects of statistical methods applicable in the fields of industry and business held in Kochi from 1-4 Jan 2003 was one of the highlights of the beginning of the New year. The conference was financially supported by the Reserve Bank of India, Mumbai; Council of Scientific and Industrial Research, New Delhi; Coconut Development Board, Kochi; Kerala Chemicals and Proteins Ltd, Kochi; State Bank of India, Kochi and State bank of Travancore, Thrikkakara. Its international sponsors were: (1) Institute for Improvement in Quality and Productivity, University of Waterloo, Canada and (2) The Committee on Statistics in Industry and Business of the International Statistical Institute, Netherlands. The Conference was hosted by Cochin University of Science and Technology. Besides a total number of 68 delegates from all over India, delegates from the U.S.A, Canada, Netherlands, Japan, New Zealand, Mauritius, Australia, Italy and Botswana totaling to 22 also participated in the Conference and contributed to the Proceedings. (But all the 22 were not foreigners – 12 of them were Indians.)

The Conference started with a welcome session. On 1st January a total of 66 papers were presented by the delegates in the 20 hour business span of the following three days.

## General Review of the Proceedings

Of all the 66 papers presented, 19 were actually read on 2 Jan 2003; 27 on 3 Jan 2003; 18 on 4 Jan 2003. The remaining two, though in their synoptic form now, are also included in the proceedings.

Out of the 19 papers presented in the 2nd day, 3 were on Quality Improvement, 2 on Regression Analysis, 6 on Reliability Parameters, 3 on Time Series Models and one each on themes like Generalised Kernel Tolerance Intervals, Multivariate Power Series and Mahalanobis Distance.

The paper on 'Quality Improvement through Statistical Thinking' by Bavas Abraham was thought provoking on account of its stress on the historical and philosophical aspects of Quality Systems.

Further Advancement in Mahalanobis Distance

T. Arthanari's presentation of Mahalanobis Distance in Multivariate Measurement Systems was strikingly novel. Like the Raman Effect in Physics, Mahalanobis Distance (1928), otherwise known as $D^2$ Statistics, was a milestone in the evolution of statistical theories, in as much as it takes into account the correlation present in the multivariate data. Genichi Taguchi of Japan found a new use of Mahalanobis Distance recently and evolved a system called the Mahalanobis-Taguchi strategy (MTS) which works in medical diagnosis, quality control and business operations such as market segmentation and the like and he did it reportedly successfully. But some misgivings still persisted amongst corporate statisticians about the validity of MTS as a statistical method. Sri. T. Arthanari of the University of Auckland, New Zealand carried the day by taking a defensive stand on MTS and providing arguments for its better understanding.

Out of the 27 papers presented on the third day, 10 were on specific subjects such as: Monitoring Groundwater well placement, statistical issues on Data Mining, Risk analysis of long-term agreements, Multivariate Spatial Process Models, Analysis of Computer Experiments, Mixture Model for analyzing warranty reliability, Circular Error Probable (for missile/ projectile trajectory), AIDS Information System, Improving quality of forecasting; and Data Mining for market analysis.

The remaining 17 papers highlighted: Estimation of Lorenz Curve & Gini Index, Multivariate Minification Process, Competing Risk Models, Linear & Circular Data, Dynamic Linear Models, Estimation of AR(1) Process, Contingency Tables, Auto Regressive Time Series Models, Process Capability Indices, Rank Minimal Schedules, Cauchy Distribution, Robust Design, Conceptual Clustering, Fishers Information, Estimation of Process Capability Indices, Confidence Limits & Tolerance Limits and Reliability Models.

**Data Mining**

With software data processing getting into vogue, scepticism prevailed about the survival of

statistical methods. The papers on Data Mining allay all fears and instill fresh hope in statisticians of finding new vistas.

**Problems of Charting a Spatial plan for Kerala**

The paper on Multivariate Spatial Process Models presented by A. Gelfand (Duke University, USA), if extended, may perhaps be of value of planners in rural development and especially those concernedwith today's micro-level planning. Even at the time of the NES Blocks, planners in Kerala were aware of the fact that a spatial plan must go hand or parallel with the local-level plan – See " Integrated Rural Development", (1981), by Abdul Thaha jointly with his geographer-wife Mumtaz Thaha. (Mr. Thaha was Chief Town Planner of Kerala in the 1990s). With the emergence of the three-tier Panchayats and the Nagarapalikas, their argiments strengthened and planners started pleading for dove-tailing spatial planning with local level planning. Our Department, too, had risen to the ocassion and chalked out a Socio-economic survey which would have generated colossus spatial data. Anyhow, if Kerala's bulky spatial data ever materialize, extension of Gelfand's ideas may someway of help in handling them.

Of the 18 papers presented on the 4th day, two of papers presented in the fourth day, two were on Statistical Process Control and the rest were one each of themes like: Chaotic Time Series. Optional Multivate Control Chart, Geometric stable law, Poisson Data, Design of Market Segment (case study), Bivariate Normal Distribution, ARFIMA Process, Random Infinite Divisibility, Multivariate Process Capability Indices, Default Probabilities, Support Vector Machines for Direct Marketing, Cumulative Sum Control Chart, Quality Control, Cauchy Chart, Quality Control, Cauchy Distribution, Slope Rotatable Designs and Order Statistics.

Of the remaining two papers, which are in their synoptic form yet, one is on Hierarchical Control Chart and the other is on Selection of Sampling Plans.

The ARFIMA process presented by V.A. Reisen, Departmento de Estatistica, CCE, UFES, is a new estimation method. Reisen thought out this method when Brazil was inundated in inflation. According to the spokesman, it is useful in predicting many economic parameters also, such as future inflation rates and the like.

**Conclusions**

1. Genichi Taguchi made further advancement in $D^2$ statistics in the best interests of his country, for Japan produces in great surpluses and is hard-pressed to pursue more and more effective marketing strategies.
2. The Thaha's propositions were based on Walter Christler's Centre Place theory. Christler was a German and he propounded this planning theory when Germany was devastated in World War II. As they resurrected Germany (West Germany) in two years, the effectiveness of this theory became a proven truth to planners the world over.

Japan also was ruined in the war. Phoenix-like, she rose from the ashes, and in a shorter time too, wisely planning her land, water and the manpower of her surviving population. And now the Japanese are after quick marketing!

Kerala hasn't undergone any devastation or faced any natural calamities. All we have to suffer is a little drought here and a little flood there; a little sea-erosion along the coastline and a little landslide in the highlands.

All we have to do is to receive the weekend economy and raise the 25 lakhs of families from the Below-poverty line.

The paper on "Quality Improvement through Statistical Thinking" has been commented upon earlier. It plays to recall the same in this connection, for it strikes us as pertinent to our point. There is well grounded reason to believe that India's granaries are full to the brim owing to the power of statistical thinking. Local-level planning is bestowed on us as a result of statistical thinking. We have to think in ranges spanning from the International to the Ward0level and put chance to work. Statistical thinking can work wonders – so says Dr. C.R. Rao in "Statistics and Truth: Putting Chance to Work:, (1989, CSIR, New Delhi).

## EXPORTS OF CASHEW KERNELS FROM INDIA

| Countries | Sep 2001 | | Apr- Sep 2001 | | Sep 2002 | | Apr- Sep 2002 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Australia | 164 | 27958 | 479 | 78463 | 197 | 33457 | 640 | 103756 |
| Austria | 5 | 749 | 21 | 4385 | 0 | 0 | 0 | 0 |
| Bahrain | 31 | 5525 | 93 | 15519 | 23 | 3533 | 144 | 23169 |
| Belgium | 101 | 21395 | 486 | 107593 | 149 | 28884 | 613 | 120277 |
| Bosnia-Herzegovina | 0 | 0 | 0 | 0 | 16 | 3046 | 16 | 3046 |
| Brazil | 0 | 0 | 16 | 2834 | 0 | 0 | 0 | 0 |
| Bulgaria | 0 | 0 | 0 | 0 | 17 | 2937 | 17 | 2937 |
| Cambodia | 15 | 4167 | 15 | 4167 | 0 | 0 | 0 | 0 |
| Canada | 159 | 29182 | 874 | 151436 | 68 | 11378 | 752 | 135063 |
| China | 32 | 5709 | 87 | 17811 | 0 | 0 | 0 | 0 |
| Cyprus | 0 | 0 | 49 | 11063 | 16 | 3766 | 83 | 20030 |
| Czech Rep. | 0 | 0 | 5 | 913 | 0 | 0 | 0 | 0 |
| Denmark | 16 | 2301 | 49 | 9034 | 0 | 0 | 0 | 0 |
| Egypt | 15 | 3386 | 54 | 12287 | 20 | 5171 | 53 | 13046 |
| Finland | 0 | 0 | 16 | 4272 | 16 | 3097 | 32 | 4344 |
| France | 228 | 47262 | 1252 | 262593 | 264 | 49336 | 1156 | 229205 |
| Germany | 48 | 7879 | 550 | 102394 | 121 | 20951 | 867 | 94522 |
| Ghana | 16 | 1551 | 16 | 1551 | 0 | 0 | 0 | 0 |
| Greece | 63 | 11372 | 200 | 38522 | 48 | 9223 | 295 | 57181 |
| Hong Kong | 48 | 10106 | 206 | 47431 | 0 | 0 | 107 | 28067 |
| Iceland | 0 | 0 | 48 | 10491 | 0 | 0 | 0 | 0 |
| Indonesia | 15 | 2615 | 15 | 2615 | 0 | 0 | 0 | 0 |
| Iran Islamic Rep. | 0 | 0 | 18 | 3620 | 0 | 0 | 0 | 0 |
| Iraq | 0 | 0 | 32 | 3450 | 0 | 0 | 0 | 0 |
| Ireland | 0 | 0 | 16 | 3629 | 0 | 0 | 16 | 2969 |
| Israel | 32 | 7822 | 349 | 80650 | 79 | 14609 | 539 | 108791 |
| Italy | 254 | 49666 | 703 | 136225 | 66 | 12934 | 438 | 80534 |
| Japan | 395 | 67861 | 2059 | 403234 | 346 | 67887 | 2567 | 504332 |
| Jordan | 15 | 3317 | 29 | 6385 | 31 | 6867 | 139 | 33151 |
| Kazakhstan | 15 | 2776 | 31 | 4005 | 0 | 0 | 16 | 2289 |
| Korea Rep. | 24 | 4181 | 71 | 13402 | 27 | 5543 | 48 | 9689 |
| Kuwait | 32 | 6859 | 194 | 40701 | 93 | 19106 | 213 | 40072 |
| Lebanon | 124 | 20545 | 250 | 37951 | 0 | 0 | 33 | 6390 |

Contd

*Exports of Cashew Kernels from India (Contd..)*

| Countries | Sep 2001 | | Apr- Sep 2001 | | Sep 2002 | | Apr- Sep 2002 | |
|---|---|---|---|---|---|---|---|---|
| | Qty | Value | Qty | Value | Qty | Value | Qty | Value |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Lithuania | 0 | 0 | 0 | 0 | 16 | 3106 | 32 | 6111 |
| Malaysia | 17 | 4321 | 56 | 10242 | 29 | 5547 | 36 | 6535 |
| Maldives | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 197 |
| Mali | 16 | 2169 | 16 | 2169 | 0 | 0 | 0 | 0 |
| Mauritious | 8 | 1834 | 9 | 2034 | 0 | 0 | 5 | 903 |
| Mexico | 16 | 3636 | 48 | 9631 | 0 | 0 | 32 | 5411 |
| Morocco | 0 | 0 | 16 | 3581 | 0 | 0 | 0 | 0 |
| Nauru RP | 0 | 0 | 16 | 2293 | 0 | 0 | 0 | 0 |
| Netherland | 680 | 124984 | 5732 | 1138204 | 700 | 129513 | 5836 | 1097231 |
| New Zealand | 32 | 6123 | 82 | 15676 | 35 | 6885 | 90 | 16145 |
| Nigeria | 0 | 0 | 16 | 3184 | 0 | 0 | 0 | 0 |
| Norway | 64 | 13245 | 273 | 55336 | 48 | 9351 | 238 | 45637 |
| Oman | 66 | 11739 | 103 | 17361 | 0 | 0 | 0 | 0 |
| Philippines | 0 | 0 | 70 | 11214 | 17 | 3239 | 26 | 4878 |
| Poland | 0 | 0 | 56 | 12349 | 0 | 0 | 0 | 0 |
| Portugal | 64 | 11673 | 105 | 22019 | 17 | 3346 | 49 | 9971 |
| Qatar | 0 | 0 | 74 | 15680 | 34 | 5809 | 34 | 5809 |
| Russia | 45 | 5857 | 138 | 18971 | 32 | 3533 | 271 | 35191 |
| Saudi Arabia | 92 | 16619 | 760 | 147415 | 174 | 29048 | 1094 | 193311 |
| Sierra Leona | 0 | 0 | 54 | 1741 | 0 | 0 | 0 | 0 |
| Singapore | 16 | 2958 | 175 | 31072 | 0 | 0 | 102 | 19276 |
| South Africa | 42 | 6872 | 101 | 18564 | 7 | 1053 | 104 | 17797 |
| Spain | 425 | 81841 | 985 | 197488 | 176 | 34873 | 795 | 161345 |
| Srilanka | 0 | 0 | 0 | 0 | 9 | 1413 | 29 | 4185 |
| Sweeden | 0 | 0 | 78 | 15976 | 0 | 0 | 0 | 0 |
| Syrian Arab Rep. | 0 | 0 | 15 | 3492 | 100 | 20275 | 151 | 30745 |
| Taiwan | 16 | 2301 | 16 | 2301 | 16 | 3128 | 32 | 6726 |
| Thailand | 32 | 7303 | 32 | 7303 | 0 | 0 | 0 | 0 |
| Trininad | 16 | 3517 | 48 | 9*864 | 16 | 3236 | 48 | 9615 |
| Turkey | 0 | 0 | 16 | 3592 | 0 | 0 | 16 | 3007 |
| United Arab | 342 | 39099 | 1219 | 203700 | 788 | 135965 | 2340 | 412349 |
| United Kingdom | 795 | 147975 | 3158 | 615725 | 446 | 84862 | 2661 | 523300 |
| USA | 3782 | 741556 | 21035 | 4381490 | 4452 | 853666 | 27052 | 5160616 |
| Vietnam | 0 | 0 | 16 | 3429 | 0 | 0 | 0 | 0 |
| **Total** | **8413** | **1580060** | **42801** | **8603722** | **8709** | **1639575** | **49858** | **9399151** |
| Unit Value (Rs. / KG) | 187.81 | | 201.02 | | 188.26 | | 188.52 | |

*Source: Cashew Bulletin, December issue.*

## PORT WISE EXPORT OF CASHEW NUT SHELL LIQUID FROM INDIA

| Ports | Sep 2001 | | Apr- Sep 2001 | | Sep 2002 | | Apr- Sep 2002 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Cochin | 167 | 22645 | 3204 | 43370 | 48 | 837 | 4024 | 47751 |
| Mangalore | 128 | 1974 | 351 | 5732 | 111 | 2616 | 333 | 7247 |
| **Total** | **1799** | **24619** | **3555** | **49102** | **159** | **3453** | **4357** | **54998** |

*Source: Cashew Bulletin, December issue.*

# Data-Cashew

IMPORT OF RAW CASHEW NUTS INTO INDIA

| Countries | Sep 2001 | | Apr- Sep 2001 | | Sep 2002 | | Apr- Sep 2002 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Benin | 1238 | 29312 | 31139 | 756056 | 1617 | 47416 | 35169 | 1019727 |
| Gambia | 238 | 6420 | 1794 | 33305 | 1071 | 36197 | 5819 | 194899 |
| Ghana | 495 | 10048 | 3733 | 79846 | 222 | 8327 | 5947 | 167603 |
| Guinea Bissau | 27595 | 722362 | 50394 | 1384868 | 19116 | 720220 | 47252 | 1746027 |
| Indonesia | 275 | 8214 | 1764 | 46116 | 798 | 30794 | 1010 | 35787 |
| Ivory Coast | 5137 | 120557 | 63641 | 1507232 | 6664 | 193065 | 76769 | 2161217 |
| Kenya | 0 | 0 | 1954 | 52006 | 0 | 0 | 1341 | 35938 |
| Madagascar | 0 | 0 | 0 | 0 | 0 | 0 | 294 | 5877 |
| Mozambique | 0 | 0 | 163 | 3870 | 438 | 8732 | 1184 | 27881 |
| Nigeria | 386 | 7641 | 8941 | 183893 | 893 | 21945 | 17476 | 397233 |
| Panama | 0 | 0 | 0 | 0 | 22 | 537 | 114 | 2772 |
| Philippines | 0 | 0 | 0 | 0 | 0 | 0 | 279 | 8262 |
| Senegal | 2088 | 48666 | 5049 | 121252 | 1423 | 47153 | 5500 | 181332 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 4337 |
| Tanzania | 4165 | 88724 | 17898 | 421623 | 0 | 0 | 2206 | 73501 |
| Thailand | 0 | 0 | 0 | 0 | 0 | 0 | 466 | 17698 |
| United Kingdom | 0 | 0 | 0 | 0 | 162 | 5751 | 162 | 5751 |
| **Total** | **41617** | **1041944** | **186470** | **4590067** | **32426** | **1120137** | **201167** | **6085842** |
| Unit Value (Rs / KG) | 25.04 | | 24.62 | | 34.55 | | 30.25 | |

*Source: Cashew Bulletin, December issue.*

## PORT WISE EXPORT OF CASHEW KERNELS FROM INDIA

| Ports | Sep 2001 | | Apr- Sep 2001 | | Sep 2002 | | Apr- Sep 2002 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Cochin | 2256 | 398177 | 20742 | 4137301 | 5574 | 1045087 | 31971 | 5942517 |
| Goa | 105 | 11119 | 315 | 58703 | 48 | 10760 | 333 | 79066 |
| Mangalore | 122 | 23519 | 651 | 116552 | 258 | 50678 | 2514 | 525154 |
| Tuticorin | 5817 | 1124403 | 19849 | 3995740 | 2636 | 497103 | 13935 | 2636222 |
| Visakhapatnam Sea | 113 | 22842 | 1244 | 295426 | 193 | 35947 | 1105 | 216192 |
| **Total** | **8413** | **1580060** | **42801** | **8603722** | **8709** | **1639575** | **49858** | **9399151** |

*Source: Cashew Bulletin, December issue.*

## TEA PRODUCTION DECLINES

Tea Production in September 2002 was 1,06,881 tonnes, 1.7 per cent lower than in September 2001. During January-Septmber 2002, production was six lakh tones compared to 6.3 lakh tones during the corresponding period of 2001. North India tea production was 5.5 per cent lower than during January-September 2001, while production in South India declined by 6.7 per cent. Around 75 per cent of total tea production in the country comes from gardens in North India.

While tea production has been falling, prices also have remained weak. Prices in September 2002 were one per cent higher than in the same month of 2001. But the trend is still depressed. The average price during January-September 2002 was Rs. 53.3 per Kg, 15.4 per cent lower than in the corresponding period of the previous year. Prices had recorded a 3.7 per cent increase during January-September 2001. Tea exports during January-July 2002 were 89,467 tonnes, 15.5 per cent lower than during the same period of 2001

### TEA PRODUCTION: JANUARY-SEPTEMBER

| | Tones | | % change | |
|---|---|---|---|---|
| | 2001 | 2002 | 2001 | 2002 |
| Northern India | 483008 | 456478 | 2.66 | -5.49 |
| Assam | 339239 | 315494 | 1.24 | -7.00 |
| West Bengal | 137845 | 135445 | 6.43 | -1.74 |
| Others | 5924 | 5539 | 0.56 | -6.50 |
| Southern India | 150822 | 140790 | -1.43 | -6.65 |
| Tamil Nadu | 98210 | 92932 | 1.23 | -5.37 |
| Kerala | 48817 | 43697 | -6.30 | -10.49 |
| Karnataka | 3795 | 4161 | -2.34 | 9.64 |
| India | 633830 | 597268 | 1.65 | -5.77 |

| | Prodn. (Tonnes) | Prodn (% chg.) | Export (Qty) (Tonnes) | Export (Qty) (% chg.) | Export (Val) (Rs.crore) | Export (Val) (% chg.) | Prices* (Rs./ Kg) | Prices* (% chg.) |
|---|---|---|---|---|---|---|---|---|
| Sep 2001 | 108722 | 2.94 | 15880 | 2.21 | 148.03 | -3.58 | 59.36 | -7.58 |
| Oct 2001 | 93995 | -7.34 | 17529 | 30.22 | 240.02 | 91.77 | 49.41 | -21.05 |
| Nov 2001 | 89772 | 9.78 | 16751 | 26.42 | 148.50 | 14.14 | 53.85 | -6.75 |
| Dec 2001 | 36113 | -9.17 | 12549 | -33.19 | 119.61 | -36.36 | 58.78 | -2.75 |
| Jan 2002 | 19092 | -8.19 | 12180 | -34.38 | 114.06 | -31.80 | 50.42 | -31.73 |
| Feb 2002 | 14037 | -13.63 | 12337 | -15.01 | 96.29 | -40.44 | 47.08 | -31.74 |
| Mar 2002 | 36137 | -6.58 | 8971 | -34.27 | 82.26 | -37.48 | 43.39 | -22.04 |
| Apr 2002 | 57324 | 1.61 | 13628 | 68.40 | 114.83 | 46.63 | 47.71 | -15.81 |
| May 2002 | 61017 | -15.39 | 12567 | -24.60 | 99.87 | -34.60 | 56.89 | -9.63 |
| Jun 2002 | 97014 | 3.27 | 13885 | -10.51 | 114.57 | -21.99 | 58.95 | -3.42 |
| Jul 2002 | 102447 | -8.74 | 15900 | -15.88 | 163.78 | -0.26 | 59.68 | -9.88 |
| Aug 2002 | 103319 | -9.88 | | | | | 56.03 | -10.22 |
| Sep 2002 | 106881 | -1.69 | | | | | 59.93 | 0.96 |
| | | | | | | | | |
| | Jan-Sep | Jan-Sep | Jan-July | Jan-Jul | Jan-Jul | Jan-Jul | Jan-Sep | Jan-Sep |
| 2001-01 | 633830 | 1.65 | 105903 | 11.85 | 1002.55 | 15.85 | 63.01 | 3.65 |
| 2002-02 | 597268 | -5.77 | 89467 | -15.52 | 785.66 | -21.63 | 53.34 | -15.35 |
| | | | | | | | | |
| | Apr-Mar | Apr-Mar | Apr-Mar | Apr-Mar | Apr-Mar | Apr-Mar | Apr-Mar | Apr-Mar |
| 2001-02 | 847248 | -0.13 | 178940 | -4.53 | 1710.81 | -4.36 | 55.97 | -9.97 |

Monthly figures may not add up to the total due to revisions.
* Average prices in Auction centers.

*Source: CMIE November issue.*

## MONTHWISE/ SEASONWISE CONSUMPTION OF FERTILIZER MATERIALS (2001-02) – KERALA

(in Tonnes)

| Fertilizer/ Material | April 2001 | May 2001 | June 2001 | July 2001 | August 2001 | September 2001 | Kharif 2001 |
|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* |
| Urea | 2560 | 7127 | 7456 | 12335 | 13765 | 11715 | 54958 |
| A.S. | 766 | 1287 | 2505 | 1694 | 1084 | 733 | 8069 |
| A.Cl. | 57 | 0 | 117 | 43 | 77 | 51 | 345 |
| CAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSP | 68 | 467 | 503 | 390 | 573 | 372 | 2373 |
| RP | 1559 | 5168 | 3165 | 5178 | 2876 | 3090 | 21036 |
| MOP | 1780 | 6480 | 10437 | 15061 | 8961 | 11017 | 53736 |
| SOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DAP | 92 | 386 | 1265 | 983 | 753 | 1152 | 4631 |
| 10-26-26 | 160 | 265 | 718 | 538 | 604 | 1218 | 3503 |
| 12-32-16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14-28-14 | 0 | 0 | 5 | 22 | 8 | 7 | 42 |
| 14-35-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-15-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16-20-0 | 0 | 12 | 5 | 3 | 8 | 7 | 35 |
| 17-17-17 | 360 | 1038 | 3059 | 3099 | 1308 | 1948 | 10812 |
| 19-19-19 | 3 | 10 | 105 | 364 | 204 | 141 | 827 |
| 20-20-0 | 1777 | 3724 | 13132 | 10164 | 7393 | 13580 | 49770 |
| 23-23-0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28-28-0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **9182** | **25964** | **42472** | **49874** | **37614** | **45031** | **210137** |

| Fertilizer/ Material | October 2001 | November 2001 | December 2001 | January 2002 | February 2002 | March 2002 | Rabi 2001-02 | Total 2001-02 |
|---|---|---|---|---|---|---|---|---|
| *1* | *9* | *10* | *11* | *12* | *13* | *14* | *15* | *16* |
| Urea | 9840 | 12512 | 8225 | 5376 | 8480 | 1725 | 46158 | 101116 |
| A.S. | 1518 | 1470 | 661 | 505 | 641 | 526 | 5321 | 13390 |
| A.Cl. | 50 | 93 | 0 | 9 | 52 | 70 | 274 | 619 |
| CAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSP | 427 | 399 | 212 | 243 | 153 | 391 | 1825 | 4198 |
| RP | 2790 | 6171 | 1049 | 461 | 537 | 3006 | 14014 | 35050 |
| MOP | 9505 | 10522 | 7171 | 4672 | 12273 | 1118 | 45261 | 98997 |
| SOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DAP | 1105 | 934 | 584 | 338 | 1901 | 338 | 5200 | 9831 |
| 10-26-26 | 36 | 384 | 138 | 98 | 385 | 453 | 1494 | 4997 |
| 12-32-16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14-28-14 | 33 | 41 | 1 | 1 | 12 | 0 | 88 | 130 |
| 14-35-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-15-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16-20-0 | 6 | 1 | 0 | 0 | 0 | 0 | 7 | 42 |
| 17-17-17 | 2230 | 1745 | 809 | 78 | 4332 | 881 | 10075 | 20887 |
| 19-19-19 | 214 | 267 | 133 | 85 | 449 | 19 | 1167 | 1994 |
| 20-20-0 | 10114 | 12231 | 7113 | 4032 | 1131 | 8752 | 43373 | 93143 |
| 23-23-0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28-28-0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **37868** | **46770** | **26094** | **15898** | **30348** | **17279** | **174257** | **384394** |

*Source: Fertiliser and Agriculture Statistics -The Fertiliser Association of India, Southern Region.*

# DISTRICTWISE/ SEASONWISE CONSUMPTION OF FERTILIZER MATERIALS (2001-02) – KERALA

(in Tonnes)

| District | UREA | | | AMMONIUM SULPHATE | | | AMMONIUM CHLORIDE | | |
|---|---|---|---|---|---|---|---|---|---|
| | Kharif | Rabi | Total | Kharif | Rabi | Total | Kharif | Rabi | Total |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* |
| Alappuzha | 1554 | 3117 | 4671 | 1612 | 2272 | 3884 | 0 | 0 | 0 |
| Ernakulam | 5245 | 4531 | 9776 | 249 | 415 | 664 | 0 | 0 | 0 |
| Idukki | 6951 | 1735 | 8686 | 1080 | 71 | 1151 | 0 | 0 | 0 |
| Kannur | 2223 | 1259 | 3482 | 64 | 45 | 109 | 0 | 0 | 0 |
| Kasargod | 934 | 523 | 1457 | 265 | 125 | 390 | 0 | 0 | 0 |
| Kollam | 1793 | 854 | 2647 | 233 | 123 | 356 | 0 | 0 | 0 |
| Kottayam | 7160 | 10006 | 17166 | 1259 | 870 | 2129 | 61 | 0 | 61 |
| Kozhikode | 3864 | 1801 | 5665 | 377 | 13 | 390 | 48 | 0 | 48 |
| Malappuram | 4020 | 3489 | 7509 | 103 | 85 | 188 | 0 | 36 | 36 |
| Palakkad | 9962 | 9163 | 19125 | 766 | 612 | 1378 | 89 | 52 | 141 |
| Pathanamthitta | 1324 | 1060 | 2384 | 113 | 77 | 190 | 0 | 0 | 0 |
| Thiruvananthapuram | 2215 | 873 | 3088 | 1285 | 185 | 1470 | 0 | 0 | 0 |
| Thrissur | 3677 | 6137 | 9814 | 399 | 223 | 622 | 147 | 186 | 333 |
| Wayanad | 4035 | 1646 | 5681 | 266 | 205 | 471 | 0 | 0 | 0 |
| *State* | *54957* | *46194* | *101151* | *8071* | *5321* | *13392* | *345* | *274* | *619* |

| District | SSP | | | RP | | | MOP | | |
|---|---|---|---|---|---|---|---|---|---|
| | Kharif | Rabi | Total | Kharif | Rabi | Total | Kharif | Rabi | Total |
| 1 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| Alappuzha | 166 | 10 | 176 | 156 | 334 | 490 | 2098 | 4082 | 6180 |
| Ernakulam | 263 | 589 | 852 | 2280 | 1346 | 3626 | 5732 | 2963 | 8695 |
| Idukki | 63 | 48 | 111 | 1741 | 1529 | 3270 | 5489 | 2794 | 8283 |
| Kannur | 142 | 52 | 194 | 1247 | 1387 | 2634 | 3086 | 1880 | 4966 |
| Kasargod | 0 | 203 | 203 | 622 | 236 | 858 | 1138 | 567 | 1705 |
| Kollam | 19 | 41 | 60 | 883 | 722 | 1605 | 1715 | 1136 | 2851 |
| Kottayam | 439 | 562 | 1001 | 3368 | 3098 | 6466 | 6978 | 7178 | 14156 |
| Kozhikode | 158 | 34 | 192 | 1727 | 925 | 2652 | 6038 | 2414 | 8452 |
| Malappuram | 64 | 33 | 97 | 2445 | 1259 | 3704 | 4191 | 3280 | 7471 |
| Palakkad | 360 | 91 | 451 | 1706 | 1244 | 2950 | 5352 | 5642 | 10994 |
| Pathanamthitta | 280 | 120 | 400 | 1123 | 464 | 1587 | 2179 | 1615 | 3794 |
| Thiruvananthapuram | 158 | 0 | 158 | 582 | 287 | 869 | 2109 | 1271 | 3380 |
| Thrissur | 30 | 40 | 70 | 791 | 365 | 1156 | 3442 | 4308 | 7750 |
| Wayanad | 232 | 1 | 233 | 2362 | 834 | 3196 | 4188 | 3936 | 8124 |
| State | 2374 | 1824 | 4198 | 21033 | 14030 | 35063 | 53735 | 43066 | 96801 |

Contd.

*DISTRICTWISE/ SEASONWISE CONSUMPTION OF FERTILIZER MATERIALS (2001-02) – KERALA (Contd...)*

| District | DAP | | | 10-26-26 | | | 14-28-14 | | | 16-20-0 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Kharif | Rabi | Total | Kharif | Rabi | Total | Kharif | Rabi | Total | Kharif | Rabi | Total |
| 1 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Alappuzha | 0 | 54 | 54 | 7 | 188 | 195 | 12 | 3 | 15 | 0 | 0 | 0 |
| Ernakulam | 454 | 259 | 713 | 727 | 133 | 860 | 0 | 0 | 0 | 0 | 0 | 0 |
| Idukki | 63 | 330 | 393 | 557 | 738 | 1295 | 0 | 80 | 80 | 0 | 0 | 0 |
| Kannur | 168 | 294 | 462 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 2 | 2 |
| Kasargod | 0 | 28 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kollam | 10 | 17 | 27 | 55 | 31 | 86 | 0 | 0 | 0 | 0 | 5 | 5 |
| Kottayam | 2238 | 2344 | 4582 | 1222 | 38 | 1260 | 20 | 4 | 24 | 0 | 0 | 0 |
| Kozhikode | 511 | 274 | 785 | 63 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 |
| Malappuram | 373 | 373 | 746 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Palakkad | 522 | 324 | 846 | 469 | 110 | 579 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pathanamthitta | 91 | 110 | 201 | 189 | 13 | 202 | 10 | 1 | 11 | 0 | 0 | 0 |
| Thiruvananthapuram | 0 | 0 | 0 | 18 | 46 | 64 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thrissur | 178 | 808 | 986 | 187 | 191 | 378 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wayanad | 23 | 7 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 35 |
| State | 4631 | 5222 | 9853 | 3502 | 1489 | 4991 | 42 | 88 | 130 | 35 | 7 | 42 |

| District | 17-17-17 | | | 19-19-19 | | | 20-20-0 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Kharif | Rabi | Total | Kharif | Rabi | Total | Kharif | Rabi | Total |
| *1* | *32* | *33* | *34* | *35* | *36* | *37* | *38* | *39* | *40* |
| Alappuzha | 46 | 180 | 226 | 50 | 10 | 60 | 2351 | 6139 | 8490 |
| Ernakulam | 1253 | 2245 | 3498 | 135 | 244 | 379 | 5705 | 3169 | 8874 |
| Idukki | 575 | 913 | 1488 | 120 | 160 | 280 | 2852 | 2817 | 5669 |
| Kannur | 461 | 557 | 1018 | 0 | 90 | 90 | 2603 | 2819 | 5422 |
| Kasargod | 605 | 496 | 1101 | 0 | 20 | 20 | 1550 | 1018 | 2568 |
| Kollam | 535 | 461 | 996 | 60 | 58 | 118 | 2805 | 2540 | 5345 |
| Kottayam | 1087 | 912 | 1999 | 70 | 90 | 160 | 3617 | 7262 | 10879 |
| Kozhikode | 680 | 473 | 1153 | 0 | 19 | 19 | 2068 | 1958 | 4026 |
| Malappuram | 371 | 367 | 738 | 0 | 44 | 44 | 3855 | 3429 | 7284 |
| Palakkad | 1609 | 1119 | 2728 | 130 | 72 | 202 | 7964 | 8615 | 16579 |
| Pathanamthitta | 593 | 564 | 1157 | 55 | 17 | 72 | 2856 | 1755 | 4611 |
| Thiruvananthapuram | 471 | 439 | 910 | 59 | 40 | 99 | 4665 | 3711 | 8376 |
| Thrissur | 442 | 413 | 855 | 70 | 46 | 116 | 3236 | 5339 | 8575 |
| Wayanad | 2085 | 1635 | 3720 | 78 | 250 | 328 | 3644 | 2291 | 5935 |
| **State** | 10813 | 10774 | 21587 | 827 | 1160 | 1987 | 49771 | 52862 | 102633 |

*Source: Fertiilser and Agriculture Statistics –The Fertiliser Association of India, Southern Region*

## AIRPORT PERFORMANCE: APRIL- AUGUST 2002-03

| | Passenger traffic ('000) | Passenger traffic (% chg) | Share of dom. (%) | Share of int. (%) |
|---|---|---|---|---|
| Bombay | 4910.0 | 0.9 | 57.7 | 42.3 |
| Delhi | 3459.4 | -4.7 | 58.2 | 41.8 |
| Madras | 1710.6 | 2.1 | 52.1 | 47.9 |
| Calcutta | 1079.6 | -0.8 | 79.7 | 20.3 |
| Bangalore | 1074.3 | 13.9 | 87.1 | 12.9 |
| Hyderabad | 783.2 | 9.0 | 75.4 | 24.6 |
| Trivandrum | 433.8 | 1.5 | 21.8 | 78.2 |
| Cochin | 418.0 | 13.8 | 39.4 | 60.6 |
| Ahmedabad | 302.9 | -6.7 | 77.7 | 22.3 |
| Calicut | 261.8 | 11.2 | 30.8 | 69.2 |
| Goa | 249.4 | -8.9 | 88.4 | 11.6 |
| Guwahati | 198.5 | 3.5 | 98.1 | 1.9 |
| Pune | 167.3 | 2.1 | 100.0 | 0.0 |
| Lucknow | 116.7 | -6.2 | 95.1 | 4.9 |
| Coimbatore | 110.4 | -3.3 | 95.5 | 4.5 |
| Vadodara | 109.5 | 22.5 | 100.0 | 0.0 |
| Jaipur | 103.6 | 4.6 | 81.9 | 18.1 |
| Srinagar | 97.7 | -12.6 | 100.0 | 0.0 |
| Nagpur | 92.3 | 11.0 | 100.0 | 0.0 |
| Mangalore | 91.8 | -4.2 | 100.0 | 0.0 |
| Jammu | 73.9 | -20.3 | 100.0 | 0.0 |
| Amritsar | 62.3 | 26.9 | 7.2 | 92.8 |
| Varanasi | 47.0 | -34.2 | 97.3 | 2.7 |
| Tiruchchirappalli | 36.3 | 26.6 | 24.9 | 75.1 |
| All airports | 17230.2 | 1.0 | 65.8 | 34.2 |

## GDP GROWS 5.8% IN Q2 DESPITE POOR FARM YIELD

*Financial-Express-New Delhi-Dec-31.*

Despite poor performance of the agriculture sector on account of widespread drought during the kharif season, the Gross Domestic Product (GDP) in the second quarter of the current financial year (July – September 2002-03) went up by 5.8 per cent. This is higher than the growth rate of 5.3 per cent recorded in the second quarter of the previous financial year.

*Apart from agriculture and electricity, gas and water supply, all other sectors including manufacturing, trade and hotels and finance posted higher growth rates in July – September this fiscal as compared to the growth rates in second quarter last year.*

According to the latest quarterly estimates released by the Central Statistical Organisation (CSO) on Tuesday, quarterly GDP at factor cost during July-September 2002 was estimated at Rs.2,98,308 crore as compared to Rs.2,82,084 crore in the corresponding period of the previous fiscal.

Agriculture sector failed to sustain the recovery witnessed in the first quarter by growing at zero per cent in the second quarter as against a healthy 6.3 per cent growth in corresponding period in 2001-02.

The zero growth in agriculture sector was attributed by the department of agriculture and co-operation to sharp decline in production of commercial crops, rice coarse cereals and pulses during the kharif season of the current year.

The production of rice, coarse cereals and pulses fell by 15.8 per cent, 27.8 per cent and 16.7 per cent respectively during the kharif season over the corresponding season in the previous year

| Looking Up | Percentage change over previous year | | | |
|---|---|---|---|---|
| | 2001-02 | | 2002-03 | |
| Industry | Q1 | **Q2** | Q1 | Q2 |
| Agriculture, forestry & fishing | 1.1 | 6.3 | 4.4 | 0.0 |
| **Mining & quarrying** | -0.3 | 0.7 | 5.3 | 5.1 |
| Manufacturing | 2.7 | 2.6 | 3.8 | 6.4 |
| Electricity, gas & water supply | 3.9 | 5.4 | 5.3 | 4.9 |
| Construction | -0.2 | 2.7 | 6.3 | 7.2 |
| Trade, hotels, transport & Commun. | 4.5 | 6.3 | 7.4 | 8.0 |
| Financing, ins., real est. & bus. service | 7.0 | 7.6 | 9.7 | 8.9 |
| Community, social & personal services | 6.5 | 5.4 | 5.7 | 5.7 |
| GDP (at factor cost) | 3.5 | 5.3 | 6.0 | 5.8 |

Among commercial crops, oil seed production is expected to decline by 25.1 per cent while production of cotton and sugar cane is expected to fall by 22.3 and 5.4 per cent respectively over their estimated production last year.

As per the data manufacturing sector witnessed a robust 6.4 per cent growth in the second quarter as to compared to 2.6 per cent in the corresponding period in the previous year, while construction sector grew at an astounding 7.2 per cent as against 2.7 per cent earlier.

Improving its performance, mining and quarrying sector registered a growth rate of 5.1 per cent in the second quarter of the current fiscal against 0.7 per cent in the same period last year, although compared to the first quarter of 2002-03, the growth was marginally lower. Financial Express – Jan. 1 '03

# CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS

(Base 1982 = 100)

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 471 | 468 | 461 | 463 | 471 | 479 | 489 | 492 | 483 | 486 | 487 | 487 |
| | 2. Mundakayam | 456 | 454 | 454 | 454 | 457 | 464 | 476 | 476 | 486 | 482 | 482 | 483 |
| | 3. Kollam | 464 | 463 | 466 | 495 | 459 | 496 | 504 | 502 | 498 | 501 | 503 | 518 |
| | 4. Thiruvananthapuram | 523 | 529 | 528 | 532 | 530 | 546 | 557 | 552 | 544 | 545 | 553 | 554 |
| | Average | 479 | 479 | 477 | 486 | 479 | 496 | 507 | 506 | 503 | 504 | 506 | 511 |
| Tamilnadu | 1. Chennai | 500 | 503 | 502 | 501 | 508 | 512 | 515 | 520 | 523 | 526 | 528 | 522 |
| | 2. Coimbatore | 449 | 451 | 455 | 465 | 471 | 480 | 477 | 482 | 481 | 479 | 491 | 487 |
| | 3. Coonoor | 458 | 458 | 460 | 466 | 469 | 474 | 477 | 473 | 478 | 488 | 490 | 483 |
| | 4. Madurai | 454 | 451 | 443 | 445 | 454 | 458 | 457 | 464 | 464 | 470 | 476 | 477 |
| | 5. Salem | 454 | 454 | 453 | 453 | 461 | 470 | 470 | 467 | 464 | 472 | 475 | 472 |
| | 6.Tiruchirappalli | 515 | 512 | 512 | 515 | 507 | 522 | 530 | 548 | 548 | 550 | 563 | 573 |
| | Average | 472 | 472 | 471 | 474 | 478 | 486 | 488 | 492 | 493 | 498 | 504 | 502 |
| Andra Pradesh | 1. Gudur | 447 | 438 | 431 | 430 | 440 | 453 | 457 | 458 | 458 | 463 | 470 | 467 |
| | 2. Gundur | 466 | 465 | 451 | 453 | 463 | 468 | 480 | 480 | 481 | 484 | 490 | 492 |
| | 3. Hyderabad | 460 | 459 | 462 | 462 | 466 | 469 | 468 | 470 | 471 | 476 | 476 | 478 |
| | 4. Visakhapatanam | 460 | 456 | 460 | 462 | 466 | 468 | 470 | 475 | 473 | 475 | 479 | 479 |
| | 5. Warangal | 496 | 489 | 486 | 487 | 496 | 496 | 503 | 509 | 506 | 514 | 517 | 507 |
| | Average | 466 | 461 | 458 | 459 | 466 | 471 | 476 | 478 | 478 | 482 | 486 | 485 |
| Karnataka | 1. Bangalore | 448 | 445 | 445 | 445 | 445 | 450 | 455 | 456 | 458 | 457 | 460 | 460 |
| | 2. Belgaum | 502 | 503 | 505 | 507 | 509 | 511 | 519 | 521 | 524 | 523 | 524 | 523 |
| | 3. Hubli Dhanwar | 462 | 459 | 460 | 460 | 462 | 469 | 477 | 477 | 480 | 481 | 484 | 480 |
| | 4. Meccara | 453 | 452 | 453 | 452 | 456 | 461 | 462 | 463 | 463 | 459 | 462 | 463 |
| | Average | 466 | 465 | 466 | 466 | 468 | 473 | 478 | 479 | 481 | 480 | 483 | 482 |
| Pondichery | 1. Pondicherry | 494 | 493 | 494 | 507 | 502 | 505 | 516 | 512 | 516 | 521 | 531 | 531 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 530 | 529 | 537 | 539 | 545 | 555 | 561 | 563 | 562 | 563 | 561 | 551 |
| Maharastra | 1. Mumbai | 543 | 550 | 553 | 554 | 555 | 558 | 560 | 562 | 563 | 563 | 565 | 569 |
| | 2. Nagpur | 486 | 589 | 491 | 491 | 495 | 499 | 493 | 496 | 499 | 500 | 504 | 497 |
| | 3. Nasik | 511 | 507 | 511 | 508 | 508 | 511 | 514 | 519 | 518 | 518 | 519 | 521 |
| | 4. Pune | 514 | 517 | 520 | 521 | 530 | 531 | 532 | 534 | 532 | 534 | 538 | 537 |
| | 5. Solapur | 481 | 479 | 476 | 477 | 485 | 484 | 486 | 490 | 499 | 497 | 492 | 489 |
| | Average | 507 | 528 | 510 | 510 | 515 | 517 | 517 | 520 | 522 | 522 | 524 | 523 |
| Haryana | 1. Faridabad | 469 | 464 | 468 | 472 | 475 | 480 | 487 | 491 | 492 | 491 | 487 | 482 |
| | 2. Yamuna Nagar | 431 | 427 | 428 | 434 | 434 | 441 | 452 | 458 | 459 | 456 | 454 | 446 |
| | Average | 450 | 446 | 448 | 453 | 455 | 461 | 470 | 475 | 476 | 474 | 471 | 464 |
| West Bengal | 1. Asansol | 449 | 443 | 449 | 452 | 451 | 452 | 459 | 463 | 463 | 465 | 467 | 460 |
| | 2. Darjeeling | 394 | 387 | 388 | 387 | 388 | 390 | 393 | 412 | 420 | 411 | 410 | 405 |
| | 3. Durgapur | 540 | 536 | 540 | 544 | 549 | 552 | 558 | 564 | 567 | 571 | 563 | 554 |
| | 4. Haldia | 573 | 571 | 579 | 578 | 577 | 579 | 584 | 589 | 590 | 592 | 590 | 582 |
| | 5. Howrah | 526 | 528 | 535 | 536 | 541 | 542 | 545 | 548 | 550 | 554 | 556 | 546 |
| | 6. Jalpaiguri | 413 | 406 | 410 | 408 | 409 | 416 | 421 | 425 | 427 | 429 | 424 | 416 |
| | 7. Kolkata | 517 | 514 | 522 | 523 | 528 | 528 | 537 | 536 | 538 | 543 | 544 | 530 |
| | 8. Raniganj | 402 | 404 | 411 | 414 | 416 | 410 | 419 | 423 | 425 | 424 | 425 | 414 |
| | Average | 477 | 474 | 479 | 480 | 482 | 484 | 490 | 495 | 498 | 499 | 497 | 488 |
| Chandigarh | 1. Chandigarh | 513 | 513 | 505 | 505 | 505 | 509 | 514 | 521 | 525 | 522 | 520 | 514 |
| Uttar Pradesh | 1. Agra | 422 | 423 | 426 | 429 | 428 | 434 | 442 | 447 | 447 | 444 | 445 | 437 |
| | 2. Ghaziabad | 463 | 459 | 464 | 466 | 473 | 478 | 483 | 486 | 489 | 483 | 481 | 478 |
| | 3. Kanpur | 444 | 452 | 455 | 448 | 450 | 461 | 465 | 470 | 471 | 467 | 468 | 456 |
| | 4. Saharaupur | 428 | 432 | 434 | 434 | 433 | 434 | 436 | 438 | 439 | 446 | 444 | 439 |
| | 5. Varanasi | 474 | 474 | 478 | 474 | 481 | 482 | 491 | 495 | 499 | 498 | 498 | 489 |
| | Average | 446 | 448 | 451 | 450 | 453 | 458 | 463 | 467 | 469 | 468 | 467 | 460 |
| Madhya Pradesh | 1. Balaghat | 412 | 408 | 409 | 410 | 413 | 417 | 428 | 431 | 432 | 445 | 444 | 438 |
| | 2. Bhopal | 507 | 501 | 503 | 503 | 504 | 512 | 512 | 515 | 516 | 517 | 516 | 509 |
| | 3. Indore | 477 | 475 | 482 | 484 | 486 | 492 | 496 | 493 | 491 | 491 | 494 | 492 |
| | 4. Jabalpur | 461 | 459 | 462 | 459 | 460 | 462 | 468 | 470 | 472 | 488 | 483 | 471 |
| | Average | 464 | 461 | 464 | 464 | 466 | 471 | 476 | 477 | 478 | 485 | 484 | 478 |
| | **All India** | **472** | **472** | **468** | **469** | **472** | **476** | **481** | **484** | **485** | **487** | **489** | **484** |

# CONSUMER PRICE INDEX AND % VARIATIONS OF INDEX FOR INDUSTRIAL WORKERS

| State | Centre | CPI for the month of | | variatio | CPI for the month of | | variatio |
|---|---|---|---|---|---|---|---|
| | | Nov-01 | Nov-02 | | Dec-01 | Dec-02 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 464 | 487 | 4.96 | 469 | 487 | 3.84 |
| | 2. Mundakayam | 455 | 482 | 5.93 | 460 | 483 | 5.00 |
| | 3. Kollam | 460 | 503 | 9.35 | 469 | 518 | 10.45 |
| | 4. Thiruvananthapuram | 507 | 553 | 9.07 | 516 | 554 | 7.36 |
| | Average | 472 | 506 | 7.37 | 479 | 511 | 6.69 |
| 2. Tamilnadu | 1. Chennai | 502 | 528 | 5.18 | 502 | 522 | 3.98 |
| | 2. Coimbatore | 452 | 491 | 8.63 | 453 | 487 | 7.51 |
| | 3. Coonoor | 458 | 490 | 6.99 | 464 | 483 | 4.09 |
| | 4. Madurai | 461 | 476 | 3.25 | 458 | 477 | 4.15 |
| | 5. Salem | 457 | 475 | 3.94 | 461 | 472 | 2.39 |
| | 6.Tiruchirappalli | 515 | 563 | 9.32 | 515 | 573 | 11.26 |
| | Average | 474 | 504 | 6.26 | 476 | 502 | 5.64 |
| 3. Andra Pradesh | 1. Gudur | 455 | 470 | 3.30 | 447 | 467 | 4.47 |
| | 2. Gundur | 459 | 490 | 6.75 | 460 | 492 | 6.96 |
| | 3. Hyderabad | 447 | 476 | 6.49 | 455 | 478 | 5.05 |
| | 4. Visakhapatanam | 458 | 479 | 4.59 | 456 | 479 | 5.04 |
| | 5. Warangal | 486 | 517 | 6.38 | 483 | 507 | 4.97 |
| | Average | 461 | 486 | 5.51 | 460 | 485 | 5.30 |
| 4. Karnataka | 1. Bangalore | 448 | 460 | 2.68 | 448 | 460 | 2.68 |
| | 2. Belgaum | 502 | 524 | 4.38 | 502 | 523 | 4.18 |
| | 3. Hubli Dhanwar | 469 | 484 | 3.20 | 462 | 480 | 3.90 |
| | 4. Meccara | 456 | 462 | 1.32 | 453 | 463 | 2.21 |
| | Average | 469 | 483 | 2.93 | 466 | 482 | 3.27 |
| 5. Pndicherry | 1. Pndicherry | 496 | 531 | 7.06 | 493 | 531 | 7.71 |

*Contd..*

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | variatio | CPI for the month of | | variatio |
|---|---|---|---|---|---|---|---|
| | | Nov-01 | Nov-02 | | Dec-01 | Dec-02 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 541 | 561 | 3.70 | 533 | 551 | 3.38 |
| 2. Maharastra | 1. Mumbai | 539 | 565 | 4.82 | 536 | 569 | 6.16 |
| | 2. Nagpur | 495 | 504 | 1.82 | 487 | 497 | 2.05 |
| | 3. Nasik | 505 | 519 | 2.77 | 504 | 521 | 3.37 |
| | 4. Pune | 526 | 538 | 2.28 | 522 | 537 | 2.87 |
| | 5. Solapur | 484 | 492 | 1.65 | 482 | 489 | 1.45 |
| | Average | 510 | 524 | 2.71 | 506 | 523 | 3.24 |
| 3. Haryana | 1. Faridabad | 478 | 487 | 1.88 | 471 | 482 | 2.34 |
| | 2. Yamuna Nagar | 438 | 454 | 3.65 | 430 | 446 | 3.72 |
| | Average | 458 | 471 | 2.73 | 451 | 464 | 3.00 |
| 4. West Bengal | 1. Asansol | 460 | 467 | 1.52 | 456 | 460 | 0.88 |
| | 2. Darjeeling | 410 | 410 | 0.00 | 402 | 405 | 0.75 |
| | 3. Durgapur | 536 | 563 | 5.04 | 532 | 554 | 4.14 |
| | 4. Haldia | 586 | 590 | 0.68 | 580 | 582 | 0.34 |
| | 5. Howrah | 547 | 556 | 1.65 | 538 | 546 | 1.49 |
| | 6. Jalpaiguri | 418 | 424 | 1.44 | 416 | 416 | 0.00 |
| | 7. Kolkata | 540 | 544 | 0.74 | 526 | 530 | 0.76 |
| | 8. Raniganj | 417 | 425 | 1.92 | 415 | 414 | -0.24 |
| | Average | 489 | 497 | 1.66 | 483 | 488 | 1.09 |
| 5. Chandigarh | 1. Chandigarh | 498 | 520 | 4.42 | 497 | 514 | 3.42 |
| 6. Uttar Pradesh | 1. Agra | 432 | 445 | 3.01 | 424 | 437 | 3.07 |
| | 2. Ghaziabad | 472 | 481 | 1.91 | 465 | 478 | 2.80 |
| | 3. Kanpur | 461 | 468 | 1.52 | 449 | 456 | 1.56 |
| | 4. Saharaupur | 430 | 444 | 3.26 | 426 | 439 | 3.05 |
| | 5. Varanasi | 493 | 498 | 1.01 | 482 | 489 | 1.45 |
| | Average | 458 | 467 | 2.10 | 449 | 460 | 2.36 |
| 7. Madhya Pradesh | 1. Balaghat | 422 | 444 | 5.21 | 421 | 438 | 4.04 |
| | 2. Bhopal | 510 | 516 | 1.18 | 507 | 509 | 0.39 |
| | 3. Indore | 482 | 494 | 2.49 | 480 | 492 | 2.50 |
| | 4. Jabalpur | 471 | 483 | 2.55 | 467 | 471 | 0.86 |
| | Average | 471 | 484 | 2.76 | 469 | 478 | 1.87 |
| | **All India** | **472** | **489** | **3.60** | **469** | **484** | **3.20** |

# CONSUMER PRICE INDEX FOR AGRICULTURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sept 02 | Oct 02 | Nov 02 | Dec 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 319 | 322 | 321 | 321 | 321 | 325 | 328 | 328 | 325 | 328 | 329 | 330 |
| 2 | Tamilnadu | 314 | 313 | 311 | 313 | 316 | 319 | 320 | 321 | 324 | 327 | 340 | 356 |
| 3 | Anthrapradesh | 324 | 325 | 326 | 329 | 331 | 334 | 335 | 337 | 338 | 340 | 345 | 343 |
| 4 | Karnataka | 308 | 308 | 309 | 309 | 314 | 314 | 315 | 316 | 320 | 320 | 322 | 324 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 303 | 303 | 303 | 303 | 308 | 314 | 315 | 319 | 321 | 320 | 321 | 318 |
| 6 | Haryana | 320 | 321 | 320 | 320 | 322 | 323 | 328 | 331 | 333 | 331 | 330 | 325 |
| 7 | West Bengal | 301 | 299 | 301 | 299 | 297 | 299 | 300 | 305 | 309 | 314 | 310 | 304 |
| 8 | Uttar Pradesh | 309 | 312 | 312 | 308 | 309 | 315 | 320 | 323 | 326 | 327 | 324 | 318 |
| 9 | Madhya Pradesh | 304 | 304 | 305 | 307 | 311 | 314 | 317 | 320 | 320 | 321 | 321 | 314 |
| 10 | Assam | 319 | 317 | 319 | 319 | 320 | 322 | 323 | 328 | 331 | 332 | 331 | 329 |
| 11 | Bihar | 291 | 290 | 291 | 292 | 288 | 290 | 293 | 296 | 298 | 300 | 300 | 296 |
| 12 | Gujarat | 312 | 313 | 316 | 219 | 321 | 325 | 229 | 332 | 334 | 333 | 332 | 328 |
| 13 | Himachalpradesh | 297 | 299 | 296 | 295 | 300 | 301 | 298 | 303 | 303 | 307 | 309 | 310 |
| 14 | Jammu & Kashmir | 329 | 330 | 330 | 231 | 338 | 333 | 334 | 335 | 337 | 340 | 342 | 346 |
| 15 | Manipur | 300 | 299 | 302 | 299 | 297 | 298 | 295 | 295 | 299 | 300 | 302 | 300 |
| 16 | Meghalaya | 351 | 350 | 354 | 354 | 348 | 344 | 341 | 345 | 343 | 346 | 343 | 343 |
| 17 | Orissa | 294 | 286 | 287 | 290 | 293 | 295 | 297 | 300 | 301 | 302 | 300 | 294 |
| 18 | Punjab | 322 | 322 | 320 | 325 | 325 | 328 | 332 | 335 | 335 | 333 | 333 | 324 |
| 19 | Rajastan | 306 | 308 | 310 | 311 | 313 | 318 | 320 | 323 | 327 | 327 | 327 | 324 |
| 20 | Tripura | 313 | 315 | 319 | 327 | 321 | 323 | 327 | 326 | 328 | 330 | 334 | 334 |
| | **All India** | **308** | **308** | **309** | **309** | **311** | **314** | **316** | **319** | **321** | **322** | **323** | **321** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR AGRICULTURAL LABOURERS

Base 1986-87 = 100]

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Nov-01 | Nov 02 | | Dec-01 | Dec -02 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 318 | 329 | 3.46 | 322 | 330 | 2.48 |
| 2 | Tamilnadu | 311 | 340 | 9.32 | 316 | 356 | 12.66 |
| 3 | Anthrapradesh | 331 | 345 | 4.23 | 327 | 343 | 4.89 |
| 4 | Karnataka | 311 | 322 | 3.54 | 312 | 324 | 3.85 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 305 | 321 | 5.25 | 304 | 318 | 4.61 |
| 6 | Haryana | 325 | 330 | 1.54 | 323 | 325 | 0.62 |
| 7 | West Bengal | 311 | 310 | -0.32 | 307 | 304 | -0.98 |
| 8 | Uttar Pradesh | 315 | 324 | 2.86 | 311 | 318 | 2.25 |
| 9 | Madhya Pradesh | 312 | 321 | 2.88 | 310 | 314 | 1.29 |
| 10 | Assam | 323 | 331 | 2.48 | 324 | 329 | 1.54 |
| 11 | Bihar | 296 | 300 | 1.35 | 296 | 296 | 0.00 |
| 12 | Gujarat | 320 | 332 | 3.75 | 315 | 328 | 4.13 |
| 13 | Himachalpradesh | 299 | 309 | 3.34 | 296 | 310 | 4.73 |
| 14 | Jammu & Kashmir | 329 | 342 | 3.95 | 326 | 346 | 6.13 |
| 15 | Manipur | 304 | 302 | -0.66 | 307 | 300 | -2.28 |
| 16 | Meghalaya | 359 | 343 | -4.46 | 356 | 343 | -3.65 |
| 17 | Orissa | 307 | 300 | -2.28 | 303 | 294 | -2.97 |
| 18 | Punjab | 328 | 333 | 1.52 | 324 | 324 | 0.00 |
| 19 | Rajastan | 306 | 327 | 6.86 | 305 | 324 | 6.23 |
| 20 | Tripura | 334 | 334 | 0.00 | 315 | 334 | 6.03 |
| | **All India** | **313** | **323** | **3.19** | **312** | **321** | **2.88** |

# CONSUMER PRICE INDEX FOR RURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sept 02 | Oct 02 | Nov 02 | Dec 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 322 | 325 | 324 | 323 | 324 | 328 | 331 | 331 | 327 | 329 | 330 | 331 |
| 2 | Tamilnadu | 314 | 313 | 312 | 313 | 316 | 319 | 320 | 322 | 324 | 327 | 339 | 354 |
| 3 | Anthrapradesh | 325 | 325 | 327 | 330 | 332 | 335 | 335 | 337 | 338 | 340 | 345 | 344 |
| 4 | Karnataka | 309 | 309 | 311 | 311 | 315 | 315 | 316 | 317 | 321 | 321 | 323 | 325 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 305 | 304 | 304 | 304 | 309 | 314 | 316 | 319 | 321 | 321 | 321 | 319 |
| 6 | Haryana | 321 | 322 | 321 | 321 | 323 | 325 | 330 | 333 | 334 | 333 | 331 | 327 |
| 7 | West Bengal | 303 | 301 | 303 | 302 | 300 | 302 | 303 | 308 | 312 | 316 | 313 | 307 |
| 8 | Uttar Pradesh | 313 | 315 | 316 | 312 | 312 | 319 | 324 | 327 | 330 | 330 | 327 | 322 |
| 9 | Madhya Pradesh | 309 | 308 | 310 | 312 | 315 | 318 | 322 | 325 | 325 | 326 | 326 | 319 |
| 10 | Assam | 319 | 317 | 319 | 320 | 320 | 322 | 323 | 328 | 331 | 332 | 331 | 329 |
| 11 | Bihar | 292 | 292 | 292 | 294 | 290 | 293 | 295 | 298 | 300 | 302 | 302 | 298 |
| 12 | Gujarat | 313 | 315 | 317 | 320 | 323 | 326 | 331 | 334 | 335 | 334 | 334 | 330 |
| 13 | Himachalpradesh | 301 | 304 | 302 | 302 | 306 | 308 | 305 | 310 | 310 | 314 | 314 | 315 |
| 14 | Jammu & Kashmir | 321 | 323 | 324 | 325 | 331 | 326 | 326 | 328 | 329 | 333 | 336 | 338 |
| 15 | Manipur | 300 | 300 | 303 | 299 | 297 | 298 | 296 | 296 | 300 | 301 | 302 | 301 |
| 16 | Meghalaya | 348 | 347 | 350 | 350 | 345 | 341 | 338 | 342 | 340 | 343 | 340 | 341 |
| 17 | Orissa | 294 | 286 | 287 | 290 | 293 | 295 | 297 | 300 | 301 | 302 | 300 | 294 |
| 18 | Punjab | 327 | 327 | 215 | 330 | 330 | 332 | 336 | 339 | 340 | 338 | 337 | 330 |
| 19 | Rajastan | 308 | 310 | 312 | 313 | 315 | 319 | 320 | 324 | 328 | 327 | 328 | 325 |
| 20 | Tripura | 307 | 309 | 313 | 321 | 315 | 317 | 321 | 319 | 321 | 323 | 328 | 328 |
| | **All India** | **311** | **311** | **311** | **312** | **313** | **317** | **319** | **321** | **323** | **324** | **326** | **324** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR RURAL LABOURERS

Base 1986-87 = 100

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Nov-01 | Nov -02 | | Dec-01 | Dec -02 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 321 | 330 | 2.80 | 326 | 331 | 1.53 |
| 2 | Tamilnadu | 312 | 339 | 8.65 | 316 | 354 | 12.03 |
| 3 | Anthrapradesh | 332 | 345 | 3.92 | 327 | 344 | 5.20 |
| 4 | Karnataka | 312 | 323 | 3.53 | 316 | 325 | 2.85 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 306 | 321 | 4.90 | 306 | 319 | 4.25 |
| 6 | Haryana | 325 | 331 | 1.85 | 323 | 327 | 1.24 |
| 7 | West Bengal | 313 | 313 | 0.00 | 310 | 307 | -0.97 |
| 8 | Uttar Pradesh | 319 | 327 | 2.51 | 315 | 322 | 2.22 |
| 9 | Madhya Pradesh | 317 | 326 | 2.84 | 314 | 319 | 1.59 |
| 10 | Assam | 324 | 331 | 2.16 | 324 | 329 | 1.54 |
| 11 | Bihar | 298 | 302 | 1.34 | 298 | 298 | 0.00 |
| 12 | Gujarat | 321 | 334 | 4.05 | 317 | 330 | 4.10 |
| 13 | Himachalpradesh | 305 | 314 | 2.95 | 302 | 315 | 4.30 |
| 14 | Jammu & Kashmir | 323 | 336 | 4.02 | 320 | 338 | 5.63 |
| 15 | Manipur | 305 | 302 | -0.98 | 308 | 301 | -2.27 |
| 16 | Meghalaya | 356 | 340 | -4.49 | 354 | 341 | -3.67 |
| 17 | Orissa | 307 | 300 | -2.28 | 303 | 294 | -2.97 |
| 18 | Punjab | 332 | 337 | 1.51 | 329 | 330 | 0.30 |
| 19 | Rajastan | 309 | 328 | 6.15 | 307 | 325 | 5.86 |
| 20 | Tripura | 328 | 328 | 0.00 | 308 | 328 | 6.49 |
| | **All India** | **316** | **326** | **3.16** | **314** | **324** | **3.18** |

# CONSUMER PRICE INDEX FOR INDUSTRIAL & AGRICULTURAL WORKERS

**(Kerala State) Base 1998-99=100**

| Centre | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thiruvananthapuram | 115 | 114 | 114 | 114 | 114 | 115 | 116 | 117 | 117 | 117 | 118 | 119 |
| Kollam | 115 | 114 | 115 | 115 | 116 | 117 | 117 | 118 | 118 | 118 | 119 | 121 |
| Pathanamthitta | 113 | 112 | 112 | 112 | 113 | 113 | 114 | 115 | 113 | 113 | 113 | 113 |
| Punalur | 114 | 113 | 112 | 112 | 113 | 113 | 113 | 113 | 115 | 115 | 116 | 116 |
| Alappuzha | 114 | 113 | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 | 114 | 114 |
| Kottayam | 115 | 114 | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 | 116 | 116 |
| Mundakkayam | 113 | 112 | 111 | 111 | 111 | 112 | 113 | 114 | 114 | 114 | 114 | 115 |
| Munnar | 115 | 114 | 114 | 114 | 114 | 115 | 116 | 116 | 115 | 115 | 115 | 115 |
| Ernakulam | 115 | 114 | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 | 116 | 116 |
| Chalakkudy | 114 | 113 | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 | 114 | 114 |
| Thrissur | 115 | 114 | 114 | 113 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 115 |
| Palakkad | 112 | 111 | 111 | 111 | 111 | 112 | 113 | 114 | 114 | 114 | 115 | 115 |
| Malappuram | 114 | 113 | 112 | 112 | 112 | 113 | 114 | 115 | 114 | 114 | 115 | 115 |
| Kozhikkode | 115 | 114 | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 | 114 | 114 |
| Meppady | 115 | 114 | 114 | 114 | 114 | 115 | 115 | 116 | 115 | 115 | 115 | 115 |
| Kannur | 115 | 114 | 114 | 113 | 114 | 114 | 114 | 115 | 114 | 114 | 115 | 115 |
| Kasargod | 114 | 113 | 112 | 112 | 113 | 113 | 113 | 113 | 113 | 114 | 115 | 115 |
| **State** | **114** | **113** | **113** | **113** | **113** | **114** | **114** | **115** | **114** | **114** | **115** | **115** |

# Prices

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

| Sl. No | Name of Commodity | Unit | Jan 02 | Feb 02 | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. RICE - Open Market** | | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 12.20 | 12.23 | 11.96 | 11.91 | 11.89 | 11.91 | 12.32 | 12.80 | 12.95 | 12.93 | 13.30 | 13.25 |
| 2 | Red - Chamba | Kg | 12.25 | 12.15 | 12.29 | 12.36 | 12.36 | 11.81 | 12.20 | 12.88 | 12.39 | 12.96 | 13.04 | 13.59 |
| 3 | White Andra Vella | Kg | 12.29 | 12.34 | 11.70 | 11.91 | 11.82 | 11.93 | 12.16 | 12.15 | 12.03 | 11.95 | 12.45 | 11.52 |
| | **B. PULSES** | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 30.57 | 30.18 | 30.07 | 30.93 | 31.29 | 31.32 | 31.14 | 30.54 | 30.96 | 30.21 | 30.54 | 30.29 |
| 5 | Black gram split w/o husk | Kg | 34.71 | 34.04 | 32.75 | 32.68 | 34.25 | 34.96 | 34.04 | 33.32 | 33.13 | 32.32 | 31.04 | 29.79 |
| 6 | Dhall(Tur) | Kg | 29.12 | 28.81 | 28.88 | 28.92 | 29.69 | 30.00 | 30.31 | 30.73 | 31.13 | 31.15 | 31.15 | 31.12 |
| **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 15.26 | 15.25 | 15.30 | 15.24 | 15.07 | 14.74 | 14.59 | 14.52 | 14.69 | 14.49 | 13.89 | 13.32 |
| 8 | Milk (Cow's) | Ltr. | 13.04 | 13.04 | 13.04 | 13.07 | 13.18 | 13.00 | 13.00 | 12.50 | 13.00 | 13.04 | 13.04 | 13.04 |
| 9 | Egg Hen's (White lagon) | Dozen | 16.95 | 16.46 | 16.00 | 15.04 | 14.92 | 17.14 | 17.04 | 14.89 | 15.23 | 14.38 | 16.21 | 16.41 |
| 10 | Mutton with bones | Kg | 116.43 | 116.43 | 116.43 | 116.43 | 120.71 | 120.71 | 120.00 | 121.79 | 121.43 | 122.14 | 121.43 | 121.43 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 70.68 | 70.68 | 70.68 | 70.68 | 71.21 | 71.14 | 71.14 | 71.07 | 71.00 | 71.07 | 71.07 | 71.07 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.25 | 69.25 | 69.25 | 69.25 | 69.13 | 69.13 | 69.20 | 69.20 | 69.20 | 69.20 | 69.20 | 69.20 |
| **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 43.61 | 41.79 | 40.04 | 44.64 | 43.86 | 45.79 | 52.14 | 52.64 | 51.04 | 49.57 | 56.93 | 61.61 |
| 14 | Groundnut oil | Kg | 50.87 | 50.42 | 49.87 | 51.50 | 52.50 | 51.48 | 53.48 | 53.38 | 56.20 | 56.38 | 57.88 | 59.53 |
| 15 | Refined oil(Postman) | Kg. | 60.33 | 59.55 | 59.40 | 61.50 | 62.10 | 62.74 | 64.93 | 65.83 | 65.65 | 63.87 | 71.20 | 76.42 |
| 16 | Gingelly oil | Kg. | 51.00 | 50.36 | 51.18 | 53.29 | 53.57 | 54.79 | 54.79 | 54.46 | 56.85 | 58.05 | 59.05 | 60.29 |
| 17 | Coconut without husk | 100 nos | 461.07 | 442.86 | 429.64 | 443.93 | 440.71 | 452.50 | 480.36 | 482.14 | 480.77 | 469.64 | 526.79 | 576.79 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | Jan 02 | Feb 02 | Mar 02 | Apr-02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 37.79 | 35.71 | 33.57 | 33.64 | 33.14 | 33.21 | 33.29 | 32.93 | 35.00 | 34.29 | 36.64 | 37.86 |
| 19 | Chillies dry | Kg. | 43.07 | 41.64 | 39.36 | 38.86 | 39.71 | 42.07 | 43.00 | 43.07 | 45.00 | 51.93 | 52.71 | 52.29 |
| 20 | Onion small | Kg. | 12.26 | 10.61 | 10.74 | 10.61 | 11.60 | 13.85 | 18.15 | 15.38 | 16.02 | 19.27 | 22.20 | 21.79 |
| 21 | Tamarind without seeds loose | Kg. | 24.57 | 24.07 | 23.21 | 22.07 | 22.71 | 22.36 | 22.64 | 22.79 | 23.69 | 24.29 | 24.86 | 25.21 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 7.21 | 7.43 | 8.07 | 9.86 | 10.00 | 12.14 | 12.00 | 10.36 | 9.15 | 8.29 | 9.07 | 9.21 |
| 23 | Tapioca Raw | Kg. | 4.68 | 4.93 | 4.89 | 5.21 | 5.07 | 4.96 | 5.32 | 5.54 | 5.62 | 5.82 | 5.89 | 5.86 |
| 24 | Potato | Kg. | 11.77 | 9.21 | 8.63 | 9.64 | 10.44 | 11.57 | 11.59 | 11.98 | 11.09 | 11.99 | 12.13 | 10.59 |
| 25 | Colocassia | Kg. | 11.71 | 12.36 | 13.00 | 13.82 | 15.18 | 14.30 | 14.00 | 14.08 | 14.69 | 13.29 | 13.21 | 12.14 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 7.39 | 6.69 | 5.90 | 5.51 | 5.36 | 6.19 | 6.85 | 7.96 | 8.40 | 8.54 | 10.31 | 7.99 |
| 27 | Brinjal | Kg. | 10.46 | 11.00 | 10.29 | 10.93 | 10.21 | 10.43 | 10.29 | 10.00 | 9.85 | 9.64 | 11.29 | 11.14 |
| 28 | Cucumber | Kg. | 8.36 | 7.86 | 6.14 | 6.21 | 5.93 | 7.93 | 8.14 | 6.79 | 8.23 | 7.93 | 9.14 | 6.57 |
| 29 | Ladies Finger | Kg. | 9.64 | 11.36 | 12.14 | 11.43 | 10.36 | 10.43 | 11.14 | 11.21 | 11.15 | 10.93 | 10.14 | 9.57 |
| 30 | Cabbage | Kg | 8.43 | 9.21 | 8.71 | 8.36 | 9.14 | 8.71 | 9.00 | 9.50 | 7.69 | 8.64 | 9.14 | 8.86 |
| 31 | Bittergourd | Kg. | 11.29 | 11.21 | 11.86 | 13.50 | 12.79 | 14.46 | 14.00 | 12.14 | 12.85 | 14.43 | 14.93 | 13.21 |
| 32 | Tomatto | Kg. | 8.71 | 8.14 | 7.71 | 8.07 | 8.64 | 11.36 | 9.57 | 10.71 | 8.54 | 9.14 | 11.93 | 8.71 |
| 33 | Chillies green | Kg. | 13.00 | 12.21 | 14.00 | 14.29 | 12.86 | 17.43 | 14.57 | 16.21 | 14.69 | 15.00 | 15.57 | 14.43 |
| 34 | Banana green | Kg. | 10.18 | 10.32 | 10.11 | 11.61 | 12.00 | 11.18 | 11.61 | 12.32 | 11.85 | 10.96 | 11.39 | 10.79 |
| 35 | Plantain green | Kg. | 8.54 | 8.89 | 8.54 | 8.61 | 8.43 | 8.46 | 8.71 | 8.71 | 9.46 | 8.89 | 9.57 | 9.07 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.70 | 7.70 | 7.71 | 7.73 | 7.73 | 7.71 | 7.80 | 7.86 | 7.88 | 7.91 | 7.95 | 7.95 |
| 37 | Toilet Soap Lux | 100 gm | 10.96 | 10.96 | 11.07 | 11.32 | 11.32 | 11.29 | 11.46 | 11.57 | 11.71 | 11.86 | 11.89 | 11.75 |
| 38 | Toothpaste Colgate | 100 gm | 28.75 | 29.11 | 29.07 | 29.79 | 29.79 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 187.46 | 189.21 | 173.69 | 168.96 | 164.32 | 154.77 | 149.95 | 151.68 | 138.67 | 130.21 | 142.75 | 153.32 |

## MONTHLY AVERAGE DOMESTIC PRICE OF SPICES FOR NOVEMBER 2002

| SPICE | CENTRE | GRADE | (RS/ KG) |
|---|---|---|---|
| Black Pepper | Cochin | Ungarbled | 94.92 |
| | | Garbled | 98.12 |
| Cardamom (Small) | Kumily | - | 508.53 |
| (Auction) | Vandanmettu | - | 536.49 |
| | Bodinayakanur | - | 498.72 |
| | Saklespur | - | 541.35 |
| | Sirsi | - | 505.15 |
| Cardamom (Large) | Siliguri | Badadana | 177.95 |
| | | Chotadana | 164.50 |
| Chillies | Virudhunagar | - | 39.00 |
| | Guntur | - | 38.40 |
| Ginger (Dry) | Cochin | Unbleached | 43.65 |
| | | Bleached | 41.40 |
| Turmeric | Cochin | Alleppey Finger | 42.00 |
| | Mumbai | Rajpuri Finger | 49.50 |
| Coriander | Mumbai | Indori | 29.22 |
| | | Kanpuri | 30.69 |
| Cumin | Mumbai | - | 78.91 |
| Fennel | Mumbai | - | 49.06 |
| Fenugreek | Mumbai | - | 18.56 |
| Mustard | Delhi | - | 17.45 |
| Garlic | Mumbai | - | 39.38 |
| Celery | Mumbai | - | 27.45 |
| Clove | Cochin | - | 357.27 |
| Nutmeg (with shell) | Cochin | - | 119.55 |
| Mace | Cochin | - | 390.45 |
| Cinnamon | Delhi | - | 64.40 |
| cassia | Chennai | - | 62.40 |

| SPICES | - | SOURCES |
|---|---|---|
| Black Pepper | - | India Pepper & Spice Trade Association, **Cochin.** |
| Cardamom (Small) | - | Auction reports received fron licenced cardamom auctioneers. |
| Cardamom (Large) | - | Spices Board Regional Office, **Gangtok.** |
| Ginger (Dry), Turmeric | - | Indian Chamber of Commerce & Industry, **Cochin.** |
| Chilliese | - | Virudhunagar Chillies Merchant Association, **Virudhunagar.** |
| Chillies | - | Agricultural Market Committee, **Guntur.** |
| Turmeric, Coriander, Cumin, Fennel, Fenugreek, Garlic, Celery | - | M/s. Chhaganlal Kalidas Metha, **Mumbai.** |
| Cinnamon & Mustard | - | Regional Office of the Spices Board, **Delhi.** |
| Clove, Nutmeg, Mace | - | Indian Express Dialy. |
| Cassia | - | Regional Office of the Spices Board, **Chennai.** |

*Source: Spice India, December issue.*

## READY OR NOT, HERE IT IS

Today the hottest topic in IT circles is Linux. There is some speculation and some claims that Linux is not yet ready to be deployed in the enterprise market. But the reality is that it is definitely ready. Linux has been around for more than 10 years now and it is fully developed as enterprise operating system. The largest numbers of Internet servers are Linux servers. It is today doing a host of things for corporates. Linux is being used for services such as email, Web, firewall, proxy, gateway, database, applications, broadcast, file server, printing and many more.

Are large enterprises relying on Linux?

Yes, several in India and abroad run critical applications on Linux. Reliance, Raymonds, Bombay Dyeing, ICICI, IDBI, Asian Paints, Bharat Petroleum and several others in India have adopted Linux. Every major Wall Street firm is now turning to Linux in a big way. This includes Merrill Lynch, Goldman Sachs, Credit Suisse First Boston, Morgan Stanley, E*TRADE and Reuters. At Hollywood Disney, Dream works, Pixar, Industrial Light and Magicare using Linux for movie production.

Is Linux right for India? China, Peru, Brazil, Mexico, Germany, France, Finland and several others have taken advantage of the Linux. This has helped them save millions of tax players dollars by adopting Linux. India has a unique opportunity with Linux thanks to its pool of software talents. With India going the Linux way, software development can be become a cottage industry.

Is Linux cost effective? Forget what anyone has to say, Linux is free and nothing can be cheaper than that. With all the free applications not only do you save the cost of the operating system but you also save on the cost of applications.

Typically you end up spending more on the applications than on the operating system. If you consider the savings, it will be far more with all the applications. If you don't have in house talent you may have to hire a company to help you setup your Linux systems but it will still work out cheaper.

How do I get support on Linux?

There are several companies which will provide you support on Linux today for a fee. Commercial support should be considered by corporates who don't want to spend their time and effort. This also gives you professional support with a maintenance contract. If you want to do it yourself without spending a penny you can get help from the Linux User Groups.

Is Linux ready for the desktop?

If that question was asked two years ago the answer would have been a definite No. Desktop is primarily driven by applications and that is what was lacking.

Today with some many nice applications already available on Linux, Linux is good enough for most desktop users. These applications may not have all the bells and whistles but they are sufficient numbers of features which any user would need. We have Mozilla/ Netscape as the browser, Open Office/Star Office as the office suite, Evolutions as the mail client and Gaim as the Instant Messenger. There are also several other applications to choose from.

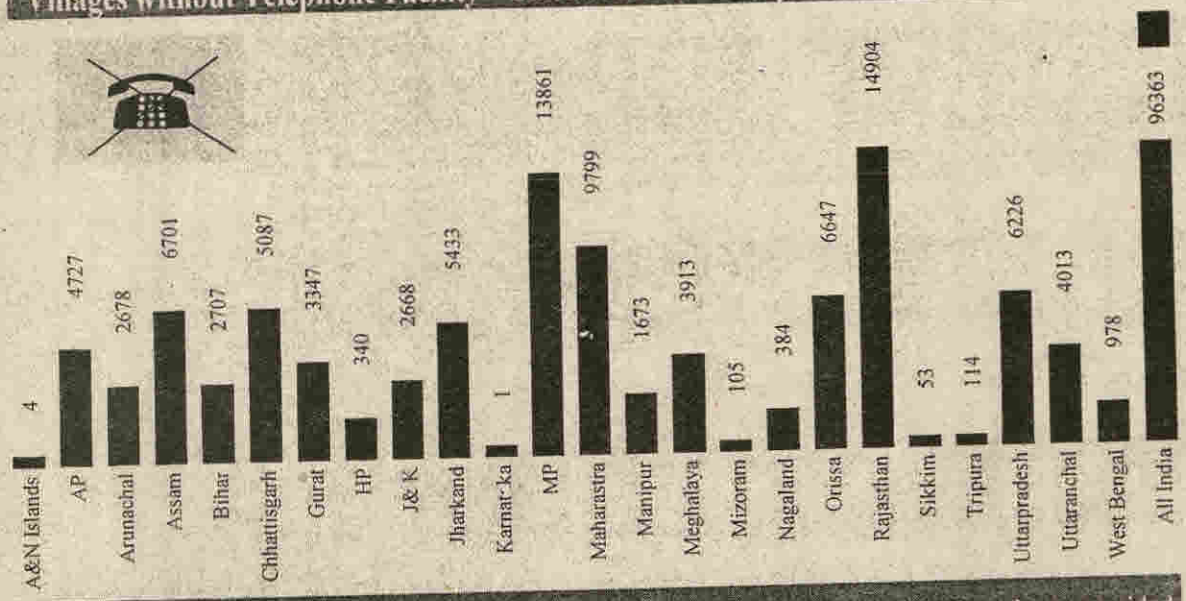
*Source: Economic Times.*

Printed and Published by Department of Economics & Statistics, Government of Kerala

# EcoStat News

February 2003
Volume - 3 Issue - 1

*For Official Use only*




As on January 31, 2003 there were still 96,363 village across the country which had not been provided with telephone connections. However Haryana, Kerala, Punjab, Tamil Nadu, Chandiarh, Delhi, Lakshadweep and Pndicherry had provided telephone connectivity to all villages

## Inside this issue

*Agriculture* ✱ *Economy* ✱ *Stock Market* ✱ *Industry*

*Rubber Statistics* ✱ *Banking* ✱ *Air Travel*

*Cyber Corner* ✱ *News* ✱ *Article*

*Stock Market* ✱ *Bullion Rates*

*Indices* ✱ *Prices*

**Department of Economics & Statistics**
**Government of Kerala**

## From Editors Desk

*EcoStat News is entering its third year of publication. The response received from the users of this publication is quite encouraging. The highlight of this edition is Statistics on Rubber. I would like to express our sincere thanks to Rubber Board for their valuable support in this regard. Smt. S. Indira, one of our editors has retired from service last month. On behalf of the editorial board I would like to place on record the services rendered by her in enriching this publication and her valuable contribution in generating useful data on Agricultural Statistics and Prices. I wish her a long, happy and prosperous life, after her retirement from service. Wish all the readers a happy new year*

**A. Meera Sahib,**
**Director & Chief Editor**



Edited printed & published for Department of Economics and Statistics, Government of Kerala

# Contents


| | Page |
|---|---|
| Agriculture | 3 |
| Economy | 7 |
| Stock Market | 10 |
| Industry | 12 |
| Rubber Statistics | 13 |
| Banking | 25 |
| Air Travel | 28 |
| Cyber Corner | 29 |
| News | 31 |
| Article | 33 |
| Exchange Rates | 38 |
| Bullion Rates | 40 |
| Indices | 41 |
| Prices | 50 |

## SPICES EXPORTS SHOOT UP

*ENS Economic Bureau*

The spices exports have shot up by 20 percent in the current fiscal in line with the trend of rising exports from the country, according to Commerce Secretary Dipak Chatterjee.

The primary analysis shows that total exports from the country have been better and in November, it grew by 16 percent. The country has targeted to double the present export level by 2006 so as to account for one percent of the global market share, he said in the presidential address at the function for the presentation of trophies and awards for excellence in spices exports, instituted by the Spices Board here today.

The spices had shown 47 percent value addition in exports last year. He urged the spices industry to maintain the export quality stands in the domestic products. This in turn will further improve the quality of exports. The spices industry should focus more on organic and value added products apart from exotic spices.

Speaking on the occasion, Spices Board chairman C J Jose said the emergence of low cost origins in the traditional exports items is making it difficult to defend the export volumes achieved in the past in addition to seriously eroding unit values of the spices exports.

The Indian spices exports have poor presence in the branded market and in the higher end value addition. The exports are pepper-centric and dependent on few spices items and hence the need to broaden the export basket by adding exotic spices such as vanila , parika and herbal spices .

The awards were given for achieving highest productivity in cardamom and vanilla and for excellence in export of spices for 2000-01 and 2001-02. The rolling trophy for topmost exporter of spices for both years was bagged by Synthite Industrial Chemicals. The company also received the trophy for topmost exporter of spices for both years.The trophy for topmost exporter of whole spices was received by AVT McCormick Ingredients PVT.Ltd., and Harmony Spices Ltd respectively for each year

*Source: Indian Express*

## EL NINO SHADOW ON RABI CROPS

The first week of January in association with an approaching western disturbance. For or cold wave conditions may occur during the second half of the week"

The northeast monsoon in the south India has come to an end on December 27. The north-east monsoon gave good showers in four southern states with the exception of coastal Andhra Pradesh which received deficient rains. The rest of the country with expectation of east MP was left practically dry in the period.

The World Meteorological Organisation (WMO) has said that 2002 is the second warmest year after 1998. Incidentally winter in India began late after two successive western disturbance brought could wave sweeping north India after December 23. IMD reports admit that despite the could wave sweeping north India " night temperatures were 3 to 5 degree centigrade above normal over parts of Northwest and central India on December 30 and 31 and nearly normal elsewhere".

The US-based National Oceanic and Atmospheric Administration (NOAA) had earlier announced 2002 ad El Nino year and its effects would be felt till February 2003. The NOAA Whether 2002 said," Other climate signature typical of El Nino also emerged in countries such as Australia, India and Indonesia as the El Nino episode evolved during the year ". According to the US based International Research Institute for Climate Prediction, Rajasthan, Gujarat, Maharashrtra, central India and most parts of peninsular India are likely to remain dry in the first three

months of 2003. Rainfall in Tamil Nadu would be 45 percent below normal J&K will have good rains. Temperature will also remain above normal in most parts of the country

## CROP LOSS IN TN COULD BE AROUND 70 PC

**By S.Vydhianathan**

Even the State's conservative hope of saving 40 percent of samba may not be realised going by harvest details coming from delta districts .

With reports of widespread crop withering the total loss in delta districts will be much higher than the Government's estimate. It will be around 70 percent, according to details available here.

As per the Government assessment, only 40 percent of samba crop plated on about 3.25 lakh ha in the composite Thanjavur district could be saved. But in reality it could be less than 30 percent.

Not only crops on over two lakh ha. started withering, even yield in areas, where farmers managed to save the crop to a certain extent, was poor.

The per hectare yield, according to farmers associations, was less than three tonnes compared to the normal productivity of six tonnes.

In ayacuts under the Vettaru and Grand Anaicut, the yield was less than one tonne. Farmers in Kumbakonam and Tiruvaiyaru, who have borewells succeeded in getting more than five tonnes.

Even to get this yield, they had to spend heavily because of groundwater depletion. According to the representatives of farmer's associations farmers were let down "by all forces" - from nature to the Government.

Through the State moved the Supreme Court and the Centre to get water, response from all quarters was "disappointing and frustrating ". It was too late now to save the standing crop.

On a meeting of the Cauvery River Authority, which may take place on February 10, they felt that no purpose would be served.

The season was now almost over and the crops had started withering. Even if water was released now, it would be difficult to save them.

They were unanimous in their view that Karnataka's "intransigence" was the main reason for the tragedy.

In many villages, farmers allowed their cattle to graze their crops, which were 80-90 days old. These crops would have been harvested -20-30 days later, had there been enough water.

Meanwhile, harvest has started in some parts of the districts. It was complete on about 23,000 ha out of 1.03 lakh ha in Thanjavour district, on 2000 ha out of 1.22 lakh in Tiruvarur district and 13,000 ha out of 97'000 ha in Nagapattinam district.

Source in the Agriculture department denied that the Government had not taken steps to save the crops.

The department had advised the farmers sufficiently in advance not to undertake planning after October, as it would not be possible for the department to provide sufficient water for irrigation But farmers went ahead with cultivation, which led to heavy crop loss" We took up the issue with every possible authority-Karnataka, the CRA, the Supreme Court and Prime Minister- but nothing came out of it. Even the order of the CRA or the apex court was not implemented" a senior official regretted.

Meanwhile, the Tamil Nadu civil Supplies Corporation has started opening direct purchase centres in the delta districts for procuring paddy from farmers

Already 30 centres were opened in Tiruvarur district and 20 in Thanjavur district. All taluk godowns in the delta and non-delta districts have been asked to purchase paddy from farmers

Under the decentralised procurement scheme, the Corporation would procure paddy on behalf of the Food Corporation of India.

The minimum support prices is Rs.530 a quintal for common varieties. It is said that there were good enquiries from farmers

## GETTING BETTER & BETTER

To days in to the new year, the good news countries on the economic front. Following on the heels on encountaging GDP growth figures for the second quarter, released by the CSO on Monday, we now have happy tidings on the trade front as well. November 2002 saw the country's exports record a healthy 16% increase compared to the corresponding period last year. With this, the growth rate in exports for the first eight months of the current fiscal now stands at a robust 16%. Of course, part of the reason for this apparently encouraging performance is because of the base effect- exports actually fell 0.8% during 2000-01. But that is only part of the reason. For the rest, recovery in global trade and, to give credit where it is due, concerted efforts by exports have played no small role. For a commerce ministry so spooked by last year's dismal showing that it preferred not to set any formal target for the current year, the year's performance comes as a welcome shot in the arm. More so since the recovery has happened despite a strengthening rupee.

The good news, however, does not end with exports. More encouraging is the sharp- 29%- increase in imports during November 2002. True, much of the increase is due to a higher oil bill thanks, in turn, to the hardening of oil prices. However, non-oil imports also recorded a 12% growth during the period April-November 2002. The Minister, Mr. Arun Shourie, seems to view this as a distressing sign of Indian industry's global uncompetitiveness vis-a-vis China. But we would not regard it in quite the same light. Rather, we would see it as a sign that industry is at last on the recovery path. This fits in with evidence that we have from other fronts as well: the pick-up in non-food credit, improvement in the index of industrial production and in business sentiment. Moreover, contrary to widespread belief, there is nothing wrong with a country, particularly a developing country, running a current account deficit. . Remember a current account deficit represents the extent to which an economy draws upon the resources of the rest of the world to finance its won needs. To that extent, a healthy growth in imports and a current account deficit (provided it is within manageable limits) is good news, not bad

## INDIA'S FOODGRAINS STOCKS DIP BELOW 50-MT MARK

*Nidhi Nath Srinivas*

THE MOUNTAIN is becoming a molehill. For the first time in nearly two years, India's official foodgrains stocks have dropped below the 50-million-tonnes mark. They are expected to further dwindle to 38 mt in the next two months - the lowest in the last three years, as brisk exports and lower procurement lead to a swifter clearing of godowns

This may help trim India's fat food subsidy bill as the total storage costs of grains is declining, even though it is still being sold at a loss. From April 1,2002, to January 1,2003, the Government has already spent 19,414.71 crore in procuring and storing foodgrain, up from Rs. 16,724 crore it spent in 2001-02.

The biggest demand has come from exports. Muscling in to the international grain markets armed with a massive subsidy, of- take for exports has risen a humongous 235% to hit 8.7 m t between January-December 2002, up from 2.6 mt last year. In fact, out of every three tonnes of rice and give tonnes of wheat released from FCI's godowns, one tonne is being shipped out.

As a result, on this New Year's day, India's food stocks fell by 9.8 mt to 48.2 mt. As another 10 mt wheat and rice will be consumed from this pile.

both by exports and domestic sales. on April 1 the Government is expected to hold just 38 mt. The last time stocks dropped to similar levels was in May 2000; a year beset by drought

## DECLINE STEEPEST IN RICE STOCKS

The decline has been steepest in rice stocks, which are lower by 24.6% to 19.3 m t, from the 25.6 mt held on January12002. This is the lowest India has held in the last two years. These stocks, however, may not get re-accumulated very easily as rice procurement so far has been 10 mt as on January1, against 11.1 mt on the same day last year.

The Government is also holding less wheat stocks, which have fallen by 11% to 28.8 mt from 32.4 mt last year. This is a 13- month low, as in last March, stocks were again around 26mt.

Interestingly, despite the drought this year, the chief reason for this dramatic decline in foodgrain stocks has been exported rather than domestic consumption. Rice exports have risen to 5.78 mt from 1.11 mt last year in the April-December period. Wheat exports have nearly doubled to 3.89 mt from 1.89 mt in the corresponding period of 2001.

Out of India's total grain off-take, while wheat exports have a 32.7% share, rice exports have a 22.8% share. This is up from 10.9% and 19.8% respectively in the corresponding period last year

Offtake under Targeted PDS has also risen during the period to 13.5 mt this fiscal, against 10 mt in the pervious year

The month-wise wheat export offtake is 3.89 lakh tonne (April), 3.56 (May), 3.04 (June), 3.31 (July), 3.57 (August), 5.82 (September), 5.34((October), and 4.27 (November). In December, it touched 6.11 lakh tonne, the highest since exports were opened up in November 2000.

In rice it is 5.79 tonne (April), 8.54(May), 5.59(June), 8.13(July), 11.14(August), 8.04 (September), 3.39(October) and 3.96(November) and 3.25 (December)

## EL NINO SHADOW ON RABI

It's not just kharif crops, El Nino and global climate change are set to cast a spell on rabi harvest too. The current spell of rains and cold wave sweeping north India notwithstanding, assessments of crops and weather reports paint a gloomy farm picture

.This year witnessed the worst drought in last 100 years and monsoon rains were deficient by 19.35 per cent. Now post-monsoon rains in October-December, crucial for rabi crops, have been deficient by 33 per cent. The average post-monsoon rains across the country were only 82.5 mm as against the normal 123.7 mm. Out of 35 meteorological subdivisions in the country, 26 received deficient to scanty rains in the period. Over 58 per cent of the meteorological districts received deficient to scanty rains, according to recent data by the India Meteorological Department (IMD).

Due to scanty rains and unfavourable weather area. coverage under all rabi crop is lagging behind as compared to the previous year's rabi season.

The IMD, being aware of a short winter, has said in its recent report, "Rain or snow may occur over northern parts of the country during

*Source: The Financial Express.*

## GDP GROSS 5.6% IN 2001-02

India's economy grew at 5.6 percent in 2001-02 against a growth of 4.4 percent recorded in the previous year. While agriculture grew 5.7 percent during the year compared to a negative 0.4 percent in the previous fiscal, growth in manufacturing was lower at 3.4 percent against 7.3 percent posted earlier.

The GDP growth rate projected by the quick estimates of national income, consumption expenditure, saving and capital formation for the year 2001-02 released by the Central Statistical Organisation (CSO) on Friday is slightly higher than the advance and revised estimates released earlier which pegged it at 5.4 per cent.

The finance ministry has reportedly estimated the GDP growth for 2002-03 at 6 percent. The CSO is scheduled to release its advance estimates for the current fiscal on February 7. GDP at constant prices in 2001-02 was estimated at Rs. 12,65,429 crore as against Rs.11,98,685 crore in the previous year.

Apart from agriculture, the growth in 2001-02 could be attributed to communication which grew at 17 percent, hotel and restaurants which posted a growth of 11.2 percent, trade which grew at 8.7 percent, and transport which registered a growth of 8.5 percent.

The quick estimates also revised the growth rate of GDP for 2000-01 to 4.4 percent as against the earlier estimates of 4 percent.

At constant prices, the country's national income rose by 6.2 percent to Rs 11,15,157 crore in 2001-02 as against Rs.10, 50,177 crore in the previous year.

Percapita income during the fiscal 2001-02 rose by 4.3 percent to Rs.10,754 as against Rs.10,306 the previous year.

While the savings rate increased to 24 percent of GDP in 2001-02 as against 23.6 percent in the previous year the increase was mainly due to rise in savings by households and private corporate.

Public sector savings declined due to dis-savings of the government administrative departments to a negative Rs.1,31,394 crore in 2001-02 as compared to a negative Rs.1,13 636 crore in the previous fiscal. Private final consumption expenditure at current prices rose to Rs.14,92,894 crore in 2001-02 as compared to Rs. 13,59,358 crore in the previous fiscal. Gross capital formation at current prices in the economy increased to Rs.5,45,091 crore in 2001-02 as compared to Rs.5,04,738 crore in the previous fiscal

## ECONOMIC GROWTH ELUSIVE DUE TO LACK OF NEW INVESTMENTS: NCAER

The overall prospects for economic growth are constrained by lack of new investments despite major gains in industrial growth in the first half of the fiscal, a leading think-tank said here.

To make matters worse, impact of poor kharif harvest on consumer demand will be felt in the second half of the year.

Growth remains elusive in most economic indictors and one factor that is yet to see significant improvement is investment activity, National Council of Applied Economic Research (NCAER) said.

In its latest analysis of the Indian economy, it said, cyclical components of non-oil imports production of commercial vehicles, cement and the BSE Sensex have declined in September as compared to their level in the previous month. Declining interest rates, stable exchange rate moderate inflation rate, liberalised foreign investment regime, quarter internal security environment or even better profit earnings of the corporate failed to visibly induce new investments in industrial production capacity, it said.

One indicator of heightened investment activity would be upturn in capital market indicators,

which is missing so far, it said adding the uncertainties over disinvestment programme also proved to be a disappointment for the markets.

Even the rabi harvest will affect rural demand for industrial output in the initial months of the next fiscal. Demand emanating from the rural sector will be spread out across two fiscal years. The demand component that can offset the adverse impact of poor agricultural harvest will be investment, it added.

## GDP GROWS 5.8% IN Q2 DESPITE POOR FARM YIELD

But the highest growth came in the financing, insurance, real estate and business service segment which clocked a growth of 8.9 percent compared to 7.6 percent in the second quarter in the previous year.

However, the growth in the second quarter was marginally lower than 9.7 percent growth registered in the first quarter of this fiscal.

Trade, hotels, transport and communication clocked an equally impressive 8 percent growth compared to 6.3 percent in the corresponding period.

Electricity, gas and water supply, however, registered a growth of 4.9 percent compared to 5.4 percent in the corresponding period last year.

In another segments, community, social and personal services industry sustained the growth of the first quarter at 5.7 percent, which was marginally higher than the 5.4 per cent estimated in the corresponding period a year earlier.

## INDIA'S FOREX KITTY GROWTH IS WORLD'S FASTEST

*Reserves' Increase 46% Against Japan's 15%, China's 35% & Taiwan's 30% In 2002*

*Rishi Chopra (ETIG)*

The year 2002 has been notable not only for India but also many other developing nations because of the massive accretion to their forex reserves. While India may not be ahead in absolute numbers, it tops in terms of growth with almost a 50% rise in its forex reserves in 2002. The only other country which manages to come close is Taiwan which has seen a 30% growth in its reserves to a record high of $159 billion in 2002.

For instance, Japan, the country with the highest forex reserves, has added $59 billion or 14.7%, while China has added $74 billion (35%), equal to more than the entire reserves of India. On the other hand, India has added $22.1 billion, a 46% increase.

While different countries have different reasons for the sharp addition to their reserves, one link is common among them; that of the revaluation of the euro and the yen vis-a-vis the dollar leading to a overall surge in the reserves.

In China's case, reserves reached record levels backed by a hefty trade surplus. In the first 10months of 2002, China had a trade surplus of $24.74 billion

In Taiwan's case, its forex reserves too hit a record high of $159 billion on account of a higher foreign exchange income surplus on the external trade front, termination of foreign currency deposit accounts and interest income from the reserves.

For Japan, the reserves touched a new high primarily on account of a stronger euro against the dollar and a rise in the prices of Japan's foreign bond holdings. The same goes for South Korea, where the gain has been mainly due to the increased value of reserved euro and yen-denominated assets against the US dollar.

On the other hand, in the case of Hong Kong and Singapore, the reserves have almost remained unchanged compared to last year.

In India's case, the principal sources of inflows are export earnings and remittances from Indians working abroad. Of late, there have been substantial dollar inflows on account of export of software and IT-enabled services.

Besides, merchandise exports have done reasonably well. Expatriate remittances are also

higher because of the uncertain global economic environment.

A large number of Indians abroad are today comfortable with repatriating money back into India -which go into foreign currency non-resident (FCNR) accounts

| Forex reserves | '02 | '01 | Chg (%) |
|---|---|---|---|
| India | 70.3 | 48.1 | 46.1 |
| China | 286.4 | 212.2 | 35.0 |
| Taiwan* | 159.1 | 122.2 | 30.2 |
| Korea | 121.4 | 102.8 | 18.2 |
| Thailand | 38.8 | 33.0 | 17.4 |
| Japan | 460.5 | 401.5 | 14.7 |
| Malaysia* | 34.4 | 30.9 | 11.6 |
| Indonesia | 30.0 | 27.2 | 10.3 |
| Singapore | 77.5 | 75.8 | 2.2 |
| Hong Kong* | 111.0 | 111.2 | -0.2 |

*As Of End Nov '02 ($ bn)

*As Of End Nov '02 ($ bn)

*Economic Times, January 14, 2003.*

## NCAER PROJECTS GDP GROWTH AT 4.9 – 5.2% IN 2002-03

**OUR ECONOMIC BUREAU**

The National Council of Applied Economic Research (NCAER) mhas projected the overall growth of gross domestic product (GDP) for the current fiscal between 4.9 per cent and 5.2 per cent. Gross domestic deficit of the Centre is projected at 5.9 per cent of GDP at market prices.

According to the monthly Macrotrack report of the NCAER, the industrial sector, including construction, mining and power is expected to grow by 6.5 to 6.6 per cent in 2002-03. While services are projected to grow by 6.9 to 7.1 per cent, agriculture output is projected to grow by zero to 1 per cent in the current fiscal. From the production side, "The dampener for the current year is agricultural growth". The forecast however is subject to uncertainties to over the estimates of agriculture and the developing international scenario on oilprice and supplies in the context of the intensified tension between the US and Iraq says the NCAER report.

The good news is on inflation, with the projected increase in Wholesale Price Index (WPI) to grow marginally, from 3.4 to 3.7 percent. Current account deficit is expected to be 1.5 per cent, with exports likely to grow by 15 per cent and imports at 10 per cent.

The monetary policy has accommodated the liquidity needs of the economy without being too easy. Bank credit to the commercial sector expanded by 10 per cent in the first half of the year, as compared to 2 per cent in the last year for the same period, says the NCAER report.Financial Express

## MARKET MAY REMAIN VOLATILE

The market may remain volatile, in the runup to the announcement of Q3 results of India Inc. The immediate trigger for the markets to rally would depend on the results and the guidance from Infosys and Wipro. The market is expecting them to revise their guidance upwards, but if they don't, it would dampen the mood of the market, dealers said.

"It depends on what guidance we see. If we see a positive guidance that means if we are beginning to look at 30 percent growth for the next year, I think there is some steam left. If not, it would underperform the market", market analysts A Tandon said.

Sandip Sabharwal, fund manager, SBI Mutual Fund, expects a broad-based rally in 2003, as he believes fundamentals are positive across sectors. He adds that there could be intermittent corrections but the long-term certainly looks positive.

With the improvement in business in the last few months, frontline IT companies are expected to come out with strong Q3 results. Similar results are also expected from companies in sectors like steel (where product prices have surged) and commercial vehicles (that is witnessing an infrastructure-based demand growth). Good Q3 results are also expected from companies in banking and pharmaceutical sectors.

There is some uneasiness among investors as the activity of foreign institutional investors (FIIs) at the beginning of the New Year proved lacklustre. The market had expected FIIs to kick-start 2003 with a bang. "We are fairly bullish on the stock markets in 2003. Valuations are compelling. Companies' financial performance has been good. Expenses have been flat, with interest costs having dropped. Interest rates have come off substantially, which will lead to an improvement in corporate bottom lines and also result in greater allocation to equities compared to other fixed income avenues," analysts said.

However, downsides exist in terms of the US economy not performing well and concerns on the oil front and a war with Iraq. In the Indian context, elections in 2003-04 could be a factor to look out for, but, if the past is any indication, politics will take precedence over economics, dealers added.

Traders say the market is betting on strong payouts by state companies to help the government bridge its yawning fiscal deficit which at the end of November totalled $17.4 billion, representing 61.5 percent of the budget estimate for 2002-03.

Some dealers said that the Sensex could take support at the 3350 level and rise again.

On the other hand, if it falls below the 3350 level then it could fall further to 3300, they added.

Business Express.

---

## DOW JONES INDUSTRIAL AVERAGE NEAR WORST YEAR SINCE 1977

***Nasdaq on track to post third-biggest drop ever***

Even if markets rally on Tuesday, as they often do on New Year's Eve, investors and traders will be glad simply to have 2002 behind them.

On Monday, blue-chip stocks finished

moderately higher after wavering throughout a day marked by light trading and investor skittishness. Continuing strength among retailing stocks, which have risen despite a checkered Christmas-shopping season, managed to buoy the Dow Jones Industrial Average, which rose 29.07 points or 0.35 per cent, to 8,332.85.

The market action on Monday appeared to be sending the markets toward a series of dubious mileposts for 2002. As of Tuesday morning, the Dow industrials are down 16.85 percent for the year, which, if it sticks, would be the worst year for the average since 1977. Worse yet, at a year-to-date decline of 31.32 per cent, the Nasdaq Composite Index appeared to be headed for its third-biggest annual decline ever – the record is the 39 per cent slide in 2000 – and the first time in its 32-year history that it has fallen three years in a row.

As the Dow industrials gained, the Standard & Poor's 500-stock index mirrored that performance, rising 0.46 per cent, or 3.99 points, to 879.39. But the Nasdaq composite, reflecting primarily technology stocks, fell 0.65 per cent, or 8.77 points, to 1,339.54.

With Monday the fifth-lightest trading day of the year for the Nasdaq Stock Market, it was hard to determine any particular trends. The new York Stock Exchange also saw feeble volume, suggesting investors' wariness of the continuing possibility of war with Iraq and ongoing sparring with the North Korean government over its alleged nuclear-weapons arsenal.

"There are a lot of people standing around, still," said Andrew Walsh, executive vice president of Olsen Securities, a Big Board brokerage houseStocks like General Electric, which are normally quite active, were trading in tiny price ranges on the NYSE floor, he had, reflecting the fact that volatility was very low.

The one curious bright spot appeared to be retailers, whose shares rose on the Big Board and the Nasdaq. Those gains came even though most of the news from the holiday-shopping front has been disappointing. JC Penney was one of the few retailers to raise December samestore sales predictions above previous estimates. Its shares rose four per cent on that news. Despite sticking to its previous forecast that December sales would disappoint compared to last year, discount retailer Wal-Mart Stores rose, too, along with other retailers like Federated Department Stores, Nasdaqlisted Bebe Stores, and more.

Another winner was UAL, the parent of troubled United Airlines, which filed a motion in bankruptcy court to moot agreements recently made with its labour unions in an effort to reduce costs. UAL shares climbed nearly four per cent each. Still, negativity was widespread. Two economic reports, one based on December existing-home sales and one on manufacturing activity in the Chicago area, showed that the pace of growth appeared to be slowing.

(The Wall Street Journal)

## INDUSTRIAL OUTPUT UP 3.7 P.C. IN NOV.

Reporting a relatively robust growth, Indian industry grew by 5.3 per cent during April-November 2002 against a paltry growth of 2.5 per cent in the same period of the preceding year.

The higher growth rate during the current fiscal was aided by all three major segments of industry.

While the mining sector grew by 5.7 per cent against 0.7 per cent, manufacturing was up 5.4 per cent against 2.6 per cent and electricity generation 4 per cent against 2.5 per cent. Thus, the overall Index of Industrial Production (IIP) was up 5.3 per cent during the period under reference against a 2.5 per cent growth.

Data released by the Central Statistical Organisation (CSO) show that the corresponding growth rates for November alone were 2.9 per cent for the mining sector against 3.7 per cent in November 2001, manufacturing 3.8 per cent against 2.3 per cent and electricity generation 3.5 per cent against 2.4 per cent. Thus the overall IIP for November was up 3.7 per cent against 2.4 per cent.

Use-based data released by CSO show that during the eight month period, the basic goods sector grew by 4.7 per cent against 2 percent in the same period in the previous year, the capital goods sector by 9.9 per cent against a negative 4.9 per cent, intermediate goods by 2.6 per cent against 2.1 per cent and the consumer goods sector by 7.3 per cent against 5.8 per cent.

In this segment, consumer durables were down (negative) 6 per cent against a positive growth of 12.9 per cent and consumer non-durables by 12.7 per cent against 3.2 per cent.

Corresponding figures for November 2002 alone show that basic goods production was up 2.9 per cent against 3 per cent in November 2001, capital goods 9.6 per cent against 1.9 per ce

nt intermediate goods by 5 percent against a negative 1.5 per cent and consumer goods by 1.8 per cent against 5.5 per cent. In this segment, consumer durables were down (negative) 1.9 per cent against a positive growth of 4.4 per cent and consumer non-durables by 3 per cent against 5.9 per cent.

The CSO data also show that as many as 13 out of the 17 two-digit industry groups displayed positive growth in November. Beverages, tobacco and related products have shown the highest growth of 35.6 per cent, followed by 22.7 per cent in transport equipment and parts and 8.3 per cent in paper and paper products and printing, publishing and allied industries.

On the other hand, wood and wood products, furniture and fixtures have shown negative trends of 24.3 per cent, followed by a decline of 7.9 per cent in leather and leather-fur products and 7.1 per cent in food products.

## LONG-TERM OUTLOOK POSITIVE

The Sensex seems to be getting into a correction mode as the much-talked about Infosys results failed to cheer the market. Some market players expect the Sensex to dip sharply due to apprehensions on quarterly results, fears of the US-Iraq war and rising oil prices.

"The outlook on technology sector has turned cautious with the Infosys quarterly earnings revealing a squeeze in margins," said Sindhu Sameer, assistant vice-president, UTI Securities. "Expectations are not high, as far as the other frontline technology stocks are concerned, as they have been performing in line or marginally below market expectations so far this year."

Sameer said, in the short-term, market players are likely to remain cautious. However, in the long-term, the outlook stays positive as favourable factors far outweigh short-term negatives.

Sameer expects funds to reduce exposure to technology sector if the earnings continue to be average,. However, he does not expect funds to sink money into other sectors.

"Some big-ticket orders, which the market had factored in, appear to be taking longer," said Ashim Syal, chief investment officer at ING investment managers.

"There is a lot of activity in the markets and the next two quarters look good. Operators look like they are at play. Money from FIIs is not yet begun to come in since they are holding their cash until the political tensions subside," dealers said.

"In the coming sessions, results of bluechip companies could decide the mood of the markets and their movement. However a major reason of worry is lack of proper allocation of FII funds. The Sensex could find support at 3305 levels, followed by 3260 levels," dealers added.

Banking and steel stocks are expected to remain in limelight.

*Source:ENS*

## DOMESTIC RUBBER PRICE DIPS

Domestic rubber prices lost up to two rupees on a kilo during the week, even as international RSS-3 recorded impressive gains. The slide in domestic prices was attributed to the absence of firm orders from major or rubber consuming industries. However, the market was alive with large-scale purchases effected by the non-type sector.

This week's closing rates per kilo for various domestic grades, with the preceding week's figures in brackets are as follows: RSS 4-Rs 44 (Rs 46), RSS 5-41.50 (Rs 43) and ungraded-Rs 39 (Rs 39.75/40). International RSS-3 prices picked up from last week's close of Rs. 39.27 a kilo to end at Rs. 40.10, yesterday.

The arrival of domestic market is steady, with higher crop from rubber gardens due to cool weather in the morning. Covering agents are hopeful that the trend will stay for a couple of weeks. In an effort to chick the rise in RSS-4 grade price, the tyre companies have reportedly given instructions to covering agents to go in for large-scale purchases of RSS-5 only, which will also ensure a saving of Rs 3 per kilo.

The North Indian demand was steady for RSS-5 and ungraded. The slump in the price of ungraded lot was mainly due to this. Significant grains were registered in the scrap rubber market, with prices soaring up to Rs 30 a kilo at one point of time during the week. Such a buoyant market for scrap rubber was unprecedented. Crumb rubber factories were vying with each other for scrap rubber.

With international prices picking up and the tapping season set to end by this month end, trading sources predict an optimistic period of domestic rubber, price-wise.

Meanwhile, a few industries are reportedly toying with the idea of imports against advanced general license, which they have contractually committed in the futures market a few months back.

Indian Express.

## DOMESTIC PRICES HOLD, INTL PRICES UP

Domestic rubber prices remained firm in the week, though international prices climbed due to heavy demand in the futures' market.

Domestic RSS-4 price touched Rs 45 a kilo in the week's opening day and held ground till Friday. However, manoeuverings by covering agents on the directions of tyre majors resulted in a decline of 50 paise today, even as arrival of stocks remained marginal. Correspondingly, RSS-5 and ungraded prices also lost slightly by the week's close.

The opening and closing rates of RSS-4, 5, and ungraded were Rs 45,43.50 and 42/42.25 and Rs 44.50, 43 and 41.75/42.

The price of international RSS-1 stepped up from last week's close of Rs. 42.83, to end at Rs 43.59 this week. Thursday saw a hike of 57 paise, more than the preceding day. Reports indicate that China and Korea are active in international futures', resulting in substantial forward trade.

Many tyre companies have withdrawn from the domestic market on the strength of stocks' inventory beefed up by limited NR imports.

However, there are reports that the quality of at least some import consignments in Vizag port were poor.

With tapping season coming to a full end, arrivals in the domestic market will be meagre in the coming weeks.

## RUBBER PRICES FALL FURTHER

*ENS Economic Bureau*

The domestic prices of all grades of rubber slided further than the preceding week up to three rupees, even as the crop yield in rubber gardens has begun to show a decline with the fast-nearing the closure of annual tapping season. On the contrary, international rubber price of RSS-1, picked up from last week's close or Rs.40.55 for a kilo and ended at Rs.42.01 this week.

The slump in domestic prices was mainly due to heavy release of stocks by growers limited demand from major consuming industries and withdrawal of North Indian industries from the scene.

The opening rates of various domestic grades for the weeks were down from last week's closing figures (in brackets) – RSS –4: Rs.43 (Rs.44.50); RSS-5: Rs. 39.50 (Rs. 40). The closing rates of the week for RSS-4 and 5 were recorded today as Rs. 40 and 38 respectively.

In the international rubber market, the trading has been streamlined against RSS-1 grade with other subsequent grades being quoted comparable prices of around 50 paise less each.

The uncertainty in domestic rubber prices has cropped up even as there is a likely production fall at the fag end of the tapping season. In many rubber growing are as trees have begun to shed ripened leaves signalling the end of the tapping season.

The North Indian demand, which propped the market last few week, was meager, due to severe winter conditions.

According to market sources, many factories in the northern parts of the country have been temporarily closed down.

**High international prices and possible domestic demand may push the prices further, according to trade**

| Particulars | Units | India | Kerala |
|---|---|---|---|
| **Rubber Production** | | | |
| Quantity | Tones per year | 631400 | 580350 |
| Percentage | | 100 | 92 |
| **Tyre Industry** | | | |
| Tyre companies | Number | 19 | 1 |
| Tyre factories | Number | 40 | 3 |
| Installed capacity | Lakh tyres per year | 605 | 20 |
| Capacity utilisation | Percentage | 72 | 94 |

*Source: .Rubber Production and Tyre Industry (2001-02)*

**TOTAL AREA, TAPPABLE AREA, PRODUCTION AND AVERAGE YIELD PER HECTARE OF RUBBER**

| Year | Total area (ha) | Tapped area (ha) | Production (Tonnes) | Average yield per hectare (kg) |
|---|---|---|---|---|
| 1950-51 | 74915 | 55800 | 15830 | 284 |
| 1955-56 | 86067 | 67181 | 23730 | 353 |
| 1960-61 | 143905 | 70253 | 25697 | 365 |
| 1965-66 | 186713 | 112709 | 50530 | 448 |
| 1970-71 | 217198 | 141176 | 92171 | 653 |
| 1975-76 | 235876 | 178480 | 137750 | 772 |
| 1980-81 | 284166 | 194245 | 153100 | 788 |
| 1981-82 | 301924 | 196211 | 152870 | 779 |
| 1982-83 | 321495 | 199712 | 165850 | 830 |
| 1983-84 | 339848 | 204520 | 175280 | 857 |
| 1984-85 | 361960 | 210519 | 186450 | 886 |
| 1985-86 | 382831 | 223347 | 200465 | 898 |
| 1986-87 | 402329 | 237064 | 219520 | 926 |
| 1987-88 | 421512 | 249100 | 235197 | 944 |
| 1988-89 | 440584 | 266103 | 259172 | 974 |
| 1989-90 | 460341 | 289060 | 297300 | 1029 |
| 1990-91 | 475083 | 306413 | 329615 | 1076 |
| 1991-92 | 488514 | 324540 | 366745 | 1130 |
| 1992-93 | 499374 | 330500 | 393490 | 1191 |
| 1993-94 | 508420 | 338550 | 435160 | 1285 |
| 1994-95 | 515547 | 346270 | 471815 | 1362 |
| 1995-96 | 524075 | 356444 | 506910 | 1422 |
| 1996-97 | 533246 | 365580 | 549425 | 1503 |
| 1997-98 | 544534 | 376970 | 583830 | 1549 |
| 1998-99 | 553041 | 387100 | 605045 | 1563 |
| 1999-2000 | 558584 | 394800 | 622265 | 1576 |
| 2000-2001 | 562670 | 399901 | 630405 | 1576 |
| 2001-2002 p | 566558 | 400713 | 631400 | 1576 |

P: Provisional

## CLASSIFICATION OF HOLDINGS AND ESTATES ACCORDING TO SIZE AT THE END OF EACH YEAR (AREA IN HECTARES)

### HOLDINGS

| Year | 2 ha & below | | | Above 2 ha & upto & including 4 ha | | |
|---|---|---|---|---|---|---|
| | Units | Area | % Share | Units | Area | % Share |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* |
| 1955-56 | 26164 | 20489 | 53.23 | 1948 | 5699 | 14.81 |
| 1960-61 | 67836 | 52340 | 57.91 | 4660 | 13981 | 15.47 |
| 1965-66 | 96477 | 72433 | 58.88 | 6175 | 18051 | 14.67 |
| 1970-71 | 114924 | 82570 | 55.12 | 9922 | 25853 | 17.26 |
| 1975-76 | 132957 | 92386 | 54.77 | 11386 | 29235 | 17.33 |
| 1980-81 | 218155 | 139809 | 64.89 | 11924 | 30140 | 13.99 |
| 1985-86 | 394984 | 238158 | 76.77 | 11152 | 28071 | 9.05 |
| 1990-91 | 763022 | 332401 | 83.63 | 13100 | 33149 | 8.34 |
| 1995-96 | 892094 | 375957 | 83.64 | 14474 | 39079 | 8.69 |
| 1996-97 | 912112 | 384008 | 83.58 | 14724 | 40145 | 8.74 |
| 1997-98 | 935456 | 394412 | 83.06 | 17210 | 44104 | 9.29 |
| 1998-99 | 948553 | 402336 | 83.18 | 17317 | 44515 | 9.20 |
| 1999-2000 | 963613 | 407601 | 83.14 | 17627 | 45031 | 9.18 |
| 2000-2001 | 968656 | 412574 | 83.29 | 17647 | 45088 | 9.10 |
| 2001-2002 p | 974200 | 414149 | 83.00 | 18141 | 45803 | 9.18 |

| Year | Above 4 ha & upto & including 20 ha | | | Total | |
|---|---|---|---|---|---|
| | Units | Area | % Share | Units | Area |
| *1* | *8* | *9* | *10* | *11* | *12* |
| 1955-56 | 1475 | 12300 | 31.96 | 29587 | 38488 |
| 1960-61 | 2878 | 24054 | 26.62 | 75374 | 90375 |
| 1965-66 | 3852 | 32526 | 26.44 | 106504 | 123010 |
| 1970-71 | 5593 | 41377 | 27.62 | 130439 | 149800 |
| 1975-76 | 6406 | 47066 | 27.90 | 150749 | 168687 |
| 1980-81 | 6389 | 45494 | 21.12 | 236468 | 215443 |
| 1985-86 | 6075 | 43980 | 14.18 | 412211 | 310209 |
| 1990-91 | 4465 | 31915 | 8.03 | 780587 | 397465 |
| 1995-96 | 4721 | 34463 | 7.67 | 911289 | 449499 |
| 1996-97 | 4801 | 35284 | 7.68 | 931637 | 459437 |
| 1997-98 | 5058 | 36364 | 7.66 | 957724 | 474880 |
| 1998-99 | 5108 | 36850 | 7.62 | 970978 | 483701 |
| 1999-2000 | 5249 | 37645 | 7.68 | 986489 | 490277 |
| 2000-2001 | 5257 | 37696 | 7.61 | 991560 | 495358 |
| 2001-2002 p | 5530 | 39012 | 7.82 | 997871 | 498964 |

## CLASSIFICATION OF HOLDINGS AND ESTATES ACCORDING TO SIZE AT THE END OF EACH YEAR (AREA IN HECTARES)

### ESTATES

| Year | Above 20 ha & upto & including 40 ha | | | Above 40 ha & upto & including 200 ha | | | Above 200 ha & upto & including 400 ha | | | Above 400 ha & upto & including 600 ha | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Units | Area | % Share | Units | Area | % Share | Units | Area | % Share | Units | Area | % Share |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1955-56 | 209 | 6781 | 14.25 | 179 | 15047 | 31.63 | 33 | 9578 | 20.13 | 15 | 7513 | 15.79 |
| 1960-61 | 271 | 7590 | 14.18 | 216 | 17812 | 33.27 | 29 | 8082 | 15.10 | 18 | 8768 | 16.38 |
| 1965-66 | 325 | 9556 | 15.00 | 248 | 20476 | 32.14 | 30 | 8551 | 13.42 | 19 | 9400 | 14.76 |
| 1970-71 | 309 | 8771 | 13.01 | 273 | 21318 | 31.63 | 29 | 8219 | 12.19 | 20 | 9966 | 14.79 |
| 1975-76 | 289 | 8235 | 12.26 | 242 | 19332 | 28.77 | 27 | 7366 | 10.96 | 17 | 8100 | 12.06 |
| 1980-81 | 258 | 7289 | 10.61 | 228 | 18659 | 27.15 | 25 | 7481 | 10.89 | 15 | 8208 | 11.94 |
| 1985-86 | 137 | 4320 | 5.95 | 171 | 14408 | 19.84 | 24 | 7305 | 10.06 | 18 | 9046 | 12.46 |
| 1990-91 | 120 | 3407 | 4.39 | 130 | 11348 | 14.62 | 22 | 6262 | 8.07 | 22 | 11051 | 14.24 |
| 1995-96 | 114 | 3286 | 4.41 | 134 | 12291 | 16.48 | 25 | 7589 | 10.18 | 19 | 9835 | 13.19 |
| 1996-97 | 112 | 3214 | 4.35 | 134 | 12262 | 16.61 | 25 | 7610 | 10.31 | 20 | 10303 | 13.96 |
| 1997-98 | 111 | 3165 | 4.54 | 136 | 11732 | 16.84 | 23 | 6821 | 9.79 | 22 | 11396 | 16.36 |
| 1998-99 | 111 | 3171 | 4.57 | 136 | 11743 | 16.94 | 23 | 7059 | 10.18 | 21 | 10775 | 15.54 |
| 1999-2000 | 111 | 3188 | 4.67 | 137 | 11680 | 17.10 | 23 | 7159 | 10.48 | 20 | 10301 | 15.08 |
| 2000-2001 | 108 | 3118 | 4.63 | 135 | 11591 | 17.22 | 24 | 7487 | 11.12 | 21 | 10720 | 15.93 |
| 2001-2002 p | 98 | 2917 | 4.32 | 136 | 11547 | 17.08 | 24 | 7548 | 11.17 | 21 | 10721 | 15.86 |

| Year | Above 600 ha & upto & including 800 ha | | | Above 800 ha | | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Units | Area | % Share | Units | Area | % Share | Units | Area |
| *1* | *14* | *15* | *16* | *17* | *18* | *19* | *20* | *21* |
| 1955-56 | *4* | *2762* | 5.81 | 6 | 5898 | 12.40 | 446 | 47579 |
| 1960-61 | 5 | 3437 | 6.42 | 8 | 7841 | 14.65 | 547 | 53530 |
| 1965-66 | 4 | 2696 | 4.23 | 10 | 13024 | 20.44 | 636 | 63703 |
| 1970-71 | 6 | 4036 | 5.99 | 12 | 15088 | 22.39 | 649 | 67398 |
| 1975-76 | 9 | 6138 | 9.14 | 14 | 18018 | 26.82 | 598 | 67189 |
| 1980-81 | 10 | 6885 | 10.02 | 17 | 20201 | 29.39 | 553 | 68723 |
| 1985-86 | 14 | 9294 | 12.80 | 20 | 28249 | 38.90 | 384 | 72622 |
| 1990-91 | 17 | 11415 | 14.71 | 21 | 34135 | 43.98 | 332 | 77618 |
| 1995-96 | 15 | 10116 | 13.56 | 19 | 31459 | 42.18 | 326 | 74576 |
| 1996-97 | 13 | 8682 | 11.76 | 19 | 31738 | 43.00 | 323 | 73809 |
| 1997-98 | 11 | 7328 | 10.52 | 19 | 29212 | 41.94 | 322 | 69654 |
| 1998-99 | 11 | 7313 | 10.55 | 19 | 29279 | 42.23 | 321 | 69340 |
| 1999-2000 | 11 | 7284 | 10.66 | 19 | 28695 | 42.01 | 321 | 68307 |
| 2000-2001 | 9 | 5887 | 8.75 | 19 | 28509 | 42.35 | 316 | 67312 |
| 2001-2002 p | 9 | 5872 | 8.69 | 19 | 28989 | 42.89 | 307 | 67594 |

## STATE WISE TOTAL AREA AND PRODUCTION OF NATURAL RUBBER IN INDIA DURING 2001-02

| State/ Territory | Total area | % share | Production | % share |
|---|---|---|---|---|
| **1. Traditional region** | | | | |
| Kerala | 475039 | 83.85 | 580350 | 91.91 |
| Tamil Nadu | 18704 | 3.30 | 21631 | 3.43 |
| *Sub Total* | *493743* | *87.15* | *601981* | *95.34* |
| **2. Non traditional region** | | | | |
| ***a. Northern states*** | | | | |
| Tripura | 27947 | 4.93 | 10304 | 1.63 |
| Assam | 12806 | 2.26 | 1755 | 0.28 |
| Meghalaya | 4354 | 0.77 | 2378 | 0.38 |
| Nagaland | 2024 | 0.36 | 393 | 0.06 |
| Manipur | 1698 | 0.30 | 198 | 0.03 |
| Mizoram | 619 | 0.11 | 63 | 0.01 |
| Arunachal Pradesh | 323 | 0.05 | 42 | 0.01 |
| *Sub Total* | *49771* | *8.78* | *15133* | *2.40* |
| ***b. Other States*** | | | | |
| Karnataka | 20017 | 3.53 | 13465 | 2.13 |
| Andaman & Nicobar | 960 | 0.17 | 397 | 0.06 |
| Goa | 843 | 0.15 | 314 | 0.05 |
| Maharashtra | 165 | 0.03 | 47 | 0.01 |
| Orissa | 517 | 0.09 | 26 | Neg. |
| West Bengal | 430 | 0.08 | 36 | Neg. |
| Andhra Pradesh | 109 | 0.02 | 1 | Neg. |
| Gujarat | 3 | Neg. | 0 | Neg. |
| *Sub Total* | *23044* | *4.07* | *14286* | *2.26* |
| **Grand Total** | **566558** | **100.00** | **631400** | **100** |

Neg. – Negligible

## PRODUCTION, IMPORT, EXPORT AND CONSUMPTION OF ALL KINDS OF RUBBER (TONNES)

| Year | Production | | Import | | | Export | |
|---|---|---|---|---|---|---|---|
| | Natural rubber | Synthetic rubber | Reclaimed rubber | Total | Natural rubber | Synthetic rubber | Natural rubber |
| *1* | *2* | *3* | *4* | *5* | *6* | *8* | *7* |
| 1950-51 | 15830 | - | NA | 15830 | 4170 | - | 964 |
| 1955-56 | 23730 | - | 2853* | 26583 | 4428 | 1201 | 12 |
| 1960-61 | 25697 | - | 5024* | 30721 | 23125 | 8097 | - |
| 1965-66 | 50530 | 14741 | 9679* | 74950 | 16357 | 2735 | - |
| 1970-71 | 92171 | 29791 | 15507 | 137469 | 2469 | 5014 | - |
| 1975-76 | 137750 | 25119 | 19581 | 182450 | - | 6391 | - |
| 1980-81 | 153100 | 25293 | 29336 | 207729 | 9250 | 17492 | - |
| 1985-86 | 200465 | 34758 | 39195 | 274418 | 41431 | 39086 | - |
| 1990-91 | 329615 | 57293 | 53629 | 440537 | 49013 | 51715 | - |
| 1991-92 | 366745 | 57726 | 54185 | 478656 | 15070 | 39210 | 5834 |
| 1992-93 | 393490 | 57892 | 61490 | 512872 | 17884 | 47362 | 5999 |
| 1993-94 | 435160 | 49633 | 62780 | 547573 | 19940 | 64338 | 186 |
| 1994-95 | 471815 | 63681 | 64425 | 599921 | 8093 | 73860 | 1961 |
| 1995-96 | 506910 | 68223 | 65780 | 640913 | 51635 | 71735 | 1130 |
| 1996-97 | 549425 | 64563 | 66670 | 680658 | 19770 | 91050 | 1598 |
| 1997-98 | 583830 | 71993 | 69840 | 725663 | 32070 | 86389 | 1415 |
| 1998-99 | 605045 | 67590 | 63980 | 736615 | 29534 | 97548 | 1840 |
| 1999-2000 | 622265 | 60293 | 64080 | 746638 | 20213 | 104842 | 5989 |
| 2000-2001 | 630405 | 65460 | 62120 | 757985 | 8970 | 106923 | 13356 |
| 2001-2002 p | 631400 | 69653 | 63550 | 764603 | 49769 | 111323 | 6995 |

| Year | Consumption | | | |
|---|---|---|---|---|
| | Natural rubber | Synthetic rubber | Reclaimed rubber | Total |
| *1* | *9* | *10* | *11* | *12* |
| 1950-51 | 19854 | - | - | 19854 |
| 1955-56 | 28445 | 461 | 2647 | 31553 |
| 1960-61 | 48148 | 7397 | 5453 | 60998 |
| 1965-66 | 63765 | 21553 | 9774 | 95092 |
| 1970-71 | 87237 | 33160 | 14348 | 134745 |
| 1975-76 | 125692 | 32452 | 19342 | 177486 |
| 1980-81 | 173630 | 47050 | 26850 | 247530 |
| 1985-86 | 237440 | 70035 | 38215 | 345690 |
| 1990-91 | 364310 | 104735 | 52500 | 521545 |
| 1991-92 | 380150 | 105650 | 54015 | 539815 |
| 1992-93 | 414105 | 108690 | 62470 | 585265 |
| 1993-94 | 450480 | 113395 | 63110 | 626985 |
| 1994-95 | 485850 | 122710 | 64655 | 673215 |
| 1995-96 | 525465 | 134085 | 65775 | 725325 |
| 1996-97 | 561765 | 142810 | 66585 | 771160 |
| 1997-98 | 571820 | 160915 | 70085 | 802820 |
| 1998-99 | 591545 | 156395 | 63095 | 811035 |
| 1999-2000 | 628110 | 167220 | 63450 | 858780 |
| 2000-2001 | 631475 | 170670 | 62260 | 864405 |
| 2001-2002 p | 638210 | 174530 | 63875 | 876615 |

p – provisional NA – Not Available * - Including import

## STATE WISE CONSUMPTION OF ALL KINDS OF RUBBER DURING 2000-2001

| State | No. of manufacturers | Consumption (Tonnes) | | | |
|---|---|---|---|---|---|
| | | Natural rubber | Synthetic rubber | Reclaimed rubber | Total |
| Andhra Pradesh | 139 | 19906 | 9330 | 3166 | 32402 |
| Bihar | 34 | 1304 | 317 | 186 | 1807 |
| Delhi | 276 | 18360 | 2176 | 1478 | 22014 |
| Goa | 25 | 23552 | 8556 | 974 | 33082 |
| Gijarat | 378 | 35107 | 6213 | 1622 | 42942 |
| Haryana | 289 | 38638 | 7596 | 1424 | 47658 |
| Karnataka | 229 | 31233 | 9312 | 4476 | 45021 |
| Kerala | 891 | 88221 | 32978 | 6773 | 127972 |
| Madhya Pradesh | 88 | 27732 | 11404 | 3159 | 42295 |
| Maharashtra | 612 | 68344 | 25989 | 8322 | 102655 |
| Orissa | 14 | 24072 | 4907 | 692 | 29671 |
| Pondicherry | 30 | 2531 | 718 | 34 | 3283 |
| Punjab | 537 | 82843 | 8001 | 16542 | 107386 |
| Rajasthan | 87 | 35867 | 8423 | 465 | 44755 |
| Tamil Nadu | 502 | 32588 | 11539 | 4119 | 48246 |
| Uttar Pradesh | 438 | 55684 | 12945 | 4178 | 72807 |
| West Bengal | 447 | 43258 | 10217 | 4603 | 58078 |
| Others | 46 | 2235 | 49 | 47 | 2331 |
| **Total** | **5062** | **631475** | **170670** | **62260** | **864405** |

## NUMBER OF LICENSED PROCESSORS DURING 2001-2002

| State/ District | No. | State/ District | No. |
|---|---|---|---|
| Thiruvananthapuram | 5 | Kozhikode | 3 |
| Kollam | 3 | Wayanadu | 0 |
| Pathanamthitta | 4 | Kannur | 4 |
| Alappuzha | 2 | Kasaragod | 1 |
| Kottayam | 39 | Kerala | 114 |
| Iddukki | 6 | Tamilnadu | 9 |
| Eranakulam | 21 | Karnataka | 8 |
| Thrissur | 10 | Tripura | 1 |
| Palakkad | 4 | | |
| Malappuram | 12 | **Grand Total** | **132** |

## CONSUMPTION OF ALL KINDS OF RUBBER ACCORDING TO END PRODUCTS DURING 2000-2001 (TONNES)

| | Products | Natural rubber | Synthetic rubber | Reclaimed rubber | Total |
|---|---|---|---|---|---|
| 1 | Auto tyres & tubes | 285275 45.18] | 94066[55.12] | 10210[16.40] | 389551[45.07] |
| 2 | Cycle tyres & tubes | 82592[13.08] | 15245[8.93] | 18283[29.37] | 116120[13.43] |
| 3 | Camel back | 38104[6.03] | 8815[5.16] | 3924[6.30] | 50843[5.88] |
| 4 | Footwears | 70547[11.17] | 31555[18.49] | 7832[12.58] | 109934[12.72] |
| 5 | Belts and hoses | 38220[6.05] | 7934[4.65] | 3922[6.30] | 50076[5.79] |
| 6 | Latex foam | 31620[5.01] | - | - | 31620[3.66] |
| 7 | Dipped goods | 32081[5.08] | - | - | 32081[3.71] |
| 8 | Cables and wires | 1719[0.27] | 1684[0.99] | 824[1.32] | 4227[0.49] |
| 9 | Battery boxes | 1865[0.30] | 2691[1.58] | 9675[15.54] | 14231[1.65] |
| 10 | Others | 49452[7.83] | 8680[5.08] | 7590[12.19] | 65722[7.60] |
| | **Total** | **631475 [100.00]** | **170670 [100.00]** | **62260 [100.00]** | **864405 [100.00]** |

Figures in bracket indicate the percentage share of consumption..

## NUMBER OF LICENSED DEALERS DURING 2001-02

| State/ Territory | |
|---|---|
| | 8417 |
| Kerala | 192 |
| Tamil Nadu | 153 |
| Punjab* | 126 |
| Delhi | 75 |
| West Bengal | 72 |
| Uttar Pradesh | 93 |
| Maharashtra | 106 |
| Karnataka | 39 |
| Haryana | 105 |
| Tripura | 36 |
| Gujarat | 5 |
| Madhya Pradesh | 19 |
| Rajasthan | 23 |
| Assam | 3 |
| Andaman & Nicobar | 12 |
| Meghalaya | 5 |
| Bihar | 4 |
| Andhra Pradesh | 1 |
| Orissa | 2 |
| Goa, Daman & Diu | 0 |
| Jammu & Kashmir | 0 |
| Mizoram | 0 |
| Manipur | 0 |
| Himachal Pradesh | 3 |
| Pondicherry | 1 |
| Nagaland | |
| **Grand Total** | **9492** |

| District | |
|---|---|
| Thiruvananthapuram | 758 |
| Kollam | 1062 |
| Pathanamthitta | 1022 |
| Alappuzha | 132 |
| Kottayam | 2308 |
| Iddukki | 418 |
| Eranakulam | 1124 |
| Thrissur | 159 |
| Palakkad | 315 |
| Malappuram | 385 |
| Kozhikode | 188 |
| Wayanadu | 59 |
| Kannur | 395 |
| Kasaragod | 92 |
| **Total** | **8417** |

* *including Chandigarh*

## WORLD RUBBER POSITION

### AREA UNDER RUBBER IN MAIN PRODUCING COUNTRIES (IN THOUSAND HECTARES)

| Territory | End of | Holdings | Estates | Total |
|---|---|---|---|---|
| Indonesia | 2000 | 2823 | 549 | 3372 |
| Thailand | 2000 | 1895 | 85 | 1980 |
| Malaysia | 2000 | 1245 | 186 | 1431 |
| China | 1998 | NA | NA | 618 |
| India | 2000 | 496 | 67 | 563 |
| Sri Lanka | 2000 | 101 | 57 | 158 |
| Brazil | 1998 | 100 | 80 | 180 |
| Nigeria | 1999 | 90 | 60 | 150 |
| Liberia | 1999 | 49 | 60 | 109 |
| Vietnam * | 1997 | 35 | 240 | 275 |
| D. R. of Congo (a) | 1999 | 10 | 25 | 35 |
| Philippines | 1999 | - | 92 | 92 |
| Myanmar | 1995 | 59 | 46 | 105 |
| Cote d'Ivoire | 1998 | 26 | 70 | 96 |
| Cameroon | 1997 | 2 | 40 | 42 |

Note: Estate areas refer to holdings of 40 ha. And over except for India where it refers to holdings of over 20 ha.

NA: Not available *: Estimate (a): Formerly Zaire.

### PRODUCTION OF NATURAL RUBBER IN MAIN PRODUCING COUNTRIES (IN THOUSAND TONNES)

| Country | 1985 | 1990 | 1995 | 1997 | 200 | 2001p |
|---|---|---|---|---|---|---|
| Thailand | 724 | 1275 | 1805 | 2033 | 2346 | 2284 |
| Indonesia | 1130 | 1262 | 1455 | 1505 | 1501 | 1577 |
| Malaysia | 1470 | 1291 | 1089 | 971 | 615 | 547 |
| India | 198 | 324 | 500 | 580 | 629 | 632 |
| China | 188 | 264 | 424 | 444* | 445* | 451* |
| Philippines | NA | 61 | 60 | 66 | 67* | 68* |
| Nigeria * | 52 | 152 | 116 | 65 | 55 | 50 |
| Sri Lanka | 138 | 113 | 106 | 106 | 88 | 86 |
| Vietnam * | 52 | 103 | 154 | 212 | 291 | 317 |
| Cote d'Ivoire | 41 | 69 | 77 | 108 | 113* | 109* |
| Liberia * | 84 | 19 | 13 | 67 | 105 | 109 |
| Brazil | 40 | 31 | 44 | 61 | 88 | 90 |
| **World** | **4400** | **5120** | **6040** | **6470** | **6750** | **7110** |

*: Estimated

NA: Not available p: Provisional

## CONSUMPTION OF NATURAL RUBBER IN MAIN CONSUMING COUNTRIES (IN THOUSAND TONNES)

| Country | 1985 | 1990 | 1995 | 1997 | 2000 | 2001p |
|---|---|---|---|---|---|---|
| U.S.A. | 764 | 808 | 1004 | 1044* | 1193* | 972* |
| Japan | 540 | 677 | 692 | 713 | 752 | 729 |
| China * | 415 | 600 | 780 | 910 | 1080 | 1215 |
| India | 233 | 358 | 517 | 572 | 638 | 631 |
| Korea Rep * | 155 | 255 | 300 | 302 | 332 | 332 |
| Malaysia | 69 | 184 | 327 | 327 | 345 | 330 |
| Germany @ | 202 | 209 | 212 | 212* | 247* | 244* |
| France | 156 | 179 | 176 | 192 | 309 | 282 |
| Brazil | 98 | 124 | 155 | 161 | 221 | 218 |
| U.K. * | 126 | 136 | 118 | 119 | 133 | 107 |
| Italy | 127 | 130 | 102 | 117 | 139 | 136 |
| Taiwan * | 84 | 105 | 103 | 105 | 97 | 94 |
| C.I.S. | 210 | 150 | 13 | 9* | 36* | 33* |
| **World** | **4430** | **5210** | **5950** | **6470** | **7340** | **7070** |

*: Estimated p: Provisional
@: Upto 1990 Federal Republic of Germany.
For C.I.S., data before 1992 refer to the former U.S.S.R.

## COUNTRY WISE IMPORT OF NATURAL RUBBER (IN THOUSAND TONNES)

| Country | 1985 | 1990 | 1995 | 1997 | 2000 | 2001p |
|---|---|---|---|---|---|---|
| U.S.A. | 770 | 820 | 1026 | 1044 | 1192 | 972 |
| China | 163 | 340 | 297 | 362 | 820 | 943 |
| Japan | 540 | 663 | 696 | 730 | 802 | 713 |
| Rep. of Korea | 159 | 254 | 289 | 299 | 331 | 330* |
| France | 155 | 178 | 176 | 192 | 309 | 282 |
| Germany | 202 | 209 | 212 | 212 | 250 | 245 |
| Spain | 110 | 119 | 130 | 148 | 171 | 184 |
| Canada | 104 | 84 | 121 | 133 | 150* | 132 |
| Brazil | 60 | 95 | 106 | 100 | 139 | 128 |
| Italy | 132 | 132 | 121 | 132 | 136 | 135 |
| U.K. | 131 | 136 | 120 | 120 | 133 | 107 |
| Turkey | 46 | 47 | 79 | 87 | 87 | 79 |
| Taiwan | 84 | 105 | 103 | 107 | 97 | 94 |
| Mexico | 65 | 68 | 55 | 80 | 90 | 67 |
| Argentina | 23 | 31 | 29 | 38 | 27 | 23 |
| India | 34 | 60 | 50 | 29 | 11 | 38 |
| **World** | **3560** | **4063** | **4219** | **4432** | **5498** | **5193** |

*: Estimated p: Provisional

## COUNTRY WISE EXPORT OF NATURAL RUBBER (IN THOUSAND TONNES)

| Country | 1985 | 1990 | 1995 | 1997 | 2000 | 2001p |
|---|---|---|---|---|---|---|
| Thailand | 685 | 1151 | 1636 | 1837 | 2166 | 2006 |
| Indonesia | 1001 | 1077 | 1324 | 1404 | 1380 | 1453 |
| Vietnam | 36 | 76 | 138 | 194 | 269* | 293 |
| Malaysia | 1497 | 1322 | 1013 | 1018 | 978 | 821 |
| Liberia | 87 | 19 | 13* | 67* | 105* | 109* |
| Nigeria | 29 | 121 | 99 | 53* | 36* | 30* |
| Cambodia | 14 | 28 | 30* | 32* | 35* | 35* |
| Sri Lanka | 120 | 87 | 68 | 61 | 33 | 32 |
| **World** | **3671** | **4076** | **4575** | **5011** | **5722** | **5709** |

*: Estimated p: Provisional

## PRODUCTION OF SYNTHETIC RUBBER (IN THOUSAND TONNES)

| Country | 1985 | 1990 | 1995 | 1997 | 2000 | 2001p |
|---|---|---|---|---|---|---|
| U.S.A. | 2026 | 2115 | 2530* | 2589 | 2395* | 2063* |
| C.I.S. | 2125 | 2277 | 837 | 725 | 737 | 919* |
| Japan | 1158 | 1426 | 1498 | 1592 | 1592 | 1466 |
| France | 544 | 522 | 618 | 595 | 669 | 672 |
| Germany @ | 448 | 525 | 480 | 555 | 849 | 828 |
| China | 171 | 316 | 493 | 600 | 836 | 1052 |
| Italy | 225 | 300 | 310 | 295 | 285 | 274 |
| Brazil | 266 | 256 | 286 | 347 | 373 | 335 |
| U.K. | 233 | 274 | 320 | 294 | 286 | 270* |
| Canada * | 209 | 195 | 170 | 216 | 187* | 145* |
| Korea Rep | 106 | 227 | 384 | 540 | 678 | 663* |
| Taiwan | 105 | 175 | 365 | 457 | 465 | 480* |
| Mexico | 146 | 133 | 142 | 154 | 187 | 173 |
| India | 37 | 58 | 67 | 74 | 60 | 69 |
| **World** | **8960** | **9890** | **9480** | **10080** | **10870** | **10490** |

*: Estimated p: Provisional

@: Upto 1990 Federal Republic of Germany.

## CONSUMPTION OF SYNTHETIC RUBBER (IN THOUSAND TONNES)\

| Country | 1985 | 1990 | 1995 | 1997 | 2000 | 2001p |
|---|---|---|---|---|---|---|
| U.S.A. | 1962 | 1821 | 2172 | 2323 | 2190 | 1840 |
| C.I.S. | 2115 | 2078 | 424 | 450 | 539 | 615 |
| Japan | 948 | 1133 | 1085 | 1163 | 1138 | 1085 |
| China * | 245 | 340 | 760 | 995 | 1455 | 1575 |
| Germany @ | 411 | 511 | 426 | 501* | 645* | 630* |
| France | 312 | 351 | 430 | 416 | 482 | 465 |
| Italy | 277 | 310 | 293 | 290 | 291* | 276* |
| Korea Rep * | 145 | 279* | 370 | 406 | 382* | 364* |
| Brazil | 235 | 284 | 280 | 310 | 320 | 322 |
| U.K. * | 201 | 223 | 226 | 235 | 188 | 167 |
| Canada | 173 | 185 | 198 | 259 | 233 | 228 |
| Taiwan * | 95 | 195 | 284 | 292 | 262 | 223 |
| Spain | 144 | 166 | 195 | 222 | 239* | 262* |
| Mexico* | 140 | 114 | 132 | 162 | 160 | 142 |
| India | 70 | 97 | 133 | 158 | 171 | 172 |
| **World** | **9000** | **9660** | **9270** | **10010** | **10820** | **10340** |

*: Estimated p: Provisional

@: Upto 1990 Federal Republic of Germany.

## WORLD PRICE OF NATURAL RUBBER (AVERAGE PRICE FOR RSS 3 PER 100 KG)

| Year | London (C.I.F.) | | Kualalumpur (F.O.B) | | Kottayam (India) Rs. |
|---|---|---|---|---|---|
| | Pound Sterling | Equivalent Rate in Rs. | Malaysian Ringgit | Equivalent Rate in Rs. | |
| 1976 | 46.02 | 750 | 189.7 | 674 | 620 |
| 1977 | 49.34 | 756 | 194.0 | 692 | 630 |
| 1978 | 54.04 | 850 | 222.5 | 789 | 885 |
| 1979 | 62.53 | 1072 | 271.1 | 1011 | 1024 |
| 1980 | 63.76 | 1170 | 298.7 | 1083 | 1154 |
| 1981 | 53.38 | 938 | 230.8 | 872 | 1423 |
| 1982 | 49*.37 | 819 | 181.3 | 739 | 1473 |
| 1983 | 73.00 | 1120 | 238.8 | 1042 | 1672 |
| 1984 | 73.26 | 1110 | 214.7 | 1040 | 1689 |
| 1985 | 61.15 | 980 | 179.8 | 890 | 1694 |
| 1986 | 57.09 | 1057 | 202.1 | 988 | 1670 |
| 1987 | 62.23 | 1321 | 236.4 | 1217 | 1766 |
| 1988 | 69.25 | 1717 | 301.2 | 1600 | 1811 |
| 1989 | 61.06 | 1623 | 247.0 | 1482 | 2040 |
| 1990 | 51.24 | 1604 | 220.6 | 1425 | 2147 |
| 1991 | 50.00 | 2000 | 216.9 | 1796 | 2128 |
| 1992 | 52.72 | 2655 | 212.6 | 2457 | 2463 |
| 1993 | 58.92 | 2786 | 207.5 | 2538 | 2546 |
| 1994 | 78.49 | 3779 | 288.6 | 3455 | 3107 |
| 1995 | 104.62 | 5375 | 390.4 | 5030 | 5059 |
| 1996 | 92.96 | 5143 | 342.9 | 4764 | 5122 |
| 1997 | 63.65 | 3776 | 273.8 | 3614 | 3988 |
| 1998 | 45.76 | 3127 | 273.1 | 2884 | 3013 |
| 1999 | 42.71 | 2989 | 231.5 | 2644 | 2997 |
| 2000 | 48.60 | 3296 | 252.5 | 3007 | 3125 |
| 2001 | 44.90 | 3041 | 218.5 | 2732 | 3109 |

Note: In the case of India, price refers to RSS 4 grade rubber

# BASIC STATISTICAL RETURNS: 1972-95

*Published by RBI in April 1998*

## CREDIT – DEPOSIT RATIO OF KERALA

| Year | C D Ratio as per Sanction | C D Ratio as per Utilisation | No of offices of Scheduled Commercial Banks |
|---|---|---|---|
| 1972 | 69.6 | 74.2 | 947 |
| 1973 | 70.5 | 75.6 | 982 |
| 1974 | 71.5 | 75.1 | 1068 |
| 1975 | 68.7 | 72.2 | 1185 |
| 1976 | 71.2 | 73.2 | 1344 |
| 1977 | 64.0 | 65.6 | 1607 |
| 1978 | 62.1 | 60.7 | 1975 |
| 1979 | 65.8 | 67.8 | 2060 |
| 1980 | 67.5 | 69.0 | 2152 |
| 1981 | 74.4 | 76.0 | 2357 |
| 1982 | 66.2 | 72.2 | 2468 |
| 1983 | 68.3 | 67.0 | 2542 |
| 1984 | 72.9 | 74.0 | 2597 |
| 1985 | 66.9 | 68.4 | 2741 |
| 1986 | 63.0 | 64.3 | 2784 |
| 1987 | 69.8 | 70.9 | 2787 |
| 1988 | 66.4 | 67.3 | 2840 |
| 1989 | 65.9 | 65.9 | 2877 |
| 1990 | 63.1 | 63.1 | 2906 |
| 1991 | 59.1 | 59.6 | 2912 |
| 1992 | 51.7 | 52.2 | 2925 |
| 1993 | 46.5 | 47.1 | 2966 |
| 1994 | 44.0 | 44.2 | 3043 |
| 1995 | 44.8 | 45.2 | 3119 |
| 1996* | | 45.4 | |
| 1997* | | 46.9 | |
| 1998* | | 44.3 | |
| 1999* | | 43.1 | |
| 2000* | | 42.29 | |
| 2001 | | 43.62 (upto December) | |
| 2002 | | 42.71 (as March 2002) | 3318 |

* Supplied by Rural Planning & Credit Department, RBI Trivandrum, for SLCC meeting to review Banking Development in Kerala on 21.07.2001.

**District-wise C-D Ratio for 1977, 1978 and 1979**

| District | As on 30-06-1977 | | | As on 30-6-1978 | | | As on 30-06-1979 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Deposits | Advances | C – D Ratio | Deposits | Advances | C – D Ratio | Deposits | Advances | C – D Ratio |
| Kannur | 47.29 | 26.61 | 56.2 | 63.23 | 33.89 | 53.59 | 84.89 | 55.37 | 65.23 |
| Kozhikode | 43.18 | 30.37 | 70.3 | 57.78 | 47.11 | 81.53 | 80.47 | 71.78 | 89.21 |
| Palakkad | 39.66 | 18.80 | 47.4 | 53.98 | 24.73 | 45.81 | 73.49 | 33.56 | 45.67 |
| Malappuram | 14.17 | 8.16 | 57.5 | 21.99 | 11.73 | 53.46 | 32.16 | 21.32 | 66.28 |
| Thrissur | 78.44 | 29.02 | 37.0 | 111.04 | 37.63 | 33.88 | 153.65 | 61.83 | 40.24 |
| Eranakulam | 170.54 | 134.00 | 79.0 | 198.92 | 162.87 | 81.87 | 285.64 | 211.65 | 74.10 |
| Idukki | 8.85 | 4.47 | 50.5 | 11.29 | 6.69 | 59.25 | 13.67 | 12.56 | 91.89 |
| Kottayam | 53.70 | 24.97 | 46.5 | 71.91 | 31.11 | 43.26 | 100.91 | 49.04 | 48.60 |
| Alappuzha | 66.70 | 26.77 | 40.1 | 97.76 | 37.73 | 38.59 | 143.24 | 55.98 | 38.87 |
| Kollam | 55.16 | 34.43 | 62.4 | 76.36 | 85.58 | 112.07 | 88.87 | 82.77 | 93.11 |
| Trivandrum | 90.09 | 39.20 | 43.5 | 126.16 | 72.31 | 57.31 | 188.96 | 103.16 | 54.60 |
| **Total** | **667.78** | **379.69** | **56.8** | **890.39** | **551.38** | **61.92** | **1245.97** | **758.78** | **60.89** |

Provisional figures based on Lead Bank Statistics.
Compiled by SLCC

**Details of Deposits, Advances and C-D Ratio - 1985**

**(Rs. in crores)**

| **District** | **Deposits** | **Advances** | **% C – D Ratio** |
|---|---|---|---|
| Thiruvananthapuram | 436.09 | 299.30 | 68.6 |
| Kollam | 187.07 | 223.74 | 119.6 |
| Pathanamthitta | 198.28 | 114.06 | 57.5 |
| Alappuzha | 295.33 | 48.27 | 16.3 |
| Kottayam | 221.07 | 143.15 | 64.8 |
| Iddukki | 30.63 | 31.31 | 102.2 |
| Eranakulam | 423.31 | 481.98 | 113.9 |
| Thrissur | 364.46 | 169.54 | 46.5 |
| Palakkad | 177.28 | 98.61 | 55.6 |
| Malappuram | 123.82 | 81.58 | 65.9 |
| Kozhikode | 165.34 | 140.94 | 85.2 |
| Wayanadu | 17.93 | 35.10 | 195.8 |
| Kannur | 179.73 | 92.09 | 51.2 |
| Kasaragod | 51.03 | 38.40 | 75.2 |
| **Total** | **2871.37** | **1998.07** | **69.6** |

Provisional figures: SLCC

## District wise C-D Ratio based on District Credit Plans: 1999-2003

| District | March 1994 | March 1995 | March 1996 | March 1997 | March 1998 | March 1999 | March 2000 | March 2001 | March 2002 |
|---|---|---|---|---|---|---|---|---|---|
| Thiruvananthapuram | | | | | | | | | |
| Kollam | | 63 | 67 | 60 | 52 | 52 | 47 | | 52 |
| Pathanamthitta | 12.01 | 13.85 | 13.92 | 13.21 | 14.23 | 13.55 | 13.05 | 13.83 | 14.77 |
| Alappuzha | 36.09 | 40.20 | 35.78 | 39.45 | 38.16 | 34.30 | 31.59 | 33.12 | |
| Kottayam | | | | 46 | 44 | 37 | | | |
| Iddukki | | 78.75 | 78.55 | 86 | 77 | 77.5 | 86.24 | 90 | 90 |
| Eranakulam | | | 69.83 | 73.33 | 70.55 | 61.50 | 66.99 | | |
| Thrissur | | 30 | 31 | 35 | 38 | 35 | 33 | 34 | 36 |
| Palakkad | | | | | 46.46 | | | | 44 |
| Malappuram | | 44 | 45.8 | 44.9 | 45 | 39.5 | | | 34.94 |
| Kozhikode | | | 62 | 65 | 71 | 56 | 64 | | 74 |
| Wayanadu | | | 101 | 103 | 111 | 117 | | | 184 |
| Kannur | | | | | | 31 | 33 | 45 | 48 |
| Kasaragod | | | 53 | 83 | 75 | 67 | 68 | | 69 |

## C-D Ratio of Kerala with and without NRE Deposits

| Year | Deposits (Rs. in crores) | | Total | (Rs. in crores) Advances | C – D Ratio | |
|---|---|---|---|---|---|---|
| | NRE | Domestic | | | With NRE Deposits | Without NRE Deposits |
| 1984-85 | 844 | 2635 | 3479 | 2181 | 62.69 | 82.77 |
| 1985-86 | 894 | 2707 | 3601 | 2371 | 65.84 | 87.59 |
| 1986-87 | 1193 | 2962 | 4155 | 2769 | 66.64 | 93.48 |
| 1987-88 | 1369 | 3442 | 4811 | 3116 | 64.77 | 90.52 |
| 1988-89 | 1584 | 4083 | 5667 | 3701 | 65.31 | 90.64 |
| 1989-90 | 2012 | 4608 | 6620 | 4118 | 62.20 | 89.37 |
| 1990-91 | 2304 | 5554 | 7858 | 4638 | 59.00 | 83.51 |
| 1991-92 | 3039 | 6632 | 9671 | 5003 | 51.73 | 75.44 |
| 1992-93 | 4499 | 7613 | 12112 | 5818 | 48.03 | 76.42 |

## NO OF AIRCRAFT MOVEMENTS

| | International | | | Domestic | | |
|---|---|---|---|---|---|---|
| | 1999-2000 | 2000-2001 | 2001-2002 | 1999-2000 | 2000-2001 | 2001-2002 |
| Delhi | 28,300 | 28,751 | 28,026 | 49,622 | 52,836 | 58,387 |
| Mumbai | 34,606 | 34,597 | 35,891 | 72,619 | 73,812 | 79,389 |
| Chennai | 11,080 | 12,063 | 12,398 | 23,531 | 25,293 | 25,673 |
| Kolkata | 6,560 | 6,658 | 6,336 | 19,635 | 19,537 | 22,213 |

## No of Passengers

| | International | | | Domestic | | |
|---|---|---|---|---|---|---|
| | 1999-2000 | 2000-2001 | 2001-2002 | 1999-2000 | 2000-2001 | 2001-2002 |
| Delhi | 37,52,834 | 39,49,803 | 37,15,383 | 45,60,817 | 49,84,157 | 47,83,826 |
| Mumbai | 50,31,028 | 51,74,716 | 49,44,825 | 65,29,449 | 70,02,604 | 65,26,606 |
| Chennai | 17,02,534 | 18,33,957 | 17,41,458 | 19,44,844 | 22,31,932 | 20,42,784 |
| Kolkata | 5,94,314 | 6,31,558 | 5,90,445 | 20,04,567 | 20,54,842 | 19,70,857 |

## IT DEPT WEIGHING LINUX OPTIONS

*Sudha Naga*

Linux enthusiasts! Disappointed by the Government's flip-flop over crowning Linux the platform of choice? Don't be. Policies are not framed overnight. Also, adoption of technology is one thing. Mandating it is not as simple, especially when you are talking open source software. And talk there is, especially in the seemingly empty Electronics Niketan which houses the Department of Information Technology.

After a series of closed-door meetings with industry, developers and academia, the government is now faced with a dilemma. Adoption of open source software for governance and education is alright. But is it advisable to madate it, locking out other sources altogether? No, says a white paper doing the rounds in the IT Department.

This move would be totally contrary to what is expected of a government, which can and should offer recommended guidelines (and naturally follow them itself) but not create a monopoly situation that does not differ from existing proprietary software monopolicies.

So what is way out? Give preference, by "mandating" a process of software/ technology evaluation, selection and procurement which "includes" open source-comparing it on functional and financial criteria to other solutions.

While "functional" is the key-word (it would be self-defeating to reject a software for which there is no functional open source equivalent offered), it is easy to lock out an open source solution by specifying a functionality that is proprietary.

For example, "ability to read Microsoft Word documents without of loss of formatting or content". "This is a trap as, only Microsoft word actually knows the structure of the documents it creates and this structure is closely guarded trade secret", points out the paper.

Which means the requirement specification should read "should be able to store documents in an open and well-documented format that makes it easy for other applications to access information contained in the document, without interaction with the original developer of the software that created the original document".

The other tricky question is whether to adopt products or the process. A product such as Linux OS would mean no cost, increased stability, enhanced security, better functionality, adherence to published standards and interoperability. But then these benefits accrue only because the source is available for all to view, for all to modify, has been worked on by a large, diffuse team and the source and binaries are free for all to distribute respectively.

"As the most visble poster child of the movement, Linux has gained instant name recognition, with enviable branding" an independent technology consulting firm. While the Linux OS does represent the public development model or Free/ Libre Open Source Software (FLOSS), the government would be better advised to consider the development process as criterion.

This is important because a large number of products that "run under Linux" have started appearing. With solutions constantly evolving, separating the development model from the software would result in another operating environment that mirrors Microsoft products'

## MULTIPLE ACCESS OPTIONS FOR INTERNET IN INDIA

*By Anand Parthasarathy*

The Internet, as we know it today, - a global network of computers and communication used by over 600 million people worldwide (20 million of them in India) – was born 20 years ago.

That was when the APRANET, a command and communication network created by the U.S. Defence Department's Advanced Research Projects agency (ARPA), was effectively "gifted" to the civilian sector and a new protocol – the set of rules used to connect large numbers of networks together, each with its own "address" – begun. This standard – TCP/ IP or Transmission Control Protocol/ Internet Protocol – used the word "Internet" for the first time.

It remains the protocol that drives the Internet even today and the man who spearheaded the development that came into effect in the first few days of January 1983, was Vinton G. Cerf, then with the ARPA.

Toda Cerf (60) is senior vice president (architecture and technology) at WorldCom. At his own technology web page called "Cerf's UP", linked to the company's website (www.worldcom.com/ global/ resources/ cerfs_up/), he welcomes fellow "Internauts" worldwide, and looks back on the astonishing growth of the Net in the last two decades, from a few hundred university and military sites in late 1982 to an estimated 605 million users in September 2002.

He warns that the world has to gear up to make another switch to a new protocol known as Internet Protocol Ipv6 in 2006, and suggests that it is

better to start early to avoid the tensions and hassles of that first implementation.

Veteran users this week are posting their own reminiscences of those pioneering days: many still proudly possess a T-shirt of the day which read: "I survived the TCP/ IP Transmission!"

And wiredNews.com suggests that the changeover to TCP/ IP was "one small switch for man, but a giant switch for mankind.com".

**Indian Developments**

It was only after the World Wide Web (WWW) was created in 1989 by Tim Berners-Lee – and the Netscape browser was launched in 1994 – that the average personal computer owner could really harness the Internet.

For Indian users, the Internet became a reality in August 1995, when the public sector Videsh Sanchar Nigam Ltd (VSNL) launched Internet services in the metros. The VSNL's monopoly ended in November 1998 when the Internet Service Provider (ISP) business was thrown open to private players under the most liberal terms: even today the license fee for ISPs is just Rs.1 per year, compared to the lakhs that cellular phone providers have to shell out.

Fuelled by the privatisation wave, there are today just over 200 active ISPs, covering 340 towns in India. The subscription base was 3.8 million in September 2002 and is expected to cross 4 millions shortly.

Since most Internet accounts in India are used by multiple members, the user base of net enabled Indians is about 20 millions. Cybercafes and Cyber "dhabas" numbering around 12000, which offer amongst the cheapest acess rates in the world (Rs. 15-20 per hour), also contribute to a more wide spread usage. The VSNL (in which the Tata group acquired 45 per cent stake in February 2002) and

Satyam, are the two largest ISPs, accounting for six lakhs subscribers each.

Other major ISPs are the government owned MTNL and BSNL and the private sector Bharti and Dishnet.

While the growth of Internet in India has been fairly modest, by international standards, it is one of the few countries where all access technologies have been tried in addition to the most common telephone dial up connection.

Internet through cable has been pioneered here by providers such as Hathway, Zeenext and Asianet.

## MICROSOFT TO LAUNCH XDOCS

Microsoft Corp. planned to announce a new business software application on Wednesday that allows users to enter and collect data across a variety of platforms. The product, dubbed XDocs, also incorporates word processing, graphics and other capabilities.

The application was developed by Microft's Office team, which focuses on business software. Microsoft chief executive Steve Ballmer was scheduled to announce the software at the gather Group's Symposium and ITExpo in Orlando, Forida. The Software is designed to allow users to gather and automatically share multiple types of data, said Scott Bishop, a Microsoft Office product manager.

For example, a sales representative returning from a trip could record expenses, new customer contact information, a report to management on the success of the trip and other information through XDocs.

The software is written using the XML standard, or extensible markup language. Because XML can identify the types of information that are entered, the application can automatically send the expenses data to the company's expense-reporting system, the customer contact information to a customer database and the report to the appropriate person.

## SONY PUMPS IS $ 20M IN PALM UNIT :

Handheld computer maker Palm Inc., said on Tuesday that Sony Corpn. has invested $ 20 Million in Palm's software division, and now owns about 6 percent of the unit.

The investments advances Palm's plans to spin off Palm Source, the unit that develops the Palm OS, which powers handhelds made by Palm and its licensees, such as Handspring Inc., Samsung Electronics Co. Ltd. And Sony.

Palm said that Sony, the leading maker of electronics ranging from personal audio systems to desktop computers and large-screen televisions, will expand its business and technical collaboration with Palm Source.

*Courtesy: Indian Express.*

## GOVERNANCE CAN MAKE ALL THE DIFFERENCE: AMARTYA SEN

By LAKSHMI BALAKRISHNAN

It was time for a reality check on the economics of life. Lectures on Indian economy are obviously not new to Delhi University, but Friday morning was different.

For, it brought together Nobel laureate, Amartya Sen, and his "subjects" on the same platform.

It was meant to be a "jan sunwai" – public hearing – on man's most basic need. And "Living with hunger: A public hearing on the right to food" did more than just present the expert views of Prof. Sen and provide glimpses of the battle against starvation being waged by people across the country.

While Prof. Sen spoke on "hunger in India", it was his answers to questions that had the visiting farmers in awe for his understanding of their problem.

"I don't think it is a question of economics, but of public policy. There is need for more explicit analysis of the effects of public policies on different classes, particularly the extreme undergoes of society. Good governance can make all the different."

Attended by university teachers, students and farmers representing 47 non-government organizations from across the country, the event saw government representation too.

Not all villagers may believe that a public forum can help solve their problems, but being heard itself was clearly a big enough achievement for many. "Coming here, speaking about the issues of starvation deaths and listening to the testimonies of others has helped us make our point. Being head in Delhi itself is half the battle won," said Kailashi Devi, who came along with a Rajasthan based NGO.

But for every ray of hope offered here, there was perhaps a story left unheard.

A group of farmers from Hapur was not amused at not being heard.

And such was their anger that they did not mind running down the entire initiative.

## RUBCO TO ENTER VIRGIN COCONUT OIL MARKET

Arun Iyer

RUBCO – The Kerala Rubber Co-operative, a leading co-operative producer of rubber products, has drawn up plans to start selling virgin coconut oil, making the co-operative one of the handful of institutions dealing in this type of oil, according to Mr. C Janardanan, consultant and advisor to Rubco.

This type of oil is produced from fresh coconuts (hence the name virgin coconut oil) and not from copra which is the traditional raw material for milling coconut oil.

Virgin coconut oil, which is low in cholesterol and has good demand in the international market, would be produced using a technology which has been patented by an Australian agriculture expert Mr. Dan Etherington.

The co-operative has already identified a buyer in Europe who had agreed to lift 30% of the annual production while the balance would be sold in the domestic market.

Rubco intends to have the direct micro-expeller (DME) units installed across as many as 200 co-operative unions ( who are members of Rubco) within the next 3-4 years.

The DME is unique in that the entire process right from removal of husk to oil extraction is manual and would be environment-friendly, Mr. Janardhanan added.

After the husk is removed and coconut scrapped, the scrapings are allowed to be dried after which oil is extracted using a hand-press. The scrapping are dried using the husk as fuel.

The expeller is effective in that close to 85% of the oil content in the scrapping is extracted.

The residue could either be used as animal feed or supplied to bakeries and confectionery units and be used as desiccated coconut.

Robco, which was set up in the late 90s sells a variety of rubber products like chappals, rubber wood furniture and rubberized-coir mattresses

.India ranks alongside Philippines and Sri Lanka in term of coconut production.

The country's production of coconuts is placed in excess of four million units, though the onset of the dreaded 'coconut mite' has affected the production.

*Economics Time*

---

## TOURIST ARRIVALS SWELL IN END – 2002

Oct-Dec Season Inflow Shoots Up 15% Year-On-Year, A First Since 1996

*Meenu Nichani*

The last quarter of 2002 saw the fortunes of the tourism and hospitality sector change for the better. The tourist inflow figures collated by the Department of Tourism reveals a 15% growth for the October-December period to 7.37 lakh visitors, against a negative growth of 23% in the corresponding period last year. Industry officials said the sector has reported a growth of this magnitude for the first time since 1996.

Of the foreign guests, the UK provided the largest component at 16.6%, followed by the US at 14.1% and Germany at 7.7%

"The last quarter has ended well and there has been a large jump of about 60% in individual travel, which means better margins. However, group travel to India has taken a beating, and the group sizes have been down from 25 people in a group to just 8 people", said Mr. L P Singh, CEO, (Leisure group), Cox and Kings.

Most hoteliers said international corporate travel and fuelled the additional demand. However, in the leisure travel category, it was largely domestic demand which was filling hotels. International leisure travel is on the decline owing to poor security perception in the South Asia region.

"It's true that the growth in corporate travel has buoyed occupancies. And the trends for the month of January and booking for February continue to be stable, as far as corporate travel is concerned," said Mr.K.B. Karchu, senior vice-president, Carlson Hospitality (India).

According to the Federation of Hotels and Restaurants Association (FHRAI), average room rates (ARR) for most hotels is likely to be steady. The period of discounts seems to be over. FHRAI research reveals that demand for hotels has risen across many cities like Mumbai, Bangalore, Goa, Delhi and Hyderabad. Hotels in Bangalore are likely to gain the most in the absence of new supply. While hotels in Delhi and Hyderabad will see growth, the Mumbai hospitality sector will continue to be pushed down by new supply of hotels.

*Economic Times.*

## IV EMPIRICAL EXPLORATION: METHODOLOGY AND RESULTS

*Continued from December Issue*

The available literature tends to suggest several possible channels through which monetary policy could impinge differentially across regions. These include, for instance, state-level differences in the mix of industries, in the number of small versus large firms and in the extent of financial deepening.

In order to test our hypothesis that whether monetary policy shocks have differential effects in different states in India, we employ a vector auto regression (VAR) framework, with state-specific SDP-economy wide GDP, monetary policy, and a variable capturing structural shock. Towards this end, the study employs annual data on NSDP for the 14 major states in India as mentioned earlier for the period 1969-1999 for which consistent data set is available[4]. In addition, we also have the real gross domestic product at the national level, an index of food price and an indicator of monetary policy shock, viz. the growth rate of real money supply, defined as $(M_3/p)$[5]. The inclusion of $P_f/P$ in the VAR deserves some explanation. Emerging market economies are often susceptible to shocks in food prices. Food, in particular, constitutes a dominant proportion of their consumption basket and especially so in relatively backward states, where a significant part of incomes is often spent of food. Keeping this in mind, an index of food prices has been included as an additional variable.

### The Frame Work

The analysis focuses on the dynamic behaviour of an n x 1 co-variance stationary vector defined by the relation

$$Z_t = \left[ Y_t^i, Y_t, \left(\frac{M3}{P}\right)_t, \left(\frac{P_f}{P}\right)_t \right] \quad \ldots (1)$$

where Y is the NDP, $Y^i$ is the NSDP in state i. $P_f/P$ is an index of food price and $M_3/P$ is the monetary policy variable. T denotes the time period.

The dynamics of $Z_t$ are represented by a VAR

$$AZ_t = B(L)Z_{t-1} + e_t \ldots\ldots\ldots (2)$$

Where A is an n x n matrix of coefficients describing the contemporaneous correlation among the variables. B(L) is an n x n matrix of polynomials in the lag operator L, and $e_t = [\epsilon_{1,t}, \epsilon_{2,t}, \ldots\ldots \epsilon_{n-1,t}, \epsilon_{n,t}]$ is an n x n vector of structural disturbances.

Solving for $Z_t$ produces the following reduced form system

$$Z_t = C(L)Z_{t-1} + u_t \quad \ldots\ldots\ldots\ldots\ldots (3)$$

Where, $C(L) = A^{-1}B(L)$ is an infinite-order lag polynomial, and $u_t = A^{-1}e_t$ describes the relationship between the model's reduced-form residuals and the model's structural residuals.

In order to achieve exact identification, instead of using Sims (1980) type triangular decomposition, sufficient restrictions are placed on the variance-covariance matrix of structural errors. For an exact identification, six restrictions have been placed on the A matrix. These are motivated by practical consideration of the transmission of economic changes through sub-national and national economies. In particular, we have assumed that the food price shock is unrelated to other shocks in the model. Secondly, while nationwide NDP is influenced by both monetary policy as well as relative food price shocks, the state-specific NSDPs

are influenced, apart from monetary policy and relative food price shocks, by economy wide NDP shocks. This provides us with the following structure of A, viz,

$$A = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} \quad \ldots\ldots\ldots\ldots (4)$$

**Table 5:**
**ADF Tests of Variables**

| State | Level[a] | Growth Rate[b] |
|---|---|---|
| NSDP- Haryana | -0.61 | -5.84 |
| NSDP- Punjab | -1.71 | -5.05 |
| NSDP- Rajasthan | -1.40 | -5.85 |
| NSDP- Bihar | -2.16 | -5.13 |
| NSDP- Orissa | -2.18 | -7.41 |
| NSDP- WB | 1.84 | -4.22 |
| NSDP- MP | -0.55 | -7.46 |
| NSDP- UP | -1.18 | -5.21 |
| NSDP- Gujarat | -0.23 | -5.03 |
| NSDP- Maharashtra | 1.44 | -4.39 |
| NSDP- Andhra Pradesh | -0.90 | -6.27 |
| NSDP- Karnataka | 1.45 | -4.41 |
| NSDP- Kerala | 0.62 | -2.98 |
| NSDP- Tamil Nadu | 0.91 | -3.85 |
| Relative Price of food | -2.40 | -5.46 |
| Net Domestic Product | 1.76 | -4.05 |
| $M_3$ /P | 1.92 | -4.56 |

a Equation includes an intercept and time trend.
b Equation includes an intercept term.
*Note: The 95 per cent values for a and b are –3.96 and –2.96, respectively.*

## UNIT ROOT TESTS

In order to avoid spuriousness, the variables used in the estimation process need to be stationary. Table 5 reports the results of the augmented Dickey-Fuller (ADF) unit root tests applied to the levels and first differences of the system's variables. As Table 5 shows, all the variables are found to be I(1). Hence, the framework as described in (1) has been taken in growth rates

## EMPIRICAL ESTIMATES

The obvious question that arises is: how can one measure the effectiveness of monetary policy in a particular state? Since all the variables are taken in real terms, monetary policy is postulated to be more effective in a state where the monetary shocks explain a larger proportion of output variance of that state. Given the annual data series employed in the study, we examined the 5-year ahead forecast error variance decomposition (FEVD) of $g(Y_i)$'s, and compared the proportion of FEVD of $g(Y_i)$ that are explained by monetary shock. An interesting pattern emerged when we delved into these numbers. Clearly, there is a clustering around of the states into two groups, the former in which monetary policy has higher impulses, and the latter, in which it was (relatively speaking) lower. This impact of the monetary shock is summarised in Tables 6 and 7, respectively for these two sets of states. Table 6 shows the states where monetary shocks have a less significant role in explaining statewise output variance; the opposite is the case depicted in Table 7.

As evident, not all states respond to the same extent to a common monetary policy shock. In Table 6, the impact of a monetary policy shock is generally found to be high in the first year for states such as Uttar Pradesh and Madhya Pradesh; for all states, state NSDP generally declines during the first year following the policy shock and increases thereafter. The impulse responses indicate that unanticipated monetary policy shocks typically have their maximum impact on NSDP after three years. For example, a policy innovation results in 6.83 per cent increase in NSDP in Punjab in the second year. The effect of the policy shock then builds to a maximum of 7.13 per cent in the fourth year and dies down thereafter.

Table 7, on the other hand, depicts the reverse scenario where the impact of a policy shock on statewise output variance is significant. As evident, most of the states included therein respond quite significantly to the policy innovation. For instance, the policy shocks results in a substantial rise in NSDP in Andhra Pradesh in Year 1, but subsequently dampens to 26.79 per cent by the end of the fifth year. Of these five states, Gujarat shows the most significant response to the policy shock with a high of 36.57 per cent; the lowest being for Maharashtra with 11.59 per cent. Interestingly, for the most of these states, the effect of the policy shock is maximum in the first year, the exception being Maharashtra, which shows the maximum response in the fifth year.

How far are these results in line with the stylised facts alluded to earlier? While there is an element of subjectivism in the clustering criterion in the sense that there is no statistical testing of the differences in output variance explained by monetary shock in state i vis-à-vis state j, the distinct pattern of clustering and the output variance between the two sets of states is, more or less, in line with the expected structural differences among the states. There are, however, certain exceptions to the observed attributes for certain states. This needs to be further explored.

**Table 6**

**States Where Monetary Shocks Have Less Significant Role in State wise Output Variance: Proportion of State wise Output Variance Explained by Monetary Shocks**

*(Per cent)*

| Year | Haryana | Punjab | Up | Bihar | Orissa | Wb | Mp | Kerala | tn |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.76 | 1.95 | 6.72 | 0.26 | 0.01 | 3.23 | 4.61 | 1.10 | 0.03 |
| 2 | 2.35 | 6.83 | 4.65 | 2.03 | 0.02 | 4.78 | 2.90 | 2.11 | 0.30 |
| 3 | 2.51 | 7.00 | 4.61 | 2.22 | 0.04 | 7.38 | 3.45 | 2.12 | 0.52 |
| 4 | 2.52 | 7.13 | 4.71 | 2.22 | 0.04 | 7.30 | 3.51 | 2.10 | 0.52 |
| 5 | 2.58 | 7.11 | 4.71 | 2.22 | 0.04 | 7.29 | 3.53 | 2.12 | 0.55 |

**Table 7**

**States Where Monetary Shocks Have a Significant Role in Statewise Output Variance: Proportion of Statewise Output Variance Explained by Monetary Shocks**

*(Per cent)*

| Year | Rajasthan | Gujarat | Maharashtra | Andhra Pradesh | Karnataka |
|---|---|---|---|---|---|
| 1 | 29.94 | 36.57 | 11.59 | 28.85 | 28.83 |
| 2 | 24.90 | 31.65 | 11.45 | 27.25 | 24.46 |
| 3 | 23.87 | 30.03 | 11.89 | 26.96 | 23.72 |
| 4 | 23.75 | 29.94 | 11.96 | 26.77 | 23.54 |
| 5 | 23.73 | 29.90 | 11.97 | 26.79 | 23.49 |

## V Concluding Observations

The present paper employs time-series techniques to examine whether monetary policy had symmetric effects across major states in India during the period 1969-70 to 1998-1999. The impulse response functions from an estimated SVAR reveal a core of states responding to monetary policy in a pro-active fashion than several other states. The study attempted to identify these core (and non-core) states that were more (less) sensitive to such policy shocks. Combining this with the earlier information in the concentration of manufacturing and the degree of financial deepening across states, it is clear that those states which have a greater concentration of manufacturing units or are relatively intensively banked tend to be more responsive to such shocks.

The analysis began by setting out the basic facts on 14 Indian states, related to those aspects likely to give rise to shock asymmetry, viz, industry-mix, industrial concentration and financial deepening. A SVAR model was elaborated with a view to examining the impact of monetary policy innovations on output in each state. Based on our analysis, states were classified into two categories; (i) those significantly affected by monetary policy shocks (Type I states); and (ii) those where monetary policy is relatively less effective (Type II states). Our conclusions lend support to what our earlier theoretical discussions lead us to expect, viz, broadly speaking, states with a heavy concentration of manufacturing enterprises and greater financial deepening tend to be more sensitive to monetary policy shocks than relatively under-banked /less industralised states. There are, however, certain exceptions to the observed attributes of some of the states.

This raises the possibility that different states are subject to shocks, which are asymmetric and hence, that in a sense, the Indian federal economy is an incomplete currency area. Monetary policy may then be more responsive to the shocks occurring in certain states, and while smoothening out output fluctuations in this group of states, might be leaving other types of shocks occurring in the remaining states, largely unattended. Further investigation is of course, necessary to confirm the presence and extent of such asymmetries as well as examine in details their sources. If it does not turn out that the regional asymmetries are indeed significant with the Indian federation falling well short of an optimum currency area, then institutional changes of a far-reaching kind in the monetary policy mechanism would be called for. While it may be premature to speculate on the nature of the required changes, there is no gainsaying that in view of severe resource constraints faced by several Indian states (Rao 2002), monetary policy would need to take regional perspective into account.

**Notes**

------[The views expressed in the paper are the authors' own, and not necessarily those of the institutions to which they belong. The authors would like to thank, without implicating M D Patra for his insightful comment for an earlier draft.]

1. See for example, Singh et al (1982), Jadhav (1994), Rangarajan (1988) and Arif (1990) and Reddy (2002).
2. These regions are New England, Mid-East, Great Lakes, Plains, Southeast, Southwest, Rocky Mountain and Far West.
3. The sample coincides with Ahluwalia's set of 14 states for the sake of comparing the SDP among the Indian states (Ahluwalia 2000).
4. The data has been culled out from the database of Indian Economy (HI Chandok), National Accounts Data(Central Statistical Organisation) and the handbook of Statistics on Indian Economy (Reserve Bank of India)
5. Both state-specific NSDP's and economy wide NDP have been taken at factor cost at constant prices.

## STOCK EXCHANGE SENSEX

| DATE | Bombay stock exchange sensex open | National stock exchange s & p cnx nifty |
|---|---|---|
| Sep'26 2002 | 3011.42 | 969.90 |
| Sep'27 2002 | 3020.33 | 976.45 |
| Sep'30 2002 | 3029.56 | 963.15 |
| Oct'3 2002 | 2963.61 | 948.20 |
| Oct'10 2002 | 2954.13 | 958.45 |
| Oct'11 2002 | 2990.99 | 971.05 |
| Dec'5 2002 | 3186.62 | 1045.95 |
| Dec'6 2002 | 3235.68 | 1069.80 |
| Dec'19 2002 | 3332.72 | 1076.00 |
| Dec'20 2002 | 3339.46 | 1079.30 |
| Dec'26 2002 | 3360.86 | 1085.05 |
| Dec'27 2002 | 3393.58 | 1098.40 |
| Jan'17 2003 | 3377.94 | 1086.50 |
| Jan'23 2003 | 3351.75 | 1070.90 |
| Jan'28 2003 | 3247.09 | 1046.20 |
| Jan'31 2003 | 3216.16 | - |
| Feb'3 2003 | 3260.04 | 1055.30 |
| Feb'4 2003 | 3283.59 | - |
| Feb'13 2003 | - | - |
| Feb'14 2003 | 3250.65 | - |
| Feb'17 2003 | 3248.90 | 1058.20 |
| Feb'19 2003 | 3303.09 | 1064.30 |
| Feb'20 2003 | 3301.87 | 1065.60 |
| Feb'21 2003 | 3303.33 | 1066.15 |
| Feb'27 2003 | 3254.84 | 1052.95 |

# EXCHANGE RATES

| Date | US Dollar | Euro | Kuwait Dinar | UAE Dirham | Bahrain Dinar | Qatary Riyal | Saudi Riyal | Omani Riyal |
|---|---|---|---|---|---|---|---|---|
| Sep'26 2002 | 48.20 | 47.17 | 159.38 | 13.12 | 127.78 | 13.23 | 12.85 | 124.86 |
| Sep'27 2002 | 48.19 | 47.11 | 159.39 | 13.11 | 127.74 | 13.22 | 12.84 | 125.06 |
| Sep'30 2002 | - | - | - | - | - | - | - | - |
| Oct'3 2002 | 48.16 | 47.67 | 159.32 | 13.11 | 127.68 | 13.22 | 12.84 | 125.00 |
| Oct'10 2002 | 48.16 | 47.51 | 159.42 | 13.11 | 127.68 | 13.22 | 12.84 | 124.77 |
| Oct'11 2002 | 48.15 | 47.47 | 159.32 | 13.10 | 127.64 | 13.21 | 12.83 | 125.38 |
| Dec'5 2002 | 48.07 | 48.07 | 159.05 | 13.08 | 127.43 | 13.19 | 12.81 | 124.78 |
| Dec'6 2002 | - | - | - | - | - | - | - | - |
| Dec'19 2002 | 47.89 | 49.15 | 159.40 | 13.03 | 126.95 | 13.14 | 12.76 | 124.05 |
| Dec'20 2002 | 47.82 | 49.03 | 159.24 | 13.01 | 126.78 | 13.13 | 12.75 | 123.89 |
| Dec'26 2002 | 47.83 | 49.50 | 159.17 | 13.02 | 126.80 | 13.13 | 12.75 | 124.14 |
| Dec'27 2002 | 47.80 | 49.62 | 159.23 | 13.01 | 126.72 | 13.12 | 12.74 | 124.06 |
| Jan'17 2003 | 47.73 | 50.83 | 159.62 | 12.99 | 126.53 | 13.10 | 12.72 | 123.65 |
| Jan'23 2003 | 47.70 | 51.27 | 159.64 | 12.98 | 126.46 | 13.09 | 12.71 | 123.58 |
| Jan'28 2003 | 47.71 | 51.51 | 159.60 | 12.98 | 126.47 | 13.09 | 12.72 | 123.59 |
| Jan'31 2003 | 47.61 | 51.53 | 159.34 | 12.96 | 126.22 | 13.07 | 12.79 | 123.34 |
| Feb'3 2003 | 47.60 | 51.08 | 159.13 | 12.95 | 126.18 | 13.06 | 12.69 | 123.30 |
| Feb'4 2003 | 47.60 | 51.44 | 159.18 | 12.95 | 126.18 | 13.06 | 12.69 | 123.30 |
| Feb'13 2003 | 47.70 | 51.45 | 159.25 | 12.98 | 126.44 | 13.09 | 12.71 | 123.56 |
| Feb'14 2003 | 47.67 | 51.51 | 159.22 | 12.97 | 126.41 | 13.08 | 12.71 | 123.50 |
| Feb'17 2003 | 47.57 | 50.94 | 158.68 | 12.95 | 126.12 | 13.06 | 12.68 | 123.47 |
| Feb'19 2003 | 47.51 | 50.94 | 158.37 | 12.93 | 125.95 | 13.04 | 12.66 | 123.08 |
| Feb'20 2003 | 47.51 | 51.17 | 158.47 | 12.93 | 125.95 | 13.04 | 12.66 | 123.02 |
| Feb'21 2003 | 47.53 | 51.48 | 158.59 | 12.94 | 126.01 | 13.05 | 12.67 | 123.13 |
| Feb'27 2003 | 47.49 | 51.32 | 158.49 | 12.92 | 125.89 | 13.03 | 12.66 | 123.02 |

## BULLION RATES

| DATE | 24 Ct Gold (10gm) Chennai | Standard gold Mumbai |
|---|---|---|
| Sep'26 2002 | 5295 | - |
| Sep'27 2002 | 5280 | - |
| Sep'30 2002 | 5300 | 5300 |
| Oct'3 2002 | 5300 | 5310 |
| Oct'10 2002 | 5260 | 5250 |
| Oct'11 2002 | 5230 | 5220 |
| Dec'5 2002 | 5255 | 5275 |
| Dec'6 2002 | 5285 | 5300 |
| Dec'19 2002 | 5575 | 5560 |
| Dec'20 2002 | 5510 | 5560 |
| Dec'26 2002 | 5545 | 5610 |
| Dec'27 2002 | 5600 | 5640 |
| Jan'17 2003 | 5730 | 5670 |
| Jan'23 2003 | 5850 | 5850 |
| Jan'28 2003 | 5870 | 5880 |
| Jan'31 2003 | 5865 | 5830 |
| Feb'3 2003 | 5835 | 5865 |
| Feb'4 2003 | 5890 | 5915 |
| Feb'13 2003 | 5740 | 5710 |
| Feb'14 2003 | 5735 | 5735 |
| Feb'17 2003 | 5590 | 5610 |
| Feb'19 2003 | 5575 | - |
| Feb'20 2003 | 5595 | 5655 |
| Feb'21 2003 | 5645 | 5670 |
| Feb'27 2003 | 5735 | 5740 |

## CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS

(Base 1982 = 100)

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 461 | 463 | 471 | 479 | 489 | 492 | 483 | 486 | 487 | 487 | 489 | 486 |
| | 2. Mundakayam | 454 | 454 | 457 | 464 | 476 | 476 | 486 | 482 | 482 | 483 | 481 | 479 |
| | 3. Kollam | 466 | 495 | 459 | 496 | 504 | 502 | 498 | 501 | 503 | 518 | 518 | 509 |
| | 4. Thiruvananthapuram | 528 | 532 | 530 | 546 | 557 | 552 | 544 | 545 | 553 | 554 | 555 | 556 |
| | Average | 477 | 486 | 479 | 496 | 507 | 506 | 503 | 504 | 506 | 511 | 511 | 508 |
| Tamilnadu | 1. Chennai | 502 | 501 | 508 | 512 | 515 | 520 | 523 | 526 | 528 | 522 | 523 | 523 |
| | 2. Coimbatore | 455 | 465 | 471 | 480 | 477 | 482 | 481 | 479 | 491 | 487 | 485 | 490 |
| | 3. Coonoor | 460 | 466 | 469 | 474 | 477 | 473 | 478 | 488 | 490 | 483 | 483 | 489 |
| | 4. Madurai | 443 | 445 | 454 | 458 | 457 | 464 | 464 | 470 | 476 | 477 | 470 | 470 |
| | 5. Salem | 453 | 453 | 461 | 470 | 470 | 467 | 464 | 472 | 475 | 472 | 467 | 465 |
| | 6.Tiruchirappalli | 512 | 515 | 507 | 522 | 530 | 548 | 548 | 550 | 563 | 573 | 564 | 556 |
| | Average | 471 | 474 | 478 | 486 | 488 | 492 | 493 | 498 | 504 | 502 | 499 | 499 |
| Andra Pradesh | 1. Gudur | 431 | 430 | 440 | 453 | 457 | 458 | 458 | 463 | 470 | 467 | 462 | 464 |
| | 2. Gundur | 451 | 453 | 463 | 468 | 480 | 480 | 481 | 484 | 490 | 492 | 488 | 495 |
| | 3. Hyderabad | 462 | 462 | 466 | 469 | 468 | 470 | 471 | 476 | 476 | 478 | 478 | 481 |
| | 4. Visakhapatanam | 460 | 462 | 466 | 468 | 470 | 475 | 473 | 475 | 479 | 479 | 476 | 475 |
| | 5. Warangal | 486 | 487 | 496 | 496 | 503 | 509 | 506 | 514 | 517 | 507 | 512 | 523 |
| | Average | 458 | 459 | 466 | 471 | 476 | 478 | 478 | 482 | 486 | 485 | 483 | 488 |
| Karnataka | 1. Bangalore | 445 | 445 | 445 | 450 | 455 | 456 | 458 | 457 | 460 | 460 | 463 | 465 |
| | 2. Belgaum | 505 | 507 | 509 | 511 | 519 | 521 | 524 | 523 | 524 | 523 | 522 | 523 |
| | 3. Hubli Dhanwar | 460 | 460 | 462 | 469 | 477 | 477 | 480 | 481 | 484 | 480 | 481 | 487 |
| | 4. Meccara | 453 | 452 | 456 | 461 | 462 | 463 | 463 | 459 | 462 | 463 | 459 | 460 |
| | Average | 466 | 466 | 468 | 473 | 478 | 479 | 481 | 480 | 483 | 482 | 481 | 484 |
| Pondichery | 1. Pondicherry | 494 | 507 | 502 | 505 | 516 | 512 | 516 | 521 | 531 | 531 | 529 | 536 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 537 | 539 | 545 | 555 | 561 | 563 | 562 | 563 | 561 | 551 | 555 | 558 |
| Maharastra | 1. Mumbai | 553 | 554 | 555 | 558 | 560 | 562 | 563 | 563 | 565 | 569 | 574 | 574 |
| | 2. Nagpur | 491 | 491 | 495 | 499 | 493 | 496 | 499 | 500 | 504 | 497 | 493 | 492 |
| | 3. Nasik | 511 | 508 | 508 | 511 | 514 | 519 | 518 | 518 | 519 | 521 | 524 | 516 |
| | 4. Pune | 520 | 521 | 530 | 531 | 532 | 534 | 532 | 534 | 538 | 537 | 540 | 539 |
| | 5. Solapur | 476 | 477 | 485 | 484 | 486 | 490 | 499 | 497 | 492 | 489 | 491 | 494 |
| | Average | 510 | 510 | 515 | 517 | 517 | 520 | 522 | 522 | 524 | 523 | 524 | 523 |
| Haryana | 1. Faridabad | 468 | 472 | 475 | 480 | 487 | 491 | 492 | 491 | 487 | 482 | 482 | 486 |
| | 2. Yamuna Nagar | 428 | 434 | 434 | 441 | 452 | 458 | 459 | 456 | 454 | 446 | 447 | 452 |
| | Average | 448 | 453 | 455 | 461 | 470 | 475 | 476 | 474 | 471 | 464 | 465 | 469 |
| West Bengal | 1. Asansol | 449 | 452 | 451 | 452 | 459 | 463 | 463 | 465 | 467 | 460 | 455 | 453 |
| | 2. Darjeeling | 388 | 387 | 388 | 390 | 393 | 412 | 420 | 411 | 410 | 405 | 410 | 403 |
| | 3. Durgapur | 540 | 544 | 549 | 552 | 558 | 564 | 567 | 571 | 563 | 554 | 552 | 551 |
| | 4. Haldia | 579 | 578 | 577 | 579 | 584 | 589 | 590 | 592 | 590 | 582 | 578 | 575 |
| | 5. Howrah | 535 | 536 | 541 | 542 | 545 | 548 | 550 | 554 | 556 | 546 | 542 | 538 |
| | 6. Jalpaiguri | 410 | 408 | 409 | 416 | 421 | 425 | 427 | 429 | 424 | 416 | 404 | 409 |
| | 7. Kolkata | 522 | 523 | 528 | 528 | 537 | 536 | 538 | 543 | 544 | 530 | 527 | 527 |
| | 8. Raniganj | 411 | 414 | 416 | 410 | 419 | 423 | 425 | 424 | 425 | 414 | 408 | 406 |
| | Average | 479 | 480 | 482 | 484 | 490 | 495 | 498 | 499 | 497 | 488 | 485 | 483 |
| Chandigarh | 1. Chandigarh | 505 | 505 | 505 | 509 | 514 | 521 | 525 | 522 | 520 | 514 | 514 | 514 |
| Uttar Pradesh | 1. Agra | 426 | 429 | 428 | 434 | 442 | 447 | 447 | 444 | 445 | 437 | 445 | 448 |
| | 2. Ghaziabad | 464 | 466 | 473 | 478 | 483 | 486 | 489 | 483 | 481 | 478 | 479 | 484 |
| | 3. Kanpur | 455 | 448 | 450 | 461 | 465 | 470 | 471 | 467 | 468 | 456 | 453 | 458 |
| | 4. Saharaupur | 434 | 434 | 433 | 434 | 436 | 438 | 439 | 446 | 444 | 439 | 440 | 444 |
| | 5. Varanasi | 478 | 474 | 481 | 482 | 491 | 495 | 499 | 498 | 498 | 489 | 484 | 491 |
| | Average | 451 | 450 | 453 | 458 | 463 | 467 | 469 | 468 | 467 | 460 | 460 | 465 |
| Madhya Pradesh | 1. Balaghat | 409 | 410 | 413 | 417 | 428 | 431 | 432 | 445 | 444 | 438 | 432 | 427 |
| | 2. Bhopal | 503 | 503 | 504 | 512 | 512 | 515 | 516 | 517 | 516 | 509 | 508 | 509 |
| | 3. Indore | 482 | 484 | 486 | 492 | 496 | 493 | 491 | 491 | 494 | 492 | 491 | 492 |
| | 4. Jabalpur | 462 | 459 | 460 | 462 | 468 | 470 | 472 | 488 | 483 | 471 | 466 | 468 |
| | Average | 464 | 464 | 466 | 471 | 476 | 477 | 478 | 485 | 484 | 478 | 474 | 474 |
| | **All India** | **468** | **469** | **472** | **476** | **481** | **484** | **485** | **487** | **489** | **484** | **483** | **484** |

# CONSUMER PRICE INDEX AND % VARIATIONS OF INDEX FOR INDUSTRIAL WORKERS

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | Jan-02 | Jan-03 | | Feb-02 | Feb-03 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 471 | 489 | 3.82 | 468 | 486 | 3.85 |
| | 2. Mundakayam | 456 | 481 | 5.48 | 454 | 479 | 5.51 |
| | 3. Kollam | 464 | 518 | 11.64 | 463 | 509 | 9.94 |
| | 4. Thiruvananthapuram | 523 | 555 | 6.12 | 529 | 556 | 5.10 |
| | Average | 479 | 511 | 6.74 | 479 | 508 | 6.06 |
| 2. Tamilnadu | 1. Chennai | 500 | 523 | 4.60 | 503 | 523 | 3.98 |
| | 2. Coimbatore | 449 | 485 | 8.02 | 451 | 490 | 8.65 |
| | 3. Coonoor | 458 | 483 | 5.46 | 458 | 489 | 6.77 |
| | 4. Madurai | 454 | 470 | 3.52 | 451 | 470 | 4.21 |
| | 5. Salem | 454 | 467 | 2.86 | 454 | 465 | 2.42 |
| | 6.Tiruchirappalli | 515 | 564 | 9.51 | 512 | 556 | 8.59 |
| | Average | 472 | 499 | 5.72 | 472 | 499 | 5.80 |
| 3. Andra Pradesh | 1. Gudur | 447 | 462 | 3.36 | 438 | 464 | 5.94 |
| | 2. Gundur | 466 | 488 | 4.72 | 465 | 495 | 6.45 |
| | 3. Hyderabad | 460 | 478 | 3.91 | 459 | 481 | 4.79 |
| | 4. Visakhapatanam | 460 | 476 | 3.48 | 456 | 475 | 4.17 |
| | 5. Warangal | 496 | 512 | 3.23 | 489 | 523 | 6.95 |
| | Average | 466 | 483 | 3.74 | 461 | 488 | 5.68 |
| 4. Karnataka | 1. Bangalore | 448 | 463 | 3.35 | 445 | 465 | 4.49 |
| | 2. Belgaum | 502 | 522 | 3.98 | 503 | 523 | 3.98 |
| | 3. Hubli Dhanwar | 462 | 481 | 4.11 | 459 | 487 | 6.10 |
| | 4. Meccara | 453 | 459 | 1.32 | 452 | 460 | 1.77 |
| | Average | 466 | 481 | 3.22 | 465 | 484 | 4.09 |
| 5. Pndicherry | 1. Pndicherry | 494 | 529 | 7.09 | 493 | 536 | 8.72 |

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | Jan-02 | Jan-03 | | Feb-02 | Feb-03 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 530 | 555 | 4.72 | 529 | 558 | 5.48 |
| 2. Maharastra | 1. Mumbai | 543 | 574 | 5.71 | 550 | 574 | 4.36 |
| | 2. Nagpur | 486 | 493 | 1.44 | 589 | 492 | -16.47 |
| | 3. Nasik | 511 | 524 | 2.54 | 507 | 516 | 1.78 |
| | 4. Pune | 514 | 540 | 5.06 | 517 | 539 | 4.26 |
| | 5. Solapur | 481 | 491 | 2.08 | 479 | 494 | 3.13 |
| | Average | 507 | 524 | 3.43 | 528 | 523 | -1.02 |
| 3. Haryana | 1. Faridabad | 469 | 482 | 2.77 | 464 | 486 | 4.74 |
| | 2. Yamuna Nagar | 431 | 447 | 3.71 | 427 | 452 | 5.85 |
| | Average | 450 | 465 | 3.22 | 446 | 469 | 5.27 |
| 4. West Bengal | 1. Asansol | 449 | 455 | 1.34 | 443 | 453 | 2.26 |
| | 2. Darjeeling | 394 | 410 | 4.06 | 387 | 403 | 4.13 |
| | 3. Durgapur | 540 | 552 | 2.22 | 536 | 551 | 2.80 |
| | 4. Haldia | 573 | 578 | 0.87 | 571 | 575 | 0.70 |
| | 5. Howrah | 526 | 542 | 3.04 | 528 | 538 | 1.89 |
| | 6. Jalpaiguri | 413 | 404 | -2.18 | 406 | 409 | 0.74 |
| | 7. Kolkata | 517 | 527 | 1.93 | 514 | 527 | 2.53 |
| | 8. Raniganj | 402 | 408 | 1.49 | 404 | 406 | 0.50 |
| | Average | 477 | 485 | 1.63 | 474 | 483 | 1.93 |
| 5. Chandigarh | 1. Chandigarh | 513 | 514 | 0.19 | 513 | 514 | 0.19 |
| 6. Uttar Pradesh | 1. Agra | 422 | 445 | 5.45 | 423 | 448 | 5.91 |
| | 2. Ghaziabad | 463 | 479 | 3.46 | 459 | 484 | 5.45 |
| | 3. Kanpur | 444 | 453 | 2.03 | 452 | 458 | 1.33 |
| | 4. Saharanpur | 428 | 440 | 2.80 | 432 | 444 | 2.78 |
| | 5. Varanasi | 474 | 484 | 2.11 | 474 | 491 | 3.59 |
| | Average | 446 | 460 | 3.14 | 448 | 465 | 3.79 |
| 7. Madhya Pradesh | 1. Balaghat | 412 | 432 | 4.85 | 408 | 427 | 4.66 |
| | 2. Bhopal | 507 | 508 | 0.20 | 501 | 509 | 1.60 |
| | 3. Indore | 477 | 491 | 2.94 | 475 | 492 | 3.58 |
| | 4. Jabalpur | 461 | 466 | 1.08 | 459 | 468 | 1.96 |
| | Average | 464 | 474 | 2.15 | 461 | 474 | 2.88 |
| | **All India** | **467** | **483** | **3.43** | **466** | **484** | **3.86** |

# CONSUMER PRICE INDEX FOR AGRICULTURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sept 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 321 | 321 | 321 | 325 | 328 | 328 | 325 | 328 | 329 | 330 | 330 | 329 |
| 2 | Tamilnadu | 311 | 313 | 316 | 319 | 320 | 321 | 324 | 327 | 340 | 356 | 355 | 355 |
| 3 | Anthrapradesh | 326 | 329 | 331 | 334 | 335 | 337 | 338 | 340 | 345 | 343 | 341 | 342 |
| 4 | Karnataka | 309 | 309 | 314 | 314 | 315 | 316 | 320 | 320 | 322 | 324 | 328 | 329 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 303 | 303 | 308 | 314 | 315 | 319 | 321 | 320 | 321 | 318 | 319 | 320 |
| 6 | Haryana | 320 | 320 | 322 | 323 | 328 | 331 | 333 | 331 | 330 | 325 | 322 | 326 |
| 7 | West Bengal | 301 | 299 | 297 | 299 | 300 | 305 | 309 | 314 | 310 | 304 | 299 | 300 |
| 8 | Uttar Pradesh | 312 | 308 | 309 | 315 | 320 | 323 | 326 | 327 | 324 | 318 | 317 | 323 |
| 9 | Madhya Pradesh | 305 | 307 | 311 | 314 | 317 | 320 | 320 | 321 | 321 | 314 | 309 | 312 |
| 10 | Assam | 319 | 319 | 320 | 322 | 323 | 328 | 331 | 332 | 331 | 329 | 325 | 326 |
| 11 | Bihar | 291 | 292 | 288 | 290 | 293 | 296 | 298 | 300 | 300 | 296 | 293 | 300 |
| 12 | Gujarat | 316 | 219 | 321 | 325 | 229 | 332 | 334 | 333 | 332 | 328 | 326 | 327 |
| 13 | Himachalpradesh | 296 | 295 | 300 | 301 | 298 | 303 | 303 | 307 | 309 | 310 | 308 | 308 |
| 14 | Jammu & Kashmir | 330 | 231 | 338 | 333 | 334 | 335 | 337 | 340 | 342 | 346 | 350 | 349 |
| 15 | Manipur | 302 | 299 | 297 | 298 | 295 | 295 | 299 | 300 | 302 | 300 | 299 | 300 |
| 16 | Meghalaya | 354 | 354 | 348 | 344 | 341 | 345 | 343 | 346 | 343 | 343 | 340 | 340 |
| 17 | Orissa | 287 | 290 | 293 | 295 | 297 | 300 | 301 | 302 | 300 | 294 | 292 | 291 |
| 18 | Punjab | 320 | 325 | 325 | 328 | 332 | 335 | 335 | 333 | 333 | 324 | 324 | 324 |
| 19 | Rajastan | 310 | 311 | 313 | 318 | 320 | 323 | 327 | 327 | 327 | 324 | 323 | 323 |
| 20 | Tripura | 319 | 327 | 321 | 323 | 327 | 326 | 328 | 330 | 334 | 334 | 331 | 323 |
| | **All India** | **309** | **309** | **311** | **314** | **316** | **319** | **321** | **322** | **323** | **321** | **320** | **322** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR AGRICULTURAL LABOURERS

Base 1986-87 = 100]

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Jan-02 | Jan-03 | | Feb-02 | Feb-03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 319 | 330 | 3.45 | 322 | 329 | 2.17 |
| 2 | Tamilnadu | 314 | 355 | 13.06 | 313 | 355 | 13.42 |
| 3 | Anthrapradesh | 324 | 341 | 5.25 | 325 | 342 | 5.23 |
| 4 | Karnataka | 308 | 328 | 6.49 | 308 | 329 | 6.82 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 303 | 319 | 5.28 | 303 | 320 | 5.61 |
| 6 | Haryana | 320 | 322 | 0.63 | 321 | 326 | 1.56 |
| 7 | West Bengal | 301 | 299 | -0.66 | 299 | 300 | 0.33 |
| 8 | Uttar Pradesh | 309 | 317 | 2.59 | 312 | 323 | 3.53 |
| 9 | Madhya Pradesh | 304 | 309 | 1.64 | 304 | 312 | 2.63 |
| 10 | Assam | 319 | 325 | 1.88 | 317 | 326 | 2.84 |
| 11 | Bihar | 291 | 293 | 0.69 | 290 | 300 | 3.45 |
| 12 | Gujarat | 312 | 326 | 4.49 | 313 | 327 | 4.47 |
| 13 | Himachalpradesh | 297 | 308 | 3.70 | 299 | 308 | 3.01 |
| 14 | Jammu & Kashmir | 329 | 350 | 6.38 | 330 | 349 | 5.76 |
| 15 | Manipur | 300 | 299 | -0.33 | 299 | 300 | 0.33 |
| 16 | Meghalaya | 351 | 340 | -3.13 | 350 | 340 | -2.86 |
| 17 | Orissa | 294 | 292 | -0.68 | 286 | 291 | 1.75 |
| 18 | Punjab | 322 | 324 | 0.62 | 322 | 324 | 0.62 |
| 19 | Rajastan | 306 | 323 | 5.56 | 308 | 323 | 4.87 |
| 20 | Tripura | 313 | 331 | 5.75 | 315 | 323 | 2.54 |
| | **All India** | **308** | **320** | **3.90** | **308** | **322** | **4.55** |

## CONSUMER PRICE INDEX FOR RURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sept 02 | Oct 02 | Nov 02 | Dec 02 | Jan 02 | Feb 02 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 324 | 323 | 324 | 328 | 331 | 331 | 327 | 329 | 330 | 331 | 331 | 331 |
| 2 | Tamilnadu | 312 | 313 | 316 | 319 | 320 | 322 | 324 | 327 | 339 | 354 | 352 | 352 |
| 3 | Anthrapradesh | 327 | 330 | 332 | 335 | 335 | 337 | 338 | 340 | 345 | 344 | 341 | 342 |
| 4 | Karnataka | 311 | 311 | 315 | 315 | 316 | 317 | 321 | 321 | 323 | 325 | 328 | 329 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 304 | 304 | 309 | 314 | 316 | 319 | 321 | 321 | 321 | 319 | 319 | 320 |
| 6 | Haryana | 321 | 321 | 323 | 325 | 330 | 333 | 334 | 333 | 331 | 327 | 324 | 328 |
| 7 | West Bengal | 303 | 302 | 300 | 302 | 303 | 308 | 312 | 316 | 313 | 307 | 302 | 303 |
| 8 | Uttar Pradesh | 316 | 312 | 312 | 319 | 324 | 327 | 330 | 330 | 327 | 322 | 321 | 326 |
| 9 | Madhya Pradesh | 310 | 312 | 315 | 318 | 322 | 325 | 325 | 326 | 326 | 319 | 315 | 318 |
| 10 | Assam | 319 | 320 | 320 | 322 | 323 | 328 | 331 | 332 | 331 | 329 | 325 | 326 |
| 11 | Bihar | 292 | 294 | 290 | 293 | 295 | 298 | 300 | 302 | 302 | 298 | 295 | 301 |
| 12 | Gujarat | 317 | 320 | 323 | 326 | 331 | 334 | 335 | 334 | 334 | 330 | 327 | 328 |
| 13 | Himachalpradesh | 302 | 302 | 306 | 308 | 305 | 310 | 310 | 314 | 314 | 315 | 313 | 312 |
| 14 | Jammu & Kashmir | 324 | 325 | 331 | 326 | 326 | 328 | 329 | 333 | 336 | 338 | 341 | 340 |
| 15 | Manipur | 303 | 299 | 297 | 298 | 296 | 296 | 300 | 301 | 302 | 301 | 299 | 300 |
| 16 | Meghalaya | 350 | 350 | 345 | 341 | 338 | 342 | 340 | 343 | 340 | 341 | 338 | 338 |
| 17 | Orissa | 287 | 290 | 293 | 295 | 297 | 300 | 301 | 302 | 300 | 294 | 293 | 291 |
| 18 | Punjab | 215 | 330 | 330 | 332 | 336 | 339 | 340 | 338 | 337 | 330 | 329 | 330 |
| 19 | Rajastan | 312 | 313 | 315 | 319 | 320 | 324 | 328 | 327 | 328 | 325 | 323 | 323 |
| 20 | Tripura | 313 | 321 | 315 | 317 | 321 | 319 | 321 | 323 | 328 | 328 | 326 | 317 |
| | **All India** | **311** | **312** | **313** | **317** | **319** | **321** | **323** | **324** | **326** | **324** | **322** | **324** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR RURAL LABOURERS

**Base 1986-87 = 100]**

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Jan-02 | Jan-03 | | Feb-02 | Feb-03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 322 | 331 | 2.80 | 325 | 331 | 1.85 |
| 2 | Tamilnadu | 314 | 352 | 12.10 | 313 | 352 | 12.46 |
| 3 | Anthrapradesh | 325 | 341 | 4.92 | 325 | 342 | 5.23 |
| 4 | Karnataka | 309 | 328 | 6.15 | 309 | 329 | 6.47 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 305 | 319 | 4.59 | 304 | 320 | 5.26 |
| 6 | Haryana | 321 | 324 | 0.93 | 322 | 328 | 1.86 |
| 7 | West Bengal | 303 | 302 | -0.33 | 301 | 303 | 0.66 |
| 8 | Uttar Pradesh | 313 | 321 | 2.56 | 315 | 326 | 3.49 |
| 9 | Madhya Pradesh | 309 | 315 | 1.94 | 308 | 318 | 3.25 |
| 10 | Assam | 319 | 325 | 1.88 | 317 | 326 | 2.84 |
| 11 | Bihar | 292 | 295 | 1.03 | 292 | 301 | 3.08 |
| 12 | Gujarat | 313 | 327 | 4.47 | 315 | 328 | 4.13 |
| 13 | Himachalpradesh | 301 | 313 | 3.99 | 304 | 312 | 2.63 |
| 14 | Jammu & Kashmir | 321 | 341 | 6.23 | 323 | 340 | 5.26 |
| 15 | Manipur | 300 | 299 | -0.33 | 300 | 300 | 0.00 |
| 16 | Meghalaya | 348 | 338 | -2.87 | 347 | 338 | -2.59 |
| 17 | Orissa | 294 | 293 | -0.34 | 286 | 291 | 1.75 |
| 18 | Punjab | 327 | 329 | 0.61 | 327 | 330 | 0.92 |
| 19 | Rajastan | 308 | 323 | 4.87 | 310 | 323 | 4.19 |
| 20 | Tripura | 307 | 326 | 6.19 | 309 | 317 | 2.59 |
| | **All India** | **311** | **322** | **3.54** | **311** | **324** | **4.18** |

# CONSUMER PRICE INDEX FOR INDUSTRIAL & AGRICULTURAL WORKERS

## (Kerala State) Base 1998-99=100

| Centre | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thiruvananthapuram | 114 | 114 | 114 | 115 | 116 | 117 | 117 | 117 | 118 | 119 | 120 | 120 |
| Kollam | 115 | 115 | 116 | 117 | 117 | 118 | 118 | 118 | 119 | 121 | 121 | 121 |
| Pathanamthitta | 112 | 112 | 113 | 113 | 114 | 115 | 113 | 113 | 113 | 113 | 114 | 114 |
| Punalur | 112 | 112 | 113 | 113 | 113 | 113 | 115 | 115 | 116 | 116 | 116 | 117 |
| Alappuzha | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 |
| Kottayam | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 | 116 | 116 | 116 | 116 |
| Mundakkayam | 111 | 111 | 111 | 112 | 113 | 114 | 114 | 114 | 114 | 115 | 115 | 115 |
| Munnar | 114 | 114 | 114 | 115 | 116 | 116 | 115 | 115 | 115 | 115 | 114 | 114 |
| Ernakulam | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 | 116 | 116 | 116 | 116 |
| Chalakkudy | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 |
| Thrissur | 114 | 113 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 115 | 115 | 115 |
| Palakkad | 111 | 111 | 111 | 112 | 113 | 114 | 114 | 114 | 115 | 115 | 115 | 115 |
| Malappuram | 112 | 112 | 112 | 113 | 114 | 115 | 114 | 114 | 115 | 115 | 116 | 116 |
| Kozhikkode | 113 | 112 | 113 | 113 | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 |
| Meppady | 114 | 114 | 114 | 115 | 115 | 116 | 115 | 115 | 115 | 115 | 114 | 114 |
| Kannur | 114 | 113 | 114 | 114 | 114 | 115 | 114 | 114 | 115 | 115 | 115 | 115 |
| Kasargod | 112 | 112 | 113 | 113 | 113 | 113 | 113 | 114 | 115 | 115 | 115 | 116 |
| **State** | **113** | **113** | **113** | **114** | **114** | **115** | **114** | **114** | **115** | **115** | **116** | **116** |

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

| Sl. No | Name of Commodity | Unit | Mar 02 | Apr 02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **A. RICE - Open Market** | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 11.96 | 11.91 | 11.89 | 11.91 | 12.32 | 12.80 | 12.95 | 12.93 | 13.30 | 13.25 | 13.29 | 13.29 |
| 2 | Red - Chamba | Kg | 12.29 | 12.36 | 12.36 | 11.81 | 12.20 | 12.88 | 13.39 | 12.96 | 13.04 | 13.59 | 13.69 | 13.65 |
| 3 | White Andra Vella | Kg | 11.70 | 11.91 | 11.82 | 11.93 | 12.16 | 12.15 | 12.03 | 11.95 | 12.45 | 11.52 | 12.55 | 12.60 |
| | **B. PULSES** | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 30.07 | 30.93 | 31.29 | 31.32 | 31.14 | 30.54 | 30.96 | 30.21 | 30.54 | 30.29 | 29.54 | 29.64 |
| 5 | Black gram split w/o husk | Kg | 32.75 | 32.68 | 34.25 | 34.96 | 34.04 | 33.32 | 33.13 | 32.32 | 31.04 | 29.79 | 28.11 | 27.14 |
| 6 | Dhall(Tur) | Kg | 28.88 | 28.92 | 29.69 | 30.00 | 30.31 | 30.73 | 31.13 | 31.15 | 31.15 | 31.12 | 30.19 | 30.77 |
| | **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 15.30 | 15.24 | 15.07 | 14.74 | 14.59 | 14.52 | 14.69 | 14.49 | 13.89 | 13.32 | 13.30 | 13.22 |
| 8 | Milk (Cow's) | Ltr. | 13.04 | 13.07 | 13.18 | 13.00 | 13.00 | 12.50 | 13.00 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 |
| 9 | Egg Hen's (White lagon) | Dozen | 16.00 | 15.04 | 14.92 | 17.14 | 17.04 | 14.89 | 15.23 | 14.38 | 16.21 | 16.41 | 16.01 | 16.54 |
| 10 | Mutton with bones | Kg | 116.43 | 116.43 | 120.71 | 120.71 | 120.00 | 121.79 | 121.43 | 122.14 | 121.43 | 121.43 | 123.57 | 123.57 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 70.68 | 70.68 | 71.21 | 71.14 | 71.14 | 71.07 | 71.00 | 71.07 | 71.07 | 71.07 | 71.21 | 71.21 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.25 | 69.25 | 69.13 | 69.13 | 69.20 | 69.20 | 69.20 | 69.20 | 69.20 | 69.20 | 68.70 | 66.70 |
| | **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 40.04 | 44.64 | 43.86 | 45.79 | 52.14 | 52.64 | 51.04 | 49.57 | 56.93 | 61.61 | 58.75 | 62.55 |
| 14 | Groundnut oil | Kg | 49.87 | 51.50 | 52.50 | 51.48 | 53.48 | 53.38 | 56.20 | 56.38 | 57.88 | 59.53 | 59.13 | 60.66 |
| 15 | Refined oil(Postman) | Kg. | 59.40 | 61.50 | 62.10 | 62.74 | 64.93 | 65.83 | 65.65 | 63.87 | 71.20 | 76.42 | 73.87 | 75.63 |
| 16 | Gingelly oil | Kg. | 51.18 | 53.29 | 53.57 | 54.79 | 54.79 | 54.46 | 56.85 | 58.05 | 59.05 | 60.29 | 62.39 | 64.93 |
| 17 | Coconut without husk | 100 nos | 429.64 | 443.93 | 440.71 | 452.50 | 480.36 | 482.14 | 480.77 | 469.64 | 526.79 | 576.79 | 570.36 | 591.07 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | Mar 02 | Apr-02 | May 02 | Jun 02 | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 33.57 | 33.64 | 33.14 | 33.21 | 33.29 | 32.93 | 35.00 | 34.29 | 36.64 | 37.86 | 37.79 | 38.21 |
| 19 | Chillies dry | Kg. | 39.36 | 38.86 | 39.71 | 42.07 | 43.00 | 43.07 | 45.00 | 51.93 | 52.71 | 52.29 | 51.29 | 49.64 |
| 20 | Onion small | Kg. | 10.74 | 10.61 | 11.60 | 13.85 | 18.15 | 15.38 | 16.02 | 19.27 | 22.20 | 21.79 | 11.36 | 11.52 |
| 21 | Tamarind without seeds loose | Kg. | 23.21 | 22.07 | 22.71 | 22.36 | 22.64 | 22.79 | 23.69 | 24.29 | 24.86 | 25.21 | 24.71 | 23.07 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 8.07 | 9.86 | 10.00 | 12.14 | 12.00 | 10.36 | 9.15 | 8.29 | 9.07 | 9.21 | 9.86 | 11.86 |
| 23 | Tapioca Raw | Kg. | 4.89 | 5.21 | 5.07 | 4.96 | 5.32 | 5.54 | 5.62 | 5.82 | 5.89 | 5.86 | 5.96 | 5.96 |
| 24 | Potato | Kg. | 8.63 | 9.64 | 10.44 | 11.57 | 11.59 | 11.98 | 11.09 | 11.99 | 12.13 | 10.59 | 9.29 | 8.46 |
| 25 | Colocassia | Kg. | 13.00 | 13.82 | 15.18 | 14.30 | 14.00 | 14.08 | 14.69 | 13.29 | 13.21 | 12.14 | 11.71 | 12.43 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 5.90 | 5.51 | 5.36 | 6.19 | 6.85 | 7.96 | 8.40 | 8.54 | 10.31 | 7.99 | 6.50 | 5.95 |
| 27 | Brinjal | Kg. | 10.29 | 10.93 | 10.21 | 10.43 | 10.29 | 10.00 | 9.85 | 9.64 | 11.29 | 11.14 | 8.64 | 8.57 |
| 28 | Cucumber | Kg. | 6.14 | 6.21 | 5.93 | 7.93 | 8.14 | 6.79 | 8.23 | 7.93 | 9.14 | 6.57 | 7.00 | 7.64 |
| 29 | Ladies Finger | Kg. | 12.14 | 11.43 | 10.36 | 10.43 | 11.14 | 11.21 | 11.15 | 10.93 | 10.14 | 9.57 | 9.50 | 10.14 |
| 30 | Cabbage | Kg | 8.71 | 8.36 | 9.14 | 8.71 | 9.00 | 9.50 | 7.69 | 8.64 | 9.14 | 8.86 | 8.43 | 8.21 |
| 31 | Bittergourd | Kg. | 11.86 | 13.50 | 12.79 | 14.46 | 14.00 | 12.14 | 12.85 | 14.43 | 14.93 | 13.21 | 12.64 | 12.21 |
| 32 | Tomatto | Kg. | 7.71 | 8.07 | 8.64 | 11.36 | 9.57 | 10.71 | 8.54 | 9.14 | 11.93 | 8.71 | 7.21 | 7.21 |
| 33 | Chillies green | Kg. | 14.00 | 14.29 | 12.86 | 17.43 | 14.57 | 16.21 | 14.69 | 15.00 | 15.57 | 14.43 | 15.57 | 13.86 |
| 34 | Banana green | Kg. | 10.11 | 11.61 | 12.00 | 11.18 | 11.61 | 12.32 | 11.85 | 10.96 | 11.39 | 10.79 | 12.68 | 13.61 |
| 35 | Plantain green | Kg. | 8.54 | 8.61 | 8.43 | 8.46 | 8.71 | 8.71 | 9.46 | 8.89 | 9.57 | 9.07 | 8.93 | 9.36 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.71 | 7.73 | 7.73 | 7.71 | 7.80 | 7.86 | 7.88 | 7.91 | 7.95 | 7.95 | 7.96 | 7.95 |
| 37 | Toilet Soap Lux | 100 gm | 11.07 | 11.32 | 11.32 | 11.29 | 11.46 | 11.57 | 11.71 | 11.86 | 11.89 | 11.75 | 11.79 | 11.96 |
| 38 | Toothpaste Colgate | 100 gm | 29.07 | 29.79 | 29.79 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 173.69 | 168.96 | 164.32 | 154.77 | 149.95 | 151.68 | 138.67 | 130.21 | 142.75 | 153.32 | 169.05 | 171.54 |

## Petroleum Prices-January 2003

| | Petrol | | | Diesel | | |
|---|---|---|---|---|---|---|
| | Existing price | After revision | Increase | Existing price | After revision | Increase |
| Delhi | 28.91 | 29.93 | 1.02 | 18.06 | 19.07 | 1.01 |
| Mumbai | 30.42 | 31.44 | 1.02 | 19.43 | 20.45 | 1.02 |
| Kolkatta | 33.63 | 34.73 | 1.10 | 23.03 | 24.24 | 1.21 |
| Chennai | 31.45 | 32.55 | 1.10 | 19.83 | 20.93 | 1.10 |

### Revised Petrol/ Diesel Prices-January 2003
*Old prices in brackets*

| Place | Petrol (Rs/ litre) | Diesel (Rs/ litre) |
|---|---|---|
| Thiruvananthapuram | 32.47 (31.38) | 21.29 (20.17) |
| Kollam | 32.50 (31.41) | 21.32 (20.20) |
| Pathanamthitta | 32.31 (31.23) | 21.14 (20.02) |
| Alappuzha | 32.45 (31.36) | 21.27 (20.15) |
| Kottayam | 32.33 (31.24) | 21.15 (20.04) |
| Iddukki | 32.53 (31.44) | 21.30 (20.19) |
| Eranakulam | 32.21(31.12) | 21.04 (19.92) |
| Thrissur | 32.34(31.25) | 21.17 (20.05) |
| Palakkad | 32.42(31.34) | 21.24 (20.12) |
| Malappuram | 32.58(31.49) | 21.39 (20.27) |
| Kozhikode | 32.48(31.39) | 21.29 (20.18) |
| Wayanadu | 32.70(31.62) | 21.47 (20.35) |
| Kannur | 32.41(31.32) | 21.23 (20.11) |
| Kasaragod | 32.61(31.53) | 21.43 (20.31) |
| Mahe | 28.69 (27.70) | 19.48 (18.43) |

### Revised Petrol Price *
**The following is the petrol and diesel prices effective from January16, 2003(Old prices in brackets)**

| Place | Petrol (Rs/ litre) | Diesel (Rs/ litre) |
|---|---|---|
| Thiruvananthapuram | 32.90 (32.47) | 21.74 (21.29) |
| Kollam | 32.93 (32.50) | 21.77 (21.32) |
| Pathanamthitta | 32.75 (32.31) | 21.59 (21.14) |
| Alappuzha | 32.88 (32.45) | 21.72 (21.27) |
| Kottayam | 32.76 (32.33) | 21.60 (21.15) |
| Iddukki | 32.97 (32.53) | 21.75 (21.30) |
| Eranakulam | 32.64 (32.21) | 21.49 (21.04) |
| Thrissur | 32.78 (32.34) | 21.62 (21.17) |
| Palakkad | 32.86 (32.42) | 21.69 (21.24) |
| Malappuram | 33.01 (32.58) | 21.84 (21.39) |
| Kozhikode | 32.91 (32.48) | 21.75 (21.29) |
| Wayanadu | 33.14 (32.70) | 21.92 (21.47) |
| Kannur | 32.85 (32.41) | 21.68 (21.23) |
| Kasaragod | 33.05 (32.61) | 21.88 (21.43) |
| Mahe | 29.08 (28.69) | 19.91 (19.48) |

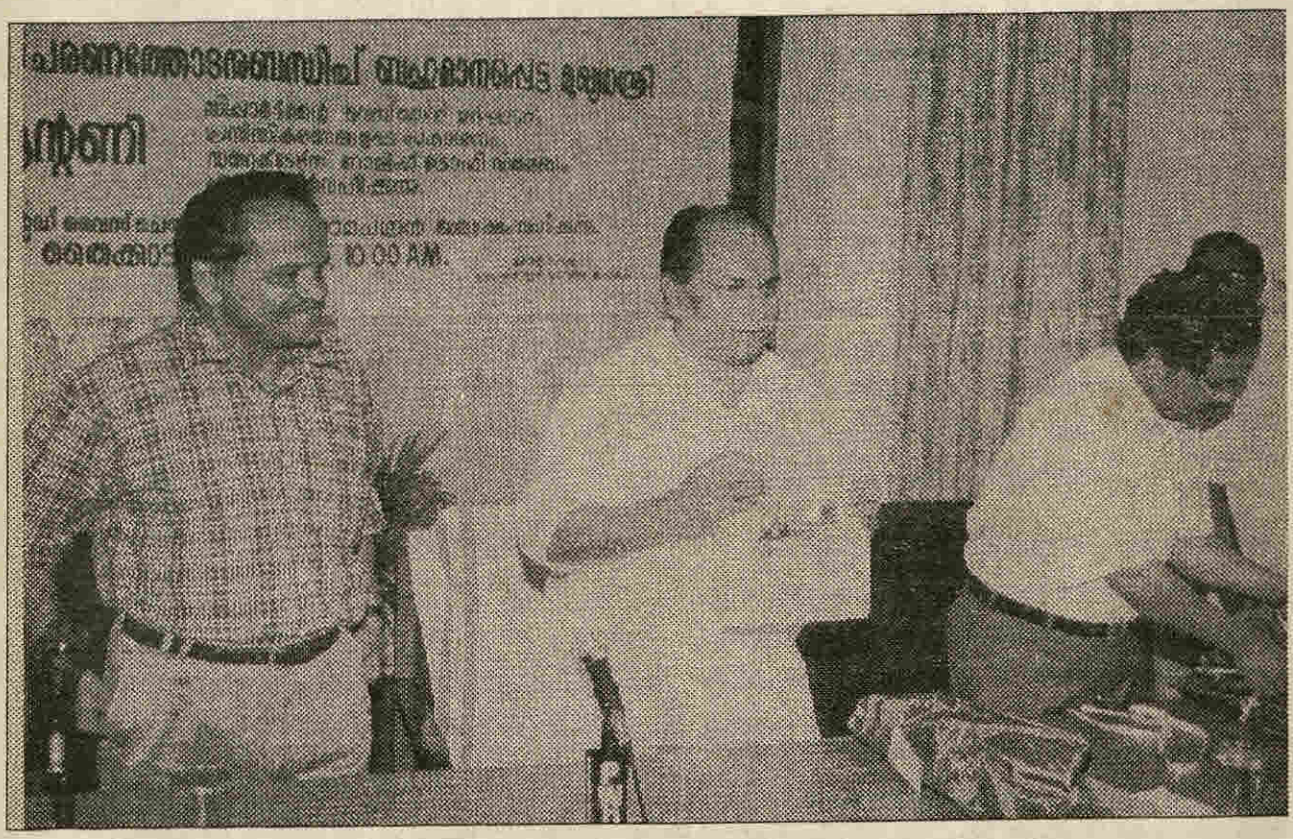
* Price in Rs.

Printed and Published by Department of Economics & Statistics, Government of Kerala

# EcoStat News

April/June 2003
Volume - 3 Issue – 2 & 3

*For Official Use only*



## Inside this issue

- Population
- Agriculture
- Banking Statistics
- Employment
- Data- Cashew
- Indices
- Prices
- News
- Article
- Cyber Corner

**Department of Economics & Statistics**
**Government of Kerala**

# From Editors Desk

*This is the second issue of year 2003. This issue includes very useful articles and data on various socio economic aspects, especially article on Post Iraq War Global Economic scenario and data on Employment.*

*Twenty first June 2003 was a remarkable day for the department, when the Honorable Chief Minister of Kerala Sri. A. K. Antony launched the official web site "ecostatkerala.org" and released five publications namely Kerala Through Plans, NORKA, Survey on Activity Status of Live Registrants Registered in Employment Exchanges, Quick Report on Aged in Kerala and Agro Climatic Zone with report on important crops in Kerala 2001-2002. I hope that the department web site will help the planners and scholars to have access to on line data for their day to day usage.*

*The study on NORKA points out the socio-economic condition of migrant families with other families and the impact of foreign remittance on the States economy and the Standard of living of the people.*

*The preliminary report on Aged in Kerala reveals that 21.61 lakh families have old age persons, which is 31.27% of total households.*

*I am very happy to appreciate the teamwork of officers of the department for releasing the above publications in time and also expects the corporation of all staff for organising new studies and releasing more publications in the near future.*

***M.R. Balakrishnan***

**Director & Chief Editor**



**Design : K. K. Basand Kumar**

**Type setting: Samila Ramachandran**

*Edited printed & published for Department of Economics and Statistics, Government of Kerala.*

# Contents


| | Page |
|---|---|
| Population | 3 |
| Agriculture | 6 |
| Banking Statistics | 11 |
| Employment | 15 |
| Data – Cashew | 16 |
| Indices | 19 |
| Prices | 29 |
| News | 32 |
| Article | 47 |
| Cyber Corner | 51 |
| In House | 55 |

## Table 1 – Area and Population by States (Census 2001)

| State/ Union Territory | Area in sq. kms. | Population | | | | |
|---|---|---|---|---|---|---|
| | | Males | Females | Persons | Rural | Urban |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **India (1)** | 3287263 | 531277078 | 495738169 | 1027015247 | 741660293 | 285354954 |
| **State:** | | | | | | |
| Andhra Pradesh | 275045 | 38286811 | 37440730 | 75727541 | 55223944 | 20503597 |
| Arunachal Pradesh | 83743 | 573951 | 517166 | 109117 | 868429 | 222688 |
| Assam | 78438 | 13787799 | 12850608 | 26638407 | 23248994 | 3389413 |
| Bihar | 173877 | 43153964 | 39724832 | 82878796 | 74199596 | 8679200 |
| Chhatisgarh | | 10452426 | 10343530 | 20795956 | 16620627 | 4175329 |
| Goa | 3702 | 685617 | 658381 | 1343998 | 675129 | 668869 |
| Gujarat | 196024 | 26344053 | 24252939 | 50596992 | 31697615 | 18899377 |
| Haryana | 44212 | 11327658 | 9755331 | 21082989 | 14968850 | 6114139 |
| Himachal Pradesh | 55673 | 3085256 | 2991992 | 6077248 | 5482367 | 594881 |
| Jammu & Kashmir(1 | 222236 | 5300574 | 4769343 | 10069917 | 7564608 | 2505309 |
| Jharkhand | | 13861277 | 13048151 | 26909428 | 20922731 | 5986697 |
| Karnataka | 191791 | 26856343 | 25877615 | 52733958 | 34814100 | 17919858 |
| Kerala | 38863 | 15468664 | 16369955 | 31838619 | 23571484 | 8267135 |
| Madhya Pradesh | 443446 | 31456873 | 28928245 | 60385118 | 44282528 | 16102590 |
| Maharashtra | 307713 | 50334270 | 46417977 | 96752247 | 55732513 | 41019734 |
| Manipur | 22327 | 1207338 | 1181296 | 2388634 | 1818224 | 570410 |
| Meghalaya | 22429 | 1167840 | 1138229 | 2306069 | 1853457 | 452612 |
| Mizoram | 21081 | 459783 | 431275 | 891058 | 450018 | 441040 |
| Nagaland | 16579 | 1041686 | 946950 | 1988636 | 1635815 | 352821 |
| Orissa | 155707 | 18612340 | 18094580 | 36706920 | 31210602 | 5496318 |
| Punjab | 50362 | 12963362 | 11325934 | 24289296 | 16043730 | 8245566 |
| Rajasthan | 342239 | 29381657 | 27091465 | 56473122 | 43267678 | 13205444 |
| Sikkim | 7096 | 288217 | 252276 | 540493 | 480488 | 60005 |
| Tamil Nadu | 130058 | 31268654 | 30842185 | 62110839 | 34869286 | 27241553 |
| Tripura | 10486 | 1636138 | 1555030 | 3191168 | 2648074 | 543094 |
| Uttar Pradesh | 294411 | 87466301 | 78586558 | 166052859 | 131540230 | 34512629 |
| Uttaranchal | | 4316401 | 4163161 | 8479562 | 6309317 | 2170245 |
| West Bengal | 88752 | 41487694 | 38733477 | 80221171 | 57734690 | 22486481 |
| **Union Territory:** | | | | | | |
| A.& N.Islands | 8249 | 192985 | 163280 | 356265 | 239858 | 116407 |
| Chandigargh | 114 | 508224 | 392690 | 900914 | 92118 | 808796 |
| D.& N.Haveli | 491 | 121731 | 98720 | 220451 | 169995 | 50456 |
| Daman & Diu | 112 | 92478 | 65581 | 158059 | 100740 | 57319 |
| Delhi | 1483 | 7570890 | 6212086 | 13782976 | 963215 | 12819761 |
| Lakshadweep | 32 | 31118 | 29477 | 60595 | 33647 | 26948 |
| Pondicherry | 492 | 486705 | 487124 | 973829 | 325596 | 648233 |

(1) The 1991 census was not held in J & K. The population of India includes the projected population of J & K as on 1.3.1991 made by the Standing Committee of Experts on Population projections (Oct 1989). The projected population of J & K excludes the population of area under unlawful occupation of Pakistan and China.

## Table II – Estimated Birth Rates, Death Rates and Infant Mortality Rates by Residence

*(Per Thousands)*

| Year/ State/ Union Territory | Birth Rate | | | Death Rate | | | Infant Mortality Rate(IMR) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* |
| 1991 | 29.5 | 30.9 | 24.3 | 9.8 | 10.6 | 7.1 | 80 | 87 | 53 |
| 1992 | 29.2 | 30.9 | 23.1 | 10.1 | 10.9 | 7.0 | 79 | 85 | 53 |
| 1993 | 28.7 | 30.4 | 23.7 | 9.3 | 10.6 | 5.8 | 74 | 82 | 45 |
| 1994 | 28.7 | 30.5 | 23.1 | 9.3 | 10.1 | 6.7 | 74 | 80 | 52 |
| 1995 | 28.3 | 30.0 | 22.7 | 9.0 | 9.8 | 6.6 | 74 | 80 | 48 |
| 1996 | 27.5 | 29.3 | 21.6 | 9.0 | 9.7 | 6.5 | 72 | 77 | 46 |
| 1997 | 27.2 | 28.9 | 21.5 | 8.9 | 9.6 | 6.5 | 71 | 77 | 45 |
| 1998(1) | 26.5 | 28.0 | 21.0 | 9.0 | 9.7 | 6.6 | 72 | 77 | 45 |
| 1999(1) | 26.0 | 27.6 | 20.8 | 8.6 | 9.4 | 6.3 | 70 | 75 | 44 |
| 2000(1) | 25.8 | 27.5 | 20.7 | 8.5 | 9.3 | 6.3 | 68 | 74 | 43 |
| **State: 2000** | | | | | | | | | |
| Andhra Pradesh | 21.3 | 21.7 | 20.1 | 8.2 | 9.0 | 5.8 | 65 | 74 | 36 |
| Arunachal Pradesh | 22.3 | 23.1 | 13.9 | 6.0 | 6.3 | 2.5 | 44 | 45 | 11 |
| Assam | 26.9 | 27.9 | 18.6 | 9.6 | 10.0 | 6.1 | 75 | 78 | 35 |
| Bihar | 31.9 | 32.8 | 25.6 | 8.8 | 9.1 | 7.1 | 62 | 63 | 53 |
| Chhatisgarh | 26.7 | 29.2 | 22.8 | 9.6 | 11.2 | 7.1 | 79 | 95 | 49 |
| Goa | 14.3 | 14.3 | 14.2 | 7.4 | 7.9 | 6.7 | 23 | 24 | 21 |
| Gujarat | 25.2 | 26.8 | 21.9 | 7.5 | 8.3 | 5.8 | 62 | 69 | 45 |
| Haryana | 26.9 | 27.9 | 23.0 | 7.5 | 7.9 | 6.2 | 67 | 69 | 57 |
| Himachal Pradesh | 22.1 | 22.5 | 16.9 | 7.2 | 7.3 | 5.5 | 60 | 62 | 37 |
| Jammu & Kashmir (1) | 19.6 | 20.3 | 16.5 | 6.2 | 6.3 | 5.9 | 50 | 51 | 45 |
| Jharkhand | 26.5 | 28.8 | 19.4 | 9.0 | 9.8 | 6.5 | 70 | 74 | 48 |
| Karnataka | 22.0 | 23.3 | 19.1 | 7.8 | 8.6 | 5.7 | 57 | 68 | 24 |
| Kerala | 17.9 | 18.0 | 17.5 | 6.4 | 6.5 | 6.2 | 14 | 14 | 14 |
| Madhya Pradesh | 31.2 | 33.2 | 23.5 | 10.2 | 11.0 | 7.5 | 88 | 94 | 54 |
| Maharashtra | 20.9 | 21.2 | 20.3 | 7.5 | 8.6 | 5.7 | 48 | 57 | 33 |
| Manipur | 18.3 | 19.1 | 16.2 | 5.6 | 5.4 | 6.0 | 23 | 23 | 25 |
| Meghalaya | 28.5 | 31.0 | 15.3 | 9.2 | 10.1 | 4.6 | 58 | 61 | 32 |
| Mizoram | 16.9 | 18.8 | 14.5 | 5.2 | 6.3 | 3.7 | 21 | 24 | 15 |
| Nagaland | - | - | 12.2 | - | - | 3.0 | - | - | 23 |
| Orissa | 24.3 | 24.8 | 20.1 | 10.5 | 11.0 | 7.0 | 96 | 99 | 66 |
| Punjab | 21.5 | 22.6 | 18.5 | 7.3 | 7.8 | 5.8 | 52 | 56 | 38 |
| Rajasthan | 31.2 | 32.6 | 25.0 | 8.4 | 8.8 | 6.5 | 79 | 83 | 58 |
| Sikkim | 21.8 | 22.1 | 14.8 | 5.7 | 5.7 | 4.0 | 49 | 49 | 36 |
| Tamil Nadu | 19.2 | 19.9 | 18.0 | 7.9 | 8.6 | 6.4 | 51 | 57 | 38 |
| Tripura | 16.5 | 17.0 | 14.0 | 5.4 | 5.3 | 5.6 | 41 | 42 | 32 |
| Uttar Pradesh | 32.8 | 34.0 | 27.2 | 10.3 | 10.8 | 8.0 | 83 | 87 | 65 |
| Uttaranchal | 20.2 | 24.6 | 17.1 | 6.9 | 10.3 | 4.5 | 50 | 73 | 26 |
| West Bengal | 20.6 | 23.0 | 14.0 | 7.0 | 7.1 | 6.7 | 51 | 54 | 37 |
| **Union Territory:** | | | | | | | | | |
| A.& N.Islands | 19.1 | 19.0 | 19.3 | 5.1 | 5.7 | 3.4 | 23 | 27 | 10 |
| Chandigargh | 17.5 | 18.9 | 17.3 | 3.9 | 3.8 | 3.9 | 28 | 28 | 26 |
| D.& N.Haveli | 34.9 | 35.9 | 24.0 | 7.8 | 8.2 | 3.5 | 58 | 62 | 14 |
| Daman & Diu | 23.7 | 21.8 | 25.4 | 6.6 | 7.1 | 6.2 | 48 | 38 | 57 |
| Delhi | 20.3 | 21.4 | 20.1 | 5.1 | 5.0 | 5.1 | 32 | 32 | 32 |
| Lakshadweep | 26.1 | 27.6 | 24.6 | 6.0 | 7.1 | 4.9 | 27 | 25 | 29 |
| Pondicherry | 17.8 | 18.4 | 17.4 | 6.5 | 7.2 | 6.0 | 23 | 33 | 15 |

(1) Excludes Nagaland (Rural) due to part-receipt of returns.

**Note:** IMR for smaller States & Union Territories are for three-year period 1996-98.

## Table III – Expectation of Life

*(Per Thousands)*

| Year/ States | At Birth | | Age 10 | | Age 20 | | Age 30 | |
|---|---|---|---|---|---|---|---|---|
| | Male | female | Male | female | Male | female | Male | female |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| 1990(1) | 57.7 | 58.1 | 56.7 | 58.5 | 47.5 | 49.7 | 38.6 | 41.1 |
| 1991(1) | 58.1 | 58.6 | 57.1 | 58.8 | 48.0 | 49.9 | 39.0 | 41.2 |
| 1992(1) | 58.6 | 59.0 | 57.2 | 58.7 | 48.0 | 49.8 | 39.0 | 41.1 |
| 1993(1) | 59.0 | 59.7 | 57.1 | 59.0 | 47.9 | 50.0 | 38.9 | 41.4 |
| 1994(1) | 59.4 | 60.4 | 57.3 | 59.3 | 48.1 | 50.3 | 39.1 | 41.6 |
| 1995(1) | 59.7 | 60.9 | 57.5 | 59.8 | 48.3 | 50.8 | 39.3 | 42.2 |
| 1996(1) | 60.1 | 61.4 | 57.7 | 60.2 | 48.5 | 51.2 | 39.5 | 42.6 |
| 1997(1) | 60.4 | 61.8 | 57.8 | 60.4 | 48.5 | 51.3 | 39.5 | 42.7 |
| **1997** | | | | | | | | |
| Andhra Pradesh | 61.2 | 63.5 | 57.1 | 59.1 | 47.8 | 50.0 | 38.8 | 41.2 |
| Assam | 56.6 | 57.1 | 55.0 | 56.0 | 45.8 | 47.2 | 36.8 | 38.9 |
| Bihar | 60.4 | 58.4 | 58.7 | 58.0 | 49.5 | 49.2 | 40.6 | 40.8 |
| Gujarat | 60.9 | 62.9 | 57.2 | 60.5 | 47.8 | 51.2 | 38.8 | 42.2 |
| Haryana | 63.7 | 64.6 | 60.3 | 63.7 | 51.0 | 54.6 | 42.1 | 45.8 |
| Himachal Pradesh | 64.6 | 62.2 | 60.1 | 61.1 | 50.6 | 51.7 | 42.0 | 42.7 |
| Karnataka | 61.6 | 64.9 | 57.3 | 61.1 | 47.8 | 51.9 | 38.8 | 43.0 |
| Kerala | 70.4 | 75.9 | 62.0 | 67.3 | 52.3 | 57.6 | 42.9 | 48.1 |
| Madhya Pradesh | 55.6 | 55.2 | 56.0 | 56.4 | 46.9 | 47.6 | 38.0 | 39.0 |
| Maharashtra | 64.4 | 66.6 | 59.2 | 61.8 | 49.7 | 52.6 | 40.5 | 43.6 |
| Orissa | 57.1 | 57.0 | 56.6 | 56.3 | 47.4 | 47.3 | 38.8 | 38.8 |
| Punjab | 66.7 | 68.8 | 61.4 | 65.4 | 52.1 | 56.3 | 43.6 | 47.3 |
| Rajasthan | 59.1 | 60.1 | 57.2 | 59.9 | 47.9 | 50.7 | 38.9 | 41.8 |
| Tamil Nadu | 63.2 | 65.1 | 57.5 | 59.8 | 48.1 | 50.5 | 39.2 | 41.7 |
| Uttar Pradesh | 58.1 | 56.9 | 56.8 | 57.0 | 47.7 | 47.9 | 38.7 | 39.3 |
| West Bengal | 62.2 | 63.6 | 58.3 | 60.1 | 49.0 | 50.9 | 39.9 | 41.7 |

## Human Development Index – 2002

| | Index | World | India |
|---|---|---|---|
| 1 | Life Expectancy at Birth | 66.9 | 62.9 |
| 2 | Adult Literacy Rate | 78.8 | 55.7 |
| 3 | GDP per capita | 6526 | 2077 |
| 4 | Life Expectancy | 70 | 63 |
| 5 | Education Index | 0.7 | 0.51 |
| 6 | Human Development Index | 0.712 | 0.563 |

*Source: World Development Report 2002.*

## Table I – Pattern Of Land Utilisation

*(Hectare)*

| Year/ State/ Union Territory | Reporting area for land utilisation statistics | Classification of reported area | | | | |
|---|---|---|---|---|---|---|
| | | Forests | Not available for cultivation | Permanent pastures & other grazing lands | Land under misc. tree crops & groves (not included in net area sown | Culturable waste land |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1990-91 | 304862 | 67805 | 40476 | 11404 | 3818 | 14995 |
| 1992-93 | 304845 | 67984 | 40912 | 11074 | 3755 | 14573 |
| 1993-94 | 304864 | 68314 | 40926 | 10959 | 3708 | 14409 |
| 1994-95 | 304829 | 68603 | 41019 | 11034 | 3732 | 14262 |
| 1995-96 | 304875 | 68817 | 41371 | 11064 | 3481 | 14098 |
| 1996-97 | 304878 | 68750 | 41543 | 11040 | 3567 | 13947 |
| 1997-98 | 305786 | 69012 | 42136 | 11046 | 3616 | 13880 |
| 1998-99 | 306046 | 68973 | 42354 | 11105 | 3600 | 13965 |
| **1998-99 (State & Union Territory)** | | | | | | |
| Andhra Pradesh | 27440 | 6199 | 4701 | 686 | 241 | 77 |
| Arunachal Pradesh (1) | 5495 | 5154 | 48 | # | 44 | # |
| Assam (2) | 7850 | 1930 | 2510 | 167 | 236 | 80 |
| Bihar | 17330 | 2949 | 3438 | 106 | 344 | 323 |
| Goa | 361 | 125 | 37 | 1 | 1 | 55 |
| Gujarat (3) | 18812 | 1859 | 3744 | 849 | 4 | 1980 |
| Haryana | 4394 | 115 | 439 | 24 | 5 | 37 |
| Himachal Pradesh (3) | 4531 | 1077 | 1148 | 1493 | 71 | 107 |
| Jammu & Kashmir | 4505@ | 2747$ | 582 | 126 | 72 | 140 |
| Karnataka | 19050 | 3063 | 2095 | 987 | 312 | 435 |
| Kerala | 3885 | 1082 | 362 | 1 | 20 | 63 |
| Madhya Pradesh | 44349 | 14708 | 4217 | 2568 | 18 | 1505 |
| Maharashtra | 30758 | 5366 | 2940 | 1341 | 222 | 888 |
| Manipur (4) | 2211 | 602 | 1445 | # | 24 | # |
| Meghalaya | 2241@ | 932 | 225 | - | 158 | 470 |
| Mizoram | 2109 | 1598 | 65 | - | - | 174 |
| Nagaland | 1560 | 875 | 65 | - | 124 | 65 |
| Orissa | 15571 | 5606 | 1456 | 534 | 774 | 445 |
| Punjab | 5033 | 605 | 394 | 4 | 5 | 37 |
| Rajasthan | 34265 | 2557 | 4308 | 1718 | 14 | 5069 |
| Sikkim (5) | 710 | 257 | 270 | 69 | 5 | 1 |
| Tamil Nadu | 12998 | 2140 | 2445 | 123 | 240 | 348 |
| Tripura | 1049 | 606 | 133 | # | 27 | 1 |
| Uttar Pradesh | 29794 | 5213 | 3486 | 296 | 547 | 896 |
| West Bengal | 8687 | 1192 | 1667 | 7 | 73 | 45 |
| A&N Islands(3) | 793 | 695 | 24 | 4 | 16 | 12 |
| Chandigargh(2) | 7 | * | 4 | - | * | * |
| D.& N.Haveli | 49 | 20 | 4 | 1 | - | * |
| Daman & Diu (6) | 10 | - | 3 | * | 1 | 2 |
| Delhi | 147 | 1 | 84 | * | 1 | 10 |
| Lakshadweep (3) | 3 | - | - | - | - | - |
| Pondicherry | 49 | - | 15 | * | 1 | 3 |

$ Includes Forest area of 2089 thou.hect. reported by the chief conservator of Forests of the State.
# Includes under the head ' Land under Miscellaneous tree crops and groves etc'.
* Below 500 hactares.
& Not available separately, included under cultivable waste.
+ Forecast data has been utilised in estimating gross cropped area.

*Table I – Pattern Of Land Utilisation (Contd..)*

*(Hectare)*

| Year/ State/ Union Territory | Classification of reported area | | | | |
|---|---|---|---|---|---|
| | Fallow land | | | | |
| | Fallow lands other than current fallows | Current fallows | Net area sown | Area sown more than once | Total cropped area |
| *1* | *8* | *9* | *10* | *11* | *12* |
| 1990-91 | 9662 | 13703 | 142999 | 42743 | 185742 |
| 1992-93 | 9675 | 14155 | 142717 | 42983 | 185700 |
| 1993-94 | 9832 | 14381 | 142335 | 44245 | 186580 |
| 1994-95 | 9969 | 13250 | 142960 | 45093 | 188053 |
| 1995-96 | 10016 | 13831 | 142197 | 45274 | 187471 |
| 1996-97 | 9892 | 13326 | 142813 | 46779 | 189592 |
| 1997-98 | 9748 | 14265 | 142083 | 48487 | 190570 |
| 1998-99 | 9914 | 13533 | 142598 | 50021 | 192619 |
| **1998-99 (State & Union Territory)** | | | | | |
| Andhra Pradesh | 1528 | 2333 | 10978 | 2647 | 13625 |
| Arunachal Pradesh(1) | 36 | 28 | 185 | 65 | 250+ |
| Assam (2) | 82 | 144 | 2701 | 1240 | 3941+ |
| Bihar | 926 | 1814 | 7431 | 2622 | 10053 |
| Goa | & | * | 142 | 29 | 171 |
| Gujarat (3) | 26 | 676 | 9674 | 1028 | 10702+ |
| Haryana | 2 | 143 | 3628 | 2692 | 6320 |
| Himachal Pradesh (3) | 28 | 57 | 549 | 421 | 970+ |
| Jammu & Kashmir | 8 | 97 | 733 | 348 | 1081 |
| Karnataka | 401 | 1266 | 10489 | 1822 | 12311 |
| Kerala | 32 | 68 | 2259 | 658 | 2917 |
| Madhya Pradesh | 761 | 733 | 19839 | 6172 | 26011 |
| Maharashtra | 1139 | 1132 | 17732 | 4423 | 22155 |
| Manipur (4) | - | - | 140 | 76 | 216 |
| Meghalaya | 166 | 69 | 221 | 44 | 265 |
| Mizoram | 163 | - | 109 | 7 | 116 |
| Nagaland | 77 | 92 | 261 | 25 | 286 |
| Orissa | 336 | 372 | 6048 | 2377 | 8425 |
| Punjab | 5 | 44 | 4238 | 3879 | 8117+ |
| Rajasthan | 2287 | 2238 | 16073 | 5328 | 21401 |
| Sikkim (5) | 9 | 4 | 95 | 32 | 127+ |
| Tamil Nadu | 1111 | 956 | 5635 | 993 | 6628 |
| Tripura | 1 | 4 | 277 | 167 | 444+ |
| Uttar Pradesh | 742 | 1028 | 17585 | 9024 | 26609+ |
| West Bengal | 33 | 229 | 5440 | 849 | 9289 |
| A&N Islands(3) | 3 | 1 | 38 | 8 | 46+ |
| Chandigargh(2) | 1 | - | 2 | 2 | 4 |
| D.& N.Haveli | 1 | 1 | 23 | 4 | 27 |
| Daman & Diu (6) | * | * | 4 | 1 | 5+ |
| Delhi | 7 | 3 | 41 | 19 | 60 |
| Lakshadweep (3) | - | - | 3 | 1 | 4 |
| Pondicherry | 3 | 1 | 25 | 18 | 43 |

(1) As per Agricultural census 1990-91 except total cropped area.
(2) Relates to the year 1993-94.
(3) Relates to the year 1994-95.
(4) As per 1972-73 ad-hoc estimates.
(5) Relates to the year 1985-86.
(6) Relates to the year 1989-90 except total cropped area..
@ Excludes area under the illegal occupation of china.

## Table II – Annual Rainfall
*(by meteorological sub-divisions)*

*(millimetre)*

| Sub-division | 1991 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* |
| 1. Andamon & Nicobar Islands | 2465.5 | 3102.1 | 3165.0 | 2355.7 | 2842.9 | 2103.8 | 2386.0 |
| 2. Arunachal Pradesh | 3309.2 | 2938.9 | 2589.7 | 2742.6 | 3794.0 | 2739.1 | 2755.1 |
| 3. Assam & Meghalaya | 2206.1 | 2706.1 | 2635.0 | 2432.5 | 2992.6 | 2599.0 | 2687.4 |
| 4. Nagaland, Mizoram, Manipur & Tripura | 2513.5 | 1670.0 | 1559.4 | 1830.9 | 1827.7 | 1874.3 | 1991.6 |
| 5. Sub-Himalayan, West Bengal & Sikkim | 3105.6 | 2896.3 | 2531.1 | 2350.9 | 3274.5 | 2897.1 | 2559.3 |
| 6. Gangetic West Bengal | 1969.1 | 1738.6 | 1399.5 | 1670.5 | 1570.4 | 1842.7 | 1586.6 |
| 7. Orissa | 1583.5 | 1725.9 | 1042.4 | 1556.8 | 1306.2 | 1527.6 | 1163.7 |
| 8. Jharkand | 1505.7 | 1402.8 | 1215.8 | 1494.9 | 1457.2 | 1762.7 | 1361.8 |
| 9. Bihar | 1024.1 | 1088.7 | 1124.0 | 1347.6 | 1322.3 | 1432.7 | 1302.7 |
| 10. Uttar Pradesh East | 833.7 | 904.5 | 1047.1 | 1068.0 | 1137.0 | 1034.4 | 1027.6 |
| 11. West Uttar Pradesh | 644.5 | 869.5 | 953.4 | 938.8 | 1056.3 | 847.5 | 834.1 |
| 12. Uttaranchal | 856.2 | 1398.0 | 1259.2 | 1450.8 | 1846.9 | 1488.7 | 1955.3 |
| 13. Haryana, Chandigarh & Delhi | 586.4 | 1066.6 | 872.2 | 875.5 | 888.4 | 463.7 | 538.1 |
| 14. Punjab | 662.2 | 877.1 | 747.0 | 896.7 | 837.4 | 571.1 | 543.8 |
| 15. Himachal Pradesh | 1319.9 | 1458.5 | 1247.4 | 1385.1 | 1349.2 | 1109.9 | 1114.6 |
| 16. Jammu & Kashmir | 1132.3 | 893.7 | 1135.8 | 1045.4 | 973.7 | 762.9 | 812.6 |
| 17. Rajasthan West | 166.7 | 458.4 | 456.7 | 568.1 | 376.1 | 245.8 | 236.4 |
| 18. Rajasthan East | 482.9 | 8.8 | 942.2 | 800.0 | 673.0 | 532.8 | 481.3 |
| 19. Madhya Pradesh Wesr | 839.5 | 927.1 | 1142.6 | 1118.3 | 910.5 | 1160.5 | 626.1 |
| 20. East Madhya Pradesh & Chattisgarh | 1203.3 | 1220.8 | 1125.2 | 1274.1 | 1013.2 | 1311.9 | 867.5 |
| 21. Gujarat region, Daman, Dadra & Nagar Haveli | 536.8 | 881.9 | 1182.0 | 1408.7 | 1399.6 | 916.7 | 788.4 |
| 22. Saurashtra, Kutch & Diu | 299.5 | 402.9 | 480.0 | 660.2 | 707.0 | 347.1 | 316.3 |
| 23. Konkan & Goa | 2682.5 | 2692.9 | 2656.0 | 2930.0 | 3251.7 | 2894.1 | 3134.5 |
| 24. Madhya Maharashtra | 781.1 | 897.8 | 966.0 | 1049.1 | 1142.0 | 874.2 | 789.6 |
| 25. Marathwada | 665.3 | 864.1 | 844.1 | 794.2 | 1215.2 | 845.0 | 863.7 |
| 26. Vidarbha | 817.4 | 1089.9 | 843.6 | 1068.8 | 1125.1 | 1119.2 | 1024.0 |
| 27. Coastal Andhra Pradesh | 1185.2 | 1354.3 | 1251.4 | 1093.0 | 1285.2 | 848.0 | 1042.1 |
| 28. Telangana | 866.3 | 1246.8 | 1014.8 | 864.7 | 1140.0 | 865.5 | 1074.3 |
| 29. Rayalaseema | 894.0 | 759.6 | 1280.1 | 805.5 | 963.1 | 584.5 | 859.5 |
| 30. Tamil Nadu & Pondicherry | 969.1 | 864.9 | 1231.9 | 1205.1 | 1034.7 | 784.2 | 873.1 |
| 31. Coastal Karnataka | 3798.4 | 3633.5 | 3121.5 | 4144.6 | 4160.3 | 3972.1 | 3542.7 |
| 32. North Interior Karnataka | 855.9 | 646.5 | 883.4 | 750.8 | 939.3 | 736.0 | 746.2 |
| 33. South interior Karnataka | 1149.6 | 1024.9 | 1231.2 | 1265.8 | 1221.5 | 1209.0 | 1239.8 |
| 34. Kerala | 2836.7 | 2888.6 | 2683.6 | 3213.9 | 3116.3 | 2872.3 | 2470.3 |
| 35. Lakshadweep | 1610.6 | 1747.6 | 1603.1 | 1764.3 | 1977.6 | 1857.8 | 1372.3 |

Note: Figures for the year 1991 are based on observatory data while figures for 1992 onwards are based on Districtwise rainfall monitoring scheme data.

## Table I – Statewise Actual Forest Cover and Recorded Forest Area

*(Sq.Kms.)*

| Year/ State/ Union Territory | Data period | Actual Forest Cover | Forest Area | Reserved Area | Protected Area | Unclassified Area |
|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* |
| 1995 | 1991-93 | 638879 | - | - | - | - |
| 1997 | 1993-95 | 633397 | 765210 | 416516 | 223309 | 125385 |
| 1999 | | 637293 | 765254 | 416548 | 223320 | 125385 |
| **1999** | | | | | | |
| **States:** | | | | | | |
| Andhra Pradesh | Nov98-Jan99 | 44229 | 63814 | 50479 | 12365 | 970 |
| Arunachal Pradesh | Dec98-Feb99 | 68847 | 51540 | 15321 | 8 | 36211 |
| Assam | Dec1998 | 23688 | 30708 | 18242 | 3934 | 8532 |
| Bihar | Dec95-Jan 96 | 4830 | 6078 | 693 | 5384 | 1 |
| Chhattisgarh | Oct-Dec96 | 56693 | 59285 | 23966 | 31107 | 4212 |
| Goa | Dec95-Jan96 | 1251 | 1424 | 165 | - | 1259 |
| Gujarat | Oct-Dec.96 & 97 | 12965 | 19393 | 13819 | 997 | 4577 |
| Haryana | Nov-Dec96 | 964 | 1673 | 247 | 1104 | 322 |
| Himachal Pradesh | Oct-Dec98 | 13082 | 35407 | 1896 | 31473 | 2038 |
| Jammu & Kashmir | Oct-Dec96 & 97 | 20441 | 20182 | 20182 | - | - |
| Jharkhand | Oct96, Jan97 | 21644 | 23148 | 4359 | 18783 | 6 |
| Karnataka | Dec95, jan96 | 32467 | 38724 | 28611 | 3932 | 69181 |
| Kerala | Jan-Marcch96 | 10323 | 11221 | 11038 | 183 | - |
| Madhya Pradesh | Oct-Dec96 | 75137 | 95212 | 58734 | 35571 | 967 |
| Maharashtra | Oct-Nov96 | 46672 | 63842 | 48373 | 9350 | 6119 |
| Manipur | Dec98 | 17384 | 15154 | 1463 | 4171 | 9520 |
| Meghalaya | Dec98 | 15633 | 9496 | 981 | 12 | 8503 |
| Mizoram | Dec98 | 18338 | 15935 | 7127 | 3568 | 5240 |
| Nagaland | Dec98 | 14164 | 8629 | 86 | 507 | 8036 |
| Orissa | Nov-Dec95 | 47033 | 57184 | 27087 | 30080 | 17 |
| Punjab | Nov-Dec96 | 1412 | 2901 | 44 | 1107 | 1750 |
| Rajasthan | Oct-Dec96 | 13871 | 31700 | 11585 | 16837 | 3278 |
| Sikkim | Nov98 | 3118 | 2650 | 2261 | 285 | 104 |
| Tamil Nadu | Jan, march-sep96 | 17078 | 22628 | 19486 | 2528 | 614 |
| Tripura | Dec98 | 5745 | 6293 | 3588 | 509 | 2196 |
| Uttaranchal | Oct, Dec96 | 23260 | 34662 | 23827 | 125 | 10710 |
| Uttar Pradesh | Oct, Dec96 | 10756 | 17001 | 12598 | 1374 | 3029 |
| West Bengal | Dec95-Feb96, Dec96 | 8362 | 11879 | 7054 | 3772 | 1053 |
| ***Union Territory:*** | | | | | | |
| A&N Islands | March97 & Jan-March98 | 7606 | 7171 | 2929 | 4242 | - |
| Chandigargh | Jan99 | 7 | 31 | 31 | - | - |
| D.& N.Haveli | Nov-Dec98 | 202 | 203 | 198 | 5 | - |
| Daman & Diu | Oct96 | 3 | 1 | - | - | - |
| Delhi | Oct-Nov98 | 88 | 85 | 78 | 7 | - |
| Lakshadweep(1) | - | - | - | - | - | - |
| Pondicherry(1) | - | - | - | - | - | - |

(1) No discernible forestcover.

*Source: Statistical Abstract, India, 2001*

## PRODUCTION OF FOODGRAIN AND MAJOR NON-FOODGRAIN CROPS IN KERALA

(Thousand tonnes)

| Year | Rice | Wheat | Coarse Cereals | Pulses | Foodgrains | Oilseeds | Cotton $ | Sugarcane | Jute &Mesta # |
|---|---|---|---|---|---|---|---|---|---|
| **KERALA** | | | | | | | | | |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* |
| 1980-81 | 1272.0 | 0.0 | 3.6 | 22.3 | 1297.9 | 15.6 | 8.3 | 461.6 | 0.0 |
| 1981-82 | 1339.7 | 0.0 | 3.6 | 20.8 | 1364.1 | 12.1 | 9.8 | 479.5 | 0.0 |
| 1982-83 | 1306.2 | 0.0 | 3.1 | 20.6 | 1329.9 | 12.2 | 9.3 | 821.4 | 0.0 |
| 1983-84 | 1207.9 | 0.0 | 3.2 | 20.7 | 1231.8 | 12.9 | 10.0 | 870.6 | 0.0 |
| 1984-85 | 1255.9 | 0.0 | 3.7 | 20.2 | 1279.8 | 15.4 | 10.0 | 427.5 | 0.0 |
| 1985-86 | 1173.1 | 0.0 | 3.6 | 25.8 | 1202.5 | 9.7 | 9.6 | 425.6 | 0.0 |
| 1986-87 | 1133.8 | 0.0 | 3.3 | 20.1 | 1157.2 | 9.4 | 9.0 | 411.8 | 0.0 |
| 1987-88 | 1037.1 | 0.0 | 3.9 | 20.0 | 1061.0 | 7.7 | 7.4 | 562.4 | 0.0 |
| 1988-89 | 1006.5 | 0.0 | 4.8 | 18.8 | 1030.1 | 18.6 | 8.3 | 537.7 | 0.0 |
| 1989-90 | 1073.6 | 0.0 | 6.0 | 18.8 | 1098.4 | 11.6 | 10.4 | 533.3 | 0.0 |
| 1990-91 | 1086.6 | 0.0 | 6.3 | 18.2 | 1111.1 | 11.02 | 13.2 | 542.9 | 0.0 |
| 1991-92 | 1060.3 | 0.0 | 6.3 | 16.7 | 1083.3 | 11.5 | 13.6 | 547.1 | 0.0 |
| 1992-93 | 1084.8 | 0.0 | 5.6 | 20.0 | 1110.4 | 12.4 | 20.0 | 428.3 | 0.0 |
| 1993-94 | 1004.0 | 0.0 | 7.1 | 33.3 | 1044.4 | 11.1 | 18.6 | 447.9 | 0.0 |
| 1994-95 | 975.1 | 0.0 | 6.0 | 18.8 | 999.9 | 15.1 | 21.8 | 477.8 | 0.0 |
| 1995-96 | 953.0 | 0.0 | 6.0 | 14.6 | 973.6 | 11.4 | 19.4 | 522.9 | 0.0 |
| 1996-97 | 831.6 | 0.0 | 5.8 | 14.6 | 852.0 | 11.8 | 20.2 | 548.1 | 0.0 |
| 1997-98 | 764.6 | 0.0 | 5.4 | 27.6 | 797.6 | 10.1 | 20.0 | 548.1 | 0.0 |
| 1998-99 | 726.7 | 0.0 | 4.9 | 22.9 | 754.5 | 8.1 | 24.2 | 424.3 | 0.0 |
| 1999-00 | 770.8 | 0.0 | 3.4 | 19.1 | 793.3 | 5.8 | 7.7 | 578.8 | 0.0 |
| 2000-01 | 751.3 | 0.0 | 3.4 | 10.6 | 765.3 | 3.5 | 6.2 | 275.6 | 0.0 |
| 2001-02 | 715.1 | 0.0 | 3.7 | 10.5 | 729.3 | 3.2 | 3.9 | 275.6 | 0.0 |
| **ALL INDIA @** | | | | | | | | | |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* |
| 1980-81 | 53631.7 | 36312.6 | 29017.7 | 10626.8 | 129588.8 | 9372.1 | 7010.0 | 154248.0 | 8159.6 |
| 1981-82 | 53248.0 | 37451.8 | 31087.8 | 11507.2 | 133294.8 | 12079.5 | 7883.8 | 186357.6 | 8370.3 |
| 1982-83 | 47115.8 | 42793.9 | 27752.1 | 11856.9 | 129518.7 | 9995.4 | 7534.4 | 189505.6 | 7171.2 |
| 1983-84 | 60097.3 | 45476.3 | 33907.0 | 12893.4 | 152374.6 | 12692.3 | 6386.5 | 174076.2 | 7723.7 |
| 1984-85 | 58336.6 | 44068.8 | 31170.7 | 11962.6 | 145538.7 | 12946.1 | 8506.6 | 170319.2 | 7787.0 |
| 1985-86 | 63825.0 | 47051.8 | 26202.1 | 13361.4 | 150440.3 | 10832.5 | 8727.0 | 170648.1 | 12646.5 |
| 1986-87 | 60556.8 | 44322.9 | 26830.9 | 11707.2 | 143417.8 | 11269.7 | 6905.2 | 186089.5 | 8626.1 |
| 1987-88 | 56862.5 | 46169.4 | 26359.5 | 10962.2 | 140353.6 | 12654.8 | 6382.0 | 196736.9 | 6777.9 |
| 1988-89 | 70488.7 | 54110.2 | 31473.6 | 13849.3 | 169921.8 | 18033.2 | 8743.7 | 203036.4 | 7859.5 |
| 1989-90 | 73572.6 | 49849.5 | 34756.5 | 12857.8 | 171036.4 | 16923.6 | 11421.8 | 225569.2 | 8288.6 |
| 1990-91 | 74291.4 | 55134.5 | 32699.1 | 14265.3 | 176390.3 | 18608.7 | 9842.4 | 241045.4 | 9227.5 |
| 1991-92 | 74677.6 | 55689.5 | 25991.4 | 12014.7 | 168373.2 | 18599.8 | 9713.9 | 253995.1 | 10285.7 |
| 1992-93 | 72867.7 | 57210.1 | 36590.9 | 12814.5 | 179483.2 | 20106.5 | 11402.5 | 228033.4 | 8589.6 |
| 1993-94 | 80298.3 | 59840.3 | 30817.0 | 13304.8 | 184260.4 | 21495.5 | 10740.6 | 229659.3 | 8428.4 |
| 1994-95 | 81814.0 | 65767.4 | 29876.2 | 14037.6 | 191495.2 | 21336.7 | 11187.6 | 275539.9 | 9076.3 |
| 1995-96 | 76975.3 | 62097.4 | 29032.4 | 12309.9 | 180415.0 | 22106.1 | 12860.7 | 281099.5 | 8807.1 |
| 1996-97 | 81736.7 | 69350.2 | 34104.9 | 14243.9 | 199435.7 | 24384.5 | 14231.3 | 277560.0 | 11129.8 |
| 1997-98 | 82534.5 | 66345.0 | 30399.9 | 12979.3 | 192258.7 | 21324.7 | 10851.4 | 279541.4 | 11016.9 |
| 1998-99 | 86076.7 | 71287.5 | 31335.4 | 14907.3 | 203606.9 | 24748.2 | 12287.1 | 288722.4 | 9810.9 |
| 1999-00 | 89682.9 | 76368.9 | 30331.4 | 13418.3 | 209801.5 | 20715.5 | 11529.6 | 299323.9 | 10558.1 |
| 2000-01 | 87698.1 | 69680.9 | 31081.0 | 11075.6 | 199535.6 | 18436.8 | 9523.8 | 295956.2 | 10556.3 |
| 2001-02 | 93084.5 | 71814.3 | 33944.5 | 13190.6 | 212033.8 | 20460.8 | 10094.1 | 300096.4 | 11640.7 |

$ : Production in thousand bales of 170 kg. each.

# : Production in thousand bales of 180 kg. each.

@ : Inclusive of Union Territories

## SAVINGS DEPOSITS WITH COMMERCIAL BANKS

(Rupees crore)

| Last Reporting Friday * | Scheduled Commercial Banks | | | Non-Scheduled Commercial Banks |
|---|---|---|---|---|
| | Total (3+4) | Indian Banks | Foreign Banks | |
| 1 | 2 | 3 | 4 | 5 |
| 1970-71 | **1524** | 1408 | 117 | 6 |
| 1971-72 | **1847** | 1713 | 135 | 4 |
| 1972-73 | **2225** | 2076 | 150 | 5 |
| 1973-74 | **2679** | 2519 | 160 | 6 |
| 1974-75 | **3091** | 2923 | 168 | 7 |
| 1975-76 | **3661** | 3480 | 182 | 9 |
| 1976-77 | **4410** | 4217 | 193 | 6 |
| 1977-78 | **5690** | 5482 | 208 | 5 |
| 1978-79 | **7293** | 7069 | 224 | 4 |
| 1979-80 | **8844** | 8603 | 241 | 5 |
| 1980-81 | **10937** | 10667 | 270 | 4 |
| 1981-82 | **12995** | 12692 | 304 | 5 |
| 1982-83 | **15055** | 14719 | 336 | 5 |
| 1983-84 | **17811** | 17430 | 381 | 6 |
| 1984-85 | **21727** | 21300 | 427 | 7 |
| 1985-86 | **24555** | 24071 | 485 | 9 |
| 1986-87 | **29354** | 28787 | 567 | 11 |
| 1987-88 | **33171** | 32546 | 625 | 15 |
| 1988-89 | **37446** | 36756 | 690 | 20 |
| 1989-90 | **44567** | 43744 | 823 | 0 |
| 1990-91 | **50501** | 49542 | 959 | 31 |
| 1991-92 | **56902** | 55554 | 1348 | 31 |
| 1992-93 | **58573** | 57256 | 1317 | 30 |
| 1993-94 | **71151** | 69434 | 1718 | 19 |
| 1994-95 | **91324** | 89019 | 2305 | 20 |
| 1995-96 | **101861** | 99347 | 2514 | 0 |
| 1996-97 | **115445** | 112570 | 2875 | 0 |
| 1997-98 | **139964** | 136770 | 3194 | 0 |
| 1998-99 | **164725** | 160889 | 3836 | - |
| 1999-00 | **191900** | 187173 | 4727 | - |
| 2000-01 | **222982** | 217452 | 5530 | - |
| 2001-02 | **279107** | 272119 | 6988 | - |

* : Data were of weekly frequency till 1984-85 and changed to fortnightly basis thereafter.

## AGGREGATE DEPOSITS ON NON-BANKING COMPANIES

(Rupees crore)

| Year | Non-bank Financial Companies | | | Non-bank Non-Financial Companies | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Regulated Deposits | Exempted Deposits | Total (2+3) | Regulated Deposits | Exempted Deposits | Total (5+6) | Regulated Deposits (2+5) | Exempted Deposits (3+6) | Total (8+9) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* |
| 1970-71 | 41.9 | 107.8 | **149.7** | 189.8 | 229.2 | **419.0** | **231.7** | **337.0** | **568.7** |
| 1971-72 | 64.7 | 146.3 | **211.0** | 354.7 | 126.1 | **480.8** | **419.4** | **272.4** | **691.8** |
| 1972-73 | 54.3 | 176.1 | **230.4** | 319.4 | 198.0 | **517.4** | **373.7** | **374.1** | **747.8** |
| 1973-74 | 80.0 | 224.0 | **304.0** | 403.7 | 320.9 | **724.6** | **483.7** | **544.9** | **1028.6** |
| 1974-75 | 104.7 | 337.7 | **442.4** | 393.6 | 360.7 | **754.3** | **498.3** | **698.4** | **1196.7** |
| 1975-76 | 128.7 | 332.8 | **461.5** | 416.2 | 387.5 | **803.7** | **544.9** | **720.3** | **1265.2** |
| 1976-77 | 147.3 | 549.0 | **696.3** | 572.8 | 465.8 | **1038.6** | **720.0** | **1014.8** | **1734.9** |
| 1977-78 | 185.1 | 564.4 | **749.5** | 685.5 | 627.5 | **1313.0** | **870.6** | **1191.9** | **2062.5** |
| 1978-79 | 155.6 | 882.9 | **1038.5** | 846.6 | 751.0 | **1597.6** | **1002.2** | **1633.9** | **2636.1** |
| 1979-80 | 187.3 | 1425.3 | **1612.6** | 884.6 | 956.4 | **1841.0** | **1071.9** | **2381.7** | **3453.6** |
| 1980-81 | 215.0 | 1260.7 | **1475.7** | 1142.3 | 1570.0 | **2712.3** | **1357.3** | **2830.7** | **4188.0** |
| 1981-82 | 214.0 | 1531.6 | **1745.6** | 1305.7 | 2440.5 | **3746.2** | **1519.7** | **3972.1** | **5491.8** |
| 1982-83 | 237.3 | 2192.9 | **2430.2** | 1740.2 | 5023.9 | **6764.1** | **1997.5** | **7216.8** | **9194.3** |
| 1983-84 | 275.6 | 2885.7 | **3161.3** | 2058.9 | 5903.9 | **7962.8** | **2334.5** | **8989.6** | **11124.1** |
| 1984-85 | 409.5 | 3946.5 | **4356.0** | 2405.8 | 9378.6 | **11784.4** | **2815.3** | **13325.1** | **16140.4** |
| 1985-86 | 485.5 | 4474.1 | **4959.6** | 2781.0 | 10331.5 | **13112.5** | **3266.5** | **14805.6** | **18072.1** |
| 1986-87 | 832.3 | 5109.3 | **5941.6** | 3244.5 | 12214.1 | **15458.6** | **4076.8** | **17323.4** | **21400.2** |
| 1987-88 | 1136.9 | 6362.8 | **7499.7** | 3598.1 | 13106.5 | **16704.6** | **4735.0** | **19469.3** | **24204.3** |
| 1988-89 | 1505.9 | 8979.0 | **10484.9** | 3901.2 | 14218.8 | **18120.0** | **5407.1** | **23197.8** | **28604.9** |
| 1989-90 | 1773.4 | 12869.6 | **14643.0** | 4223.7 | 17215.3 | **21439.0** | **5997.1** | **30084.9** | **36082.0** |
| 1990-91 | 2040.7 | 15195.5 | **17236.2** | 4706.2 | 22131.1 | **26837.3** | **6746.9** | **37326.6** | **44073.5** |
| 1991-92 | 2824.1 | 17614.4 | **20438.5** | 4672.4 | 26073.9 | **30746.3** | **7496.5** | **43688.3** | **51184.8** |
| 1992-93 | 4287.8 | 40668.6 | **44956.4** | 4890.1 | 98250.9 | **103141.0** | **9177.9** | **138919.5** | **148097.4** |
| 1993-94 | 17389.5 | 39047.9 | **56437.4** | 5812.9 | 123530.4 | **129343.3** | **23202.4** | **162578.3** | **185780.7** |
| 1994-95 | 25440.5 | 60054.6 | **85495.1** | 7260.7 | 151250.5 | **158511.2** | **32701.2** | **211305.1** | **244006.3** |
| 1995-96 | 38710.6 | 62961.8 | **101672.4** | 8040.1 | 178869.1 | **186909.2** | **46750.7** | **241830.9** | **288581.6** |
| 1996-97 | 53116.0 | 71253.7 | **124369.7** | 9592.0 | 214281.1 | **223873.1** | **62708.0** | **285534.8** | **348242.8** |

## BPL Estimates for Major States in India

| | State | State Estimate 1977 | NSS Estimate 1999-2000 (%) |
|---|---|---|---|
| 1 | Andhra Pradesh | 39.91 | 11.05 |
| 2 | Assam | 60.00 | 40.00 |
| 3 | Bihar | 49.64 | 44.30 |
| 4 | Gujarat | 35.45 | 13.17 |
| 5 | Haryana | 24.25 | 8.27 |
| 6 | Tamil Nadu | 29.16 | 20.55 |
| 7 | Karnataka | 33.99 | 17.38 |
| 8 | Kerala | 35.56 | 9.38 |
| 9 | Punjab | 27.90 | 6.35 |
| 10 | West Bengal | 44.49 | 31.85 |
| 11 | Madhya Pradesh | 43.87 | 37.06 |
| 12 | Maharashtra | 35.07 | 23.72 |

*Source: The Hindu.*

## KEY DEFICIT INDICATORS OF THE CENTRAL GOVERNMENT

(Rupees crore)

| Year | Gross Fiscal Deficit | Net Fiscal Deficit | Gross Primary Deficit | Net Primary Deficit | Revenue Deficit | Primary Revenue Deficit* | Budgetary Deficit # | Net RBI Credit @ |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1970-71 | 1408 | 780 | 803 | 749 | -163 | -769 | 285 | 223 |
| 1971-72 | 1727 | 1217 | 1057 | 1146 | 100 | -570 | 519 | 583 |
| 1972-73 | 2179 | 990 | 1403 | 927 | 15 | -761 | 870 | 1211 |
| 1973-74 | 1733 | 772 | 851 | 626 | -237 | -1119 | 328 | 630 |
| 1974-75 | 2302 | 865 | 1301 | 640 | -765 | -1766 | 720 | 528 |
| 1975-76 | 3029 | 1364 | 1802 | 1070 | -886 | -2114 | 367 | -288 |
| 1976-77 | 3802 | 1572 | 2314 | 1189 | -298 | -1786 | 131 | 816 |
| 1977-78 | 3680 | 1813 | 2034 | 1608 | -430 | -2076 | 932 | -260 |
| 1978-79 | 5710 | 2126 | 3726 | 1569 | -292 | -2276 | 1506 | 2191 |
| 1979-80 | 6392 | 3133 | 4100 | 2201 | 694 | -1598 | 2433 | 2650 |
| 1980-81 | 8299 | 5110 | 5695 | 4301 | 2037 | -567 | 2477 | 3551 |
| 1981-82 | 8666 | 4591 | 5471 | 3611 | 392 | -2803 | 1400 | 3207 |
| 1982-83 | 10627 | 5973 | 6689 | 4887 | 1308 | -2630 | 1656 | 3368 |
| 1983-84 | 13030 | 7770 | 8235 | 5643 | 2540 | -2255 | 1417 | 3949 |
| 1984-85 | 17416 | 10972 | 11442 | 8961 | 4225 | -1749 | 3745 | 6055 |
| 1985-86 | 21858 | 13544 | 14346 | 10627 | 5889 | -1623 | 5316 | 6190 |
| 1986-87 | 26342 | 17036 | 17096 | 13143 | 7777 | -1469 | 8261 | 7091 |
| 1987-88 | 27044 | 18431 | 15793 | 12935 | 9137 | -2114 | 5816 | 6559 |
| 1988-89 | 30923 | 20770 | 16645 | 13473 | 10515 | -3763 | 5642 | 6503 |
| 1989-90 | 35632 | 23722 | 17875 | 14439 | 11914 | -5843 | 10592 | 13813 |
| 1990-91 | 44632 | 30692 | 23134 | 17924 | 18562 | -2936 | 11347 | 14746 |
| 1991-92 | 36325 | 24622 | 9729 | 8961 | 16261 | -10335 | 6855 | 55808 |
| 1992-93 | 40173 | 30232 | 9098 | 11644 | 18574 | -12501 | 12312 | 4257 |
| 1993-94 | 60257 | 45994 | 23516 | 24331 | 32716 | -4025 | 10960 | 260 |
| 1994-95 | 57703 | 40313 | 13644 | 12050 | 31029 | -13031 | 961 | 2130 |
| 1995-96 | 60243 | 42432 | 10198 | 10806 | 29731 | -20314 | 9807 | 19855 |
| 1996-97 | 66733 | 46394 | 7255 | 9022 | 32654 | -26824 | 13184 | 1934 |
| 1997-98 | 88937 | 63062 | 23300 | 22748 | 46449 | -19188 | -910 | 12914 |
| 1998-99 | 113349 | 79944 | 35467 | 32138 | 66976 | -10906 | -209 | 11800 |
| 1999-00 | 104717 | 89910 | 14468 | 33539 | 67596 | -22653 | 864 | -5588 |
| 2000-01 | 118816 | 107854 | 19502 | 40904 | 85234 | -14080 | -1197 | 6705 |
| 2001-02 | 140955 | 123074 | 33495 | 51129 | 100162 | -7298 | -1496 | -5150 |
| 2002-03RE | 145466 | 131697 | 29803 | 56605 | 104712 | -10951 | 5298 | - 42722** |
| 2003-4BE | 153637 | 141375 | 30414 | 57312 | 112292 | -10931 | | |

RE : Revised Estimates.
@ : Variation over the end-March position, as peer RBI records after closure of Government Accounts.
(-) : Indicates surplus.
# : With the discontinuance of the ad-hoc Treasury bills and 91-day tap Treasury bills, the concept of conventional budget deficit has lost its relevance since April 1, 1997. Thereafter these figures represent draw down on cash balances.
* : Revenue Deficit net of Interest Payments.
** : Upto March 21, 2003.

**Note:** Since 1999-2000 Gross Fiscal Deficit excludes States' share in Small Savings as per the new system of accounting.

## NRI DEPOSITS IN DOLLARS – OUTSTANDING

*(US $ million)*

| Year | NR(E)RA | FCNR(A) | FCNR(B) | NR(NR)RD | FC(B&O)D | FC(O)N | Total |
|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* |
| 1991 | 3618 | 10103 | - | - | 265 | - | **13986** |
| 1992 | 3025 | 9792 | - | - | 732 | - | **13549** |
| 1993 | 2740 | 10617 | - | 621 | 1037 | - | **15015** |
| 1994 | 3523 | 9300 | 1108 | 1754 | 533 | 12 | **16230** |
| 1995 | 4556 | 7051 | 3063 | 2486 | - | 10 | **17166** |
| 1996 | 3916 | 4255 | 5720 | 3542 | - | 13 | **17446** |
| 1997 | 4983 | 2306 | 7496 | 5604 | - | 4 | **20393** |
| 1998 | 5637 | 1 | 8467 | 6262 | - | 2 | **20369** |
| 1999 | 6045 | - | 7835 | 6618 | - | - | **20498** |
| 2000 | 6758 | - | 8172 | 6754 | - | - | **21684** |
| 2001 | 7147 | - | 9076 | 6849 | - | - | **23072** |
| 2002 | 8449 | - | 9673 | 7052 | - | - | **25174** |

## NRI DEPOSITS IN RUPEES – OUTSTANDING

*(Rupees crore)*

| Year | NR(E)RA | FCNR(A) | FCNR(B) | NR(NR)RD | FC(B&O)D | FC(O)N | Total |
|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* |
| 1991 | 7040 | 19845 | - | - | 515 | - | **27400** |
| 1992 | 7833 | 30576 | - | - | 1895 | - | **40304** |
| 1993 | 8616 | 33163 | - | 1952 | 3261 | - | **46992** |
| 1994 | 11053 | 29176 | 3476 | 5501 | 1672 | 38 | **50916** |
| 1995 | 14348 | 22207 | 9648 | 7831 | - | 32 | **54066** |
| 1996 | 13452 | 14616 | 19648 | 12166 | - | 45 | **59927** |
| 1997 | 17886 | 8282 | 26906 | 20116 | - | 14 | **73204** |
| 1998 | 22267 | 4 | 33445 | 24735 | - | 9 | **80460** |
| 1999 | 25629 | - | 33222 | 28058 | - | - | **86909** |
| 2000 | 29465 | - | 35632 | 29447 | - | - | **94544** |
| 2001 | 33357 | - | 42357 | 31966 | - | - | **107680** |
| 2002 | 41205 | - | 47175 | 34392 | - | - | **122772** |

FCNR(A) : Foreign Currency Non-Resident (Accounts).

FCNR(B) : Foreign Currency Non-Resident (Banks).

NR(E)RA : Non-Resident (External) Rupee Accounts.

NR(NR)RD : Non-Resident (Non-Repatriable) Rupee Deposits.

FC(B&O)D : Foreign Currency (Bank and other) Deposits.

FC(O)N : Foreign Currency(Ordinary) Non-Repatriable Deposits.

*Source: Handbook of Statistics on the Indian Economy, Reserve Bank of India.*

## EMPLOYMENT IN PUBLIC AND ORGANISED PRIVATE SECTORS

(In million)

| Year | Public Sector (end-March) | Private Sector (end-March) | Number of Persons on the Live Register (end December) |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1970-71 | 11.10 | 6.73 | 5.10 |
| 1971-72 | 11.69 | 6.96 | 6.90 |
| 1972-73 | 12.40 | 6.72 | 8.22 |
| 1973-74 | 12.73 | 6.75 | 8.43 |
| 1974-75 | 13.13 | 6.79 | 9.33 |
| 1975-76 | 13.63 | 6.79 | 9.78 |
| 1976-77 | 14.18 | 6.95 | 10.92 |
| 1977-78 | 14.73 | 7.11 | 12.68 |
| 1978-79 | 15.58 | 7.23 | 14.33 |
| 1979-80 | 15.12 | 7.24 | 16.20 |
| 1980-81 | 15.48 | 7.40 | 17.84 |
| 1981-82 | 16.28 | 7.53 | 19.75 |
| 1982-83 | 16.75 | 7.39 | 21.95 |
| 1983-84 | 17.22 | 7.36 | 23.55 |
| 1984-85 | 17.58 | 7.43 | 26.27 |
| 1985-86 | 17.68 | 7.37 | 30.13 |
| 1986-87 | 18.24 | 7.39 | 30.25 |
| 1987-88 | 18.32 | 7.39 | 30.05 |
| 1988-89 | 18.51 | 7.45 | 32.78 |
| 1989-90 | 18.77 | 7.58 | 34.63 |
| 1990-91 @ | 19.06 | 7.68 | 36.30 |
| 1991-92 @ | 19.21 | 7.85 | 36.76 |
| 1992-93 @ | 19.33 | 7.85 | 36.28 |
| 1993-94 @ | 19.45 | 7.93 | 36.69 |
| 1994-95 @ | 19.47 | 8.06 | 36.74 |
| 1995-96 @ | 19.43 | 8.51 | 37.43 |
| 1996-97 @ | 19.56 | 8.69 | 39.14 |
| 1997-98 @ | 19.42 | 8.75 | 40.09 |
| 1998-99 @ | 19.41 | 8.70 | 40.37 |
| 1999-00 | 19.31 | 8.65 | 41.34 |
| 2000-01 | 19.14 | 8.65 | 42.00 |
| 2001-02 | | | 41.17 |

@: Data are based on Quarterly Employment Review.

*Source: Handbook of Statistics on the Indian Economy, Reserve Bank of India.*

## Employment Situation

| | | |
|---|---|---|
| 1 | Labour Force in the world (98-99) | 3 Billion |
| 2 | Fully employed persons in the world | 160 Million |
| 3 | Underemployed in the world | 25-30 % of labour force |
| 4 | Unemployed youth (15-24) in the world | 60 Million |
| 5 | Labour force of India (2000) | 406 Million |
| 6 | Employed labour force of India (2000) | 397 Million |
| 7 | Employment seekers on the Live register of 939 Electronic exchange in India (2000) | 41 Million |
| 8 | Fully unemployed labour force in the country (2000) | 9 Million |

*Source: Annual Report of Ministry of labour, Government of India (2002-2003)*

## EXPORTS OF CASHEW KERNELS FROM INDIA

| Countries | Mar 2002 | | Apr- Mar 2002 | | Mar 2003 | | Apr- Mar 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Australia | 76 | 11542 | 1191 | 183181 | 101 | 16013 | 1381 | 224156 |
| Austria | 0 | 0 | 21 | 4385 | 0 | 0 | 0 | 0 |
| Bahrain | 53 | 7151 | 254 | 49023 | 63 | 6629 | 417 | 63475 |
| Belgium | 32 | 5820 | 1006 | 204442 | 134 | 26769 | 1427 | 283518 |
| Bosnia-Herzegovina | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 3046 |
| Brazil | 0 | 0 | 16 | 2834 | 0 | 0 | 0 | 0 |
| Bulgaria | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 8721 |
| Cambodia | 0 | 0 | 15 | 4167 | 0 | 0 | 0 | 0 |
| Canada | 111 | 19596 | 1749 | 305670 | 159 | 27064 | 1502 | 271629 |
| China | 0 | 0 | 87 | 17811 | 0 | 0 | 0 | 0 |
| Cyprus | 0 | 0 | 98 | 21966 | 32 | 7113 | 216 | 49677 |
| Czech Rep. | 0 | 0 | 5 | 913 | 0 | 0 | 16 | 2902 |
| Denmark | 0 | 0 | 49 | 9034 | 0 | 0 | 0 | 0 |
| Egypt | 15 | 3631 | 156 | 36677 | 0 | 0 | 118 | 27842 |
| Finland | 0 | 0 | 16 | 4272 | 0 | 0 | 83 | 14454 |
| France | 152 | 33394 | 2517 | 536370 | 101 | 19461 | 2236 | 445560 |
| Germany | 48 | 6733 | 1031 | 181865 | 938 | 26907 | 2423 | 230820 |
| Ghana | 0 | 0 | 16 | 1551 | 0 | 0 | 0 | 0 |
| Greece | 32 | 5672 | 638 | 127602 | 127 | 23472 | 915 | 178136 |
| Hong Kong | 16 | 3767 | 654 | 139533 | 16 | 3735 | 392 | 97223 |
| Iceland | 0 | 0 | 48 | 10491 | 0 | 0 | 0 | 0 |
| Indonesia | 0 | 0 | 15 | 2615 | 0 | 0 | 0 | 0 |
| Iran Islamic Rep. | 0 | 0 | 18 | 3620 | 0 | 0 | 0 | 0 |
| Iraq | 0 | 0 | 32 | 3450 | 0 | 0 | 0 | 0 |
| Ireland | 0 | 0 | 32 | 6818 | 0 | 0 | 16 | 2969 |
| Israel | 95 | 19742 | 1064 | 232523 | 32 | 5685 | 940 | 186773 |
| Italy | 113 | 19139 | 1265 | 239724 | 161 | 29353 | 1070 | 201704 |
| Japan | 459 | 86343 | 4783 | 919651 | 295 | 54783 | 4123 | 803402 |
| Jordan | 24 | 3512 | 143 | 29639 | 15 | 2795 | 349 | 75833 |
| Kazakhstan | 0 | 0 | 63 | 5941 | 0 | 0 | 32 | 4629 |
| Korea Rep. | 0 | 0 | 148 | 27639 | 11 | 2146 | 143 | 28198 |
| Kuwait | 65 | 13454 | 469 | 99255 | 67 | 12642 | 434 | 83329 |
| Lao P.D.R | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 2786 |
| Latvia | 0 | 0 | 48 | 6629 | 64 | 10106 | 143 | 24020 |
| Lebanon | 16 | 3747 | 567 | 105215 | 16 | 5492 | 323 | 77075 |
| Libya | 0 | 0 | 0 | 0 | 16 | 2668 | 16 | 2668 |
| Lithuania | 0 | 0 | 16 | 3352 | 0 | 0 | 111 | 20155 |
| Malaysia | 0 | 0 | 71 | 12486 | 5 | 622 | 40 | 7156 |
| Maldives | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 570 |
| Mali | 0 | 0 | 16 | 2169 | 1 | 355 | 2 | 543 |
| Mauritius | 0 | 0 | 13 | 2996 | 0 | 0 | 12 | 2438 |
| Mexico | 0 | 0 | 86 | 16301 | 0 | 0 | 48 | 7842 |
| Morocco | 0 | 0 | 16 | 3581 | 0 | 0 | 0 | 0 |
| Nauru RP | 0 | 0 | 16 | 2293 | 0 | 0 | 0 | 0 |
| Netherland | 928 | 173309 | 13104 | 2491851 | 1262 | 225110 | 13315 | 2446917 |
| New Zealand | 0 | 0 | 316 | 57330 | 48 | 6230 | 314 | 50987 |
| Nigeria | 0 | 0 | 16 | 3184 | 0 | 0 | 0 | 0 |

EXPORTS OF CASHEW KERNELS FROM INDIA (Contd..)

| Countries | Mar 2002 | | Apr- Mar 2002 | | Mar 2003 | | Apr- Mar 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Qty | Value | Qty | Value Rs. | Qty | Value | Qty | Value Rs. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Norway | 48 | 9217 | 464 | 93603 | 32 | 5759 | 445 | 85550 |
| Oman | 0 | 0 | 103 | 17411 | 0 | 0 | 0 | 0 |
| Philippines | 4 | 723 | 92 | 15054 | 0 | 0 | 35 | 6538 |
| Poland | 0 | 0 | 71 | 15266 | 16 | 2854 | 48 | 9482 |
| Portugal | 0 | 0 | 121 | 25228 | 0 | 0 | 81 | 16127 |
| Qatar | 17 | 2939 | 102 | 20387 | 17 | 2819 | 51 | 8628 |
| Russia | 32 | 2444 | 458 | 54394 | 112 | 15469 | 644 | 88480 |
| Saudi Arabia | 215 | 36076 | 1791 | 332980 | 407 | 66156 | 2501 | 424617 |
| Sierra Leona | 0 | 0 | 54 | 1741 | 0 | 0 | 0 | 0 |
| Singapore | 16 | 2707 | 466 | 82846 | 16 | 2728 | 496 | 94807 |
| South Africa | 0 | 0 | 135 | 22264 | 32 | 5204 | 225 | 38121 |
| Spain | 55 | 10830 | 1669 | 334882 | 163 | 31045 | 1678 | 335159 |
| Srilanka | 8 | 1159 | 19 | 2522 | 6 | 908 | 63 | 8302 |
| Sweeden | 0 | 0 | 78 | 15976 | 0 | 0 | 0 | 0 |
| Syrian Arab Rep. | 17 | 3158 | 127 | 30842 | 45 | 10123 | 278 | 58122 |
| Taiwan | 16 | 3358 | 64 | 11752 | 0 | 0 | 64 | 12641 |
| Thailand | 0 | 0 | 32 | 7303 | 0 | 0 | 0 | 0 |
| Trininad | 32 | 6028 | 79 | 15892 | 16 | 2964 | 79 | 15634 |
| Tunisia | 0 | 0 | 0 | 0 | 65 | 10933 | 96 | 16816 |
| Turkey | 0 | 0 | 32 | 6311 | 0 | 0 | 32 | 5944 |
| United Arab | 308 | 51251 | 3251 | 613729 | 711 | 117566 | 5765 | 1007983 |
| United Kingdom | 588 | 111867 | 6551 | 1251072 | 352 | 65935 | 5195 | 1007264 |
| USA | 4078 | 737205 | 44420 | 8646119 | 3575 | 679670 | 53720 | 10158871 |
| Vietnam | 0 | 0 | 16 | 3429 | 0 | 0 | 0 | 0 |
| **Total** | **7669** | **1395514** | **92087** | **17741052** | **9227** | **1535283** | **104134** | **19330239** |
| Unit Value (Rs / Kg) | 181.92 | | 192.66 | | 166.39 | | 185.62 | |

**PORT WISE IMPORT OF RAW CASHEW NUT INTO INDIA**

| Ports | Mar 2002 | | Apr- Mar 2002 | | Mar 2003 | | Apr- Mar 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Cochin | 3736 | 103953 | 191579 | 5024620 | 5176 | 144812 | 249970 | 7724696 |
| Mangalore | 0 | 0 | 101 | 2019 | 0 | 0 | 304 | 7848 |
| Tuticorin | 3195 | 95346 | 163876 | 4473503 | 2474 | 74967 | 150386 | 4633171 |
| **Total** | **6931** | **199299** | **355556** | **9500142** | **7650** | **219779** | **400660** | **12365715** |

**PORT WISE EXPORT OF CASHEW NUT SHELL LIQUID FROM INDIA**

| Ports | Mar 2002 | | Apr- Mar 2002 | | Mar 2003 | | Apr- Mar 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Cochin | 60 | 698 | 3365 | 454640 | 0 | 0 | 6424 | 75468 |
| Mangalore | 128 | 2110 | 813 | 13636 | 15 | 622 | 791 | 17117 |
| **Total** | **188** | **2808** | **4178** | **59276** | **15** | **622** | **7215** | **92585** |

## IMPORT OF RAW CASHEW NUTS INTO INDIA

| Countries | Mar 2002 | | Apr- Mar 2002 | | Mar 2003 | | Apr- Mar 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Benin | 0 | 0 | 32239 | 781180 | 0 | 0 | 36905 | 1066212 |
| Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 1148 | 31734 |
| Burkinafaso | 0 | 0 | 246 | 3816 | 0 | 0 | 0 | 0 |
| El Salvador | 0 | 0 | 249 | 9865 | 0 | 0 | 341 | 13725 |
| Gambia | 0 | 0 | 2012 | 39167 | 167 | 3663 | 6361 | 209566 |
| Ghana | 0 | 0 | 3745 | 80327 | 0 | 0 | 6039 | 170667 |
| Guinea | 0 | 0 | 0 | 0 | 0 | 0 | 382 | 10418 |
| Guinea Bissau | 0 | 0 | 70685 | 1938578 | 0 | 0 | 65750 | 2413319 |
| Indonesia | 3829 | 111721 | 42920 | 1360884 | 2720 | 86873 | 45334 | 1553253 |
| Ivory Coast | 0 | 0 | 68875 | 1664991 | 0 | 0 | 84006 | 2365923 |
| Kenya | 1287 | 37452 | 9481 | 274054 | 1397 | 41314 | 4288 | 123274 |
| Madagascar | 495 | 11735 | 1551 | 33446 | 467 | 10838 | 2328 | 53729 |
| Monacco | 0 | 0 | 200 | 5344 | 0 | 0 | 0 | 0 |
| Mozambique | 232 | 5609 | 25655 | 665326 | 2610 | 69494 | 38767 | 1009225 |
| Nigeria | 0 | 0 | 9511 | 196448 | 0 | 0 | 17619 | 400436 |
| Panama | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 2772 |
| Philippines | 0 | 0 | 0 | 0 | 0 | 0 | 279 | 8262 |
| Senegal | 0 | 0 | 5448 | 130943 | 0 | 0 | 7759 | 264135 |
| Singapore | 0 | 0 | 200 | 4732 | 0 | 0 | 159 | 4337 |
| Tanzania | 1088 | 32782 | 82539 | 2311041 | 289 | 7597 | 82432 | 2641280 |
| Thailand | 0 | 0 | 0 | 0 | 0 | 0 | 486 | 17697 |
| United Kingdom | 0 | 0 | 0 | 0 | 0 | 0 | 163 | 5751 |
| **Total** | **6931** | **199299** | **355556** | **9500142** | **7650** | **219779** | **400660** | **12365715** |
| Unit Value (Rs / KG) | 28.75 | | 26.72 | | 28.73 | | 30.86 | |

## PORT WISE EXPORT OF CASHEW KERNELS FROM INDIA

| Ports | Mar 2002 | | Apr- Mar 2002 | | Mar 2003 | | Apr- Mar 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) | Qty (M.T) | Value Rs. (000) |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| Cochin | 4994 | 907152 | 52295 | 9994441 | 6390 | 999755 | 66859 | 12169621 |
| Goa | 46 | 6472 | 705 | 113295 | 26 | 5366 | 549 | 130592 |
| Mangalore | 442 | 87813 | 2381 | 456914 | 372 | 7189 | 4967 | 1018426 |
| Tuticorin | 2123 | 380684 | 34076 | 6594726 | 2248 | 418956 | 29398 | 5538424 |
| Visakhapatnam Sea | 64 | 13393 | 2628 | 581674 | 191 | 40010 | 2384 | 473176 |
| **Total** | **7669** | **1395514** | **92087** | **17741052** | **9227** | **1532853** | **104137** | **19330239** |

*Source: Cashew Bulletin, June issue.*

**Consumer Price Index (Cost of Living Index) numbers for Agricultural and Industrial Workers for the month of March 2003**

(Base 1998-99 =100)

| Sl. No | Centre | Linking Factor * | Index Numbers for | | Estimated Indices for | |
|---|---|---|---|---|---|---|
| | | | February 03 | March 03 | February 03 | March 03 |
| 1 | Thiruvananthapuram | 10.39 | 120 | 121 | 1247 | 1257 |
| 2 | Kollam | 10.28 | 121 | 121 | 1244 | 1244 |
| 3 | Punalur | 9.96 | 114 | 113 | 1135 | 1125 |
| 4 | Pathanamthitta | - | 117 | 117 | - | - |
| 5 | Alappuzha | 10.45 | 114 | 114 | 1191 | 1191 |
| 6 | Kottayam | 10.40 | 116 | 115 | 1206 | 1196 |
| 7 | Mundakkayam | 10.12 | 115 | 114 | 1164 | 1154 |
| 8 | Munnar | 10.03 | 114 | 113 | 1143 | 1133 |
| 9 | Eranakulam | 9.92 | 116 | 116 | 1151 | 1151 |
| 10 | Chalakkudy | 10.60 | 114 | 114 | 1208 | 1208 |
| 11 | Thrissur | 10.05 | 115 | 115 | 1156 | 1156 |
| 12 | Palakkad | 10.48 | 115 | 115 | 1205 | 1205 |
| 13 | Malappuram | 10.30 | 116 | 116 | 1195 | 1195 |
| 14 | Kozhikode | 10.08 | 114 | 113 | 1149 | 1139 |
| 15 | Meppady | 10.64 | 114 | 113 | 1213 | 1202 |
| 16 | Kannur | 10.06 | 115 | 115 | 1157 | 1157 |
| 17 | Kasaragod | - | 116 | 116 | - | - |

- *Linking factors approved in G.O (MS) No.7/2002/Plg. dated 21-03-2002 have been used from October 2001. Base for all centres is 1970 = 100.*

## CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS

(Base 1982 = 100)

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 489 | 492 | 483 | 486 | 487 | 487 | 489 | 486 | 479 | 488 | 485 | 491 |
| | 2. Mundakayam | 476 | 476 | 486 | 482 | 482 | 483 | 481 | 479 | 476 | 486 | 489 | 496 |
| | 3. Kollam | 504 | 502 | 498 | 501 | 503 | 518 | 518 | 509 | 518 | 513 | 514 | 512 |
| | 4. Thiruvanantha puram | 557 | 552 | 544 | 545 | 553 | 554 | 555 | 556 | 553 | 563 | 555 | 569 |
| | Average | 507 | 506 | 503 | 504 | 506 | 511 | 511 | 508 | 507 | 513 | 511 | 517 |
| Tamilnadu | 1. Chennai | 515 | 520 | 523 | 526 | 528 | 522 | 523 | 523 | 525 | 536 | 536 | 540 |
| | 2. Coimbatore | 477 | 482 | 481 | 479 | 491 | 487 | 485 | 490 | 491 | 500 | 497 | 503 |
| | 3. Coonoor | 477 | 473 | 478 | 488 | 490 | 483 | 483 | 489 | 492 | 501 | 509 | 506 |
| | 4. Madurai | 457 | 464 | 464 | 470 | 476 | 477 | 470 | 470 | 472 | 481 | 480 | 484 |
| | 5. Salem | 470 | 467 | 464 | 472 | 475 | 472 | 467 | 465 | 469 | 484 | 485 | 489 |
| | 6.Tiruchirappalli | 530 | 548 | 548 | 550 | 563 | 573 | 564 | 556 | 541 | 559 | 573 | 572 |
| | Average | 488 | 492 | 493 | 498 | 504 | 502 | 499 | 499 | 498 | 510 | 513 | 516 |
| Andra Pradesh | 1. Gudur | 457 | 458 | 458 | 463 | 470 | 467 | 462 | 464 | 466 | 464 | 467 | 469 |
| | 2. Gundur | 480 | 480 | 481 | 484 | 490 | 492 | 488 | 495 | 499 | 507 | 510 | 514 |
| | 3. Hyderabad | 468 | 470 | 471 | 476 | 476 | 478 | 478 | 481 | 487 | 492 | 495 | 505 |
| | 4. Visakhapatanam | 470 | 475 | 473 | 475 | 479 | 479 | 476 | 475 | 475 | 478 | 481 | 491 |
| | 5. Warangal | 503 | 509 | 506 | 514 | 517 | 507 | 512 | 523 | 525 | 530 | 536 | 538 |
| | Average | 476 | 478 | 478 | 482 | 486 | 485 | 483 | 488 | 490 | 494 | 498 | 503 |
| Karnataka | 1. Bangalore | 455 | 456 | 458 | 457 | 460 | 460 | 463 | 465 | 469 | 475 | 475 | 477 |
| | 2. Belgaum | 519 | 521 | 524 | 523 | 524 | 523 | 522 | 523 | 524 | 527 | 530 | 533 |
| | 3. Hubli Dhanwar | 477 | 477 | 480 | 481 | 484 | 480 | 481 | 487 | 486 | 491 | 495 | 496 |
| | 4. Meccara | 462 | 463 | 463 | 459 | 462 | 463 | 459 | 460 | 460 | 470 | 471 | 474 |
| | Average | 478 | 479 | 481 | 480 | 483 | 482 | 481 | 484 | 485 | 491 | 493 | 495 |
| Pondichery | 1. Pondicherry | 516 | 512 | 516 | 521 | 531 | 531 | 529 | 536 | 533 | 544 | 547 | 547 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 561 | 563 | 562 | 563 | 561 | 551 | 555 | 558 | 564 | 568 | 568 | 569 |
| Maharastra | 1. Mumbai | 560 | 562 | 563 | 563 | 565 | 569 | 574 | 574 | 578 | 585 | 586 | 586 |
| | 2. Nagpur | 493 | 496 | 499 | 500 | 504 | 497 | 493 | 492 | 495 | 496 | 501 | 504 |
| | 3. Nasik | 514 | 519 | 518 | 518 | 519 | 521 | 524 | 516 | 524 | 531 | 535 | 534 |
| | 4. Pune | 532 | 534 | 532 | 534 | 538 | 537 | 540 | 539 | 541 | 553 | 556 | 560 |
| | 5. Solapur | 486 | 490 | 499 | 497 | 492 | 489 | 491 | 494 | 494 | 491 | 491 | 498 |
| | Average | 517 | 520 | 522 | 522 | 524 | 523 | 524 | 523 | 526 | 531 | 534 | 536 |
| Haryana | 1. Faridabad | 487 | 491 | 492 | 491 | 487 | 482 | 482 | 486 | 493 | 494 | 494 | 497 |
| | 2. Yamuna Nagar | 452 | 458 | 459 | 456 | 454 | 446 | 447 | 452 | 454 | 457 | 458 | 458 |
| | Average | 470 | 475 | 476 | 474 | 471 | 464 | 465 | 469 | 474 | 476 | 476 | 478 |
| West Bengal | 1. Asansol | 459 | 463 | 463 | 465 | 467 | 460 | 455 | 453 | 455 | 467 | 471 | 474 |
| | 2. Darjeeling | 393 | 412 | 420 | 411 | 410 | 405 | 410 | 403 | 404 | 420 | 424 | 427 |
| | 3. Durgapur | 558 | 564 | 567 | 571 | 563 | 554 | 552 | 551 | 561 | 566 | 563 | 559 |
| | 4. Haldia | 584 | 589 | 590 | 592 | 590 | 582 | 578 | 575 | 581 | 584 | 584 | 588 |
| | 5. Howrah | 545 | 548 | 550 | 554 | 556 | 546 | 542 | 538 | 541 | 557 | 555 | 557 |
| | 6. Jalpaiguri | 421 | 425 | 427 | 429 | 424 | 416 | 404 | 409 | 410 | 411 | 416 | 418 |
| | 7. Kolkata | 537 | 536 | 538 | 543 | 544 | 530 | 527 | 527 | 533 | 545 | 542 | 541 |
| | 8. Raniganj | 419 | 423 | 425 | 424 | 425 | 414 | 408 | 406 | 410 | 419 | 424 | 421 |
| | Average | 490 | 495 | 498 | 499 | 497 | 488 | 485 | 483 | 487 | 496 | 497 | 498 |
| Chandigarh | 1. Chandigarh | 514 | 521 | 525 | 522 | 520 | 514 | 514 | 514 | 516 | 516 | 519 | 519 |
| Uttar Pradesh | 1. Agra | 442 | 447 | 447 | 444 | 445 | 437 | 445 | 448 | 451 | 449 | 447 | 449 |
| | 2. Ghaziabad | 483 | 486 | 489 | 483 | 481 | 478 | 479 | 484 | 488 | 490 | 493 | 493 |
| | 3. Kanpur | 465 | 470 | 471 | 467 | 468 | 456 | 453 | 458 | 464 | 465 | 463 | 465 |
| | 4. Saharaupur | 436 | 438 | 439 | 446 | 444 | 439 | 440 | 444 | 446 | 450 | 449 | 448 |
| | 5. Varanasi | 491 | 495 | 499 | 498 | 498 | 489 | 484 | 491 | 502 | 498 | 498 | 503 |
| | Average | 463 | 467 | 469 | 468 | 467 | 460 | 460 | 465 | 470 | 470 | 470 | 472 |
| Madhya Pradesh | 1. Balaghat | 428 | 431 | 432 | 445 | 444 | 438 | 432 | 427 | 428 | 433 | 438 | 441 |
| | 2. Bhopal | 512 | 515 | 516 | 517 | 516 | 509 | 508 | 509 | 515 | 520 | 524 | 525 |
| | 3. Indore | 496 | 493 | 491 | 491 | 494 | 492 | 491 | 492 | 506 | 513 | 514 | 518 |
| | 4. Jabalpur | 468 | 470 | 472 | 488 | 483 | 471 | 466 | 468 | 473 | 475 | 480 | 482 |
| | Average | 476 | 477 | 478 | 485 | 484 | 478 | 474 | 474 | 481 | 485 | 489 | 492 |
| | **All India** | **481** | **484** | **485** | **487** | **489** | **484** | **483** | **484** | **487** | **493** | **494** | **497** |

## CONSUMER PRICE INDEX AND % VARIATIONS OF INDEX FOR INDUSTRIAL WORKERS

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variatio |
|---|---|---|---|---|---|---|---|
| | | May-02 | May-03 | | Jun-02 | Jun-03 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 471 | 485 | 2.97 | 479 | 491 | 2.51 |
| | 2. Mundakayam | 457 | 489 | 7.00 | 464 | 496 | 6.90 |
| | 3. Kollam | 459 | 514 | 11.98 | 496 | 512 | 3.23 |
| | 4. Thiruvananthapuram | 530 | 555 | 4.72 | 546 | 569 | 4.21 |
| | Average | 479 | 511 | 6.57 | 496 | 517 | 4.18 |
| 2. Tamilnadu | 1. Chennai | 508 | 536 | 5.51 | 512 | 540 | 5.47 |
| | 2. Coimbatore | 471 | 497 | 5.52 | 480 | 503 | 4.79 |
| | 3. Coonoor | 469 | 509 | 8.53 | 474 | 506 | 6.75 |
| | 4. Madurai | 454 | 480 | 5.73 | 458 | 484 | 5.68 |
| | 5. Salem | 461 | 485 | 5.21 | 470 | 489 | 4.04 |
| | 6.Tiruchirappalli | 507 | 573 | 13.02 | 522 | 572 | 9.58 |
| | Average | 478 | 513 | 7.32 | 486 | 516 | 6.10 |
| 3. Andra Pradesh | 1. Gudur | 440 | 467 | 6.14 | 453 | 469 | 3.53 |
| | 2. Gundur | 463 | 510 | 10.15 | 468 | 514 | 9.83 |
| | 3. Hyderabad | 466 | 495 | 6.22 | 469 | 505 | 7.68 |
| | 4. Visakhapatanam | 466 | 481 | 3.22 | 468 | 491 | 4.91 |
| | 5. Warangal | 496 | 536 | 8.06 | 496 | 538 | 8.47 |
| | Average | 466 | 498 | 6.78 | 471 | 503 | 6.92 |
| 4. Karnataka | 1. Bangalore | 445 | 475 | 6.74 | 450 | 477 | 6.00 |
| | 2. Belgaum | 509 | 530 | 4.13 | 511 | 533 | 4.31 |
| | 3. Hubli Dhanwar | 462 | 495 | 7.14 | 469 | 496 | 5.76 |
| | 4. Meccara | 456 | 471 | 3.29 | 461 | 474 | 2.82 |
| | Average | 468 | 493 | 5.29 | 473 | 495 | 4.71 |
| 5. Pndicherry | 1. Pndicherry | 502 | 547 | 8.96 | 505 | 547 | 8.32 |

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | May-02 | May-03 | | Jun-02 | Jun-03 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 545 | 568 | 4.22 | 555 | 569 | 2.52 |
| 2. Maharastra | 1. Mumbai | 555 | 586 | 5.59 | 558 | 586 | 5.02 |
| | 2. Nagpur | 495 | 501 | 1.21 | 499 | 504 | 1.00 |
| | 3. Nasik | 508 | 535 | 5.31 | 511 | 534 | 4.50 |
| | 4. Pune | 530 | 556 | 4.91 | 531 | 560 | 5.46 |
| | 5. Solapur | 485 | 491 | 1.24 | 484 | 498 | 2.89 |
| | Average | 515 | 534 | 3.73 | 517 | 536 | 3.83 |
| 3. Haryana | 1. Faridabad | 475 | 494 | 4.00 | 480 | 497 | 3.54 |
| | 2. Yamuna Nagar | 434 | 458 | 5.53 | 441 | 458 | 3.85 |
| | Average | 455 | 476 | 4.73 | 461 | 478 | 3.69 |
| 4. West Bengal | 1. Asansol | 451 | 471 | 4.43 | 452 | 474 | 4.87 |
| | 2. Darjeeling | 388 | 424 | 9.28 | 390 | 427 | 9.49 |
| | 3. Durgapur | 549 | 563 | 2.55 | 552 | 559 | 1.27 |
| | 4. Haldia | 577 | 584 | 1.21 | 579 | 588 | 1.55 |
| | 5. Howrah | 541 | 555 | 2.59 | 542 | 557 | 2.77 |
| | 6. Jalpaiguri | 409 | 416 | 1.71 | 416 | 418 | 0.48 |
| | 7. Kolkata | 528 | 542 | 2.65 | 528 | 541 | 2.46 |
| | 8. Raniganj | 416 | 424 | 1.92 | 410 | 421 | 2.68 |
| | Average | 482 | 497 | 3.11 | 484 | 498 | 3.00 |
| 5. Chandigarh | 1. Chandigarh | 505 | 519 | 2.77 | 509 | 519 | 1.96 |
| 6. Uttar Pradesh | 1. Agra | 428 | 447 | 4.44 | 434 | 449 | 3.46 |
| | 2. Ghaziabad | 473 | 493 | 4.23 | 478 | 493 | 3.14 |
| | 3. Kanpur | 450 | 463 | 2.89 | 461 | 465 | 0.87 |
| | 4. Saharaupur | 433 | 449 | 3.70 | 434 | 448 | 3.23 |
| | 5. Varanasi | 481 | 498 | 3.53 | 482 | 503 | 4.36 |
| | Average | 453 | 470 | 3.75 | 458 | 472 | 3.01 |
| 7. Madhya Pradesh | 1. Balaghat | 413 | 438 | 6.05 | 417 | 441 | 5.76 |
| | 2. Bhopal | 504 | 524 | 3.97 | 512 | 525 | 2.54 |
| | 3. Indore | 486 | 514 | 5.76 | 492 | 518 | 5.28 |
| | 4. Jabalpur | 460 | 480 | 4.35 | 462 | 482 | 4.33 |
| | Average | 466 | 489 | 4.99 | 471 | 492 | 4.41 |
| | **All India** | **472** | **494** | **4.66** | **476** | **497** | **4.41** |

## CONSUMER PRICE INDEX FOR AGRICULTURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 02 | Aug 02 | Sept 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 328 | 328 | 325 | 328 | 329 | 330 | 330 | 329 | 328 | 331 | 335 | 341 |
| 2 | Tamilnadu | 320 | 321 | 324 | 327 | 340 | 356 | 355 | 355 | 354 | 358 | 359 | 362 |
| 3 | Anthrapradesh | 335 | 337 | 338 | 340 | 345 | 343 | 341 | 342 | 343 | 345 | 347 | 352 |
| 4 | Karnataka | 315 | 316 | 320 | 320 | 322 | 324 | 328 | 329 | 330 | 332 | 334 | 333 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 315 | 319 | 321 | 320 | 321 | 318 | 319 | 320 | 321 | 322 | 325 | 330 |
| 6 | Haryana | 328 | 331 | 333 | 331 | 330 | 325 | 322 | 326 | 329 | 331 | 329 | 332 |
| 7 | West Bengal | 300 | 305 | 309 | 314 | 310 | 304 | 299 | 300 | 303 | 305 | 308 | 308 |
| 8 | Uttar Pradesh | 320 | 323 | 326 | 327 | 324 | 318 | 317 | 323 | 325 | 325 | 322 | 325 |
| 9 | Madhya Pradesh | 317 | 320 | 320 | 321 | 321 | 314 | 309 | 312 | 316 | 317 | 320 | 323 |
| 10 | Assam | 323 | 328 | 331 | 332 | 331 | 329 | 325 | 326 | 329 | 334 | 336 | 337 |
| 11 | Bihar | 293 | 296 | 298 | 300 | 300 | 296 | 293 | 300 | 305 | 304 | 300 | 301 |
| 12 | Gujarat | 229 | 332 | 334 | 333 | 332 | 328 | 326 | 327 | 331 | 335 | 336 | 339 |
| 13 | Himachalpradesh | 298 | 303 | 303 | 307 | 309 | 310 | 308 | 308 | 310 | 315 | 309 | 311 |
| 14 | Jammu & Kashmir | 334 | 335 | 337 | 340 | 342 | 346 | 350 | 349 | 348 | 352 | 353 | 346 |
| 15 | Manipur | 295 | 295 | 299 | 300 | 302 | 300 | 299 | 300 | 301 | 302 | 303 | 305 |
| 16 | Meghalaya | 341 | 345 | 343 | 346 | 343 | 343 | 340 | 340 | 340 | 341 | 348 | 345 |
| 17 | Orissa | 297 | 300 | 301 | 302 | 300 | 294 | 292 | 291 | 295 | 297 | 302 | 310 |
| 18 | Punjab | 332 | 335 | 335 | 333 | 333 | 324 | 324 | 324 | 332 | 332 | 330 | 333 |
| 19 | Rajastan | 320 | 323 | 327 | 327 | 327 | 324 | 323 | 323 | 325 | 326 | 328 | 330 |
| 20 | Tripura | 327 | 326 | 328 | 330 | 334 | 334 | 331 | 323 | 322 | 315 | 315 | 320 |
| | ***All India*** | **316** | **319** | **321** | **322** | **323** | **321** | **320** | **322** | **324** | **326** | **327** | **330** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR AGRICULTURAL LABOURERS

Base 1986-87 = 100]

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | May-02 | May-03 | | Jun-02 | Jun-03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 321 | 335 | 4.36 | 325 | 341 | 4.92 |
| 2 | Tamilnadu | 316 | 359 | 13.61 | 319 | 362 | 13.48 |
| 3 | Anthrapradesh | 331 | 347 | 4.83 | 334 | 352 | 5.39 |
| 4 | Karnataka | 314 | 334 | 6.37 | 314 | 333 | 6.05 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 308 | 325 | 5.52 | 314 | 330 | 5.10 |
| 6 | Haryana | 322 | 329 | 2.17 | 323 | 332 | 2.79 |
| 7 | West Bengal | 297 | 308 | 3.70 | 299 | 308 | 3.01 |
| 8 | Uttar Pradesh | 309 | 322 | 4.21 | 315 | 325 | 3.17 |
| 9 | Madhya Pradesh | 311 | 320 | 2.89 | 314 | 323 | 2.87 |
| 10 | Assam | 320 | 336 | 5.00 | 322 | 337 | 4.66 |
| 11 | Bihar | 288 | 300 | 4.17 | 290 | 301 | 3.79 |
| 12 | Gujarat | 321 | 336 | 4.67 | 325 | 339 | 4.31 |
| 13 | Himachalpradesh | 300 | 309 | 3.00 | 301 | 311 | 3.32 |
| 14 | Jammu & Kashmir | 338 | 353 | 4.44 | 333 | 346 | 3.90 |
| 15 | Manipur | 297 | 303 | 2.02 | 298 | 305 | 2.35 |
| 16 | Meghalaya | 348 | 348 | 0.00 | 344 | 345 | 0.29 |
| 17 | Orissa | 293 | 302 | 3.07 | 295 | 310 | 5.08 |
| 18 | Punjab | 325 | 330 | 1.54 | 328 | 333 | 1.52 |
| 19 | Rajastan | 313 | 328 | 4.79 | 318 | 330 | 3.77 |
| 20 | Tripura | 321 | 315 | -1.87 | 323 | 320 | -0.93 |
| | **All India** | **311** | **327** | **5.14** | **314** | **330** | **5.10** |

## CONSUMER PRICE INDEX FOR RURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jul 02 | Aug 02 | Sept 02 | Oct 02 | Nov 02 | Dec 02 | Jan 02 | Feb 02 | Mar 03 | Apr 03 | May 03 | Jun 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 331 | 331 | 327 | 329 | 330 | 331 | 331 | 331 | 330 | 333 | 336 | 342 |
| 2 | Tamilnadu | 320 | 322 | 324 | 327 | 339 | 354 | 352 | 352 | 351 | 355 | 356 | 359 |
| 3 | Anthrapradesh | 335 | 337 | 338 | 340 | 345 | 344 | 341 | 342 | 344 | 345 | 348 | 353 |
| 4 | Karnataka | 316 | 317 | 321 | 321 | 323 | 325 | 328 | 329 | 331 | 333 | 335 | 334 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 316 | 319 | 321 | 321 | 321 | 319 | 319 | 320 | 322 | 323 | 326 | 330 |
| 6 | Haryana | 330 | 333 | 334 | 333 | 331 | 327 | 324 | 328 | 331 | 332 | 330 | 333 |
| 7 | West Bengal | 303 | 308 | 312 | 316 | 313 | 307 | 302 | 303 | 305 | 308 | 312 | 312 |
| 8 | Uttar Pradesh | 324 | 327 | 330 | 330 | 327 | 322 | 321 | 326 | 328 | 328 | 325 | 328 |
| 9 | Madhya Pradesh | 322 | 325 | 325 | 326 | 326 | 319 | 315 | 318 | 321 | 322 | 325 | 327 |
| 10 | Assam | 323 | 328 | 331 | 332 | 331 | 329 | 325 | 326 | 329 | 334 | 336 | 337 |
| 11 | Bihar | 295 | 298 | 300 | 302 | 302 | 298 | 295 | 301 | 307 | 306 | 302 | 303 |
| 12 | Gujarat | 331 | 334 | 335 | 334 | 334 | 330 | 327 | 328 | 332 | 336 | 337 | 341 |
| 13 | Himachalpradesh | 305 | 310 | 310 | 314 | 314 | 315 | 313 | 312 | 315 | 321 | 316 | 317 |
| 14 | Jammu & Kashmir | 326 | 328 | 329 | 333 | 336 | 338 | 341 | 340 | 340 | 344 | 346 | 340 |
| 15 | Manipur | 296 | 296 | 300 | 301 | 302 | 301 | 299 | 300 | 302 | 303 | 304 | 306 |
| 16 | Meghalaya | 338 | 342 | 340 | 343 | 340 | 341 | 338 | 338 | 338 | 339 | 346 | 343 |
| 17 | Orissa | 297 | 300 | 301 | 302 | 300 | 294 | 293 | 291 | 295 | 297 | 303 | 310 |
| 18 | Punjab | 336 | 339 | 340 | 338 | 337 | 330 | 329 | 330 | 337 | 338 | 336 | 338 |
| 19 | Rajastan | 320 | 324 | 328 | 327 | 328 | 325 | 323 | 323 | 325 | 326 | 328 | 329 |
| 20 | Tripura | 321 | 319 | 321 | 323 | 328 | 328 | 326 | 317 | 315 | 306 | 306 | 311 |
| | **All India** | **319** | **321** | **323** | **324** | **326** | **324** | **322** | **324** | **326** | **328** | **329** | **332** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR RURAL LABOURERS

**Base 1986-87 = 100]**

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | May-02 | May-03 | | Jun-02 | Jun-03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 324 | 336 | 3.70 | 328 | 342 | 4.27 |
| 2 | Tamilnadu | 316 | 356 | 12.66 | 319 | 359 | 12.54 |
| 3 | Anthrapradesh | 332 | 348 | 4.82 | 335 | 353 | 5.37 |
| 4 | Karnataka | 315 | 335 | 6.35 | 315 | 334 | 6.03 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 309 | 326 | 5.50 | 314 | 330 | 5.10 |
| 6 | Haryana | 323 | 330 | 2.17 | 325 | 333 | 2.46 |
| 7 | West Bengal | 300 | 312 | 4.00 | 302 | 312 | 3.31 |
| 8 | Uttar Pradesh | 312 | 325 | 4.17 | 319 | 328 | 2.82 |
| 9 | Madhya Pradesh | 315 | 325 | 3.17 | 318 | 327 | 2.83 |
| 10 | Assam | 320 | 336 | 5.00 | 322 | 337 | 4.66 |
| 11 | Bihar | 290 | 302 | 4.14 | 293 | 303 | 3.41 |
| 12 | Gujarat | 323 | 337 | 4.33 | 326 | 341 | 4.60 |
| 13 | Himachalpradesh | 306 | 316 | 3.27 | 308 | 317 | 2.92 |
| 14 | Jammu & Kashmir | 331 | 346 | 4.53 | 326 | 340 | 4.29 |
| 15 | Manipur | 297 | 304 | 2.36 | 298 | 306 | 2.68 |
| 16 | Meghalaya | 345 | 346 | 0.29 | 341 | 343 | 0.59 |
| 17 | Orissa | 293 | 303 | 3.41 | 295 | 310 | 5.08 |
| 18 | Punjab | 330 | 336 | 1.82 | 332 | 338 | 1.81 |
| 19 | Rajastan | 315 | 328 | 4.13 | 319 | 329 | 3.13 |
| 20 | Tripura | 315 | 306 | -2.86 | 317 | 311 | -1.89 |
| | **All India** | **313** | **329** | **5.11** | **317** | **332** | **4.73** |

## CONSUMER PRICE INDEX FOR INDUSTRIAL & AGRICULTURAL WORKERS

**(Kerala State) Base 1998-99=100**

| Centre | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thiruvananthapuram | 116 | 117 | 117 | 117 | 118 | 119 | 120 | 120 | 121 | 122 | 121 | 122 |
| Kollam | 117 | 118 | 118 | 118 | 119 | 121 | 121 | 121 | 121 | 122 | 122 | 122 |
| Pathanamthitta | 114 | 115 | 113 | 113 | 113 | 113 | 114 | 114 | 113 | 112 | 111 | 112 |
| Punalur | 113 | 113 | 115 | 115 | 116 | 116 | 116 | 117 | 117 | 117 | 118 | 119 |
| Alappuzha | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 | 114 | 115 | 115 | 116 |
| Kottayam | 115 | 115 | 115 | 115 | 116 | 116 | 116 | 116 | 115 | 116 | 117 | 117 |
| Mundakkayam | 113 | 114 | 114 | 114 | 114 | 115 | 115 | 115 | 114 | 114 | 114 | 115 |
| Munnar | 116 | 116 | 115 | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 | 115 |
| Ernakulam | 115 | 115 | 115 | 115 | 116 | 116 | 116 | 116 | 116 | 117 | 117 | 118 |
| Chalakkudy | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 | 114 | 115 | 115 | 116 |
| Thrissur | 114 | 114 | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 116 | 115 | 116 |
| Palakkad | 113 | 114 | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 116 | 116 | 116 |
| Malappuram | 114 | 115 | 114 | 114 | 115 | 115 | 116 | 116 | 116 | 117 | 118 | 119 |
| Kozhikkode | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 | 113 | 114 | 115 | 116 |
| Meppady | 115 | 116 | 115 | 115 | 115 | 115 | 114 | 114 | 113 | 113 | 112 | 112 |
| Kannur | 114 | 115 | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 116 | 115 | 117 |
| Kasargod | 113 | 113 | 113 | 114 | 115 | 115 | 115 | 116 | 116 | 118 | 117 | 119 |
| **State** | **114** | **115** | **114** | **114** | **115** | **115** | **116** | **116** | **115** | **116** | **116** | **117** |

## MONTHLY AVERAGE PRICE OF SPICES FOR NOVEMBER 2002

| SPICE | CENTRE | GRADE | (RS/ KG) |
|---|---|---|---|
| Black Pepper | Cochin | Ungarbled | 72.26 |
| | | Garbled | 75.74 |
| Cardamom Small | Vandanmettu | - | 465.72 |
| (Auction) | Thekkady | - | 452.39 |
| | Mumbai | - | 457.53 |
| | Saklashpur | - | 496.39 |
| | Sirsi | - | 468.93 |
| Cardamom (Large) | Siliguri | Badadana | 135.15 |
| | | Chotadana | 122.70 |
| Chillies | Virudhunagar | - | 35.25 |
| | Guntur | - | 39.00 |
| Ginger (Dry) | Cochin | Unbleached | 55.00 |
| | | Bleached | 50.00 |
| Turmeric | Cochin | Alleppey Finger | 48.60 |
| | Mumbai | Rajpuri Finger | 56.25 |
| Coriander | Mumbai | Indori | 33.75 |
| | | Kanpuri | 39.70 |
| Cumin 4% | Mumbai | - | 68.63 |
| Fennel | Mumbai | - | 53.50 |
| Fenugreek | Mumbai | - | 19.08 |
| Mustard | Delhi | - | 20.58 |
| Garlic | Mumbai | - | 17.00 |
| Celery | Mumbai | - | 25.97 |
| Clove | Cochin | - | 221.18 |
| Nutmeg (with shell) | Cochin | - | 101.47 |
| Mace | Cochin | - | 292.06 |
| Cinnamon | Delhi | - | 54.50 |
| cassia | Chennai | - | 55.00 |

*Source: Spice India June 2003.*

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

| Sl. No | Name of Commodity | Unit | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **A. RICE - Open Market** | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 12.32 | 12.80 | 12.95 | 12.93 | 13.30 | 13.25 | 13.29 | 13.29 | 13.30 | 13.13 | 13.09 | 13.59 |
| 2 | Red - Chamba | Kg | 12.20 | 12.88 | 13.39 | 12.96 | 13.04 | 13.59 | 13.69 | 13.65 | 13.65 | 13.51 | 13.27 | 13.35 |
| 3 | White Andra Vella | Kg | 12.16 | 12.15 | 12.03 | 11.95 | 12.45 | 11.52 | 12.55 | 12.60 | 12.50 | 12.44 | 12.57 | 12.80 |
| | **B. PULSES** | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 31.14 | 30.54 | 30.96 | 30.21 | 30.54 | 30.29 | 29.54 | 29.64 | 29.71 | 29.89 | 30.43 | 30.07 |
| 5 | Black gram split w/o husk | Kg | 34.04 | 33.32 | 33.13 | 32.32 | 31.04 | 29.79 | 28.11 | 27.14 | 27.25 | 27.18 | 27.04 | 26.39 |
| 6 | Dhall(Tur) | Kg | 30.31 | 30.73 | 31.13 | 31.15 | 31.15 | 31.12 | 30.19 | 30.77 | 30.04 | 30.08 | 31.04 | 31.00 |
| | **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 14.59 | 14.52 | 14.69 | 14.49 | 13.89 | 13.32 | 13.30 | 13.22 | 13.15 | 13.08 | 13.34 | 13.32 |
| 8 | Milk (Cow's) | Ltr. | 13.00 | 12.50 | 13.00 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 |
| 9 | Egg Hen's (White lagon) | Dozen | 17.04 | 14.89 | 15.23 | 14.38 | 16.21 | 16.41 | 16.01 | 16.54 | 14.61 | 15.47 | 15.04 | 18.09 |
| 10 | Mutton with bones | Kg | 120.00 | 121.79 | 121.43 | 122.14 | 121.43 | 121.43 | 123.57 | 123.57 | 125.71 | 125.71 | 126.43 | 125.71 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 71.14 | 71.07 | 71.00 | 71.07 | 71.07 | 71.07 | 71.21 | 71.21 | 71.21 | 71.21 | 71.50 | 71.14 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.20 | 69.20 | 69.20 | 69.20 | 69.20 | 69.20 | 68.70 | 66.70 | 66.70 | 66.27 | 65.71 | 66.21 |
| | **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 52.14 | 52.64 | 51.04 | 49.57 | 56.93 | 61.61 | 58.75 | 62.55 | 62.11 | 59.23 | 58.30 | 53.88 |
| 14 | Groundnut oil | Kg | 53.48 | 53.38 | 56.20 | 56.38 | 57.88 | 59.53 | 59.13 | 60.66 | 64.96 | 65.96 | 65.86 | 66.37 |
| 15 | Refined oil(Postman) | Kg. | 64.93 | 65.83 | 65.65 | 63.87 | 71.20 | 76.42 | 73.87 | 75.63 | 74.28 | 75.88 | 76.79 | 80.21 |
| 16 | Gingelly oil | Kg. | 54.79 | 54.46 | 56.85 | 58.05 | 59.05 | 60.29 | 62.39 | 64.93 | 68.34 | 69.63 | 70.55 | 69.68 |
| 17 | Coconut without husk | 100 nos | 480.36 | 482.14 | 480.77 | 469.64 | 526.79 | 576.79 | 570.36 | 591.07 | 597.50 | 579.29 | 569.64 | 531.43 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | Jul 02 | Aug 02 | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 33.29 | 32.93 | 35.00 | 34.29 | 36.64 | 37.86 | 37.79 | 38.21 | 38.54 | 39.86 | 43.00 | 43.89 |
| 19 | Chillies dry | Kg. | 43.00 | 43.07 | 45.00 | 51.93 | 52.71 | 52.29 | 51.29 | 49.64 | 50.93 | 51.29 | 51.21 | 51.50 |
| 20 | Onion small | Kg. | 18.15 | 15.38 | 16.02 | 19.27 | 22.20 | 21.79 | 11.36 | 11.52 | 11.10 | 11.41 | 15.69 | 15.71 |
| 21 | Tamarind without seeds loose | Kg. | 22.64 | 22.79 | 23.69 | 24.29 | 24.86 | 25.21 | 24.71 | 23.07 | 22.71 | 22.36 | 22.64 | 22.57 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 12.00 | 10.36 | 9.15 | 8.29 | 9.07 | 9.21 | 9.86 | 11.86 | 13.07 | 14.14 | 15.77 | 18.50 |
| 23 | Tapioca Raw | Kg. | 5.32 | 5.54 | 5.62 | 5.82 | 5.89 | 5.86 | 5.96 | 5.96 | 5.88 | 6.13 | 5.96 | 5.89 |
| 24 | Potato | Kg. | 11.59 | 11.98 | 11.09 | 11.99 | 12.13 | 10.59 | 9.29 | 8.46 | 8.36 | 9.07 | 10.56 | 10.46 |
| 25 | Colocassia | Kg. | 14.00 | 14.08 | 14.69 | 13.29 | 13.21 | 12.14 | 11.71 | 12.43 | 12.77 | 14.36 | 14.85 | 15.52 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 6.85 | 7.96 | 8.40 | 8.54 | 10.31 | 7.99 | 6.50 | 5.95 | 5.75 | 6.35 | 7.57 | 8.79 |
| 27 | Brinjal | Kg. | 10.29 | 10.00 | 9.85 | 9.64 | 11.29 | 11.14 | 8.64 | 8.57 | 8.79 | 9.29 | 11.14 | 12.00 |
| 28 | Cucumber | Kg. | 8.14 | 6.79 | 8.23 | 7.93 | 9.14 | 6.57 | 7.00 | 7.64 | 6.50 | 6.43 | 7.43 | 8.07 |
| 29 | Ladies Finger | Kg. | 11.14 | 11.21 | 11.15 | 10.93 | 10.14 | 9.57 | 9.50 | 10.14 | 13.64 | 13.50 | 11.93 | 11.79 |
| 30 | Cabbage | Kg | 9.00 | 9.50 | 7.69 | 8.64 | 9.14 | 8.86 | 8.43 | 8.21 | 7.86 | 7.93 | 8.71 | 15.43 |
| 31 | Bittergourd | Kg. | 14.00 | 12.14 | 12.85 | 14.43 | 14.93 | 13.21 | 12.64 | 12.21 | 12.14 | 13.00 | 14.36 | 17.00 |
| 32 | Tomatto | Kg. | 9.57 | 10.71 | 8.54 | 9.14 | 11.93 | 8.71 | 7.21 | 7.21 | 7.93 | 13.00 | 16.07 | 12.07 |
| 33 | Chillies green | Kg. | 14.57 | 16.21 | 14.69 | 15.00 | 15.57 | 14.43 | 15.57 | 13.86 | 13.50 | 13.00 | 13.79 | 20.29 |
| 34 | Banana green | Kg. | 11.61 | 12.32 | 11.85 | 10.96 | 11.39 | 10.79 | 12.68 | 13.61 | 12.57 | 11.86 | 11.14 | 12.43 |
| 35 | Plantain green | Kg. | 8.71 | 8.71 | 9.46 | 8.89 | 9.57 | 9.07 | 8.93 | 9.36 | 8.57 | 8.68 | 8.29 | 9.00 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.80 | 7.86 | 7.88 | 7.91 | 7.95 | 7.95 | 7.96 | 7.95 | 7.91 | 7.91 | 7.91 | 7.93 |
| 37 | Toilet Soap Lux | 100 gm | 11.46 | 11.57 | 11.71 | 11.86 | 11.89 | 11.75 | 11.79 | 11.96 | 12.11 | 12.21 | 12.25 | 12.29 |
| 38 | Toothpaste Colgate | 100 gm | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.29 | 27.50 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 149.95 | 151.68 | 138.67 | 130.21 | 142.75 | 153.32 | 169.05 | 171.54 | 173.79 | 171.14 | 176.05 | 176.21 |

## Dynamics of Inflation in Services Consumers Stuck with Inefficiencies and High Costs

*Price developments in services need to be analysed on the basis of CPI to study their contribution to inflation in relation to that of goods. At present, services sectors account for almost 50 percent of the aggregate GDP. Higher price increases, rising productivity and increased tradability could create a 'virtuous circle' associated with a higher share of services in GDP. However, reforms and privatisation programmes, if not associated with increased efficiency, may also contribute to a rise in charges and services prices.*

The recent dampening of the rate of inflation and its reduced volatility in India, has been mainly due to increased openness and slow growth conditions in industry associated with over capacity and competition faced with weak demand, and not much on account of anchoring of inflationary expectations by the central bank as elsewhere. New trends are reflected in increasing discounts and gifts now part of sales of the manufactured goods. Agricultural prices are not rising as MSPs of rice and wheat are now almost frozen, imports and exports are freer, and prices of perennial crops have shown a downward trend though these are not fully reflected in retail (consumer) prices as illustrated by tea, coffee and tobacco. Tea auction prices at around Rs. 85 per Kg may be compared with a retail price of Rs. 400 per Kg. the gap is indeed 'comprehensible'. 'Fair trade' promotion may only help the situation as is happening in the case of coffee (Oxfam 2002).

*Dynamics of Services Prices*

The recent observed overall rate of inflation indicated by WPI and CPI (IW) is given in Table1.

Thus, price developments in services need to be analysed on the basis of the CPI, to study their contribution to inflation in relation to that of, agricultural and manufactured goods. They reveal that CPI inflation rates exceeded WPI inflation rates in 2001-02 and this year so far which may be mainly due to services. The Reserve Bank of India in its annual report (RBI 2002) has reported that the price movements of some services which are included in the CPI could have contributed to the divergence. No further analysis has been reported. The mid-year review (December 2002) of the ministry of finance emphasises the moderation in the CPI inflation rate compared with the previous year, which is due to a comfortable food supply (with weights of 57 percent in the CPI), but omits any analysis of its excess over WPI inflation rate. by the nature of statistic, the WPI does not include services.

There is a need to analyse the dynamics service prices also because the share of services sectors in aggregate GDP (NAS, CSO) is now around one-half. It was 48.9 percent (excluding construction and electricity) in 2001-02 (COP). The share of services in aggregate exports (credits) ans imports (debits) has also increased to 25.2 percent and 20.3 percent respectively, going by the RBI definition and BOP accounts [RBI Bulletin, October 2002]. The higher share is partly explained by software, risen recently at an impressive rate, covered under 'miscellaneous' of services.

It is recognised that services comprise a highly diversified sector covering construction, public utilities like power and transport, financial transactions, infotainment, personal services and public administration guided by totally varied factors and affected most by reforms and competition, on the other hand, and changing demand patterns and lifestyles, on the other. The quality and customer follow - up play a major role in the pricing of services. Unlike products, the increased 'economic openness's only indirectly helps in balancing changes in services prices though may provide crucial inputs. Many services remain non-tradable. Tradability in services is therefore increasing as productivity rises and is reflected in its share in the GDP.

Taxing services has been hazardous. Service tax collection has increased since 1994-95 when it was introduced, mainly due to addition of more and more services every year, the rate remaining 5 percent. The collections worked out to 0.41 percent (Rs. 36 bn) of GDP in 2001-02 against 0.12 percent (Rs. 4.07 bn) in 1994-95 [Mukhopadhyay 2002]. Thus, the incidence of service tax remains low and may not be a cause of the rise in the rate of inflation in services

Services are a skill and labour-intensive sector and variations in wages play a determining role in price developments. Wages have a tendency to rise but not to roll back and a 'ratchet effect' operates. Thus, prices of services remain high for long unless the labour market id highly competitive like that in the software sector..

*Weight of Services in CPI*

This is not entirely clear as certain services and products overlap in the present pattern of the index. However, our exercise shows that clearly identifiable services account for a little over 16 percent in the CPI

| | | | |
|---|---|---|---|
| 1 | Medical care – fees and premium | : | 1.09 |
| 2 | Education and recreation fees and tickets | : | 1.88 |
| 3 | Transport and communication – fees/ fare and postages | : | 2.21 |
| 4 | Personal care – barber charges | : | 0.57 |
| 5 | Others – laundry, washing, tailoring charges | : | 1.59 |
| 6 | Housing – rent | : | 8.67 |
| | Sub-Total | : | 16.01 |
| 7 | Fuel and light | : | 6.28 |
| | Grand Total | : | 22.29 |

The weight goes up to 22.3 percent if fuel and light services and goods are included in services. It goes up to about 25 percent if all services overlapping with products also are included.

The poor also avail of services, they must be paying atleast for housing and, in contingencies, for medical care. Fuel and light remain essential items of expenditure. The latest data (Planning Commission) on per capita expenditure of the poverty class (Annexure I) show that medical care has a very significant and similar weight in both rural and urban areas. Fuel and light have much higher weight common to both the areas (Table 2).

Thus, as expected, the weight of services including fuel and light in the consumption basket of the poor is higher at 22.66 in urban areas compared with 17.55 in rural areas.

*Perception of Consumer Price Variations*

The indices of prices being statistical have their limitations of coverage, weights and variations in quality. The CPI in vogue has 1982 as base and is under revision. This applies particularly to services in the CPI. The people's perceptions, therefore, need also to be observed. As in products, there have been pluses as well as minuses in price variations ('Price Perceptions', editorial, *Business Standard*, September 28, 2002). The general perceptions about certain services are brought in Table 3

Not all of the items in table 3 are clearly identifiable in the CPI in the details of weights and price developments. What is clear is that variations have been the result of changing conditions like privatisation or resorting more to private providers besides changing costs and margins. The general perception is that there is a trend to reduce costs though the providers are constrained by rigidities particularly those of wage bill and delivery systems prevailing for a long time. Power is a case in point. reforms have led to a rise in charges as per costs, but due to overstaffing and inefficiencies, costs have yet to be reduced significantly and thus revision of charges in this sector has contributed to a higher rate of CPI inflation.

*GDP Deflator of Services*

What the aggregate or 'economy-wide (NAS, CSO) [CSO 2001] picture shows is that recently the rate of inflation in the services sectors has indeed risen compared with the previous year and has mostly been higher than the overall rate (Table 4).

Thus, the data or the first quarter of 2002-03 show that the rate of inflation in construction, affecting housing financing, social and personal services has been much higher than in the previous year. They have apparently contributed to the higher rate of CPI inflation compared with WPI rate.

*Rate of (CPI) inflation in services*

Annexure II shows the indices and the rate of CPI inflation in items on a monthly basis for the period April 2001 to March 2002 and April 2002 ot September 2002, the latest available from the labour bureau. When compared with the overall CPI and the rate of inflation, we find that education and recreation, transport and communication, and housing have recorded a rate higher than the overall rate all thorough in the previous year. Transport and communications, housing and 'others' recorded a higher rate for all the six months of 2002-03 for which information is available (Table 5).

The rate of inflation in CPI of the personal care and 'others' group has been higher in only in three months during 2001-02. 'Others' include laundering, washing and tailoring charges. The inflation rate has been lower in medical care in the first six months of 2002.

**Table 1: Rate of Inflation**

| Year | WPI Rate (Percent) | CPI Rate (Percent) |
|---|---|---|
| 2000-01 | 7.2 | 3.8 |
| 2001-02 | 3.6 | 4.3 |
| 2002-03 | 25.5* (5.2) | 4.3* (3.7) |

**Note:** * April-September; parentheses show figures for the corresponding period of the previous year

**Table 2: Weights in Per Capita Expenditure of Poverty Classes, 1999-2000**

| | Rural | urban |
|---|---|---|
| Rent | 0.07 | 2.05 |
| Medical | 3.97 | 4.01 |
| Education | 1.15 | 2.32 |
| **Sub-Total** | **5.19** | **8.38** |
| **Others** | | |
| Entertainment | 0.22 | 0.59 |
| Conveyance | 1.47 | 2.13 |
| Consumer Services | 2.49 | 2.66 |
| **Cumulative Total** | **9.37** | **13.76** |
| Fuel and Light | 8.18 | 8.90 |
| **Grand Total** | **17.55** | **22.66** |

**Table 3: Perception of Services Prices**

| Due to | Increase in Variations | Decrease in Variations |
|---|---|---|
| Reforms and competition | Urban Bus Transport*<br>Domestic power rates*<br>Cable charges | Air fares<br>Mobile phone revenues<br>House purchases |
| Strong demand, lifestyle and privatisation | Private school education<br>Pharmaceuticals and cosmetics<br>Premium auto services | Travel services and hospitality<br>Personal services<br>Financial services** |

**Note:** * *Efficiency effort did not necessarily follow the reforms.*
** Charge on bank demand drafts/ transfers of money.

**Table 4: GDP Deflators**

| Sector | 2000-01 | 2001-02 | 2001-02 Q-1 | 2002-03 Q-1 |
|---|---|---|---|---|
| Construction | 3.4 | 3.7 | 1.9 | 5.5 |
| Trade, Hotels, Transport and Communication | 3.8 | 3.0 | 1.4 | 5.0 |
| Financing, insurance, real estate and business services | 4.3 | 3.5 | 1.8 | 5.4 |
| Community, social and personal services | 3.8 | 3.8 | 3.0 | 4.3 |
| Aggregate GDP | 3.8 | 3.5 | 2.0 | 4.3 |

**Table 5: Frequency of Higher Rate in Services**

| Services | Number of Months | | |
|---|---|---|---|
| | Weight | April 2001-2002 | April-September 2002 |
| Medical care | 1.05 | 5 | Lower (5) |
| Education and recreation | 1.88 | 12 | 4 (6) |
| Transport and Communication | 2.21 | 12 | 6 (6) |
| Personal care and effects | 0.57 | 3 | 4 (3) |
| Others | 1.59 | 3 | 6 (4) |
| Housing | 8.67 | 12 | 6 (6) |
| Fuel and Light | 6.28 | 9 | 6 (6) |

**Note:** Figures in parentheses refer to the corresponding months of the previous year.

The average rate of inflation has been higher (than the overall average rate) in education, transport and communication, and housing, and higher also in the case of 'others' in 2002 Table 6.

It is also noteworthy that the overall rate of inflation in 2002 so far has been higher than in the previous year except in case of medical care. The higher rate of inflation in transport may have been mainly due to the upward revisions in fuel prices.

*Services Prices at Different Centres*

Analysing the rate of inflation according to locations, we find that most centres of reporting with some kind of well-known services orientation have recorded a higher average rate of inflation than the overall average. The centres to be picked up more scientifically require detailed analysis. Annexure III shows the varying rates recorded at such centres in 2001-02 and during April-September 2002, but all higher than the overall rate. This is inline with the observed dynamics of services contributing to the higher (CPI) rate of inflation.

*Contribution of different Services Prices in CPI Inflation*

The analysis of contribution, as per details in Annexure IV and Annexure V, shows that about one-half of CPI inflation has been contributed by food and fuel, at 47.1 percent in 2001-02 and 50.5 percent in 2002-03 (April-September). Services prices have contributed about the remaining one half of the rate of inflation during both 2001-02 and April-September 2002 (Table 7).

Housing, among services, accounted for a substantial (over one-fifth) share of the CPI inflation in 2001-02 and 2002-03. Elsewhere, housing prices have been rising and much ahead of incomes in most US cities. House prices have risen by nearly a third in real terms, since 1997, in the eight of 50 biggest metropolitan areas. In the Euro area, services prices have recorded high increase since May 2002 and the main inflation components were restaurants, transport and accommodation prices. Among other services, as Table 7 shows, the contribution of transport and communications has risen in India in 2002-03, price revisions in fuel account for the high rate of price rise in case of transport. The contribution of medical care declined in 2002-03 while that of education increased marginally. The contribution of 'others' covering laundry, washing and tailoring charges, has declined substantially in 2002-03. To what extent changes in wages account for the variations in contribution needs further analysis.

*Role of Variations in Wages*

The ECB analysis [ECB 2002] of price developments in the euro area reveals the importance of wage variations in services prices and the rate of inflation. Services prices had risen in the euro area at the rate of 1.7 percent in 2000 and 2.5 percent in 2001 but have been edging upto 3.1, 3.2 and 3.3 percent in the first, second and third quarters of 2002, respectively, highest among the index components. This is mainly due to increases in both air transport services prices and accommodation services prices counteracted in September by a relatively strong increase in restaurant prices. But they reflected past wage developments, indirect effects from past price shocks and, to a small extent, some euro cash changeover effects at the turn of the year. The restaurant services prices also showed a rise due to these developments and led to a rise in perceived inflation by consumers who frequently visit restaurants. Due to no further increase in the annual rate of change of negotiated wages in the second quarter of 2002, ECB expects services price inflation to moderate. Thus, wage rate of variations have a lot to do with the rate of inflation in the euro-zone countries. It is recognised that the levels of wages and social securities are high in these countries making these variations important.

*Perceived Inflation in Case of Services*

The perceived inflation by consumers depends on the importance attached to price developments in goods and services they buy frequently. Analysis of prices of goods shows that the availability of essential goods of consumption is comfortable and their prices remain steady except for seasonal variation observed recently in edible oils and onions. With the shift in importance of consumption towards items of comfort, leisure and support services, observed in private consumption expenditure (PCE), the perception of inflation in services remains strong, notably in housing. The discounts and gifts are not directly related to MRP by the consumers and are taken as freebies Indeed, formal MRP or like prices of certain items and of services associated with them are not falling despite a significant decline in raw material or base material prices, for example, tea and coffee. This is mainly due to lack of adequate price information and consumer pressure. The World Bank pink sheets (World Bank 2002) show how average prices of these commodities declined recently (Table 8).

The case of tobacco is similar. Tobacco prices in the country have been declining but a pack of cigarette costs the same today as in the previous year.

**Table 6: Average Rate of Inflation in Services**

| Services | April 2001-2002 | April-September 2002 |
|---|---|---|
| Medical care | 4.2 | 2.5 (5.0) |
| Education and recreation | 6.4 | 7.5 (6.4) |
| Transport and Communication | 6.8 | 10.7 (5.9) |
| Personal care and effects | 3.5 | 4.3 (3.4) |
| 'Others' | 4.0 | 5.0 (3.8) |
| Housing | 10.9 | 10.2 (9.2) |
| Fuel and Light | 6.4 | 11.2 (8.5) |
| Overall | 4.3 | 4.3 (3.7) |

**Note:** Figures in parentheses relate to the same months of the previous year.

**Table 7: Contribution of Services Prices in Inflation**

| Services | 2001-2002 | 2002-03 (April-September ) |
|---|---|---|
| Medical care | 3.3 | 1.8 |
| Education and recreation | 4.2 | 4.7 |
| Transport and Communication | 4.9 | 7.4 |
| Housing | 23.9 | 22.3 |
| Fuel and Light | 10.8 | 17.0 |
| Others | 13.1 | 9.5 |
| Total | 60.2 | 62.7 |

**Table 8: World Prices of Coffee and Tea**

| Item | January-December 2000 | January-December 2001 | January-December 2002 |
|---|---|---|---|
| Tea (Kolkatta auction) | 180.6 | 166.1 | 145.0 |
| Coffee, Arabica | 192.0 | 137.3 | 132.0 |
| Cofee, Robusta | 91.0 | 60.7 | 61.5 |

**Production and Export of Cardamom in Guatemala**

| Year | Production (Tonnes) | Export( Tonnes) |
|---|---|---|
| 1985 | 7450 | 6172 |
| 1986 | 8970 | 7977 |
| 1987 | 10819 | 11488 |
| 1988 | 11307 | 11302 |
| 1889 | 11500 | 11075 |
| 1990 | 11120 | 11111 |
| 1991 | 13500 | 13161 |
| 1992 | 12472 | 13238 |
| 1993 | 12925 | 14440 |
| 1994 | 14966 | 13211 |
| 1995 | 15601 | 13918 |
| 1996 | 16327 | 21252 |
| 1997 | 16689 | 14018 |
| 1998 | 15000 | 17445 |
| 1999 | 13000 | 13216 |
| 2000 | 10000 | 8536 |
| 2001 | 11800 | 7457 |

## Annexure I

### Itemwise Per Capita and Percentage Distribution in Total Expenditure for Poverty Class (1999-2000)

*(Rs per month)*

| Sl no | Item | Rural | | Urban | |
|---|---|---|---|---|---|
| | | Average Consumption | Percentage Distribution | Average Consumption | Percentage Distribution |
| | **I Food** | 208.03 | 64.80 | 278.31 | 59.99 |
| 1 | Cereals | 99.28 | 30.93 | 98.18 | 21.16 |
| 2 | Gram | 0.35 | 0.11 | 0.54 | 0.12 |
| 3 | Cereal substitution | 0.17 | 0.05 | 0.23 | 0.05 |
| 4 | Pulses and pulse products | 14.17 | 4.41 | 18.73 | 4.04 |
| 5 | Milk and milk products | 16.30 | 5.08 | 36.25 | 7.81 |
| 6 | Edible oil | 13.49 | 4.20 | 19.52 | 4.21 |
| 7 | Egg, fish and meat | 9.55 | 2.97 | 17.82 | 3.84 |
| 8 | Vegetables | 23.16 | 7.21 | 31.36 | 6.76 |
| 9 | Fruits (fresh) | 2.75 | 0.86 | 6.29 | 1.36 |
| 10 | Fruits (dry) | 0.66 | 0.21 | 1.29 | 0.28 |
| 11 | Sugar | 7.33 | 2.28 | 11.03 | 2.38 |
| 12 | Salt | 0.94 | 0.29 | 1.16 | 0.25 |
| 13 | Spices | 9.86 | 3.07 | 12.93 | 2.79 |
| 14 | Beverages, etc | 10.02 | 3.12 | 23.0 | 4.96 |
| | **II Non-Food** | 113.00 | 35.20 | 185.62 | 40.01 |
| 1 | Paan | 1.57 | 0.49 | 2.29 | 0.49 |
| 2 | Tobacco | 5.59 | 1.74 | 6.51 | 1.40 |
| 3 | Intoxicants | 2.65 | 0.83 | 3.22 | 0.69 |
| | **Sub-total (1+2+3)** | **9.81** | **3.06** | **12.02** | **2.59** |
| 4 | Fuel and Light | 26.25 | 8.18 | 41.31 | 8.90 |
| 5 | Clothing | 23.99 | 7.47 | 30.55 | 6.59 |
| 6 | Footwear | 2.96 | 0.92 | 5.01 | 1.08 |
| 7 | Education | 3.69 | 1.15 | 10.75 | 2.32 |
| 8 | Medical – Institutional | 1.66 | 0.52 | 2.95 | 0.64 |
| 9 | Medical – Non-institutional | 11.09 | 3.45 | 15.63 | 3.37 |
| 10 | Entertainment | 0.71 | 0.22 | 2.73 | 0.59 |
| 11 | Goods personal care and effects | 0.61 | 0.19 | 0.84 | 0.18 |
| 12 | Toilet articles | 7.80 | 2.43 | 13.77 | 2.97 |
| 13 | Sundry articles | 6.60 | 2.06 | 10.24 | 2.21 |
| | **Sub-total (10+11+12+13)** | **15.72** | **4.90** | **27.58** | **5.94** |
| 14 | Consumer services | 7.99 | 2.49 | 12.34 | 2.66 |
| 15 | Conveyance | 4.71 | 1.47 | 9.88 | 2.13 |
| | **Sub-total (14+15)** | **12.70** | **3.96** | **22.21** | **4.79** |
| 16 | Rent | 0.24 | 0.07 | 9.51 | 2.05 |
| 17 | Taxes and cesses | 0.29 | 0.09 | 2.22 | 0.48 |
| | **Sub-total (10 to 17)** | 28.94 | 9.01 | 61.51 | 13.26 |
| 18 | Durable goods | 4.61 | 1.44 | 5.89 | 1.27 |
| | **Total expenditure (I +II)** | **321.03** | **100.00** | **463.93** | **100.00** |

**Table 9: Monthly Rates of Inflation**

| Index | Jan 2002 | Feb 2002 | March 2002 | April 2002 | May 2002 | June 2002 | July 2002 | Aug 2002 | Sep 2002 | Jan-Sep 2002 (av) | April- Sep 2002 (av) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CPI | 4.94 | 5.19 | 5.17 | 4.69 | 4.66 | 4.16 | 3.89 | 3.86 | 4.30 | 4.54 | 4.26 |
| WPI | 1.51 | 1.39 | 1.76 | 1.50 | 1.50 | 2.43 | 2.79 | 3.22 | 3.64 | 2.19 | 2.51 |

**Table 10: Prices of Major Groups**

| Index | weight | Jan 2002 | Feb 2002 | March 2002 | April 2002 | May 2002 | June 2002 | July 2002 | Aug 2002 | Sep 2002 | Jan-Sep 2002 (av) | April-Sep 2002 (av) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Food Group | 57.00 | 3.3 | 3.4 | 3.6 | 2.9 | 2.6 | 2.0 | 2.3 | 1.8 | 3.1 | 2.8 | 2.5 |
| Paan, Supari, etc | 3.15 | 4.5 | 4.2 | 3.1 | 2.0 | 1.9 | 1.6 | 1.7 | 1.6 | 1.8 | 2.5 | 1.8 |
| Fuel & Light | 6.28 | 5.3 | 7.0 | 9.7 | 10.9 | 11.4 | 11.5 | 10.8 | 11.1 | 11.2 | 9.9 | 11.2 |
| Housing | 8.67 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 7.5 | 7.5 | 7.6 | 11.1 | 10.3 |
| Clothing, Bedding | 8.54 | 6.8 | 6.8 | 5.1 | 2.5 | 2.8 | 2.9 | 2.7 | 2.7 | 2.5 | 3.9 | 2.7 |
| Miscellaneous * | 16.36 | 4.9 | 4.9 | 4.9 | 5.3 | 5.5 | 6.0 | 6.1 | 5.4 | 6.1 | 5.4 | 5.7 |
| Overall | 100.00 | 4.9 | 5.2 | 5.2 | 4.7 | 4.7 | 4.2 | 3.9 | 3.9 | 4.3 | 4.5 | 4.3 |

Note: * Include medical care, education, telecommunication and transport, personal care and others.

## Annexure II

**Consumer Price Index (CPI) Numbers for Industrial Workers during 2001-02**

*(Base 1982=100)*

| Group / Sub-Group | weight | | Apr-01 | May-01 | Jun-01 | Jul-01 | Aug-01 | Sep-01 | Oct-01 |
|---|---|---|---|---|---|---|---|---|---|
| Medical care | 2.59 | Index | 530 | 533 | 533 | 534 | 535 | 536 | 537 |
| | | Inflation | 5.0 | 5.3 | 5.1 | 4.9 | 4.7 | 4.9 | 4.9 |
| Education, recreation and amusements | 3.14 | Index | 383 | 383 | 384 | 389 | 394 | 395 | 397 |
| | | Inflation | 7.3 | 7.0 | 5.8 | 6.0 | 6.5 | 5.9 | 5.9 |
| Transport and Communication | 2.65 | Index | 503 | 503 | 506 | 506 | 506 | 506 | 523 |
| | | Inflation | 7.5 | 5.2 | 5.9 | 5.9 | 5.6 | 5.4 | 7.2 |
| Personal care and effects | 3.31 | Index | 441 | 442 | 444 | 445 | 446 | 447 | 449 |
| | | Inflation | 4.0 | 3.8 | 3.5 | 3.2 | 3.0 | 3.0 | 3.2 |
| Others | 4.67 | Index | 438 | 439 | 440 | 442 | 443 | 445 | 447 |
| | | Inflation | 3.8 | 3.8 | 3.8 | 4.0 | 3.5 | 3.7 | 3.7 |
| Housing group | 8.67 | Index | 479 | 479 | 479 | 517 | 517 | 517 | 517 |
| | | Inflation | 6.4 | 6.4 | 6.4 | 12.1 | 12.1 | 12.1 | 12.1 |
| All items | 100.00 | Index | 448 | 451 | 457 | 463 | 466 | 465 | 468 |
| | | Inflation | 2.3 | 2.5 | 3.4 | 4.0 | 5.2 | 4.7 | 4.2 |

## Annexure II (Contd..)

| Group / Sub-Group | weight | | Nov-01 | Dec-01 | Jan-02 | Feb-02 | Mar-02 | Average (Apr-Mar) |
|---|---|---|---|---|---|---|---|---|
| Medical care | 2.59 | Index | 537 | 540 | 541 | 542 | 543 | 537 |
| | | Inflation | 4.9 | 2.7 | 2.7 | 2.5 | 2.6 | 4.2 |
| Education, recreation and amusements | 3.14 | Index | 399 | 403 | 406 | 4.6 | 407 | 396 |
| | | Inflation | 6.1 | 6.9 | 6.8 | 6.3 | 6.3 | 6.4 |
| Transport and Communication | 2.65 | Index | 523 | 540 | 540 | 538 | 538 | 519 |
| | | Inflation | 6.7 | 9.1 | 8.4 | 7.6 | 7.4 | 6.8 |
| Personal care and effects | 3.31 | Index | 452 | 454 | 454 | 457 | 457 | 449 |
| | | Inflation | 3.4 | 3.4 | 3.2 | 4.1 | 4.1 | 3.5 |
| Others | 4.67 | Index | 449 | 452 | 453 | 455 | 456 | 447 |
| | | Inflation | 4.2 | 4.4 | 4.1 | 4.4 | 4.3 | 4.0 |
| Housing group | 8.67 | Index | 517 | 517 | 541 | 541 | 541 | 514 |
| | | Inflation | 12.1 | 12.1 | 12.9 | 12.9 | 12.9 | 10.9 |
| All items | 100.00 | Index | 472 | 469 | 467 | 466 | 468 | 463 |
| | | Inflation | 4.9 | 5.2 | 4.9 | 5.2 | 5.2 | 4.3 |

**CPI Numbers for Industrial Workers during 2002-03 (April – September)**
*(Base 1982=100)*

| Group / Sub-Group | weight | | Apr-02 | May-02 | Jun-02 | Jul-02 | Aug-02 | Sep-02 | Average (Apr-Sep) |
|---|---|---|---|---|---|---|---|---|---|
| Medical care | 2.59 | Index | 544 | 544 | 545 | 548 | 549 | 550 | 547 (534) |
| | | Inflation | 2.6 | 2.1 | 2.3 | 2.6 | 2.6 | 2.6 | 2.5 (5.0) |
| Education, recreation and amusements | 3.14 | Index | 409 | 414 | 418 | 420 | 419 | 422 | 417 (388) |
| | | Inflation | 6.8 | 8.1 | 8.9 | 8.0 | 6.3 | 6.8 | 7.5 (6.4) |
| Transport and Communication | 2.65 | Index | 547 | 549 | 560 | 565 | 566 | 566 | 559 (505) |
| | | Inflation | 8.7 | 9.1 | 1.7 | 11.7 | 11.9 | 11.9 | 10.7 (5.9) |
| Personal care and effects | 3.31 | Index | 459 | 459 | 463 | 463 | 466 | 469 | 463 (444) |
| | | Inflation | 4.1 | 3.8 | 4.3 | 4.0 | 4.5 | 4.9 | 4.3 (3.4) |
| Others | 4.67 | Index | 459 | 461 | 463 | 464 | 466 | 467 | 463 (441) |
| | | Inflation | 4.8 | 5.0 | 5.2 | 5.0 | 5.2 | 4.9 | 5.0 (3.8) |
| Housing group | 8.67 | Index | 541 | 541 | 541 | 556 | 556 | 556 | 549 (498) |
| | | Inflation | 12.9 | 12.9 | 12.9 | 7.5 | 7.5 | 7.5 | 10.2 (9.2) |
| All items | 100.00 | Index | 469 | 472 | 476 | 481 | 484 | 485 | 478 (458) |
| | | Inflation | 4.7 | 4.7 | 4.2 | 3.9 | 3.9 | 4.3 | 4.3 (3.7) |

**Note:** Figures in parentheses indicate averages i4.1n the corresponding period of the previous year.

## Annexure III

**Annual Percentage Variation in the CPI (IW) of Major Service-Oriented Centres, 2001-02**

| State | | Weight | Apr-01 | May-01 | Jun-01 | Jul-01 | Aug-01 | Sep-01 | Oct-01 |
|---|---|---|---|---|---|---|---|---|---|
| Andhra Pradesh | Hyderabad | 1.63 | 1.2 | 3.1 | 4.5 | 4.5 | 4.7 | 4.7 | 4.2 |
| | Warangal | 1.54 | 3.2 | 4.3 | 4.3 | 4.4 | 6.8 | 5.6 | 8.6 |
| Gujarat | Surat | 0.86 | 4.0 | 4.9 | 7.3 | 8.9 | 9.2 | 8.5 | 8.0 |
| | Vadodara | 0.88 | 3.0 | 3.9 | 5.5 | 5.7 | 7.4 | 6.2 | 5.0 |
| Haryana | Faridabad | 1.17 | 5.0 | 6.4 | 5.4 | 6.9 | 8.1 | 6.7 | 7.7 |
| Jammu & Kashmir | Srinagar | 0.22 | 5.1 | 6.4 | 8.0 | 5.5 | 17.2 | 13.9 | 11.4 |
| Karnataka | Belgaum | 1.33 | -0.8 | -0.2 | 1.9 | 3.1 | 5.7 | 4.2 | 5.7 |
| Madhya Pradesh | Balaghat | 1.37 | 5.0 | 6.6 | 6.2 | 6.2 | 8.2 | 7.7 | 7.9 |
| | Bhopal | 1.51 | 4.0 | 5.3 | 6.6 | 10.3 | 11.9 | 12.0 | 11.0 |
| | Indore | 1.28 | 3.5 | 5.2 | 6.1 | 5.6 | 6.5 | 6.5 | 5.8 |
| Maharashtra | Mumbai | 7.87 | 4.0 | 2.5 | 3.3 | 4.5 | 5.3 | 5.3 | 4.5 |
| | Nasik | 2.04 | 8.0 | 8.6 | 9.0 | 7.0 | 6.3 | 5.7 | 4.6 |
| Rajasthan | Ajmer | 1.59 | 3.2 | 3.4 | 3.2 | 3.9 | 6.0 | 5.8 | 5.0 |
| | Jaipur | 1.25 | 3.0 | 2.0 | 4.0 | 5.9 | 6.9 | 6.2 | 6.1 |
| Uttar Pradesh | Kanpur | 1.30 | 3.8 | 4.7 | 5.2 | 4.8 | 5.3 | 5.8 | 6.0 |
| | Saharanpur | 1.68 | 1.7 | 4.5 | 6.0 | 6.2 | 5.1 | 4.6 | 5.1 |
| West Bengal | Asansol | 1.00 | 2.0 | 2.2 | 2.7 | 3.4 | 8.4 | 8.1 | 8.5 |
| | Durgapur | 0.98 | 7.7 | 8.3 | 7.8 | 7.2 | 10.0 | 9.0 | 7.8 |
| | Haldia | 0.83 | 2.3 | 2.5 | 3.4 | 19.4 | 19.5 | 19.0 | 16.1 |
| | Kolkata | 4.24 | 7.1 | 5.9 | 7.3 | 11.6 | 13.2 | 11.4 | 9.7 |
| Chandigarh | Chandigarh | 0.16 | 5.5 | 6.8 | 6.1 | 6.3 | 7.6 | 7.5 | 6.2 |
| Delhi | Delhi | 1.79 | 1.7 | 26.1 | 3.3 | 2.3 | 3.1 | 3.5 | 3.4 |
| | All-India | 100.00 | 2.3 | 2.5 | 8.3 | 4.0 | 5.2 | 4.7 | 4.2 |

## Annexure III (Contd..)

| State | | Weight | Nov-01 | Dec-01 | Jan-02 | Feb-02 | Mar-02 | Average (Apr-Mar) |
|---|---|---|---|---|---|---|---|---|
| Andhra Pradesh | Hyderabad | 1.63 | 4.7 | 6.8 | 7.7 | 8.3 | 8.5 | 5.2 |
| | Warangal | 1.54 | 9.2 | 9.0 | 11.7 | 10.1 | 9.0 | 7.2 |
| Gujarat | Surat | 0.86 | 6.8 | 5.8 | 5.6 | 3.5 | 3.9 | 6.4 |
| | Vadodara | 0.88 | 5.0 | 4.8 | 4.6 | 3.7 | 5.7 | 5.0 |
| Haryana | Faridabad | 1.17 | 7.2 | 6.6 | 5.6 | 3.6 | 2.9 | 6.0 |
| Jammu & Kashmir | Srinagar | 0.22 | 10.9 | 9.7 | 8.6 | 8.2 | 10.6 | 9.6 |
| Karnataka | Belgaum | 1.33 | 7.3 | 6.8 | 6.1 | 7.9 | 8.6 | 4.7 |
| Madhya Pradesh | Balaghat | 1.37 | 8.2 | 7.9 | 4.8 | 4.1 | 3.5 | 6.4 |
| | Bhopal | 1.51 | 11.6 | 10.9 | 10.0 | 6.8 | 7.5 | 9.0 |
| | Indore | 1.28 | 6.4 | 5.3 | 5.3 | 4.9 | 5.9 | 5.6 |
| Maharashtra | Mumbai | 7.87 | 4.5 | 4.7 | 5.0 | 6.8 | 7.0 | 4.8 |
| | Nasik | 2.04 | 3.1 | 3.1 | 3.0 | 4.1 | 4.5 | 5.6 |
| Rajasthan | Ajmer | 1.59 | 5.5 | 5.2 | 4.8 | 5.7 | 5.2 | 4.8 |
| | Jaipur | 1.25 | 6.3 | 7.9 | 6.4 | 6.4 | 5.3 | 5.5 |
| Uttar Pradesh | Kanpur | 1.30 | 7.0 | 4.9 | 3.3 | 3.9 | 3.4 | 4.8 |
| | Saharanpur | 1.68 | 5.7 | 5.2 | 6.2 | 7.2 | 6.9 | 5.4 |
| West Bengal | Asansol | 1.00 | 9.5 | 9.6 | 10.6 | 10.5 | 10.3 | 7.1 |
| | Durgapur | 0.98 | 7.4 | 8.8 | 12.3 | 12.6 | 11.1 | 9.2 |
| | Haldia | 0.83 | 18.4 | 19.6 | 19.1 | 19.0 | 17.9 | 14.7 |
| | Kolkata | 4.24 | 12.5 | 14.1 | 13.4 | 14.2 | 13.2 | 11.1 |
| Chandigarh | Chandigarh | 0.16 | 5.7 | 5.5 | 8.7 | 8.5 | 5.9 | 6.7 |
| Delhi | Delhi | 1.79 | 4.2 | 3.9 | 3.3 | 3.1 | 3.7 | 5.1 |
| | All-India | 100.00 | 4.9 | 5.2 | 4.9 | 5.2 | 5.2 | 4.7 |

**Annual Percentage Variation in the CPI (IW) of Major Service-Oriented Centres, 2002-03 (April-September)**

| State | | Weight | Apr-02 | May-02 | Jun-02 | Jul-02 | Aug-02 | Sep-02 | Average (Apr-Sep) |
|---|---|---|---|---|---|---|---|---|---|
| Andhra Pradesh | Hyderabad | 1.63 | 8.2 | 6.6 | 6.3 | 6.1 | 6.3 | 6.3 | 6.7 |
| | Warangal | 1.54 | 8.5 | 8.8 | 6.7 | 6.6 | 7.6 | 8.1 | 7.7 |
| Gujarat | Surat | 0.86 | 2.8 | 2.1 | 1.0 | 0.6 | 0.2 | 1.4 | 1.4 |
| | Vadodara | 0.88 | 4.5 | 2.7 | 3.3 | 3.0 | 1.7 | 2.4 | 2.9 |
| Haryana | Faridabad | 1.17 | 1.9 | 1.5 | 1.9 | 0.8 | 1.7 | 2.4 | 1.7 |
| Jammu & Kashmir | Srinagar | 0.22 | 10.3 | 9.9 | 8.0 | 8.7 | 0.4 | -1.1 | 6.0 |
| Karnataka | Belgaum | 1.33 | 8.1 | 6.7 | 5.1 | 5.1 | 4.2 | 5.9 | 5.8 |
| Madhya Pradesh | Balaghat | 1.37 | 3.3 | 2.0 | 1.7 | 3.4 | 2.1 | 2.9 | 2.6 |
| | Bhopal | 1.51 | 7.0 | 6.1 | 6.2 | 2.0 | 1.8 | 2.6 | 4.3 |
| | Indore | 1.28 | 3.4 | 3.6 | 4.2 | 4.6 | 3.4 | 3.4 | 3.8 |
| Maharashtra | Mumbai | 7.87 | 6.3 | 5.9 | 5.3 | 4.7 | 5.2 | 5.4 | 5.5 |
| | Nasik | 2.04 | 4.1 | 2.8 | 2.8 | 2.0 | 3.0 | 1.6 | 2.7 |
| Rajasthan | Ajmer | 1.59 | 4.3 | 3.3 | 4.7 | 5.1 | 4.6 | 5.1 | 4.5 |
| | Jaipur | 1.25 | 5.5 | 4.6 | 3.6 | 2.3 | 3.7 | 5.6 | 4.2 |
| Uttar Pradesh | Kanpur | 1.30 | 1.4 | 1.6 | 2.7 | 2.4 | 3.5 | 3.7 | 2.6 |
| | Saharanpur | 1.68 | 5.9 | 4.1 | 2.8 | 2.3 | 1.4 | 1.9 | 3.1 |
| West Bengal | Asansol | 1.00 | 9.4 | 7.9 | 7.4 | 7.0 | 2.2 | 2.2 | 6.0 |
| | Durgapur | 0.98 | 10.8 | 10.2 | 11.1 | 10.1 | 7.0 | 6.8 | 9.3 |
| | Haldia | 0.83 | 17.7 | 17.8 | 17.7 | 2.1 | 2.3 | 2.6 | 10.0 |
| | Kolkata | 4.24 | 12.7 | 13.5 | 11.9 | 7.0 | 3.9 | 3.9 | 8.8 |
| Chandigarh | Chandigarh | 0.16 | 5.0 | 4.3 | 4.9 | 4.5 | 4.8 | 4.8 | 4.7 |
| Delhi | Delhi | 1.79 | 2.5 | 3.4 | 4.1 | 4.7 | 5.0 | 5.2 | 4.2 |
| | All-India | 100.00 | 4.7 | 4.7 | 4.2 | 3.9 | 3.9 | 4.3 | 4.3 |

Household charges in case of power, transport and water are rising due to reforms right 'user pricing', not always associated with efficiency improvements. Thus, the consumers are stuck with high cost in these cases. It is likely that further reforms if not accompanied by reduced inefficiencies, may lead to upward revision in charges and fees of utilities as also in case of railways. They will naturally have a spiralling impact on personal and community services. It is only in telecommunications and airways that privatisation and competition have directly lead to downward revision of charges. These services are, however, confined to elite groups and have little weight in the CPI. They, however, lead to higher perceived inflation by general consumers.

*Latest Inflation Developments*

The monthly CPI-based rate of inflation, which includes services, is reported to be higher than the WPI so far in 2002.

Some moderation in the CPI inflation rate from 5.2 percent at the beginning of the year to 3.9 percent in July-August and 4.3 percent in September is mainly explained by one-time increase in charges of utility services like electricity and decline in the rate of rise in housing prices from July 2002 (Table 10).

| | 2001-02 | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|---|
| WPI | 3.7 | 3.5 | 3.0 | 3.0 |
| CPI | 4.4 | 4.0 | 3.5 | 3.5 |

The WPI rate is on the rise since June due to upward revision of prices of petroleum products and some pressure on prices of manufactured products like edible oils and steel. The deficit monsoon also had an adverse impact on domestic supplies of essential goods, and thus on prices, notably of edible oils and pulses. The prices of foodgrains are, however steady, with 57 percent weight in the CPI rate down. Annexure VI and Annexure VII show the relatively sustained higher inflation rate (weighted) in services prices compared with overall consumer prices from January 2001 to September 2002. The sustained trend is observed also in the US. The trend is also observed in the euro area since September 2001.

*Inflation Forecasts*

The IEG-DPC (2002) have forecast the WPI inflation rate at 3.8 percent to 4.0 percent and the CPI rate at 3.7-3.8 percent for the coming months. The prices of FMCGs and commercial vehicles may show a downward trend due to reduced farm income and consumer spending. The hardening rupee vis-à-vis the US dollar, that is, the rupee appreciation may, however, provide a check on prices through cheaper imports, notably essential items such as edible oils and pulses, and metals and fuel. But there has been some rise in global prices of metals, rubber, plastic products and paper, which may reflect in the CPI rate of inflation, and in low degrees, depending on weight, in the WPI rate.

The two inflations rates forecast for the medium term by an international consultancy agency [HSBC 2002] are given in Table 11.

The CPI rate may remain above the WPI rate although both may move in a narrow range. The prospects of convergence are uncertain ('Wholesale, retail inflation set to converge in November', Business Standard, 2002.)

*Increasing Tradability and Services Prices*

To what extent services prices would contribute to the CPI rate different from the WPI rate of inflation is a matter of further detailed analysis. The details may include the impact of likely reforms and the competitiveness of the services sector, trends in changing consumer behavior as also the emerging scenario of retailing, be it distribution services or financial services. At present, the consumers are stuck with increased services prices due to inefficiencies and high costs of utilities. As some of the services become more tradable, global trends would also need to be analysed, such as in case of communications, recreation and travel.

The higher price increases, rising productivity and increased tradability could create a 'virtuous circle' associated with a higher share of services in GDP. Increasing modernisation and technological upgradations, also competition, may help in raising productivity while increasing sophistication and consumer preference for services associated with products (like electronic items, PCs sanitaryware, automobiles, white goods and construction) may enable service providers to enhance charges and fees. On the other hand, reforms and privatisation of public utilities, if not associated with increased efficiency, may also contribute to rise in charges and thus services prices which may not be part of the 'virtuous circle'.

## Annexure IV

**Contribution of Groups / Sub-Groups to Total Rate of CPI (IW) - Based Inflation (Annual), 2001-02**

| Sl No | Group / Sub-Group | weight | Apr-01 | May-01 | Jun-01 | Jul-01 | Aug-01 | Sep-01 | Oct-01 |
|---|---|---|---|---|---|---|---|---|---|
| I | Food group Index | 57.00 | 0.00 | 15.55 | 38.00 | 34.83 | 47.09 | 40.71 | 45.00 |
| II | Fuel and light | 6.28 | 25.75 | 19.98 | 15.07 | 13.26 | 10.10 | 11.06 | 0.66 |
| III | Clothing, bedding, Footwear etc. | 8.54 | 4.27 | 3.88 | 3.42 | 2.37 | 2.60 | 3.25 | 3.60 |
| IV | Housing | 8.67 | 25.14 | 22.86 | 16.76 | 26.97 | 21.11 | 23.12 | 25.55 |
| V | Miscellaneous sub-groups (Service items) | 16.36 | 37.63 | 31.23 | 22.90 | 18.18 | 14.23 | 15.58 | 18.08 |
| a. | Medical care | 2.59 | 6.48 | 6.36 | 4.32 | 3.60 | 2.70 | 3.08 | 3.41 |
| b. | Education, recreation and amusements | 3.14 | 8.16 | 7.14 | 4.40 | 3.84 | 3.28 | 3.29 | 3.64 |
| c. | Transport and Communication | 2.65 | 9.28 | 6.02 | 4.95 | 4.12 | 3.11 | 3.28 | 4.88 |
| VI | Others* | 11.13 | 20.92 | 18.21 | 13.08 | 11.01 | 10.01 | 12.21 | 13.26 |
| | Inflation rate in all-items | 100.00 | 2.28 | 2.50 | 3.39 | 4.04 | 5.19 | 4.73 | 4.23 |

## Annexure IV (Contd..)

| Sl No | Group / Sub-Group | weight | Nov-01 | Dec-01 | Jan- 02 | Feb-02 | Mar-02 | Average (Apr-Mar) |
|---|---|---|---|---|---|---|---|---|
| I | Food group Index | 57.00 | 49.23 | 49.57 | 38.86 | 37.17 | 39.65 | 36.31 |
| II | Fuel and light | 6.28 | 0.86 | 3.55 | 7.14 | 8.91 | 12.67 | 10.75 |
| III | Clothing, bedding, Footwear etc. | 8.54 | 3.11 | 5.20 | 8.15 | 7.80 | 5.94 | 4.47 |
| IV | Housing | 8.67 | 22.07 | 21.11 | 24.43 | 23.37 | 23.37 | 22.99 |
| V | Miscellaneous sub-groups (Service items) | 16.36 | 16.36 | 16.36 | 16.36 | 15.65 | 15.65 | 19.85 |
| a. | Medical care | 2.59 | 2.94 | 1.58 | 1.65 | 1.46 | 1.58 | 3.26 |
| b. | Education, recreation and amusements | 3.14 | 3.28 | 3.55 | 3.71 | 3.28 | 3.28 | 4.24 |
| c. | Transport and Communication | 2.65 | 3.98 | 5.18 | 5.06 | 4.38 | 4.26 | 4.88 |
| VI | Others* | 11.13 | 14.53 | 10.26 | 11.00 | 13.63 | 9.25 | 13.11 |
| | Inflation rate in all-items | 100.00 | 4.89 | 5.16 | 4.94 | 5.19 | 5.17 | 4.31 |

**Contribution of Groups/ Sub-Groups to Total Rate of CPI (IW)-Based Inflation (Annual), 2002-03 (April-September)**

| Sl No | Group / Sub-Group | weight | Apr-02 | May-02 | Jun-02 | Jul-02 | Aug-02 | Sep-02 | Average (Apr-Sep) |
|---|---|---|---|---|---|---|---|---|---|
| I | Food group Index | 57.00 | 35.29 | 32.57 | 27.00 | 34.83 | 28.50 | 42.75 | 33.49 |
| II | Fuel and light | 6.28 | 15.25 | 15.85 | 17.85 | 17.79 | 18.49 | 16.64 | 16.98 |
| III | Clothing, bedding, Footwear etc. | 8.54 | 3.25 | 3.66 | 4.05 | 4.27 | 4.27 | 3.42 | 3.82 |
| IV | Housing | 8.67 | 25.60 | 25.60 | 28.29 | 18.79 | 18.79 | 16.91 | 22.33 |
| V | Miscellaneous sub-groups (Service items) | 16.36 | 18.70 | 19.48 | 23.25 | 25.45 | 22.72 | 22.90 | 22.08 |
| a. | Medical care | 2.59 | 1.73 | 1.36 | 1.64 | 2.01 | 2.01 | 1.81 | 1.76 |
| b. | Education, recreation and amusements | 3.14 | 3.89 | 4.64 | 5.62 | 5.41 | 4.36 | 4.24 | 4.69 |
| c. | Transport and Communication | 2.65 | 5.55 | 5.80 | 7.53 | 8.69 | 8.83 | 7.95 | 7.39 |
| VI | Others* | 11.13 | 9.44 | 10.52 | 8.02 | 8.21 | 14.75 | 6.28 | 9.54 |
| | Inflation rate in all-items | 100.00 | 4.69 | 4.66 | 4.16 | 3.89 | 3.86 | 4.30 | 4.26 |

**Note:** Figures in parentheses indicate averages in the corresponding period of the previous year.

## Annexure VI

### Consumer Prices: All items vis-à-vis Services

**India**

| | Jan 2001 | Feb 2001 | Mar 2001 | Apr 2001 | May 2001 | June 2001 | July 2001 | Aug 2001 | Sep 2001 | Oct 2001 | Nov 2001 | Dec 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All items | 3.2 | 3.0 | 2.5 | 2.3 | 2.5 | 3.4 | 4.0 | 5.2 | 4.7 | 4.2 | 4.9 | 5.2 |
| Services | 6.2 | 6.0 | 5.9 | 5.7 | 5.4 | 5.3 | 7.2 | 7.1 | 7.1 | 7.3 | 7.4 | 7.6 |

| | Jan 2002 | Feb 2002 | Mar 2002 | Apr 2002 | May 2002 | June 2002 | July 2002 | Aug 2002 | Sep 2002 |
|---|---|---|---|---|---|---|---|---|---|
| All items | 4.9 | 5.2 | 5.2 | 4.7 | 4.7 | 4.2 | 3.9 | 3.9 | 4.3 |
| Services | 7.7 | 7.7 | 7.7 | 7.9 | 8.1 | 8.5 | 6.6 | 6.5 | 6.5 |

**Ecro Area**

| | Jan 2001 | Feb 2001 | Mar 2001 | Apr 2001 | May 2001 | June 2001 | July 2001 | Aug 2001 | Sep 2001 | Oct 2001 | Nov 2001 | Dec 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All items | 2.5 | 2.6 | 2.6 | 3.0 | 3.4 | 3.1 | 2.8 | 2.8 | 2.5 | 2.4 | 2.1 | 2.0 |
| Services | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.7 | 2.8 |

| | Jan 2002 | Feb 2002 | Mar 2002 | Apr 2002 | May 2002 | June 2002 | July 2002 | Aug 2002 | Sep 2002 |
|---|---|---|---|---|---|---|---|---|---|
| All items | 2.7 | 2.5 | 2.5 | 2.4 | 2.0 | 1.8 | 1.9 | 2.1 | 2.1 |
| Services | 3.0 | 3.0 | 3.2 | 3.0 | 3.3 | 3.2 | 3.2 | 3.3 | 3.3 |

**United States**

| | Jan 2001 | Feb 2001 | Mar 2001 | Apr 2001 | May 2001 | June 2001 | July 2001 | Aug 2001 | Sep 2001 | Oct 2001 | Nov 2001 | Dec 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All items | 3.7 | 3.5 | 2.9 | 3.3 | 3.6 | 3.2 | 2.7 | 2.7 | 2.6 | 2.1 | 1.9 | 1.6 |
| Services | 4.5 | 4.5 | 4.4 | 4.3 | 4.5 | 4.5 | 4.2 | 4.2 | 3.9 | 3.6 | 3.8 | 3.7 |

| | Jan 2002 | Feb 2002 | Mar 2002 | Apr 2002 | May 2002 | June 2002 | July 2002 | Aug 2002 | Sep 2002 |
|---|---|---|---|---|---|---|---|---|---|
| All items | 1.1 | 1.1 | 1.5 | 1.6 | 1.2 | 1.1 | 1.5 | 1.8 | 1.5 |
| Services | 3.0 | 3.1 | 3.1 | 3.2 | 3.1 | 2.8 | 3.0 | 3.1 | 3.2 |

*Source: Economic and Political Weekly, June-July 2003.*

## Monsoon delay may affect economic recovery: CMIE

The delay in monsoon has adversely affected the prospects of an economic recovery in the current fiscal and raised the risk of drought and water shortages, according to the Centre for Monitoring Indian Economy (CMIE).

The economic think tank in its monthly review today said the prospects for economic recovery in 2003-04 "suffered a blow" as the south west monsoon failed to hit the Kerala coast on June 1.

Rains were late as of end of first week of June, CMIE said adding the water levels in major reservoirs was only 65 percent of the 10-year average level at the end of May 2003.

The delay in monsoon was particularly worrisome because it follows a drought year in which both the kjarif and rabi seasons had witnessed falls in the foodgrain and non-food crops, CMIE said.

"The meteorological Department has identified two out of six instances when the rains have been below normal. While this may be redeeming, the impact on the agriculture is less gratifying and production declined in five of the six instances of delayed monsoons", CMIE said. The below normal rains in the pre-monsoon season and the delay in the onset of south-west monsoon had effected sowing of early kharif cereals and rice, it added. PTI

### Monsoon Rainfall (Normal – 196 cm)

| Year | Amount (CM) | Date of onset |
|---|---|---|
| 1992 | 241 | June 5 |
| 1993 | 188 | May 28 |
| 1994 | 246 | May 28 |
| 1995 | 200 | June 8 |
| 1996 | 194 | June 3 |
| 1997 | 230 | June 9 |
| 1998 | 220 | June 3 |
| 1999 | 160 | May 25 |
| 2000 | 176 | June 1 |
| 2001 | 186 | May 23 |
| 2002 | 128 | May 29 |

## Rupee closes at two-year high

*ENS Economic Bureau*

The Indian rupee rose to its highest close in over two years on Friday, helped by a bullish euro, though central bank intervention and importer demand kept it off the day's peak.

The local currency closed at 46.87/ 88 per dollar, the highest level since May 10, 2001. It moved between 46.8050 and 46.9000 during the day. "The rupees strengthening may continue so long as the euro continues its rally, but the pace wont be that much as people are slowly covering, and the mopping up operations continue, "said a dealer.

The euro gained against the dollar in the global market despite a half percentage point interest rate cut by the European Central Bank, amid persisting concerns about the health of the US economy.

But importers were still cautious and increasingly covering foreign exchange exposures after a recent bout of volatility, which saw the rupee slide to a three-and-half week intra-day low of 47.25 on Monday from a two-year high of 46.75 eight days earlier.

Traders said importer dem and also triggered a round of covering in the evening, by banks which had gone short earlier in the day. The rupee has gained 0.47 percent over the week, taking its total gains in 2003 to 2.37 percent.

The local currency has benefited from the dollar's global slump and increased investment inflows, with foreign funds stepping up investments in Indian debt, after the drop in forward dollar premiums.

Such debt investments shot up to $ 400.4 million in May from a combined $ 264.2 million in the first four months of 2003.

### GDP to grow by 5.9 – 6.3 pc: ICRA

The credit rating agency ICRA today pegged India's economic growth rate at 5.9-6.3 percent with agriculture poised to grow by 4.9-6.7 percent while industry and services slated to post over 6 percent during 2003-04.

ICRA's GDP forecast is higher than 6 percent made by Reserve Bank and Asian Development Bank for this fiscal, apart from IMF's projection of 5.1 percent for 2003.

"It is our assessment that provided the south wet monsoon does not turn out to be a failure as that of last year, the growth in 2003-04 is poised to show distinct improvement. We expect that the growth of GDP would range somewhere between 5.9 and 6.3 percent", ICRA said in its report 'Money & Finance'.

It said if the growth estimates for 2002-03 were moved up and closer to a more realistic five percent, the country's GDP growth would be close to six percent.

"If no revision whatsoever is made to the advance estimate for 2002-03, then the growth would be around 6.3 percent", the report said.

In sectoral terms, ICRA said agriculture growth could range between 4.9 and 6.7 percent this fiscal compared to the estimated negative growth of 3.1 percent in 2002-03.

Industry is slated to grow by 5.4 percent this fiscal as against 6.1 percent in 2002-03, while service sector is expectedto grow by 6.6 percent this fiscal, compared to 7.1 percent in the last fiscal, it added.

## Key infrastructure industries' performance dips to 4 percent

Signalling a downtrend in economic activity, key infrastructure industries performed badly for the second successive month this fiscal with growth plummeting to four percent during May, led by a massive fall in crude oil production.

The growth of six key infrastructure industries – crude petroleum, petroleum products, coal, electricity, cement and finished steel – fell to four percent in May from 5.6 percent during the corresponding month of previous fiscal, according to data released by the government today.

The growth also fell during April-May period from 5.8 percent to four percent with crude production falling by 3.6 percent.

Production of petroleum refinery products dipped marginally by 0.1 percent during May when compared with year ago period.

Cement production reported a fall in growth from 9.7 percent during May last year to 7.8 percent this year. Electricity sector, however, posted a healthy five percent growth last month, up from 1.8 percent last year.

Coal production improved marginally with growth climbing to 3.5 percent during May 2003 from 3.2 percent a year ago.

Finished steel also reported a fall as performance dipped from 8.7 percent to 7.2 percent in May 2003.

Cumulative growth during the April-May period fell owing to a major fall in crude production which declined by 3.6 percent as compared to a growth of 5.9 percent during the corresponding period last year.

Petroleum products also fell by 4.9 percent in the two-month period to touch 3.2 percent, while cement production declined massively to 2.6 percent from double-digit figures.

Finished steel, however, improved its performance with growth crossing nine percent level as compared to 7.7 percent last year.

*Source: Indian Express, June 25, 2003.*

### Country per capita cigarette consumption per annum

| | | |
|---|---|---|
| Bangladesh | : | 232 |
| Pakistan | : | 562 |
| Nepal | : | 628 |
| China | : | 13115 |
| UK | : | 1833 |
| USA | : | 2372 |
| Japan | : | 2857 |
| India | : | 119 |

*Source: Indian Express Daily*

## 'Water management needs to become a mass movement'

The crucial link in India's bid to increase its food production over the next two decades would be water, with increased focus needed on effective water management, according to Dr. S. Nagarajan, director of the Indian Agricultural Research Institute (IARI).

"Today family planning or vaccination have become popular as they are perceived to be peoples' movement. A move on similar lines is required for water and water management. There must be greater realisation about the benefits of water harvesting," he added.

He also said that unlike urban centres where municipal authorities had passed rainwater harvesting-related legislation, Dr. Nagarajan said that similar legislation was not necessary in rural India.

"Rural India has always been using techniques like percolation tanks which need to be encouraged. There is a greater need to use local resources more effectively," Dr. Nagarajan said.

Interestingly enough some studies have shown that irrigation projects operate at extremely low efficiency levels. Effective water management assumes significance in that 57% of the country's geographical area is affected by various types of degradation, with water erosion accounting for the bulk of the destruction (149 million hectares or 79%).

It is estimated that by 2020, domestic demand for foodgrains would be around 294 million tonnes, milk (126-183 million tonnes), vegetables (136-181 million tonnes), fruits (68-98 million tonnes) and fish (18.3 million tonnes).

Commenting on the increased use of fertilisers, Dr. Nagarajan said that the compounded annual growth rate (CAGR) of rice productivity in north India has declined to 1.34% in the 90s compared to 3.19% in the 80s, while in the case of wheat it declined to 2.32% compared to 3.1% in the 80s.

While the average in CAGRs is higher than 2% on a pan-India basis, Dr. Nagarajan said that the average was lower than the population growth rate notably in the Indo-Gangetic plains, causing room for concern.

Economic Times, January 14, 2003.

## Monetary Policy – Facile Assumption

The monetary policy announced by the governor of the Reserve Bank of India, Mr. Bimal Jalan, is based on facile and fanciful assumptions. It is a case of risk taking which is titally unwarranted in the prevailing domestic and global economic and political environment.

The leadership of NDA government, in particular the Prime Minister, have been driven in the election year to play, under pressure or by inclination, the role of smart by half politicians looking for quick, short-term electoral gains. Their policy preferences political, social and economic are tending to pander to the lobbies of the sectional interests with political clout and bargaining power. They are often ad-hoc and full of roll backs and somersaults.

Mr. Jalan too seems to have fallen under their spell. He is required to help them to achieve their ends, however, farfetched and whimsical they may be. But he is a career bureaucrat who should not make clumsy effort to ape this style of policy-making and is expected to assert his independent position in his capacity as the highest authority in the making of the official monetary policy.

It really makes no sense for him to further cut the interest rates for commercial banks to lend and borrow on sound economic and commercial criteria. The availability of funds of the commercial banks for lending to private corporate sector should be more rationally regulated.

The private corporate sector in India has not been able to raise resources from trade in their stocks and shares on the stock markets. There is no good reason to give them free access to financial resources of the commercial banks. The private business corporations have not made use of bank funds for productive investment and the cheap bank credit drawn upon by them has been used for trading in stocks and shares and acquisitions and mergers for market domination to derive monopoly advantage in segments of industry.

The cheap bank credit has also gone into boosting extravagant consumption, especially of imported goods and services by a thin layer of affluence in Indian society. It has not helped the mass of the people to access the market and satisfy their essential needs for goods and services.

The upshot is that the flow of bank credit to the private business corporations has increased the profitability of corporations by exploiting the labour in their existing production capacities

borrowed funds have not been used for investment to build new production capacity especially for essential goods and services of mass interest.

The cheap credit policy and easy availability of funds of the commercial banks has not resulted in the pick up of economic growth on a broad social and geographical base. Even as sluggish economic growth has tended to assume features of over all economic recession, inflationary pressures have picked up the prices, both wholesale and retail, of essential goods and services have started climbing up and have already touched as high a level as 6.7 percent in the last quarter of last years as against 2.2 percent in the corresponding period in the previous year.

But Mr. Jalan has cavalierly ignored all the red lights in his rush to provide cheap credit and easy availability of funds from commercial banks for the private corporate sector and for boosting the current consumption of rich. These are commended as reform measures to boost the economic growth, which has yet to materialise. But economic growth has decelerated in the last three years even as prime bank rate has been bought down from 11 to 6 percent. The release of funds of the commercial for lending has found few reliable takers in the private corporate sector. They have been investment strike, in spite of many fiscal concession and incentives even while dire reprisals have been threatened for any labour strike.

Mr. Jalan has assumed that the investment strike will end by his latest interest/ CRR cuts and inflationary pressures will become "benign" rather than oppressive for the investors. This assumption seems to be inspired by the idea that the up market of the upper and middle classes has already sufficiently developed in India for business corporations to exploit and garner attractive returns on their investment. Similar crazy ideas have been floated to attract foreign investment too. Such ideas do not work in practice and have failed to yield positive results in terms either of viable investment, sustainable economic growth or social welfare. The logic of market-friendly economic growth is indeed such that access of the mass of the people, including even over middle class to goods and services at affordable prices is barred in order to guarantee attractive returns for investors, Indian and Foreign. But this is also the basis for the optimistic expectation of Mr. Jalan that the price inflation may soon become benign. The temporary fall in oil prices in the international market after the victory of USA in the war on Iraq may too have inspired this optimism. But control of the USA over the Iraqi oil will only help US oil conglomerates to manipulate the prices of oil for their global business plans. It will not be reliable basis for nursing false expectations about growth and stability of the Indian economy.

At the present level and the nature of the economic and social development in India, misdirected investments and distorted economic growth impair the ability to mobilise resources for productive investment in both the public and private sector. Private investment and productive activity in India has to grow and flourish only in step with planned public investment and development of economic social and cultural infrastructure by such investment. This has been conclusively established by the experience of the last ten years of implementation of so-called economic reforms.

There is clear evidence that bias against public investment and privatisation of public enterprise in the development of industry and infrastructure in the public sector has slowed down private investment too. The upshot of the market-friendly economic growth and structural adjustment of the Indian economy in the name of liberalisation and globalisation has been to push Indian economy deeper and deeper in the mire of stagflation that is uncertain growth and inflationary pressures rocking the economy.

Price movements cannot be controlled by administrative or political fiats. There is the need to curb elitist demand on available resources and step up of investment to augment essential supplies in the economy. It is also necessary to curb the wasteful expenditure of all kinds, including on the military build up in the name of security because it is actually inspired in India by the vain idea of asserting regional hegemony and winning international recognition as a regional superpower.

The road to growth with equity and stability lies in curbs on investment for meeting elitist consumption demands and curbs on the growth of the service sector, which is out of step with the growth of productive sectors – agriculture and industry. Investment in industrial and agricultural growth has to be given a broad social base.

The government must give top priority to controlling inflation. But their effort must not be limited to populist gestures or selective administrative measures. What is needed is a break with the elitist- oriented, socio-economic

development strategy mindlessly conceived and pursued. A strategy of development, which serves the basic need of the people and ensures equitable sharing of the gains of economic growth, has to be evolved and implemented not only for sustainable economic growth but also security.

## Post Iraq War Global Economic Scenario

The war of the USA against Iraq is the beginning of the recolonisation of the developing countries by armed force. This blights prospects for peaceful development of the global economy based on principles of equity and reciprocity in economic relations between nation states. World War II led to the winding up of direct colonial rule in under developed countries. But the US war on Iraq is a desperate attempt to reverse the course of history. The siren song of globalisation has suddenly gone mute in the din and destruction of war.

The defeat of fascist rule paved the way for the reconstruction of developed countries devastated by World War II as a global enterprise. The developing countries, after gaining political independence, too found opportunities to embark on the path of self-reliant effort, with high expectations of financial and technological inputs from the developed countries for the growth and modernisation of their economics. All these gains of the World War II are now being attempted to be nullified by US militarists.

A significant development in this context was the passage in the mid-seventies of a resolution of the UN General Assembly, which the USA alone voted against, that asserted the sovereignty of nation states on their natural resources and upheld the claims of the developing countries for unconditional financial and technological support for the development of their economics. But the developed countries, in particular the USA never reconciled to these just and valid demands and claims of the developing countries and free their people from colonial shackles.

After lying low for sometime, the USA and its allies started plotting to find ways to resume exploitation of the developing countries, their resources, labour and consumers under novel forms. They resorted to ideological persuasion and used their stronger military and economic power for their purposes. It seems that repeated cycles of economic recession in the working of the capitalist system has impelled the USA and its junior ally, Britain, to finally opt for desperate measures to regain their imperialist hegemony over the developing countries. The war on Iraq is not a fortuitous break on multilateral corporation and world peace. It is a part of a design that the US has been building up in the last decade to nullify the political and economic gains of developing countries after independence from colonial yoke.

It is indeed ironic but significant that the destruction in Iraq by USA should be seen by USA and U.K administration as an opportunity for their business corporations in particular those based in the USA to exploit. The US economy is at present passing through a deep recessionary cycle. The US administration seems to have been advised, which it seems to have accepted with alacrity, that it should go to war against Iraq, to be beginning with and follow up with wars against other developing countries on a selective basis to revive its economy. For this scheme to work, the market of all under-developed countries must, be opened to absorb the "production capacity of the US corporations and assure their investment attractive returns. The security of their corporations has also to be ensured by political domination of the developing countries. The US administration as the political representative of the international financial capital will, therefore, find one or another soft target among the developing countries for its war plans.

The increasing imbalances and iniquities are, therefore, dismissed as irrelevant for the overall growth of the capitalist economy in the world. The y are treated a inherent in the process of economic growth itself. Globalisation and inter-dependence with multinational corporations holding the centre stage in economic activity and global flows of capital and technology are claimed to be the only basis for sound economic growth policy.

This counter-offensive of a handful of the developed countries with the USA leading the way against demands and claims of the developing countries in the global economic relations gathered strength after the collapse of the block of socialist countries led by USSR which was earlier seen as a countervailing force in the management of international economic and political relations. The USA administration then planned to dictate its terms in international relations by enhancing its armament capability to wage wars against developing countries without fear of retribution. It also felt free to repudiate its international treaty obligations as and when it suited its convenience.

The idea of a unique development model for India came at his point under sharp questioning by the developed countries and their international financial institutions. The Indian big business and its hangers in the intelligentsia and their political representative accepted early in the nineties that they had no option but to accept the abridgement of the sovereign status of Indian Republic.

The critical challenge to be faced by India and all developing countries in these conditions has been the assertion of political sovereignty for safe guarding the autonomy of the national development process itself and ensure steady growth of the economy and equity for the people. The dominant social and economic interests and their political representatives – parties and personalities – in many of these countries are not willing or able, by default or design, to come to grips with this challenge. On the contrary, ruling circles and their publicists in India do not hesitate to deride the very concept of the sovereignty of the Indian State in its relationship with USA.

This brings up for consideration the position of India as regard its economic, in particular industrial development, in the global frame. The fact is that there have been a steady decline in the rate of growth of industrial production from 7.6 percent achieved in the fifties to 6.3 percent in the sixties and 5.2 percent in the seventies. Indian economy has since been passing through a crisis situation. Norms and principles, which are crucial for any move towards an acceptable world economic and political order and do not become applicable in practice as a result of argument and debate only. There are real clash of interests to be reckoned with. The developing countries and their people must combat unreservedly the outlook and preference of vested interests in the established economic and political order and relations by concerted action. Solidarity of the working people globally, in particular, has to become an active ingredient in the striving for a new and equitable world order. Within the framework of a positive and growth-oriented approach to the structuring of the world order, vested interests in the developed as well as developing countries which constantly contrive a clash of interests between the working people of the developed and developing countries have to exposed and combated. It is only thus that the concept of inter-dependence and common stakes of the developed and developing countries in global economic activity, growth and equity-oriented world order can become relevant. Any interpretation of the concept of globalisation and interdependence, which subordinates the growth and equity needs of the developing countries, is to pervert this concept.

*Source: Monthly Commentary of Indian Economic conditions : Vol. KL IV No. 10, May 2003.*

**Road Accident Death figures in Kerala (2000)**

| | | No | | | No |
|---|---|---|---|---|---|
| 1 | Buses | 517 | 6 | Two Wheelers | 525 |
| 2 | Truck/ Lorry | 202 | 7 | Three Wheelers | 208 |
| 3 | Tempovan | 105 | 8 | Bicycle | 113 |
| 4 | Jeeps | 244 | 9 | Pedestriants | 628 |
| 5 | Cars | 148 | | | |

*Source: Crime Statistics 2000.*

**Fertility and Infant Mortality Rates of Social Groups in India (1988-99)**

| | Fertility rate | Infant Mortality rate |
|---|---|---|
| Scheduled Castes | 3.15 | 83 |
| Scheduled Tribes | 3.06 | 84 |
| Other Backward Castes | 3.47 | 76 |
| General Category (Forward Communities) | 1.99 | 62 |

*Source: The National Family Health Survey (98-99).*

## Indian Software Firms Feel Acquisitions Can be a Risky Way to Fast growth

Software company Infotech enterprises has been on a spending spree. In 1998 it had a Rs. 30 crore war chest for acquisition but it has almost run through the entire amount. The Hyderabad based geographical information systems specialist has bought software companies in the United Kingdom, Germany and Mumbai. Now, the company is wondering whether it should dip into its reserves because it would like to buy another company in the United States. Says Chief Executive and Managing Director B.V.R Mohan Reddy: " inorganic growth will continue to be an important part of our growth plan".

It was the smartest path to rapid growth when the software boom was at its peak. Every company was scouting the world for smaller companies that could be bought at the right price. Infosys invested about $9 million in seven companies and it says that it may create a separate fund for acquisitions of new generation technology companies.

But Infosys, like other infotech companies, has learnt that you have to be cautious about investments. It has written off $3.17 million in two American companies EC Cubed and JASDIC Park. Similarly, Chennai-based SSI has written off its Rs. 20 crore investment in a US company Netfinex and has taken a Rs. 2.2 crore hit on its balance sheet as a result of its purchase of Indigo International.

"Indian IT companies were excited about investments last year as they were looking at them as a easy way to earn money. But the changes in the technology sector and the capital markets have spoiled their plans", said Sachin Mohindra, director and fund manager with Chescor International.

But the appetite for acquitions and investments hasn't vanished completely. In June, Infosys picked up a 12 percent stake in another American company Workadia. The cost: $2.2 million. Other strategic investments or acquisitions could also be on the cards. " By strategic investment what we mean is that any investment we make in a company should be able to bring in immediate value added and also at the same time derive tangible benefits," says Infosys board member Phaneesh Murthy.

Delhi-based NIIT has just started a venture capital arm which it believes will contributes 15 percent of turnover over the next two years. The new company NIIT Ventures will make strategic investments and acquisitions. NIIT has already bought a string of small companies in India including Medvarsity, Oneweb Systems and Relativity Technologies. It denies reports that these investments aren't producing the expected returns. "All our investments are doing well and we are expecting our plans to stay on track," says a company spokesman.

Nevertheless, everyone is moving more cautiously in the wake of tech slowdown. Take Silverline Technologies. In November Shanker Iyer, CEO and president of IT services was gung-ho about his third acquisition in a span of barely three months. He had picked up Canadian company CIT, Hong Kong-based SCI and Sera-Nova in the United States. "Acquiring a company enables you to capture a window of opportunities and gain market share and mind experienced. It gives us technological expertise besides giving us a geographical presence," he had said at the time.

Today, analysts say that Silverline paid too high a price for its acquisitions and this has contributed to a fall in profits. Its revenues are down from the heady peaks of last year. In the quarter ended December 2000 it had net profits of Rs. 35 crore on revenues of Rs. 75 crore. That's down to profit of Rs. 18 crore on revenues of Rs. 56 crore. "Most second ring companies have made acquisitions at a high price to gain access to the clients. But today, with no business, many appear to be repenting at leisure, "says Aman Chowhan, analyst at Tata-T D Waterhouse Securities.

*Source: Monthly Commentary on Indian Economic Conditions, May 2003.*

## New SGI Line Is Seeking To Bolster Linux Abilities

*Don Clark*

Silicon Graphics Inc said it has developed hardware and software that significantly extend the ability of the Linux operating system to handle the toughest scientific computing tasks.

The Mountain View, California, computer maker is introducing a family of server systems that allow as many as 64 of Intel Corp's Itanium 2 microprocessor chips to share a single pool of memory, roughly four times as many processors as current Linux-based supercomputers.

Under some circumstances, a pool of data could be shared by multiple 64-processor systems, allowing hundreds or thousands of processors to be clustered together into large supercomputers, SGI said.

Some laboratories now construct supercomputers using huge numbers of Linux-based systems, but the processors typically don't share memory.

As a result, the systems must pass data back and forth in ways that reduce efficiency in completing some scientific calculations, such as globalclimate prediction and windtunnel simulation, said Greg Estes, vice president of marketing at SGI.

The company is hoping to recapture market share in supercomputers, where it has lost ground in recent years to rivals including International Business Machines Corp, Armonk, NY, and Hewlett-packard Co, Palo Alto, Calif.

At prices ranging from $70,176 to $1.13 million, Mr Estates said computers in SGI's Altix 3000 family offer roughly twice the performance of comparable IBM machines for half the price.

Dave Turek, an IBM vice-president in charge of Linux cluster systems, said it would take time to evaluate SGI's claims.

But he said its approach seems to target a small segment of the market that needs shared-memory systems and could include proprietary additions to Linux that users have been reluctant to adopt.

The development is good news for Intel, which has been struggling to find wide acceptance among commercial customers for its Itanium 2 line of chips.

While H-P uses Itanium 2, IBM uses a different chip architecture. Cray Inc. Of Seattle recently agreed to construct a large supercomputer for Sandia National Laboratories in Albuquerque, NM., using a rival chip from Advanced Micro Devices Inc., Sunnyvale, Calif.

"This is an exciting announcement," said Mark Seager, assistant department head for advanced technology at Lawrence Livermore National Laboratory in Livermore, Calif., "But SGI is going to face tough competition."

The Wall Street Journal

Financial Express, January 8, 2003.

## Apple G5 Computer

Apple Computer Inc has introduced new Macintoshes and its G5 computer Chi, a design by International Business Machines Corp that can handle twice as much data at once as traditional PC microchips. The company also said that its new online music store have sold five million song since its inception eight weeks ago, or an average of 6,25,000 songs a week or more than 89,000 songs a day.

## Intel launches new processors

Intel today introduced, here, as part of its worldwide launch, the new Itanium 2 processors and Intel Xeon processors MP, for high end enterprise computing. Terming the new processors "do more with less" enterprise architectures, the President of Intel India, Ketan Sampath, said more than 85 percent of servers shipped today were based on Intel architecture according to industry analysis. The new products extend Intel's strength in multi-processor, business critical server deployments, the high end of a company's computing data centre. Server with four or more processors accounted for more than 60 percent of the total server market revenue last year. The Intel Xeon processor MP will deliver scalability with price performance for the enterprise application and mid-range data tier.

The Itanium processor family delivers flexibility for large-scale, data centre applications. The Supercomputing Research Centre at IISc her had been using Itium 2 since April, Mr. Sampath said.

The new processors would be made available in India with OEM partners who include HP, HCL, IBM and Wipro

## The ugly face of IT

In the lay mind, information technology (IT) is associated with a clean and safe environment. Actually this is far from the truth.

The manufacture of IT hardware involves the use of more than 1,000 materials. Many of these materials are highly toxic, such as special gases used in semiconductor manufacture, lead and cadmium in computer circuit boards, lead oxide and barium in computer monitors' cathode ray tubes, mercury in switches and flat screens, and brominated flame retardants on printed circuit boards, cables and plastic casing.

Comprehensive health impacts of the mixtures and material combinations in the products are often not known. But international research has revealed that high-tech production workers experience premature death, elevated rates of cancer, neurological disorders, miscarriages and giving birth to children with severe birth defects. In addition, new evidence is revealing that computer recycling employees have high levels on dangerous chemicals in their blood. The IT industry also saps a community's resources. One semiconductor plant alone can require enough electricity to power a electricity of 60,000 and several million gallons of water a day. Thirty years of irresponsible handling of chemicals used in manufacturing have resulted in highly contaminated ground water and severe community health problems in a number of countries including, the US, Japan, Mexico and Scotland.

At least the health and environmental problems associated with the making of IT equipment are limited to the regions around the manufacturing nodes. But a much bigger and more widespread ecological disaster is in the making due to other reason – the universal adoption of IT all over the globe and the rapid obsolescence of IT products. This has led to mountains of obsolete IT products, particularly PCs, monitors and printers occupying landfills, where their highly toxic contents can eventually leach into the soil and groundwater. "E-waste" has become one of the world's fastest growing and most toxic waste streams.

The US National Safety Council predicts that in that country alone between 315 million and 680 million computers will become obsolete within the next few years. The waste will contain more than 2 billion kg of plastic. 0.5 billion kg of lead, 1 million kg of cadmium, 0.5 million kg of chromium, and nearly 200,000 kg of mercury. Environmentalists also worry that with the popularity of new liquid crystal display technology, and increasing number of old monitors using cathode ray tubes are ending up in the trash. Now looming in the horizon is a similar disposal problem regarding the tens o millions of first generation mobile phones.

What is ominous for developing countries is that much of this e-waste is being dumped in their territories due to their lax monitoring of waste imports. In February 2002, the Basel action Network (BAN) and Silicon Valley Toxics Coalition (SVTC) released the ground breaking report, "Exporting Harm: The High-Tech Trashing of Asia," which stated that as much as 80 percent of electronic waste collected for recycling in the US was shipped to Asia, mainly China, India and Pakistan, where environmentally destructive processing and disposal such as open burning, acid baths and plain dumping create environmental and health nightmares.

Significantly, The Basel Convention of 1994 and the Ban Amendment, which was signed by all developed nations except the US, identity e-waste as hazardous and prohibit the shipment of hazardous waste from rich countries to poor ones. After the release of the report, China has clamped down on e-waste imports but India continues to receive the trash.

Amazingly, less than 10 percent of the outdated computer products are refurbished or recycled. In 2001, a national Computer Takeback Campaign (CTBC) was started in the US. which promotes "clean and green" production and extended producer responsibility (EPR). Simply stated, EPR rquires companies to take full financial and physical responsibility for their products throughout their life cycle, including end of life recycling, reuse, or disposal. Where countries have enacted environmental regulations the computer

industry has responded by developing sustainable products, accepting their responsibility throughout those products' lifecycles, encouraging reuse of materials, and working toward environmentally sound disposal.

*Some significant examples of laws include:*

*Europe:* the European Union's (EU) Waste Electrical and Electronic Equipment (WEEE) and reduction of hazardous Substances (RoHS) Directives, both adopted by the EU's parliament in October 2002, require the elimination of certain hazardous materials and set standards for producer responsibility for recycling and takeback.

*Japan:* the Appliance Recycling Law in 2001, now requires takeback of certain electronic products that will soon include computers. The Pollution Release and Transfer Registry (PRTR), also introduced last year, is driving the disclosure of chemical use in production.

*US:* While there are no natural laws or regulations, California and Massachusetts have banned landfilling cathode ray tube monitors and televisions because of the lead content in the glass. Several other states and municipalities are considering similar legislation.

During the past year, more than 20 states introduced legislation to address electronic waste (e-waste). The National Conference of Environmental legislators has a chart of states with e-waste legislation.

The failure to pass crucial legislation in many countries has allowed the computer industry to resist addressing many criticisms, such as the amount of hazardous material used to make their products and the ever-growing pile of waste that results from the dynamic pace of innovation in the Information Technology (IT) industry. As a result, double standard exits between countries, as well as within companies. For example, one of the world's leading computer companies sells to American consumers, computers containing brominated flame-retardants, used to prevent fires in circuit boards. Some countries prohibit the flame-retardants, which are suspected of blocking hormones and impairing some biological processes. In those countries, this MNC ships machines free of chemicals.

In India, the mountains of e-waste have not yet manifested themselves. This is because of the propensity to not throw away equipment, even though it is obsolete, till it becomes totally unservicable. But, in the younger generation, this attitude is changing and the thowaway culture of the West is slowly permeating into the country. Another factor limiting generation of e-waste in India is that we do not have a sizeable IT hardware manufacturing infrastructure as yet. We also commenced large scale computerisation a bit late in this country, compared to the developed countries or even the ASEAN bunch.

Nevertheless, the problems is going to build up from henceforth. On a rough estimate, we should now be having around 10 million computers ready for junking, and we are going to scrap a million more every year in the future. With mobile telephony zooming off, we can soon see at least a million handsets joining the scrap heap every year in the near future. To this pile, we will start adding a few lakh CRT monitors every year, especially when LCD monitors start coming down in price. Unless the Indian Government comes up with legislation compelling vendors to initiate a take back and recycle mechanism, the Indian IT dream could well end up in an ecological nightmare.

*Source: The Hindu June 23, 2003.*

## Oracle to hire 1,000

Oracle India Pvt. Ltd, the wholly owned subsidiary of Oracle Corporation, has yet set a roadmap of increasing its workforce to 4,000 people by 2004. Currently, the company has over 3,000 people and is one of the largest multinational employers in the country. Oracle has been adding more than 1,000 people per year over the last two years and hopes to add 1,000 people again this year. Oracle has also the largest research and development investment outside of the US and more than 80 percent of its employees in the country are involved in software development work. It has two development centres – Bangalore and Hyderabad. These development centres carry out development work across the entire Oracle product family for the global market.

**I. District Office Phone Numbers**

| | | | | |
|---|---|---|---|---|
| Thiruvananthapuram | - | 95471 | - | 2330573 |
| Kollam | - | 95474 | - | 2793418 |
| Pathanamthitta | - | 95468 | - | 2322748 |
| Alappuzha | - | 95477 | - | 2252312 |
| Kottayam | - | 95481 | - | 2562073 |
| Idukki | - | 95486 | - | 2222856 |
| Eranakulam | - | 95484 | - | 2422533 |
| Thrissur | - | 95487 | - | 2361339 |
| Palakkad | - | 95491 | - | 2533106 |
| Malappuram | - | 95483 | - | 2734939 |
| Kozhikode | - | 95495 | - | 2370343 |
| Wayanad | - | 954936 | - | 202633 |
| Kannur | - | 95497 | - | 2700405 |
| Kasaragod | - | 954994 | - | 256474 |

**II. Website Launched**

The Official Website 'ecostatkerala.org' launched by the Honourable Chief Minister Sri. A.K. Antony on 21st June 2003.

**III. Publications released**

The Honourable Chief Minister of Kerala Sri. A.K. Antony released the following five publications on 21st June 2003.

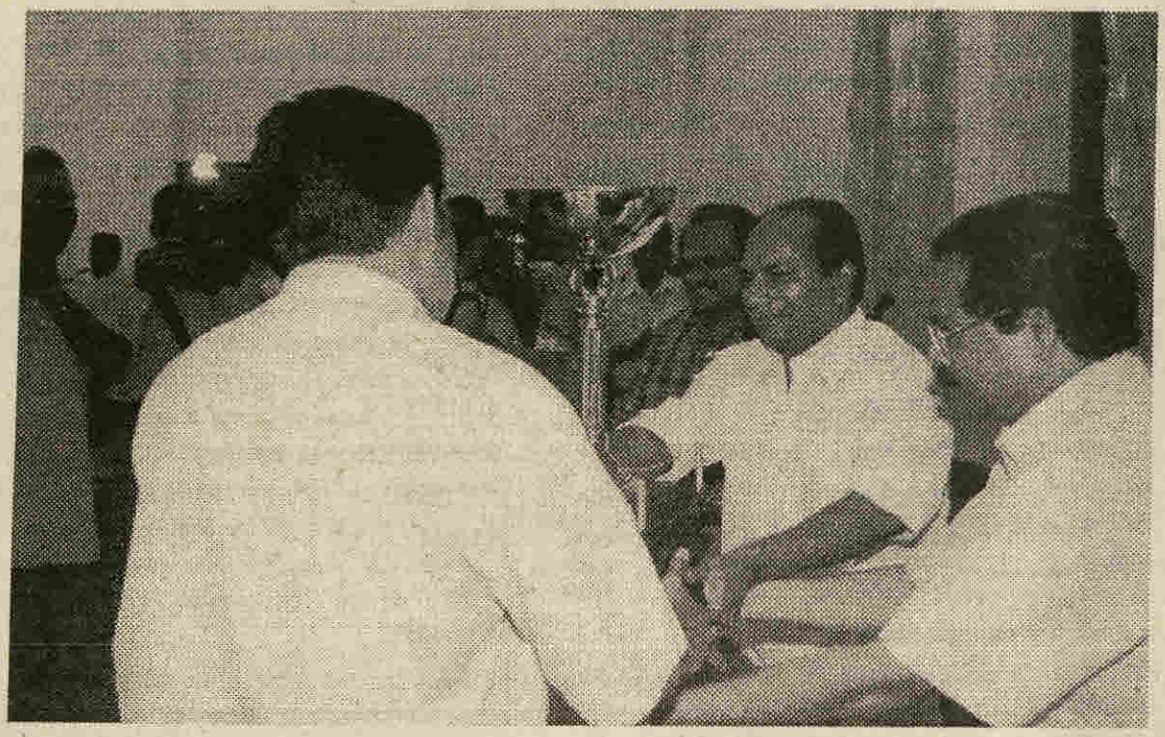
1. *Kerala Through Plans.*
2. *NORKA*
3. *Survey on Activity Status of Live Registrants Registered in Employment Exchanges*
4. *Quick Report on Aged in Kerala*
5. *Agro Climatic Zones*

**IV. Retirement**

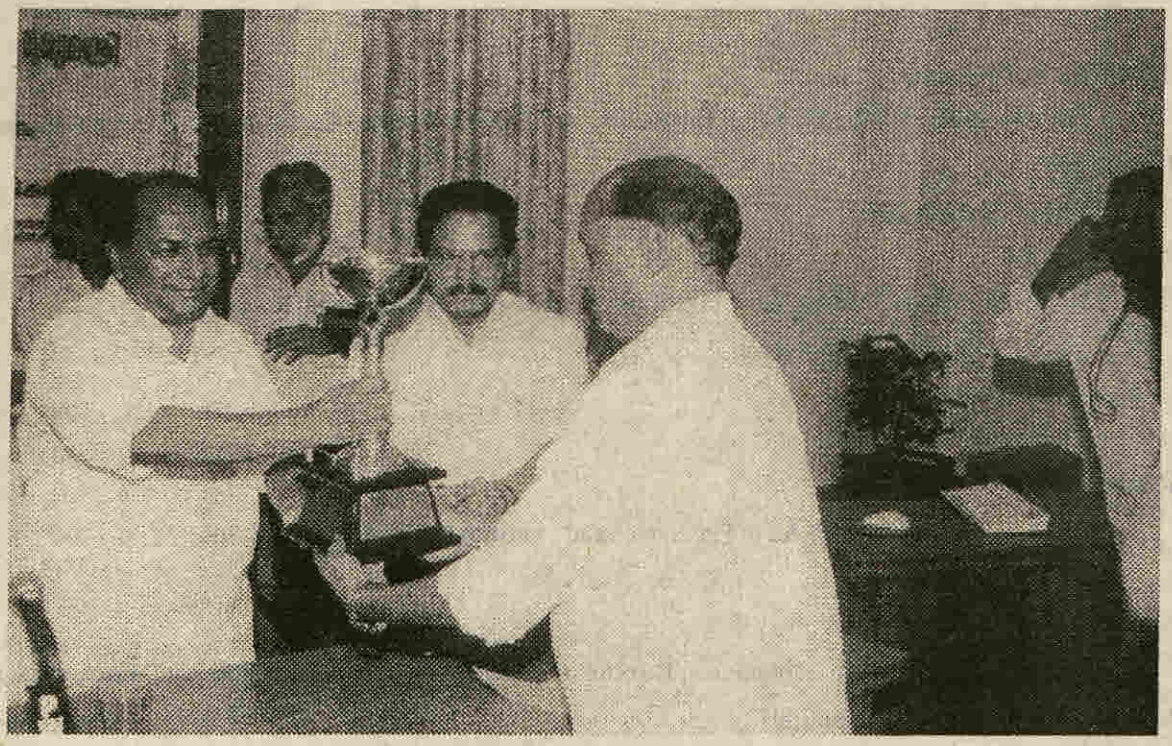
Sri. A. Meera Sahib, Director of Economics and Statistics retired on 31st May 2003.

**V. New Charge**

Sri. M.R. Balakrishnan, Additional Director (General) took charge as Director of Economics and Statistics with effect from 1st June 2003.



Honourable Chief Minister Sri. A.K. Antony giving Director's trophy to Sri. C.K. Rajendran, Deputy Director, Kollam for the best district performance during the year 2002-2003.



Honourable Chief Minister Sri. A.K. Antony giving Director's trophy to Sri. Rajan, Taluk Statistical Officer, Alathur, Palakkad for the best Taluk performance during the year 2002-2003.

## VI. Department Official Website and E-Mail Addresses

### E-Mail id's of the Officers of the Department of Economics & Statistics

**Website: www.ecostatkerala.org**

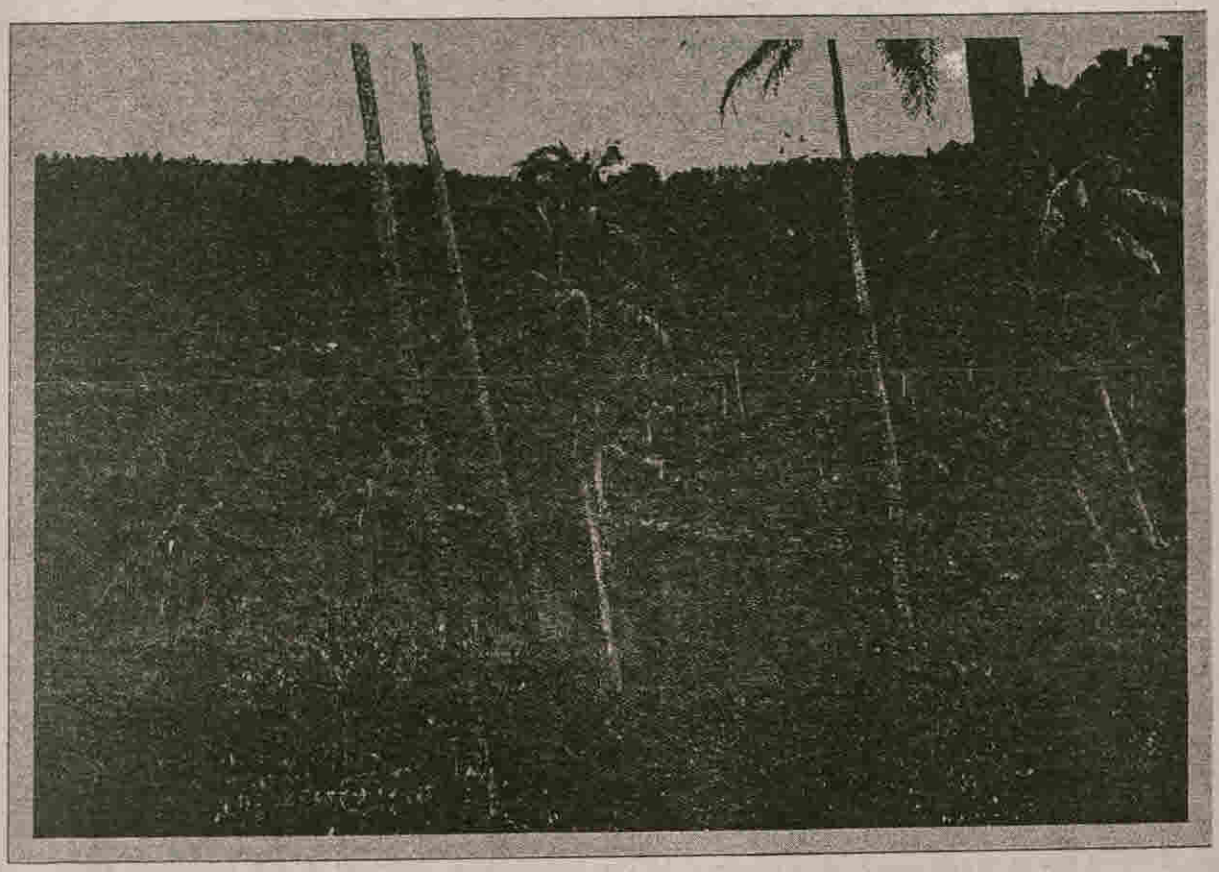
| | | |
|---|---|---|
| 1. | Secretary, Planning & Economic Affairs | secplg@ecostatkerala.org |
| 2. | Director, Department of Eco. & Stat. | dir@ecostatkerala.org |
| 3. | Additional Director General | addlg@ecostatkerala.org |
| 4. | Additional Director, State Income | addlsi@ecostatkerala.org |
| 5. | Additional Director, Prices | addlprices@ecostatkerala.org |
| 6. | Joint Director, Planning, Publication & Co-ordination | jdppc@ecostatkerala.org |
| 7. | Joint Director, Timely Reporting Survey | jdtrs@ecostatkerala.org |
| 8. | Joint Director, Agricultural Census | jdagc@ecostatkerala.org |
| 9. | Joint Director, Surveys & Design | jdsd@ecostatkerala.org |
| 10. | Deputy Director, Computer Division | ddcomp@ecostatkerala.org |
| 11. | Deputy Director, Evaluation | ddevaluation@ecostatkerala.org |
| 12. | Deputy Director, Agricultural Census | ddagc@ecostatkerala.org |
| 13. | Deputy Director, Vital Statistics | ddvs@ecostatkerala.org |
| 14. | Administrative Officer, DES | ao@ecostatkerala.org |
| 15. | Deputy Director, E & S Thiruvananthapuram, | ddtvm@ecostatkerala.org |
| 16. | Deputy Director, E & S, Kollam | ddklm@ecostatkerala.org |
| 17. | Deputy Director, E & S, Pathanamthitta | ddpta@ecostatkerala.org |
| 18. | Deputy Director, E & S, Alappuzha | ddalp@ecostatkerala.org |
| 19. | Deputy Director, E & S, Kottayam | ddktm@ecostatkerala.org |
| 20. | Deputy Director, E & S, Idukki | ddidi@ecostatkerala.org |
| 21. | Deputy Director, E & S, Ernakulam | ddekm@ecostatkerala.org |
| 22. | Deputy Director, E & S, Thrissur | ddtsr@ecostatkerala.org |
| 23. | Deputy Director, E & S, Palakkad | ddpkd@ecostatkerala.org |
| 24. | Deputy Director, E & S, Malappuram | ddmpm@ecostatkerala.org |
| 25. | Deputy Director, E & S, Kozhikkode | ddkkd@ecostatkerala.org |
| 26. | Deputy Director, E & S, Wayanad | ddwyd@ecostatkerala.org |
| 27. | Deputy Director, E & S, Kannur | ddknr@ecostatkerala.org |
| 28. | Deputy Director, E & S, Kasaragod | ddksd@ecostatkerala.org |

Printed and Published by Department of Economics & Statistics, Government of Kerala

# EcoStat News

August 2003
Volume 3 – Issue – 4

*For Official Use only*



## Inside this issue

- Population
- Coir Exports
- Article
- Prices
- Wages & Earnings
- Vehicle Statistics
- Indices
- Cyber Corner

**Department of Economics & Statistics**
**Government of Kerala**

4

# From Editors Desk

*Besides data on various socio-economic indicators, this issue of "eco-stat news" includes thought provoking articles on topics of current interest. This welcome change in the content has been introduced by the editorial board with the extreme hope of promoting the report writing talent of our officials engaged in data management and connected assignments throughout the state. To begin with a lead article on "Employment Scenario in the State" prepared by Sri P. C. Jain, Additional Director is included in this issue. I request all our talented officials to take the initiative in contributing useful articles and analytical reports on socio-economic issues that may attract interest of the public.*

*The department is now very much keen to provide quality data on time to planners, administrators, scholars and other data users. Restructuring of statistical system of our state on the recommendations of National Statistical Commission is on the anvil. The department is hopeful of a big leap with the co-operation, dedication and hard work of all its officials. Enlargement of the knowledge base and improvements in skills are very vital in this timely attempt to progress with times.*

***M.R. Balakrishnan***
**Director & Chief Editor**



**Design : K. K. Basand Kumar**
**Type setting: Samila Ramachandran**

*Edited printed & published for Department of Economics and Statistics, Government of Kerala.*

# Contents


| | Page |
|---|---|
| Population | 3 |
| Wages & Earnings | 6 |
| Coir Exports | 9 |
| Vehicle Statistics | 9 |
| Article | 10 |
| Indices | 27 |
| Prices | 38 |
| Cyber Corner | 40 |

**Table 1: Number of Towns, Percentage and Growth rate of Urban population in India since 1901**

| Census Year | No of Towns/ Uas | Percent Urban to Total population | Annual Expn Gr of Urban population |
|---|---|---|---|
| 1901 | 1827 | 10.84 | - |
| 1911 | 1815 | 10.29 | 0.03 |
| 1921 | 1949 | 11.18 | 0.79 |
| 1931 | 2072 | 11.99 | 1.75 |
| 1941 | 2250 | 13.86 | 2.77 |
| 1951 | 2843 | 17.29 | 3.47 |
| 1961 | 2365 | 17.97 | 2.34 |
| 1971 | 2590 | 19.91 | 3.21 |
| 1981 | 3378 | 23.34 | 3.83 |
| 1991 | 3768 | 25.72 | 3.09 |
| 2001 | 4368 | 27.78 | 2.73 |

**Table 2a: pattern of Internal Migration for males in Urban India, 1961-91**

| | 1961 | 1971 | 1981 | 1991 |
|---|---|---|---|---|
| Urban Male Population | 42.8 | 58.7 | 84.9 | 114.9 |
| Urban male Migrants | | | | |
| a Intercensal | 10.2<br>(23.8) | 10.8<br>(18.5) | 14.1<br>(16.9) | 13.3<br>(11.7) |
| a1 Intercensal interstate | 3.4<br>(7.9) | 3.3<br>(5.6) | 3.7<br>(4.4) | 3.7<br>(3.3) |
| b Lifetime | 16.1<br>(37.5) | 19.7<br>(33.6) | 27.1<br>(32.4) | 29.6<br>(26.0) |
| b1 Lifetime interstate | 5.3<br>(12.3) | 6.6<br>(11.2) | 8.4<br>(10.0) | 9.1<br>(8.0) |

**Table 2b: Disaggregation of Total Incremental Urban Population into Components**

| | Percentage Distrubution | | | |
|---|---|---|---|---|
| | 1961-71 | 1971-81 | 1981-91 | 1991-01 |
| Total increase | 30.18 | 49.9 | 57.7 | 67.7 |
| (a) Natural increase on base year pop and on inter-censal migrants | 64.6 | 51.3 | 61.3 | 59.4 |
| (b) Population of new towns less declassified towns | 13.8 | 14.8 | 9.4 | 6.2 |
| © Net RU migration | 18.7 | 19.6 | 21.7 | 21.0 |
| (d) Increase due to expansion in area and merging of towns | 2.9 | 14.2 | 7.6 | 13.0 |

**Table 3a: Number of Towns and Percentage of Urban Population in Various Size Categories**

| Census Year | Number of Towns | | | | | | Percentage of Urban Population | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Class I | Class II | Class III | Class IV | Class V | Class VI | Class I | Class II | Class III | Class IV | Class V | Class VI |
| 1901 | 24 | 43 | 130 | 391 | 744 | 479 | 26.00 | 11.29 | 15.64 | 20.83 | 20.14 | 6.10 |
| 1911 | 23 | 40 | 135 | 364 | 707 | 485 | 27.48 | 10.51 | 16.4 | 19.73 | 19.31 | 6.57 |
| 1921 | 29 | 45 | 145 | 370 | 734 | 571 | 29.70 | 10.39 | 15.92 | 18.29 | 18.67 | 7.03 |
| 1931 | 35 | 56 | 183 | 434 | 800 | 509 | 31.20 | 11.65 | 16.80 | 18.00 | 17.14 | 5.21 |
| 1941 | 49 | 74 | 242 | 498 | 920 | 407 | 38.23 | 11.42 | 16.35 | 15.78 | 15.08 | 3.14 |
| 1951 | 76 | 91 | 327 | 608 | 1124 | 569 | 44.63 | 9.96 | 15.72 | 13.63 | 12.97 | 3.09 |
| 1961 | 102 | 129 | 437 | 719 | 711 | 172 | 51.42 | 11.23 | 16.94 | 12.77 | 6.87 | 0.77 |
| 1971 | 148 | 173 | 558 | 827 | 623 | 147 | 57.24 | 10.92 | 16.01 | 10.94 | 4.45 | 0.44 |
| 1981 | 218 | 270 | 743 | 1059 | 758 | 253 | 60.37 | 11.63 | 14.33 | 9.54 | 3.58 | 0.50 |
| 1991 | 300 | 345 | 947 | 1167 | 740 | 197 | 65.20 | 10.95 | 13.19 | 7.77 | 2.60 | 0.29 |
| 2001 | 393 | 401 | 1151 | 1344 | 888 | 191 | 68.67 | 9.67 | 12.23 | 6.84 | 2.36 | 0.23 |

**Table 3b: Annual Exponential Growth Rates of Urban Population in Various Size Categories**

| Census Year | Class I | Class II | Class III | Class IV | Class V | Class VI |
|---|---|---|---|---|---|---|
| 1901-11 | 0.54 | -0.73 | 0.46 | -0.55 | -0.43 | 0.72 |
| 1911-21 | 1.57 | 0.68 | 0.50 | 0.03 | 0.46 | 1.47 |
| 1921-31 | 2.24 | 2.89 | 2.28 | 1.59 | 0.89 | -1.25 |
| 1931-41 | 4.81 | 2.59 | 2.51 | 1.47 | 1.50 | -2.26 |
| 1941-51 | 5.02 | 2.10 | 3.07 | 2.01 | 1.97 | 3.31 |
| 1951-61 | 3.72 | 3.50 | 3.05 | 1.65 | -4.05 | -11.62 |
| 1961-71 | 4.29 | 2.93 | 2.65 | 1.67 | -1.14 | -2.32 |
| 1971-81 | 4.34 | 4.43 | 2.69 | 2.43 | 1.64 | 5.05 |
| | (3.46) | (3.09) | (3.33) | (3.00) | (3.15) | (3.90) |
| 1981-91 | 3.84 | 2.38 | 2.26 | 1.02 | -0.13 | -2.45 |
| | (2.96) | (2.75) | (2.59) | (2.50) | (2.62) | (3.64) |
| 1991-01 | 3.42 | 1.76 | 2.15 | 1.64 | 1.93 | 0.80 |
| | (2.76) | (2.37) | (2.27) | (2.19) | (2.22) | (3.26) |

**Table 3c: Annual Exponential Growth Rates of Population in Different Categories of Urban Centres**

| | 1981-91 | 1991-2001 |
|---|---|---|
| Class I cities | 2.96 | 2.76 |
| Metro cities | 3.25 | 2.88 |
| Capital cities | 3.36 | 2.79 |
| Common towns (excluding new & declassified towns) | 2.83 | 2.56 |
| Urban population | 3.09 | 2.73 |

Note: The population growth rates in the first three rows have been computed using the base year population for classification of cities.

**Table 4: Pattern of Level of Urbanisation and Growth of Urban Population Across Sates/ Uts**

| States | Percentage Urban Population | | | | Annual Exponential Growth Rate | | |
|---|---|---|---|---|---|---|---|
| | 1971 | 1981 | 1991 | 2001 | 1971-81 | 1981-91 | 1991-01 |
| Andhra Pradesh | 19.31 | 23.25 | 26.84 | 27.08 | 3.94 | 3.55 | 1.37 |
| Arunachal Pradesh | 3.70 | 6.32 | 12.21 | 20.41 | 8.32 | 9.28 | 7.00 |
| Assam | 8.82 | 9.88 | 11.09 | 12.72 | 3.29 | 3.29 | 3.09 |
| Bihar | 10.00 | 12.46 | 13.17 | 10.47 | 4.34 | 2.65 | 2.57 |
| Chhatisgarh | NA | NA | NA | 20.08 | NA | NA | 3.09 |
| Delhi | 89.70 | 92.84 | 89.93 | 93.01 | 4.56 | 3.79 | 4.14 |
| Goa | 26.44 | 32.46 | 41.02 | 49.77 | 4.37 | 3.96 | 3.32 |
| Gujarat | 28.08 | 31.08 | 34.40 | 37.35 | 3.42 | 2.90 | 2.8 |
| Haryana | 17.66 | 21.96 | 24.79 | 29.00 | 4.65 | 3.58 | 4.11 |
| Himachal Pradesh | 6.99 | 7.72 | 8.70 | 9.79 | 3.02 | 3.11 | 2.81 |
| Jammu & Kashmir | 18.59 | 21.05 | 22.76 | 24.88 | 3.80 | 3.44 | 3.44 |
| Jharkhand | NA | NA | NA | 22.25 | NA | NA | 2.55 |
| Karnataka | 24.31 | 28.91 | 30.91 | 33.98 | 4.08 | 2.55 | 2.53 |
| Kerala | 16.24 | 18.78/ | 26.44 | 25.97 | 3.19 | 4.76 | 0.74 |
| Madhya Pradesh | 16.29 | 20.31 | 23.21 | 26.67 | 4.46 | 3.71 | 2.71 |
| Maharashtra | 31.17 | 35.03 | 38.73 | 42.4 | 3.35 | 3.27 | 2.95 |
| Manipur | 13.19 | 26.44 | 27.69 | 23.88 | 9.70 | 2.98 | 1.21 |
| Meghalaya | 14.55 | 18.03 | 18.69 | 19.63 | 4.87 | 3.10 | 3.16 |
| Mizoram | 11.36 | 25.17 | 46.2 | 49.5 | 11.79 | 9.57 | 3.27 |
| Nagaland | 9.95 | 15.54 | 17.28 | 17.74 | 8.49 | 5.58 | 5.27 |
| Orissa | 8.41 | 11.82 | 13.43 | 14.97 | 5.21 | 3.08 | 2.61 |
| Punjab | 23.73 | 27.72 | 29.72 | 33.95 | 3.62 | 2.55 | 3.19 |
| Rajasthan | 17.63 | 20.93 | 22.88 | 23.38 | 4.52 | 3.31 | 2.71 |
| Sikkim | 9.37 | 16.23 | 9.12 | 11.1 | 9.55 | -3.23 | 4.83 |
| Tamil Nadu | 30.26 | 32.98 | 34.2 | 43.86 | 2.45 | 1.76 | 3.56 |
| Tripura | 10.43 | 10.98 | 15.26 | 17.02 | 3.26 | 6.19 | 2.53 |
| Uttar Pradesh | 14.02 | 18.01 | 19.89 | 20.78 | 4.78 | 3.27 | 2.84 |
| Uttaranchal | NA | NA | NA | 25.59 | NA | NA | 2.84 |
| West Bengal | 24.75 | 26.49 | 27.39 | 28.03 | 2.75 | 2.54 | 1.84 |
| **Union Territories:** | | | | | | | |
| A.& N.Islands | 22.77 | 26.36 | 26.8 | 32.67 | 6.38 | 4.10 | 4.40 |
| Chandigargh | 90.55 | 93.6 | 89.69 | 89.78 | 5.92 | 3.07 | 3.40 |
| D.& N.Haveli | 0 | 6.67 | 8.47 | 22.89 | - | 5.28 | 14.59 |
| Daman & Diu | - | - | 46.86 | 36.26 | - | 4.93 | 1.87 |
| Lakshadweep | 0 | 46.31 | 56.29 | 44.47 | - | 4.46 | -0.77 |
| Pondicherry | 42.04 | 52.32 | 64.05 | 66.57 | 4.66 | 4.92 | 2.26 |
| All-India | 20.22 | 23.73 | 25.72 | 27.78 | 3.79 | 3.09 | 2.73 |

*Source: Economic and Political Weekly, July 2003.*

## Wages and Earnings

### Table 2 (a) - Average Daily Wage Rates for Agricultural Occupations in Rural India during April, 2003 (By States, Age composition & Sex)

| Sl No | State | Ploughing | | | Sowing | | | Weeding | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Men | Women | Children | Men | Women | Children | Men | Women | Children |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Andhra Pradesh | 59.59 | - | - | 47.04 | 33.59 | @ | 49.95 | 32.17 | @ |
| 2 | Assam | 65.56 | - | - | 56.14 | @ | - | 56.73 | 50.40 | @ |
| 3 | Bihar | 55.27 | - | - | 54.52 | 47.41 | 38.33 | 47.95 | 43.32 | 39.26 |
| 4 | Gujarat | 66.68 | @ | - | 62.93 | 52.67 | - | 52.59 | 51.10 | - |
| 5 | Haryana | 83.20 | - | - | 79.63 | @ | - | 80.22 | 74.88 | - |
| 6 | Himachal Pradesh | 101.00 | - | - | 101.00 | @ | - | @ | @ | - |
| 7 | Jammu & Kashmir | 130.37 | - | - | 115.83 | - | - | @ | - | - |
| 8 | Karnataka | 58.41 | @ | @ | 52.91 | 35.52 | @ | 51.09 | 36.26 | 25.55 |
| 9 | Kerala | 247.14 | - | - | 175.34 | @ | - | - | 103.99 | @ |
| 10 | Madhya Pradesh | 49.72 | - | - | 48.65 | 40.00 | - | 44.07 | 37.69 | @ |
| 11 | Maharashtra | 60.11 | @ | @ | 63.79 | 38.50 | - | 52.32 | 33.72 | 24.50 |
| 12 | Manipur | 60.56 | - | - | 50.00 | - | - | 50.00 | 45.00 | - |
| 13 | Meghalaya | 69.52 | - | - | 62.86 | 46.43 | @ | @ | @ | @ |
| 14 | Orissa | 58.62 | - | - | 51.48 | - | - | 57.92 | @ | - |
| 15 | Punjab | @ | - | - | 84.60 | - | - | 83.86 | - | - |
| 16 | Rajasthan | 86.11 | - | - | 80.71 | @ | - | - | @ | - |
| 17 | Tamil Nadu | 118.83 | - | - | 73.33 | 42.71 | - | @ | 38.55 | @ |
| 18 | Tripura | - | - | - | - | - | - | - | - | - |
| 19 | Uttar Pradesh | 56.38 | - | - | 55.91 | 46.54 | @ | 55.32 | 46.87 | 41.67 |
| 20 | West Bengal | 80.25 | - | @ | 52.34 | 49.11 | @ | 52.16 | 48.35 | @ |
| | **All India** | **72.51** | **40.00** | **@** | **64.00** | **44.90** | **35.90** | **54.46** | **45.75** | **38.42** |

| Sl No | State | Transplanting | | | Harvesting | | | Winnowing | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Men | Women | Children | Men | Women | Children | Men | Women | Children |
| 1 | 2 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 1 | Andhra Pradesh | @ | 34.41 | @ | 51.88 | 36.93 | 30.56 | 46.45 | 32.57 | @ |
| 2 | Assam | 58.89 | 50.44 | - | 57.93 | 51.50 | - | @ | - | - |
| 3 | Bihar | 49.15 | 46.19 | 38.67 | 57.53 | 51.56 | 41.43 | 53.02 | 43.57 | 43.00 |
| 4 | Gujarat | 50.91 | 49.00 | - | 55.33 | 54.00 | - | 53.80 | 50.83 | - |
| 5 | Haryana | 80.29 | @ | - | 91.42 | 89.09 | - | 84.50 | - | - |
| 6 | Himachal Pradesh | @ | @ | - | @ | @ | - | - | - | - |
| 7 | Jammu & Kashmir | @ | - | - | 112.00 | - | - | @ | - | - |
| 8 | Karnataka | 52.45 | 38.68 | @ | 51.38 | 36.31 | 21.67 | 47.36 | 37.67 | @ |
| 9 | Kerala | - | 99.65 | - | @ | 95.25 | - | - | | - |
| 10 | Madhya Pradesh | @ | - | - | 43.62 | 38.97 | @ | 39.64 | 34.00 | @ |
| 11 | Maharashtra | 62.25 | 43.50 | - | 58.64 | 37.82 | @ | 55.71 | 41.44 | @ |
| 12 | Manipur | - | - | - | - | - | - | @ | @ | - |
| 13 | Meghalaya | @ | @ | @ | @ | @ | - | @ | @ | - |
| 14 | Orissa | 49.83 | 41.88 | @ | 51.03 | 41.82 | @ | 57.00 | @ | - |
| 15 | Punjab | 81.17 | @ | - | 86.33 | @ | - | @ | - | - |
| 16 | Rajasthan | - | - | - | 69.11 | 46.67 | - | - | - | - |
| 17 | Tamil Nadu | 70.58 | 38.44 | - | 67.86 | 49.05 | @ | 67.31 | 49.08 | - |
| 18 | Tripura | - | - | - | - | - | - | - | - | - |
| 19 | Uttar Pradesh | 55.97 | 44.17 | @ | 57.46 | 47.43 | 37.73 | 54.92 | 41.88 | @ |
| 20 | West Bengal | 53.42 | 49.46 | @ | 51.33 | 49.09 | @ | 48.72 | 46.14 | @ |
| | **All India** | **57.45** | **48.75** | **33.94** | **58.64** | **48.25** | **32.43** | **53.34** | **43.55** | **35.67** |

*Table 2 (a) - Average Daily Wage Rates for Agricultural Occupations in Rural India during April, 2003 (By States, Age composition & Sex) (Contd..)*

| Sl No | States | Threshing | | | Picking | | | Herdsman | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Men | Women | Children | Men | Women | Children | Men | Women | Children |
| *1* | *2* | *21* | *22* | *23* | *24* | *25* | *26* | *27* | *28* | *29* |
| 1 | Andhra Pradesh | 60.68 | 43.16 | @ | @ | 35.55 | @ | 32.14 | 31.48 | 27.50 |
| 2 | Assam | @ | - | - | - | - | - | @ | - | 32.04 |
| 3 | Bihar | 55.78 | 41.67 | @ | @ | @ | - | 40.86 | @ | 27.37 |
| 4 | Gujarat | 54.24 | 53.33 | - | 60.83 | 60.00 | - | 52.14 | - | - |
| 5 | Haryana | 78.79 | - | - | @ | @ | - | @ | - | - |
| 6 | Himachal Pradesh | - | - | - | - | - | - | - | - | - |
| 7 | Jammu & Kashmir | @ | - | - | - | - | - | - | - | - |
| 8 | Karnataka | 45.27 | 34.83 | @ | 44.00 | 36.80 | 27.93 | 44.29 | @ | 31.78 |
| 9 | Kerala | @ | @ | - | - | - | - | - | - | - |
| 10 | Madhya Pradesh | 43.78 | 37.07 | @ | 35.00 | 33.57 | @ | 34.92 | 32.19 | 22.87 |
| 11 | Maharashtra | 53.86 | 33.95 | @ | @ | 26.67 | @ | 39.09 | 26.00 | 25.30 |
| 12 | Manipur | - | - | - | - | - | - | 46.43 | - | - |
| 13 | Meghalaya | @ | @ | @ | @ | @ | - | @ | @ | @ |
| 14 | Orissa | 55.00 | @ | - | @ | @ | - | 31.24 | @ | 20.00 |
| 15 | Punjab | @ | @ | - | - | - | - | - | - | - |
| 16 | Rajasthan | 63.33 | @ | - | - | - | - | 43.13 | @ | @ |
| 17 | Tamil Nadu | 68.47 | 43.10 | - | @ | @ | - | @ | - | - |
| 18 | Tripura | - | - | - | - | - | - | - | - | - |
| 19 | Uttar Pradesh | 61.71 | 48.46 | 40.00 | @ | @ | - | @ | - | - |
| 20 | West Bengal | 51.98 | 50.97 | @ | @ | @ | @ | @ | - | 26.61 |
| | **All India** | **56.76** | **43.84** | **31.04** | **53.57** | **42.02** | **28.38** | **40.35** | **32.20** | **25.87** |

| Sl No | States | Well digging | | | Cane crushing | | |
|---|---|---|---|---|---|---|---|
| | | Men | Women | Children | Men | Women | Children |
| *1* | *2* | *30* | *31* | *32* | *33* | *34* | *35* |
| 1 | Andhra Pradesh | @ | @ | - | @ | @ | - |
| 2 | Assam | @ | - | - | - | - | - |
| 3 | Bihar | 56.69 | @ | - | 54.44 | - | @ |
| 4 | Gujarat | 73.30 | @ | - | @ | @ | - |
| 5 | Haryana | @ | - | - | @ | - | - |
| 6 | Himachal Pradesh | - | - | - | - | - | - |
| 7 | Jammu & Kashmir | - | - | - | - | - | - |
| 8 | Karnataka | 75.55 | @ | - | 55.75 | 42.67 | - |
| 9 | Kerala | 205.42 | - | - | - | - | - |
| 10 | Madhya Pradesh | 51.36 | 43.06 | @ | 46.00 | @ | @ |
| 11 | Maharashtra | 69.74 | 36.67 | - | @ | @ | - |
| 12 | Manipur | @ | - | - | - | - | - |
| 13 | Meghalaya | @ | - | - | - | - | - |
| 14 | Orissa | @ | - | - | - | - | - |
| 15 | Punjab | @ | - | - | - | - | - |
| 16 | Rajasthan | 108.81 | @ | - | @ | - | - |
| 17 | Tamil Nadu | 107.40 | 48.33 | - | 70.00 | @ | - |
| 18 | Tripura | - | - | - | - | - | - |
| 19 | Uttar Pradesh | 76.36 | - | - | 53.14 | @ | @ |
| 20 | West Bengal | @ | - | - | - | - | - |
| | **All India** | **83.33** | **44.13** | @ | **59.55** | **44.32** | **36.47** |

*– = Indicates that the particular category of workers i.e. men/ women/ children, were not engaged in that operation either because of their non-availability; or the activity connected with the occupation was not undertaken in the state, or the activity was out of season in the state, etc. etc.*

** = Picking includes picking of cotton, jute, tea and others.*

*@ = Number of quotations are less than five.*

**Table 2 (b) - Average Daily Wage Rates for Non-Agricultural Occupations in Rural India during April, 2003 (By States, Age composition & Sex)**

| Sl No | States | Carpenter | | | Black smith | | | Cobbler | | | Mason | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Men | Women | Children | Men | Women | Children | Men | Women | Children | Men | Women | Children |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Andhra Pradesh | 79.31 | - | - | 72.05 | - | @ | 53.03 | - | - | 96.32 | @ | - |
| 2 | Assam | 98.74 | - | - | 71.79 | - | - | 66.67 | - | - | 105.26 | - | - |
| 3 | Bihar | 93.33 | - | - | 81.32 | - | - | 68.53 | - | @ | 105.77 | - | - |
| 4 | Gujarat | 124.32 | - | - | @ | - | - | | - | - | 140.29 | - | - |
| 5 | Haryana | 138.50 | - | - | 117.1 | - | - | 87.60 | - | - | 159.83 | - | - |
| 6 | Himachal Pradesh | 174.44 | - | - | 158.0 | - | - | - | - | - | 173.75 | - | - |
| 7 | Jammu & Kashmir | 168.33 | - | - | 119.7 | - | - | | - | - | 174.44 | - | - |
| 8 | Karnataka | 97.76 | - | - | 78.92 | - | - | 58.18 | - | - | 103.29 | - | - |
| 9 | Kerala | 191.43 | - | - | 169.7 | - | - | | - | - | 185.00 | - | - |
| 10 | Madhya Prades | 79.49 | - | - | 65.45 | - | - | 52.21 | - | - | 95.74 | - | - |
| 11 | Maharashtra | 95.05 | - | - | 78.37 | - | - | 68.41 | - | - | 106.75 | - | - |
| 12 | Manipur | 77.78 | - | - | 67.86 | - | - | 52.78 | - | - | 79.44 | - | - |
| 13 | Meghalaya | 105.56 | - | - | 76.25 | - | - | 62.86 | - | - | 97.50 | - | - |
| 14 | Orissa | 100.09 | - | - | 91.67 | - | - | - | - | - | 109.08 | - | - |
| 15 | Punjab | 155.10 | - | - | 154.0 | - | - | - | - | - | 159.37 | - | - |
| 16 | Rajasthan | 152.27 | - | - | @ | - | - | - | - | - | 152.55 | - | - |
| 17 | Tamil Nadu | 117.95 | - | @ | 102.9 | - | - | 60.28 | - | - | 132.29 | @ | @ |
| 18 | Tripura | 90.00 | - | - | 45.56 | - | - | 45.00 | - | - | 90.00 | - | - |
| 19 | Uttar Pradesh | 111.09 | - | @ | 96.92 | - | @ | 63.05 | - | @ | 126.08 | - | - |
| 20 | West Bengal | 87.55 | - | - | 66.31 | - | - | 54.75 | - | - | 92.96 | - | - |
| | **All India** | **106.27** | - | @ | **83.78** | - | @ | **61.73** | - | @ | **117.17** | @ | @ |

| Sl No | State | Tractor driver | | | Sweeper | | | Unskilled labourers (Unspecified) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Men | Women | Children | Men | Women | Children | Men | Women | Children |
| 1 | 2 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 1 | Andhra Pradesh | 71.99 | - | - | @ | @ | - | 49.60 | 35.83 | 28.28 |
| 2 | Assam | - | - | - | - | - | - | 55.96 | 45.09 | 34.50 |
| 3 | Bihar | 69.58 | - | - | 52.14 | @ | @ | 48.97 | 45.04 | 41.25 |
| 4 | Gujarat | 70.83 | - | - | @ | @ | - | 52.26 | 51.15 | @ |
| 5 | Haryana | 96.63 | - | - | 84.33 | 83.60 | - | 87.08 | 80.83 | - |
| 6 | Himachal Pradesh | @ | - | - | - | - | - | 100.00 | @ | - |
| 7 | Jammu & Kashmir | - | - | - | - | - | - | 101.11 | - | - |
| 8 | Karnataka | 70.04 | - | - | 42.97 | 42.60 | - | 44.80 | 33.32 | 23.69 |
| 9 | Kerala | @ | - | - | - | - | - | 142.72 | 99.55 | - |
| 10 | Madhya Pradesh | 71.55 | - | - | 45.83 | 43.21 | - | 37.80 | 31.93 | 21.45 |
| 11 | Maharashtra | 70.00 | - | - | @ | - | - | 48.09 | 31.10 | 24.05 |
| 12 | Manipur | 95.63 | - | - | - | - | - | 46.11 | 44.38 | - |
| 13 | Meghalaya | - | - | - | @ | @ | @ | 56.67 | @ | @ |
| 14 | Orissa | 101.83 | - | - | - | - | - | 46.08 | 41.29 | 24.07 |
| 15 | Punjab | 99.00 | - | - | @ | 50.53 | - | 83.75 | @ | - |
| 16 | Rajasthan | 96.55 | - | - | - | - | - | 69.57 | 60.52 | |
| 17 | Tamil Nadu | 102.57 | - | - | @ | @ | - | 71.08 | 48.09 | 45.81 |
| 18 | Tripura | 90.00 | - | - | - | - | - | 60.00 | @ | - |
| 19 | Uttar Pradesh | 67.26 | - | - | 63.00 | 60.60 | @ | 56.68 | 47.54 | 37.78 |
| 20 | West Bengal | 107.36 | - | - | @ | @ | - | 50.53 | 45.96 | 34.17 |
| | **All India** | **78.69** | - | - | **50.86** | **50.84** | - | **58.00** | **43.60** | **29.69** |

*– = Indicates that the particular category of workers i.e. men/ women/ children, were not engaged in that operation either because of their non-availability; or the activity connected with the occupation was not undertaken in the state, or the activity was out of season in the state, etc. etc.*

*@ = Number of quotations are less than five.*

**Note:** The average daily wage rates at all-India level are derived by dividing the sum total of wages by number of quotations of all states taken together.

***Source: Indian Labour Journal July 2003***

# Coir Exports

## Export of Coir products from India

*Q = Quantity in M tonnes* *V = Value in Rs. lakhs*

| Item | June 2003* | | June 2003 | | Apr 2003-June 2003 | | Apr 2002-June 2003 | |
|---|---|---|---|---|---|---|---|---|
| | Q | V | Q | V | Q | V | Q | V |
| Coir fibre | 140 | 14.04 | 42 | 3.89 | 340 | 35.30 | 244 | 23.44 |
| Coir yarn | 1114 | 289.71 | 677 | 173.52 | 3072 | 810.28 | 2493 | 650.23 |
| Coir mats | 2804 | 1767.37 | 2962 | 1890.76 | 10180 | 6307.20 | 8518 | 5431.63 |
| Coir matting | 381 | 248.02 | 443 | 288.20 | 1179 | 739.24 | 1332 | 868.62 |
| Coir rugs & carpet | 231 | 166.32 | 257 | 171.77 | 455 | 333.22 | 544 | 364.03 |
| Coir rope | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 41 | 10.26 |
| Rubberised coir | 33 | 26.65 | 35 | 26.45 | 84 | 68.19 | 114 | 88.46 |
| Curled coir | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 243 | 39.58 |
| Coir geotextiles | 142 | 59.91 | 99 | 52.31 | 594 | 247.39 | 390 | 198.41 |
| Coir other sorts | 58 | 20.30 | 23 | 6.39 | 100 | 43.09 | 101 | 42.37 |
| Coir pith | 2156 | 172.52 | 2070 | 155.31 | 6527 | 502.94 | 5677 | 449.54 |
| **Total** | **7059** | **2764.84** | **6608** | **2768.60** | **22531** | **9086.81** | **19697** | **8166.57** |

* Provisional value estimated

*Source: Coir News, July 2003*

# Vehicle Statistics

## Vehicle Statistics in Kerala

| Sl No | Vehicles | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 |
|---|---|---|---|---|---|
| 1 | Heavy vehicles, Three wheeler, Tempo etc. | 1,63,443 | 1,73,856 | 1,84,176 | 1,95,363 |
| 2 | Buses | 58,888 | 65,681 | 71,966 | 79,613 |
| 3 | Cars, Taxi cars, Station wagons, Jeeps | 3,96,874 | 4,27,885 | 4,58,285 | 4,95,331 |
| 4 | Autorickshaws, Motorised Bicycles | 2,27,953 | 2,48,408 | 2,65,830 | 2,85,212 |
| 5 | Scooter, Motor cycle | 10,20,797 | 11,51,735 | 12,89,035 | 14,48,425 |
| 6 | Tractor | 7782 | 8177 | 8459 | 8702 |
| 7 | Triller | 4763 | 4763 | 4979 | 4979 |
| 8 | Trailor | 1506 | 1576 | 1771 | 1818 |
| 9 | Others | 27107 | 28680 | 29697 | 30334 |

Source: Mathrubhumi, July 28, 2003.

# EMPLOYMENT SCENARIO OF KERALA STATE

*P.C.Jain, Additional Director, DES*

**1. Introduction:**

An expanding labour force with shrinking employment opportunities necessitates the persistence of unemployment as a "major menace" of Kerala economy. The National Commission on Labour has rightly described unemployment as a "ticking time bomb". It is true that the economy is expanding showing a "jobless" growth trend. The new economic policies of internal liberalization and globalization have created an atmosphere which is not conducive to the development of job opportunities in the country as a whole. Besides extensive deprivation in agricultural sector the fiscal measure of staff reduction in government sector, shedding of excess labour by private industrial units and induction of sophisticated machinery and automation in many economic activities etc aggravates the unemployment situation in the state. A better understanding of the complexities of employment situation in India is enabled by the employment estimates of National Sample Survey Organization based on the three concepts , the "Usual Status". "Current Weekly Status" and "Current Daily Status". The above three concepts are based on three different reference periods for ascertaining the activity status of a person. The "Usual Status" refers to last 365 days while "Current Weekly Status" indicates last 30 days and "Current Daily Status" denotes activities for the last 7 days. Since the above concepts are based on "major time spent criterion" quality of work or income does not get reflected in theses approaches.

**2. Work Participation:**

The Census data on work participation rate in the state showed s a decreasing trend during the two decades form 1961 to 1971and an increasing trend thereafter. Workforce is not seen increasing in the same rate as that of population. All India estimates on workforce by the NSS also revealed the reduction in the proportion of work force to total population in rural and urban areas of the country. Table 1 below furnishes the Work Participation Rate of Kerala State as per Census data.

**Table:1. Work Participation in Kerala**

| Year | Work Participation (%) |
|---|---|
| 1951 | 32.2 |
| 1961 | 33.3 |
| 1971 | 29.1 |
| 1981 | 30.5 |
| 1991 | 31.4 |
| 2001 | 32.3 |

*Source: Kerala Through Plans ,May-2003,DES*

The District wise data on work participation for 2001 shows that Idukki has the highest and Malappuram has the lowest work participation ratio (WPR). In 1961 Palakkad showed the highest WPR and Kottayam the lowest. But in 1971 the lowest WPR was shown by the district of Malappuram. In 1981 Wayanad showed the highest WPR . In 1991 onwards the highest WPR is shown by the district of Idukki. Table 2 gives the district wise WPR for four decades since 1961. The first decade from 1961has been a phase of recession in respect of W P R for almost all the districts in the state and in subsequent decades an increasing trend is seen.

**Table: 2. Work Participation in Districts**

| District | 1961 | 1971 | 1981 | 1991 | 2001 |
|---|---|---|---|---|---|
| Thiruvananthapuram | 31.0 | 28.6 | 30.21 | 32.60 | 32.04 |
| Kollam | 31.0 | 28.6 | 30.27 | 32.10 | 32.10 |
| Pathanamthitta | | | | 29.72 | 29.7 |
| Alappuzha | 33.8 | 28.2 | 31.93 | 34.09 | 34.4 |
| Kottayam | 29.1 | 27.3 | 29.82 | 31.22 | 32.9 |
| Idukki | 39.1 | 34.6 | 37.77 | 39.71 | 43.3 |
| Eranakulam | 33.6 | 28.7 | 31.68 | 33.44 | 36.1 |
| Thrissur | 33.1 | 28.4 | 29.63 | 31.96 | 32.2 |
| Palakkad | 40.2 | 35.9 | 35.36 | 35.48 | 36.2 |
| Malappuram | 32.2 | 27.1 | 25.17 | 24.29 | 24.1 |
| Kozhikode | 30.1 | 26.9 | 27.1 | 26.57 | 27.9 |
| Wayanad | | | 38.04 | 38.76 | 39.3 |
| Kannur | 35.4 | 30.2 | 29.93 | 28.87 | 31.8 |
| Kasargod | | | | 33.35 | 34.7 |
| **State** | **33.3** | **29.1** | **30.5** | **31.43** | **32.3** |

*Source: Kerala Through Plans, May-2003, DES*

Table-3 giving district wise distribution of labour force in male female breakup for 1991 and 2001 indicates that Idukki district tops with highest WPR for men and Malappuram with the lowest. The district of Wayanad had the highest WPR for men in 1991 but the position shifted to Idukki district in 2001. The lowest WPR for women is shown in the district of Malappuram

**Table: 3-District-wise & Sex-wise work Participation Rate 1991 and 2001**

| District | Male | | Female | |
|---|---|---|---|---|
| | 1991 | 2001 | 1991 | 2001 |
| Thiruvananthapuram | 50.2 | 51.5 | 15.6 | 14.4 |
| Kollam | 47.7 | 48.5 | 17.0 | 16.7 |
| Pathanamthitta | 48.0 | 47.6 | 12.5 | 13.2 |
| Alappuzha | 46.8 | 49.7 | 22.0 | 20.2 |
| Kottayam | 50.4 | 52.4 | 12.1 | 13.9 |
| Idukki | 55.2 | 58.4 | 23.8 | 28.1 |
| Eranakulam | 51.5 | 55.4 | 15.5 | 17.1 |
| Thrissur | 47.2 | 50.8 | 17.9 | 15.1 |
| Palakkad | 48.6 | 52.2 | 23.1 | 21.1 |
| Malappuram | 40.7 | 42.8 | 8.7 | 6.6 |
| Kozhikode | 44.6 | 48.8 | 9.0 | 8.1 |
| Wayanad | 53.2 | 55.7 | 23.8 | 22.8 |
| Kannur | 44.7 | 50.0 | 13.8 | 15.2 |
| Kasaragod | 46.1 | 49.3 | 21.0 | 20.8 |

*Source: Kerala Through Plans, May-2003,DES*

National Sample Survey (NSS) also had estimated Work Participation Rate based on the "Usual Status" concept. NSS Data on sex-wise work participation rate in respect of Rural and Urban Kerala through its "Employment Unemployment Surveys" conducted during 1983 (38th Round) 1987-88 (43rd Round) 1993-94 (50th Round) and 1999-2000 (55th Round) are given in Table 4 below

**Table: 4 Sex-wise Work Participation Rate for Rural & Urban Kerala**

| Year | Rural | | Urban | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 1 | 2 | 3 | 4 | 5 |
| 1983 | 51.0 | 19.34 | 52.51 | 14.76 |
| 1987-88 | 47.0 | 17.8 | 49.2 | 13.6 |
| 1993-94 | 55.5 | 18.1 | 58.7 | 20.1 |
| 1999-2000 | 52.6 | 19.5 | 53.4 | 15.6 |

*Source: NSS Reports for 38th, 43rd, 50th & 55th Rounds*

Work participation Rate (WPR) of women in the state continues to be low both in rural and urban areas. Work participation of men in rural areas and women in urban areas was found to be the highest during 1993-94. Compared to the position in 1993-94-work participation of men in rural and urban Kerala has shown a declining trend. But WPR of women showed an increasing trend in rural areas and a declining trend in urban area of the state.

Age specific work participation rates for 1983, 1993-94 and 1999-2000 are furnished in Tables 5,6 and 7 below.

**Table: 5 Age Specific Work Participation Rate (1983)**

| Age Group | Kerala | | | |
|---|---|---|---|---|
| | Rural | | Urban | |
| | Male | Female | Male | Female |
| 1 | 2 | 3 | 4 | 5 |
| 15-29 | 56.03 | 20.39 | 53.52 | 13.94 |
| 30-44 | 94.03 | 35.28 | 92.98 | 28.07 |
| 45-59 | 90.49 | 32.03 | 91.51 | 25.48 |
| 60%Above | 55.51 | 15.91 | 50.54 | 12.93 |
| All Ages | 51.05 | 19.34 | 52.51 | 14.76 |

*Source: NSS Reports for 38th, 43rd, 50th & 55th Rounds*

Work participation of men and women in the age group of 30-59 was found to be the highest and WPR of the aged was found to the lowest in rural and urban areas during 1983. Work participation of youth in the age group of 15-29 remained below 60% in rural area and below 25% in urban areas

**Table: 6. Age-Specific Work Participation Rate (1993-94)**

| Age Group | Kerala | | | |
|---|---|---|---|---|
| | Rural | | Urban | |
| | Male | Female | Male | Female |
| 1 | 2 | 3 | 4 | 5 |
| 20-24 | 65.4 | 15.3 | 64.5 | 17.4 |
| 25-29 | 85.8 | 19.6 | 87.1 | 18.5 |
| 30-34 | 94.8 | 29.3 | 94.7 | 20.2 |
| 35-39 | 96.9 | 33.8 | 96.3 | 28.6 |
| 40-44 | 96.0 | 35.0 | 98.1 | 28.9 |
| 45-49 | 96.3 | 32.0 | 95.8 | 33.5 |
| 50-54 | 94.1 | 21.8 | 89.5 | 31.7 |
| 55-59 | 89.2 | 17.7 | 75.8 | 20.9 |
| 60-64 | 63.8 | 16.3 | 69.4 | 12.0 |
| 65&Above | 53.2 | 10.3 | 49.6 | 10.4 |
| ***All Age*** | ***51.5*** | ***15.2*** | ***54.2*** | ***15.2*** |

*Source: NSS Reports for 38th, 43rd, 50th & 55th Rounds*

WPR data for 1993-94 shows that work participation of men in the age group of 30-54 and women in the age group of 35-49 were the highest in rural areas. In urban areas work participation of men in the age group of 30-54 and WPR of women in the age group of 35-54 was found to be the highest. WPR of the aged showed a decrease in urban areas work participation of youth (20-29) showed a remarkable increase.

**Table: -7.Age Specific Worker Participation Rate (1999-2000)**

| Age Group | Kerala | | | | | |
|---|---|---|---|---|---|---|
| | Rural | | | Urban | | |
| | Male | Female | Persons | Male | Female | Persons |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* |
| 20-24 | 67.0 | 16.8 | 41.5 | 58.1 | 13.[illegible] | 33.3 |
| 25-29 | 88.8 | 18.8 | 50.3 | 90.1 | 23.5 | 54.9 |
| 30-34 | 91.8 | 26.2 | 56.8 | 95.1 | 23.3 | 56.8 |
| 35-39 | 94.7 | 37.6 | 61.9 | 93.9 | 33.6 | 61.3 |
| 40-44 | 97.3 | 31.9 | 61.2 | 97.8 | 35.8 | 65.7 |
| 45-49 | 97.5 | 29.1 | 61.8 | 95.4 | 32.1 | 61.1 |
| 50-54 | 88.3 | 31.7 | 58.0 | 93.9 | 29.4 | 63.5 |
| 55-59 | 77.1 | 19.7 | 47.6 | 74.8 | 14.1 | 45.6 |
| 60-64 | 50.8 | 8.7 | 27.2 | 43.6 | 8.3 | 24.0 |
| 65&Above | 52.6 | 15.9 | 33.3 | 53.4 | 15.6 | 33.7 |

*Source: NSS Reports for 38th, 43rd, 50th & 55th Rounds*

Age specific work participation rate for the year 1999-2000 furnished in Table 7 above reveals that WPR is the highest WPR is maintained by men in the age group of 30-54 and highest the WPR of women has been shifted to age group of 35-39 in rural Kerala. As regards urban areas highest WPR was maintained by men in the age group of 30-54 and for women in the age group of 35-54.

*Child Labour:*

Census figures for the period from 1971 show the continuance of child labor in the state but with declining trend of child labour in the State. The number of child workers in census record for 1971, 1981 and 1991 are 111801,92854 and 34800 respectively.

**3. Educational Level Classification of Worker Population Ratio:**

The education level specific classification of the worker population ratio for 1999-2000 is given in Table 8 below. Among persons of age 15 years and above who are employed in a particular education category per thousand people in that education category is defined as the education level specific worker population ratio. Among rural persons who are illiterate only 37% were members of the workforce. It is also seen that more than 68% of rural and 55 % of urban illiterate males were members of the work force while only 25.7% of rural and 16.7% of above urban illiterate women were in the workforce. Among rural persons with educational level of Graduation and above less than 50% were in the workforce in rural areas while more than 57% of the above group urban areas were members of the workforce. It is further seen that 72.5% of males and 25.5% of females of the above educational group were found in the labour force in rural Kerala and in case of urban areas the corresponding figures stood at 80.9 % and 31.9% respectively. It is also evident that more than 51% in rural and above 50 % in urban belonging to the category of literate upto the primary were members of the work force

**Table: -8. Education Level Specific Worker Population Ratio (1999-2000)**

| Educational Status | Kerala | | | | | |
|---|---|---|---|---|---|---|
| | Rural | | | Urban | | |
| | Male | Female | Persons | Male | Female | Persons |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Not Literate | 68.3 | 25.7 | 37.0 | 54.6 | 16.7 | 25.7 |
| Literate up to Primary | 80.3 | 25.9 | 51.1 | 78.3 | 24.3 | 49.8 |
| Middle | 75.8 | 17.3 | 46.9 | 77.7 | 16.8 | 47.4 |
| Secondary | 63.9 | 14.9 | 40.2 | 64.7 | 20.0 | 41.6 |
| Higher Secondary | 52.4 | 13.6 | 30.9 | 46.0 | 16.7 | 30.7 |
| Graduates and above | 72.5 | 25.5 | 48.3 | 80.9 | 31.9 | 57.1 |

*Source: NSS Report for 55th Round*

**4. Industrial Classification of Total Workforce:**

Table 9 below gives details of employment by industrial classification. It can be seen that there is a sharp decline in the percentage of persons employed in agriculture sector during the period from 1987-88 to 1999-2000. The decline is very high in respect of urban areas. The share of mining & quarrying, manufacturing, construction, trade,, transport and communication has grown over the period and the overall growth in employment is due to these factors.

**Table: -9- Industry classification of Usual Workers**

| Industry Classification | 1987-88 | | 1999-2000 | |
|---|---|---|---|---|
| | Rural | Urban | Rural | Urban |
| Agriculture | 55.8 | 17.6 | 42.3 | 7.1 |
| Mining & Quarrying | 1.5 | 0.4 | 1.9 | 0.4 |
| Manufacturing | 10.3 | 16.1 | 13.5 | 21.7 |
| Electricity Gas & water | 0.4 | 0.6 | 0.2 | 0.6 |
| Construction | 4.9 | 5.7 | 10.7 | 11.7 |
| Trade | 10.1 | 16.2 | 13.5 | 28.3 |
| Transport &Communication | 4.7 | 9.5 | 7.0 | 9.5 |
| Community Services Etc | 10.3 | 24.9 | 2.0 | 4.7 |
| Others | 1.9 | 9.0 | 8.9 | 16.0 |

*Source: NSS Reports for 43rd & 55th Rounds*

**5. Number of Usually Employed Persons in Households:**

NSS data of 43rd and 55th round surveys furnished in Table –10 have been used to understand the distribution pattern and growth trend of households in the state based on the number of usually employed persons in the household. Figures given in brackets relate to 44th round data for the year 1987-88. Highest percentage of families in rural (33.2%) and urban (35.8%) had only one usually employed member. The second largest category of households in rural areas (23.5%) had one male and one female usually employed person in their family. But in urban areas 28.3% belonged to other group in the classification above. It is also found that lion share of women headed families rural areas had only one usually employed female member. It may also be noted that a decreasing trend in the seen in respect of percentage of families with no usually employed persons and families with only one male usually employed person in their families when compared with the corresponding position in 1987-88. The reverse trend observed in respect of other category of families is indicative of the positive changes in the field of employment scenario in the state

**Table-10. Distribution of households by number of usually employed persons (1999-2000&1987-88)**

| Number of Usually Employed persons in the Household | Rural | | Urban | |
|---|---|---|---|---|
| | All Households | Women Headed Household | All Households | Women Headed Household |
| *1* | *2* | *3* | *4* | *5* |
| None | 4.5<br>(6.4) | 11.3<br>(16.6) | 10.2<br>(12.1) | 22.3<br>(27.4) |
| Only one male | 33.2<br>(39.9) | 14.8<br>(16.9) | 35.8<br>(41.7) | 16.2<br>(16.7) |
| Only one female | 8.9<br>(8.8) | 32.0<br>(30.6) | 6.7<br>(7.1) | 24.3<br>(24.2) |
| Only one male and one female | 23.5<br>(17.8) | 17.1<br>(12.1) | 19.0<br>(13.0) | 12.2<br>(8.0) |
| Others households | 30<br>(27.1) | 24.9<br>(23.8) | 28.3<br>(26.2) | 25.1<br>( 23.6) |

*Source: NSS Reports for 43rd & 55th Rounds*

**6. Trend in Employment Generation:**

Census figures on the growth of worker population furnished in Table-11 provide the employment generation trend in the state during last five decades. Though employment generation figures kept an increasing path the average annual growth of employment showed a declining trend during the last decade from 1991 to 2001. the highest annual growth was seen in 1991.

**Table-11.Growth in Worker Population in Kerala**

| Year | Number of Workers (Lakhs) | Percentage of Average Annual Growth |
|---|---|---|
| 1961 | 56.30 | - |
| 1971 | 62.16 | 1.04 |
| 1981 | 69.13 | 1.21 |
| 1991 | 91.47 | 3.23 |
| 2001 | 102.92 | 1.25 |

*Source: Census Reports*

**7. Major Indicators of Employment Situation:**

The NSS data for 1999-2000 showed that the rate of growth of employment in the country on Current Daily Status (CDS) basis declined from 2.7% in 1993-94 to 1.07% pre annum in 1994-2000. The major indicators of employment situation Kerala in comparison with the Indian situation is furnished in Table-12 below.

**Table-12. Major Indicators of Employment Situation in Kerala & India**

| Sl.No | Indicator | Kerala | India |
|---|---|---|---|
| 1 | Employment (000) | 9802 | 336736 |
| 2 | Employment Growth Rate (1993-1994 to 1999-2000 | 0.07 | 1.07 |
| 3 | Unemployment Rate | - | - |
| | 1993-1994 | 15.1 | 5.99 |
| | 1999-2000 | 20.97 | 7.32 |
| 4 | Employment Elasticity 1993-1994 to 1999-2000 | 0.013 | 0.160 |
| 5 | GDP Growth Rate (Percentage per annum) | 5.5 | 6.7 |

*Source: Kerala Through Plans, May-2003,DES*

**8. Employment in Factory Sector:**

*Employment generation in factory* sector in the state furnished in Table-13 below shows a low but steady growth rate over the period since 1978.

**Table: -13. Employment Generation in Registered Factory Sector**

| Year | Number of Factories | Employment in Lakhs |
|---|---|---|
| *1* | *2* | *3* |
| 1978 | 7784 | 2.88 |
| 1980 | 9106 | 3.00 |
| 1985 | 11530 | 2.92 |
| 1990 | 12448 | 3.56 |
| 1992 | 14608 | 3.76 |
| 1997 | 17336 | 4.29 |
| 2002 (Provisional) | 18602 | 4.37 |

*Source: Kerala Through Plans,-May-2003,DES*

***9. Employment in Organized Sector:***

Employment opportunities in organized public and private sectors of Kerala could only be maintained around 12 lakhs as revealed by the Employment Market Information (EMI) data for the period from 1978 to 2002 furnished in Table-14 below. Significance growth in employment was not visible.

**Table-14. Employment in Public / Private sector**

| Year | Public sector (Lakhs) | Private sector (Lakhs) | Total (Lakhs) |
|---|---|---|---|
| 1978 | 4.60 | 4.95 | 9.55 |
| 1980 | 4.85 | 5.09 | 9.94 |
| 1985 | 5.63 | 5.09 | 10.72 |
| 1990 | 6.25 | 4.96 | 11.21 |
| 1992 | 6.51 | 5.28 | 11.79 |
| 1997 | 6.20 | 5.43 | 11.63 |
| 2002 | 6.44 | 5.75 | 12.19 |

*Source: Kerala Through Plans, May-2003, DES*

**Table-15-Employment Generation in Organized Public & Private Sectors**

*According to Industry Division (Lakhs)*

| Sl. No | Industry Division | Year | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1978 | 1980 | 1985 | 1990 | 1992 | 1997 | 2002 |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| 1 | Agriculture, Livestock & Forestry | 10.3 | 10.6 | 9.2 | 8.9 | 9.0 | 9.1 | 9.0 |
| 2 | Mining &Quarrying | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| 3 | Manufacturing | 32.2 | 31.6 | 29.2 | 27.1 | 27.7 | 27.2 | 27.1 |
| 4 | Construction | 2.6 | 2.6 | 1.5 | 1.6 | 1.8 | 1.8 | 1.8 |
| 5 | Electricity, Gas, Water & Sanitary Services | 1.8 | 1.7 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 |
| 6 | Trade, Restaurants &Hotels | 1.6 | 1.6 | 1.7 | 1.8 | 2.0 | 1.9 | 1.9 |
| 7 | Transport, Storage & Communication | 7.2 | 7.2 | 8.7 | 8.5 | 8.3 | 8.3 | 8.3 |
| 8 | Finance, Insurance, Real Estates & Business Services | 3.8 | 4.4 | 5.9 | 6.4 | 6.8 | 7.1 | 7.0 |
| 9 | Services Sector | 40.4 | 40.2 | 41.0 | 43.3 | 41.7 | 42.0 | 40.51 |
| | Total Employment | 9.55 | 9.94 | 10.72 | 11.21 | 11.79 | 11.63 | 12.19 |

*Source: Kerala Through Plans, May-2003, DES*

Table 15 shows that service sector contributed the lion share of employment in public and private sectors of Kerala economy. The declining trend in employment during 1978 –80 periods took an increasing trend since 1985 with the exception in 1997 showing a marginal decline. Employment generation in agriculture sector remained stagnant since 1992. The manufacturing sector also showed a stagnant employment generation since1990.

**10. Employment in Un-organized Manufacturing Sector:**

Table-16 shows the employment contribution pattern of various categories of enterprises in the un-organized manufacturing sector in the state. In rural and urban areas own-account manufacturing enterprises (with no hired worker on a regular basis) contributes the major share of employment in un-organized sector. Non-directory manufacturing enterprises (with atleast one hired worker and less than 6 total workers) are second in employment generation. The directory manufacturing enterprises (with atleast one hired worker and 6 or more total workers) makes the lowest percentage of employment contribution

**Table-16 Employment in Un-organized Manufacturing Sector- 2000-2001**

| Sl.No | Category | Rural | Urban | Total |
|---|---|---|---|---|
| 1 | Own-Account Manufacturing Enterprises | 4319 (51%) | 805 (36%) | 5124 (48%) |
| 2 | Non-Directory Manufacturing Enterprises | 2361 (28%) | 776 (35%) | 3137 (29%) |
| 3 | Directory Manufacturing Enterprises | 1802 (21%) | 545 (29%) | 2347 (23%) |
| | Total | 8482 (100%) | 2226 (100%) | 10608 (100%) |

**11. Employment Type of Households:**

Table-17 below furnishes classification of households in Kerala according to type of employment. Agricultural labour households, which constitute the highest of household category in rural areas shows a declining, trend in percentage. The increasing trend in the percentage of "other labour households" and "other household" categories is indicative of the necessary shift in employment type by households in Kerala. Percentage of households self-employed in agriculture also showed a declining trend. Self-employment in non-agricultural sector in rural areas remains almost steady 1993-94.

**Table: -17 Classifications of Households by Type of Employment (%)**

| House Hold Type | 1983 | 1987-88 | 1993-94 | 1999-2000 |
|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* |
| | **Rural** | | | |
| Self Employed in Agriculture | 23.28 | 23.8 | 19.3 | 18.3 |
| Self Employed in Non-Agriculture | 14.99 | 15.5 | 16.1 | 16.5 |
| Agriculture Labour Households | 31.69 | 30.3 | 29.8 | 21.8 |
| Other Labour Households | 17.60 | 17.7 | 18.8 | 24.7 |
| Other Households | 12.44 | 12.7 | 16.0 | 18.7 |
| | **Urban** | | | |
| Self employed Households | 28.60 | 31.7 | 32.0 | 32.0 |
| Wage /Salaried households | NA | 34.6 | 31.8 | 30.6 |
| Casual Labour Households | NA | 21.2 | 23.4 | 24.7 |
| Other Households | 71.40 | 12.5 | 12.8 | 12.7 |

*Source: NSS Reports for 38th, 43rd, 50th & 55th Rounds*

The urban areas reveal a different picture with the highest percentage of households self-employed during 1993-94 and 1999-2000 closely followed by the wage/salaried group. But during 1987-88 period wage/salaried group of household formed the highest category closely followed by the self-employed group of households. Available data for the period 1983 reveals that the highest participation of urban households was in activities other than self-employment.

**12. Unemployment Rates:**

For a better understanding of employment unemployment situation, activity status measures of NSSO are used. As per the Usual Activity Status concept it is seen that the rate of un-employment stand reduced from 27.2% in 1993-94 to 10.9% in 1999-2000 in rural areas and from 21.4% to 12.5% in urban areas. The Current Weekly Status estimate also shows the declining trend in un-employment in the state. But the Current daily Status estimate shows an increasing trend in the intensity of un-employment in rural Kerala.

**Table-18. Alternative Measures of Unemployment Rate**

| Activity Status | 1993-94 | | 1999-2000 | |
|---|---|---|---|---|
| | Rural | Urban | Rural | Urban |
| Usual Activity | 27.2 | 21.4 | 10.9 | 12.5 |
| Current Weekly Status | 22.3 | 20.7 | 12.5 | 13.8 |
| Current Daily Status | 14.7 | 17.7 | 21.7 | 7.0 |

*Source: NSS Reports for 50th & 55th Round*

**13. Incidence of Un-employment:**

The estimates obtained by adopting the current weekly status, and current daily status approaches reflects the overall effect caused by intermittent changes in the activity pattern of the population. The current weekly status (cws) of workforce would give the number of the proportion of persons with some work on the average in a week and the current daily status (cds) estimates would give the proportion of employed person-days on an average in a day during the survey year. An index of the average weekly picture of underemployment is the formula (cws-cds x 100/cws) for the 1983,1993-94 & 1999-2000 in Table-19 below.

**Table-19. Index of Incidence of Un-employment in Kerala**

| Activity Status | 1983 | | | | 1993-94 | | | | 1999-2000 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rural | | Urban | | Rural | | Urban | | Rural | | Urban | |
| | M | F | M | F | M | F | M | F | M | F | M | F |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *11* | *12* | *13* |
| CWS | 48.36 | 17.95 | 49.91 | 11.31 | 55.7 | 22.7 | 58.4 | 21.9 | 56.1 | 22.2 | 56.9 | 22.0 |
| CDS | 40.44 | 13.77 | 43.22 | 12.14 | 52.5 | 17.9 | 55.7 | 19.3 | 53.3 | 18.3 | 53.9 | 19.5 |
| Index of Under Employment | 16 | 23 | 13 | 15 | 5 | 21 | 5 | 11 | 4 | 17 | 5 | 11 |

*Source: NSS Reports for 43rd, 50th & 55th Rounds*

**14. Un-employment Rate in India:**

Un-employment rate as percentage of labour force from 1977-78 to 1999-2000 is furnished in Table-20. The usual status measures show modest increase in the rate of un-employment in the nineties from 2.56% to 2.81% and from 1.90% to 2.23%. But the current daily status measure shows a sharp increase from 6.03% to 7.32%. The figures show an increase in un-employment rate reversing the earlier trend in 1977 and 1983.

**Table-20. Un-employment Rate in India (Percentage of Labour Force)**

| Activity Status | 1977-78 | 1983 | 1987-88 | 1993-94 | 1999-2000 |
|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* |
| Usual Principal Status | 4.23 | 2.77 | 3.77 | 2.56 | 2.81 |
| Usual Principal & subsidiary Status | 2.47 | 1.90 | 2.62 | 1.90 | 2.23 |
| Current Weekly Status | 4.48 | 4.51 | 4.80 | 3.63 | 4.41 |
| Current Daily Status | 8.18 | 8.28 | 6.09 | 6.03 | 7.32 |

*Source: Report of the National Commission on Labour-2003*

**15. Un-employment rate in India and some other countries:**

The World Employment Report gives the following un-employment rates of India and some other neighboring countries. The figures given in Table-21 below relates to the year 1996.

**Table: - 21. Unemployment Rate in India and some other countries**

| Name of Country | Rate of Un-Employment (1996) |
|---|---|
| India | 4.4 |
| Australia | 8.6 |
| Bangladesh | 2.5 |
| China | 3.0 |
| Indonesia | 4.0 |
| Korea | 2.0 |
| Malaysia | 2.6 |
| Pakistan | 5.4 |
| Philippines | 7.4 |
| Sri Lanka | 11.3 |

*Source: The Report of National Commission on Labour (2003)*

**16. Un-employment among Major Religious Groups:**

The NSS estimate on un-employment among major religious groups in the State in its 55th round of survey on employment and un-employment id given in Table-22 below. The extent of un-employment of rural men and urban female is found to be the highest among the Muslim community in the state, closely followed by Hindus and Christians. The Christians have the highest percentage of un-employed women in rural areas.

**Table-22.Un-Employed Persons According to Major Religious Group (1999-2000)**

| Religion | Rural | | | Urban | | |
|---|---|---|---|---|---|---|
| | Male | Female | Persons | Male | Female | Persons |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* |
| Hinduism | 5.8 | 12.1 | 8.2 | 4.0 | 18.[illegible] | 9.2 |
| Islam | 9.1 | 12.2 | 10.1 | 10.1 | 30.5 | 14.7 |
| Christianity | 4.7 | 20.1 | 9.4 | 6.4 | 17.4 | 10.0 |
| All | 6.2 | 13.6 | 8.7 | 5.7 | 20.0 | 10.3 |

*Source: NSS Reports for 55th Round*

**17. Un-employment among social groups:**

Extent of un-employment for males is the highest (5.2%) for Scheduled Tribes in rural areas as per NSS data for 1999-2000 furnished in Table-23 below. Un-employment of rural women is highest (4.9%) among forward communities, closely followed by Scheduled Castes (4.5%) As regards urban males OBCs have the highest un-employment percentage in the state. Un-employment is the highest (8%) for women belonging to Scheduled Cast communities in urban areas of the state.

**Table-23-Unemployed according to Usual Status &Social Group (1999-2000)**

| Social Group | Rural | | Urban | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 1 | 2 | 3 | 4 | 5 |
| ST | 5.2 | 3.3 | 0.4 | 5.3 |
| SC | 4.8 | 4.5 | 4.0 | 8.0 |
| OBC | 4.7 | 3.7 | 4.4 | 5.8 |
| Others | 4.6 | 4.9 | 3.4 | 5.0 |

*Source: NSS Reports for 55th Round*

**18. Un-employment of Educated Persons:**

NSS data for 1999-2000 in Table-24 reveals that un-employment among the educated category in rural areas is very high at 25.3%. The problem is more acute in the case of educated women. 49.1% of educated women in rural areas and 41.9% in urban areas are found to be un-employed.

**Table: - 24. Unemployment Rate of Educated Persons (1999-2000)**

| Activity Status | Kerala | | | | | |
|---|---|---|---|---|---|---|
| | Rural | | | Urban | | |
| | Male | Female | Persons | Male | Female | Persons |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Usual Activity | 15.0 | 49.1 | 25.3 | 9.9 | 41.9 | 21.2 |
| Current Weekly Status | 14.9 | 42.1 | 23.5 | 11.5 | 36.9 | 20.7 |

*Source: NSS Reports for 55th Round*

**19. Un-employment among Youth:**

The usual status data on un-employment among youth who are in the age group of 15-29 given in Table-25 shows the extent of un-employment among youth in the state. 25.8 % of youth in rural areas and 28.8% in urban areas are found to be un-employed. The rate of un-employment is exorbitantly high at 45.1% in rural and 50.8% in urban areas. A high percentage of males in the age group of 15-19 and females in the age group of 20-24 were found to have the highest rate of un-employment.

**Table-25 Unemployment Youth (1999-2000)**

| Age Group | Kerala | | | | | |
|---|---|---|---|---|---|---|
| | Rural | | | Urban | | |
| | Male | Female | Total | Male | Female | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15-19 | 30.0 | 45.8 | 34.9 | 41.4 | 55.1 | 45.3 |
| 20-24 | 20.5 | 52.6 | 30.1 | 21.2 | 60.7 | 35.3 |
| 25-29 | 9.2 | 35.6 | 16.3 | 6.7 | 38.5 | 16.4 |
| ***Youth*** | ***17.8*** | ***45.1*** | ***25.8*** | ***18.4*** | ***50.8*** | ***28.8*** |

*Source: NSS Reports for 55th Round*

**20. Extent of Underemployment:**

The current weekly status of usually employed person has been made use of to measure the extent of under employment prevailing among the usually working people. Table-26 shows that at least 4.4% of the rural and 3.9 % of urban males, 2.8 % rural and 1.6% of females were found to be un-employed during 7 days preceding the date of survey indicating the extent of underemployment for the usually working category of people in the state.

**Table:-26. Underemployment among Usually Employed Persons based on current weekly status (99-2000)**

| Current Weekly Status | Kerala | | | |
|---|---|---|---|---|
| | Rural | | Urban | |
| | Male | Female | Male | Female |
| 1 | 2 | 3 | 4 | 5 |
| Employed | 90.8 | 75.8 | 96.6 | 81.6 |
| Un-employed | 4.4 | 2.8 | 3.9 | 1.6 |
| Not in Labour force | 4.8 | 21.4 | 4.3 | 16.8 |

*Source: NSS Reports for 55th Round*

**21. Job Seekers On the Live Register of Employment Exchanges:**

Employment Exchange data since 1978 given in Table-27 below shows that in 2002 there were 42.38 lakh persons registered with various Employment Exchanges in the state. But the Employment Exchange figures are not indicative of the actual extent of un-employment in the state. A recent study conducted by the Department of Economics & Statistics in 2000 revealed that only 60.25% of persons on the live register are actually un-employed and remain without any income. According to this rate the actual number of un-employed in the state would be around 25.53 Lakhs only. But this figure of 25 Lakhs indicates the strain on the minds of the un-employed in the state.

**Table-27.Job Seekers on the Live Register of Employment Exchanges (Lakhs)**

| Year | General Job Seekers | Professional & Technical Job Seekers | Total Job Seekers |
|---|---|---|---|
| 1978 | 10.21 | 0.31 | 10.52 |
| 1980 | 9.40 | 0.39 | 15.79 |
| 1985 | 23.93 | 0.64 | 24.57 |
| 1990 | 32.04 | 1.16 | 33.20 |
| 1992 | 37.19 | 1.28 | 38.47 |
| 1997 | 34.12 | 1.39 | 35.51 |
| 2002 | 39.53 | 1.80 | 42.38 |

*Source: Kerala Through Plans, May-2003, DES*

The district wise percentage distribution of registrants according to means of livelihood is furnished in Table-28.

**Table-28.Percentage distribution of registrants according to Means of Livelihood**

| No | District | Total | Manual labour | Self employed in Agrl.Sector | Self employed in NonAgrl.Sector | Permanent Salary | Other income | No Income |
|---|---|---|---|---|---|---|---|---|
| 1 | Kasaragod | 100 | 19.62 | 4.03 | 8.60 | 9.17 | 14.49 | 44.09 |
| 2 | Kannur | 100 | 17.44 | 1.78 | 4.91 | 6.38 | 6.24 | 63.24 |
| 3 | Wayanad | 100 | 14.71 | 10.07 | 8.67 | 6.28 | 5.66 | 54.61 |
| 4 | Kozhikode | 100 | 21.65 | 1.08 | 5.55 | 6.60 | 8.58 | 56.54 |
| 5 | Malappuram | 100 | 23.10 | 1.31 | 7.65 | 9.90 | 4.93 | 53.12 |
| 6 | Palakkad | 100 | 17.45 | 1.56 | 9.49 | 9.23 | 8.26 | 54.01 |
| 7 | Thrissur | 100 | 10.40 | 0.84 | 8.53 | 8.94 | 6.95 | 64.33 |
| 8 | Eranakulam | 100 | 17.57 | 1.38 | 6.93 | 11.54 | 2.83 | 59.75 |
| 9 | Idukki | 100 | 10.38 | 9.42 | 7.88 | 5.22 | 10.65 | 56.45 |
| 10 | Kottayam | 100 | 14.65 | 1.78 | 6.64 | 9.93 | 6.62 | 60.39 |
| 11 | Alappuzha | 100 | 14.96 | 1.10 | 10.86 | 9.66 | 5.45 | 57.97 |
| 12 | Pathanamthitta | 100 | 8.28 | 0.93 | 6.30 | 6.73 | 7.36 | 70.39 |
| 13 | Kollam | 100 | 11.72 | 1.08 | 6.46 | 5.51 | 7.88 | 67.34 |
| 14 | Thiruvananthapuram | 100 | 16.21 | 0.70 | 6.74 | 3.45 | 10.67 | 62.23 |
| | **State** | **100** | **15.74** | **1.69** | **7.36** | **7.65** | **7.31** | **60.25** |

*Source:-Report on Activity Status of Registrants on the Live Register of Employment Exchanges–DES, May 2003*

As given in Table29 the above survey also revealed that in total, 67.14% of the registrants were willing to accept any permanent or temporary job through employment exchanges while 10.67% of registrants only preferred job according to their educational qualifications. It is significantly seen that a portion (0.85%) of registrants were not willing to accept any type of job due to illness, economically well off, family problem, like to continue in self employment etc.

**Table-29. Distribution of registrants according to preference of job**

| No | Preference of job | No. of registrants | Percentage |
|---|---|---|---|
| 1 | No preference | 50502 | 1.31 |
| 2 | Any permanent job | 627923 | 16.33 |
| 3 | Any Perm/temp Job | 2581095 | 67.14 |
| 4 | Perm/Temp according to Education | 410129 | 10.67 |
| 5 | Better Perm/Temp | 66114 | 1.72 |
| 6 | At convenient place | 63646 | 1.66 |
| 7 | Not willing to accept any job | 32710 | 0.85 |
| 8 | Others | 11988 | 0.31 |
| | **Total** | **3844107** | **100** |

**22. The Global Employment Scenario:**

The Global employment and un-employment situation according to the "World Employment Report-1998-99 was as follows. The estimated world population in 1997 has been 6 Billion. Half of it (3 Billion) is estimated to be in the labour force. The estimated number of fully un-employed persons in the world worked out to be 160Million. It is also estimated that 20 to 30% of the employed labour force in the world were under employed. Around 60 Million youth (age group 15-24) in the world were continuously in search of work.

The world trend in employment sector has been one of slow down of economic growth and the consequent growth of employment in the unorganized sector. Casualisation of employment in formal and informal sectors is visible and the share of informal sector in employment has not been declining. The persistence of underemployment even in the wake of increasing employment has been another remarkable world trend in the field of employment. The incidence of long-term un-employment has been on the increase. Another interesting feature in employment situation in the world over has been the low level of education and skills of the labour force.

**23. Conclusion:**

Kerala should think of a strategy of creating productive employment for the youth. The "demographic advantage" of our state need be planned for a strong employment market. Self-employment initiatives of the Kudumbasree, Self-help group initiative of Lijjat Pappad, Mushroom growing initiative of MS Swami Nathan Foundation, Motivation initiatives of "Life Achievement Business School" etc can be replicated intensively in our state to find a lasting solution to the problem of un-employment.

## Kerala ranks high in inflow of foreign contributions

As many as 1,474 organisations in Kerala received foreign contributions totalling Rs 360.31 crore during 2000-2001.

Kerala ranks third in the country after Delhi and Tamil Nadu in terms of the total number of organisations that have received contributions. Kerala is placed sixth as regards the total amount of foreign aid received after Delhi, Tamil Nadu, Andhra Pradesh, Karnataka and Maharashtra, according to the Annual Report 2000-2001 on Receipt of Foreign Contribution by Voluntary Associations brought out by the Foreigners Division of the Ministry of Home Affairs, Government of India.

Kerala is closely followed by West Bengal with 1,314 associations receiving Rs 256 crore.

Gospel for Asia tops the list of organisations in Kerala having received the highest amount of foreign contribution (Rs 58.10 crore) during 2000-2001, followed by Mata Amritanandamayi Mission (Rs 23.19 crore)

Almost 90 percent of the recipient organisations in Kerala belonged to the Christian community, followed by Muslim (about five percent), Hindu and non-religious organisations. The organisations included missionary agencies, social service organisations, convents, orphanages, hospitals, archdioceses, dioceses, ashrams, seminaries, educational institutions, bala bhavans and charitable trusts.

At the all-India level, 14,598 associations received foreign contributions amounting to Rs 4,535.23 cr during the year. Sri Sathya Sai Central Trust, Andhra Pradesh, received the highest amount of foreign contribution (Rs 88.18 cr) and Watch Tower Bible and Tract Society India, Maharashtra (Rs 74.88 crore).

Fifty-two associations received foreign contribution in received foreign contribution in excess of Rs 10 crore and Rs 5 crore and 669 associations between Rs 5 crore and Rs 1 crore.

The list of donor countries is headed by USA (Rs 1,492 crore), followed by UK (Rs 677 crore) Germany (Rs 664 crore), Italy (Rs 269 crore) and Netherlands (Rs 227 crore).

The highest amount was received for activities connected with rural development (Rs 547 crore), followed by health care and family welfare (Rs 432 crore), relief for natural calamities (Rs 339 crore), construction/ extension of buildings (Rs 289 crore) and help for the poor, aged and destitute (Rs 235 crore).

*Source: The New Indian Express, July 26, 2003*

## CMIE forecasts 6.5 pc growth

*Good monsoon rain to boost rural economy*

India's stuttering economy is expected to make a good performance this year. A strong rebound in farming after a good monsoon will help the Indian economy grow 6.5 percent in the year to March 2004, up from 4.3 percent the previous year, the Centre for monitoring Indian Economy (CMIE) has forecast.

Moreover, India's industrial output rose 5.7 percent in May, helped by strong consumer demand buoyant export orders, data released by the Central Statistical organisation of the Government showed on Friday.

Foreign funds, which have lapped up Indian shares for the past two months, are likely to step up investment in Asia's third largest economy because of improved growth prospects, analysts said.

The Mumbai based independent economic think tank said in its monthly report released on Friday that India's farm sector would expand 7.5 percent despite a slight delay in the monsoon. The farm sector shrunk 3.2 percent last year as the country suffered its worst drought in 15 years after poor monsoon rainfall, dragging down overall growth.

Under the ideal conditions of good monsoon, agriculture production had the prospects to grow at 15 percent in 2003-2004. however, the delay in monsoon eroded part of this expected rise, CMIE said. There was a lag in the sowing pattern till end of June 2003 and governments of southern states had issued warnings to prepare for worse indicating this was not the ideal weather condition for crop production.

Food production is expected to grow by 11.4 percent and non-food production by 5.8 percent in 2003-2004, it added. But growth of industrial output, which accounts for a quarter of GDP, is likely to dip to five percent from last year's 5.7 percent because rural demand trickles down to other sectors only towards the end of this fiscal year after the harvest in winter.

So the effect of last year's poor harvest will be felt for most of this year, while the expected good farm output this year will boost industrial output next year, economists said.

The services sector, which contributes half of total output, is seen maintaining growth at seven

percent, CMIE said. Exports are projected to grow at nine percent for the year ended March 2004 while the imports would grow at a lower rate of 4.5 percent in the same period. The trade deficit was expected to remain lower at US $ 7 billion in 2003-2004 as against $ nine billion in 2002-2003.

CMIE, reviewing the performance of various sectors in 2002-2003, said the projected decline in agricultural sector at 3.2 percent was likely to witness further downward revision.

Inflows from foreign funds have helped India's benchmark Sensex gain 27 percent from a six-month low struck in late April. Investors also hope the successful listing of the country's largest carmaker, Maruthi Udyog Ltd will inject new life into India's limp privatisation programme. The government diluted its stake in Maruthi through a hugely oversubscribed IPO. "I think global liquidity is chasing high growth, and 6 to 6.5 percent growth is a good rate for foreign fund investment", said an analyst.

With the Indian economy poised to grow at more than six percent, the central bank is likely to hold interest rates steady for some time, economists said.

*Source: The New Indian Express, July 12, 2003*

## Lonely Autumn for the Aged

Over three percent of the total aged people in the State are left to live alone in their houses, according to the latest survey report prepared by the Economics and Statistics Department.

The survey, 'The Aged in Kerala', says that there are 49,578 households in the State where people are left alone to spend the autumn of their lives. Thiruvananthapuram district leads the list with 7,171 households. At the bottom of the list is Kasaragod with 944 households.

According to the survey, over 10 percent of the State's population consist of people aged above 60, with half of them in the 70 plus age group.

An interesting finding in the report is that 10.35 percent of the total households with elderly have their sons/ daughters living abroad. Malappuram has the maximum such houses (19.36 percent) and Idukki the minimum (1.74 percent).

The breaking up of joint family system and the evolution of small families, shift from agriculture-based economy to service sector, migration of a larger section of the youth to other States and countries have led to this situation, the survey points out.

Pathanamthitta district has the highest proportion of aged people – around 15 percent of its total population.

The male-female combination in the state, according to the study, is 1,147 females for every 1,000 males in the 60 plus age group. The sex ratio is maximum in Kannur followed by Thrissur while Idukki is the only district where the males outnumber the females in the 60 plus age group. Around 55 percent of the female population in the 60 plus age group are widows.

The high proportion of elderly people in the State could be attributed directly ot the lower birth and death rate compared to other Sates. Quality of life, health consciousness and literacy have all contributed to the lengthening of life span which goes well beyond 70, the survey points out.

On the flip side of it, Kerala has the maximum number of old age homes in the country.

Aliamma Thampy of the Help Age has said that she was getting as many as 100 queries a day on old age homes.

Demographic experts also are least amused by the increasing proportion of the aged in the State. Former Director of Economics and Statistics, A. Meera Sahib, who initiated the survey, described the situation as 'alarming'.

"It is high time that the Government understands the gravity of the problem and drafts a population policy. Otherwise, it is only a matter of time for the much-hyped Kerala model to fall flat," he said.

According to S. Irudaya Rajan of CDS, the situation is likely to turn worse. "The aged population had been increasing at a worrying pace and by 2025 one in every 5 will be a senior citizen outnumbering the younger population", he added.

*Source: The New Indian Express, July 31, 2003*

## Expats' money being spent lavishly by kin

A study on migrants and returnees by the Directorate of Economics & Statistics, titled 'Activity Status of Migrants and Returnees', has revealed that the per-head expenditure of families of migrants is nearly 35 percent higher than that of others.

While each member of a migrant family spends Rs 650.44 a month, one from a non-migrant family spends only Rs 496.56. in the case of families with both migrants a2d returnees, it is 584.92 and for families of returnees is is Rs 514.05. most of the houses of migrants and returnees have modern electrical and electronic equipment. The average family size of families of migrants and returnees is 7.01 members, whereas that of resident families is only 4.79, according to the study.

The study that began in 1999 was carried out through a multi-sampling technique covering families of migrants in all the 14 districts. It was completed in May 2003.

It pointed out that the migrants had invested a major chunk of their earnings on land and building. While 29 percent of the total investments by migrants were on construction and purchase of residential buildings, 24.7 percent was on purchasing land. The other sectors of major spending include marriage and treatment.

Among those who had invested in real estate, 75 percent purchased less than 50 cents and only 1.75 percent purchased above five acres. The maximum area of land was purchased in Kottayam district and the minimum was in Kozhikode.

The study said that among a sample of 1000 migrants, only 39 made capital investments above Rs 5 lakh whereas 644 invested less than Rs 25,000 and 216 invested amounts ranging from Rs 1 lakh to Rs 5 lakh. Among the returnees, 20 per 1000 invested above Rs 5 lakh, 167 per 1000 between Rs 1 lakh and Rs 5 lakh and 704 per 1000 less than Rs 25,000.

The study also pointed out that the number of returnees was increasing every year. Of a total of 5.4 lakh returnees, 91,000 were sent back for various reasons, including the new restriction in that region, 88,000 returned due to ill-health, 81,000 following retrenchment of services and 72,000 due to lack of life security. The maximum number of returnees are from Saudi Arabia, followed by the UAE. Most of the returnees are in the age group of 30-39.

Noting that 34.97 percent of the returnees are unemployed, the study stressed the need for utilising their expertise for the development of the State.

The total number of Kerala migrants outside the country is 13.84 lakh, of which 11.4 lakh are employed. The largest number of migrants is in the UAE (4.09 lakh), followed by Saudi Arabia (4.08 lakh). A major portion of the migrants is not technically qualified and is employed in the category of workers.

Of the 11.4 lakh employed migrants, 4.2 lakh secured job through recruitment agencies and 3.7 lakh through sources like relatives and friends.

A total of 7,333 migrants were reported dead over these years, of which 3,613 due to illness and 3,062 in accidents. As many as 1478 of them were employed as workers. A major section among those dead were in the age group of 30-39.

*Source: The New Indian Express, July 21, 2003*

## Industrial production up 5.7 percent in June

Keeping in tune with the economic growth prospects for the current fiscal, India's industrial output registered a 5.7 percent growth in June 2003, against 4.5 percent in the same month last year.

The growth of industrial output in the April-June quarter was 5.3 percent, compared to 4.3 percent in the same period a year earlier, the Index of Industrial Production (IIP) released today by the Central Statistical Organisation (CSO) showed.

The Reserve Bank of India (RBI) and various other institutions have predicted a six percent growth in the gross domestic product (GDP) for 2003-2004.

Manufacturing, which has considerable weightage in the IIP, grew by 5.8 percent in June

against 4.2 percent in the same month. Last year in April-June the sector grew by 5.8 percent, up from 4.2 percent. Mining had a growth rate of 5.9 percent in June down from nine percent last year, while electricity recorded a 4.7 percent growth, up from 3.8 percent in the same month earlier.

In the first quarter, mining output grew by 5.3 percent, down from 6.8 percent, while electricity had a growth of 3.9 percent, marginally higher than the 3.7 percent in April-June 2002.

As many as 11 of 17 two-digit industry groups have shown positive growth during June. The highest growth rates were recorded by wool, silk and man made fibre textiles (26 percent), followed by transport equipment and parts (25.2 percent) and rubber, plastic, petroleum and coal products (17.3 percent).

Negative growth was witnessed by leather and fur products (13.3 percent), followed by a decline of 8.4 percent in cotton textiles and 5.7 percent in metal products and parts, except machinery and equipment.

## BPL families excel in information technology, bio-tech sectors

Sunrise sectors of information technology (IT), computers and biotechnology are not areas one associate with below the poverty line (BPL) families, especially when it comes to running successful businesses. Not anymore.

Various units started by BPL families under the guidance of 'Kudumbasree', the Kerala Government aided poverty eradicating mission, have not only established a firm footing in these sectors within a short span of time, but have also become a potential avenue for large-scale employment generation among the youth in the poor families in the future.

Currently, about 67 software and seven hardware units by the BPL families are functioning in the State, garnering a revenues to the tune of Rs 10 crore and Rs 1.5 crore respectively till date. Importantly, a majority of the entepreuners in the software firms are women. "The software employees are doing various projects such as data processing, web portal designing, data entry for the transport departments, sub-registrar offices etc.," said T.K. Jose, executive director, Kudumbasree.

The software and hardware units, though separate entities, bid for the tenders as a group and thereby are in a position to grab contracts. The hardware units, for instance, sells the computers under the KCL (Kudumbasree computer links) brand name and by pricing the products Rs 4,000 to Rs 7,000 cheaper compared to their multi-national counterparts, can emerge as a successful venture in the coming years. "It will take sometime for the units to become profitable," Jose said. As far as the software units are concerned, the notable projects undertaken during the last couple of years include, the work on 35,000 ration cards (from dataentry to issuance stage) for the Sate Government, computerisation of birth and death certificate registration for the Cochin corporation and computerisation of sub-registrars office, among other things.

"We assist the unit for bidding for contract, besides helping them in getting the required training in computers," explained Kabir B Haroon, Eranakulam district mission co-ordinator, Kudumbasree. For starters, the minimum qualification is graduation and diploma in computer education. The average age is between 25 and 30.

In the bio-technology sector, as a first step, the Kudumbasree along with the Spices board, are training a group of 10 youngsters (8 of them women) in the tissue-culture in vanilla. "After an year long training at Spices Board, the group can establish their own enterprises for tissue culture in vanilla or an become a consultant in tissue-culture", said Kabir.

Those undergoing the training are also entitled for a stipend of Rs 1,500 per month. Though there are occasional incidents like people leaving from these units, the Kudumbasree officials said most people prefer to work in the units where they are "the owner, manager and the employee."

*Source: The New Indian Express, July 22, 2003.*

## Table I - Consumer Price Index Numbers for Agricultural and Rural Laborers

| Sl No | State | Linking factor fo general Index a | General Index | | Food Index | | Pan, Supari, Tobacco Intoxicants Index | |
|---|---|---|---|---|---|---|---|---|
| | | | March 2003 | April 2003 | March 2003 | April 2003 | March 2003 | April 2003 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Andhra Pradesh | 4.84 | 343 | 345 | 347 | 350 | 365 | 363 |
| 2 | Assam | b | 329 | 334 | 316 | 323 | 384 | 386 |
| 3 | Bihar | 6.22 | 305 | 304 | 293 | 291 | 348 | 347 |
| 4 | Gujarat | 5.34 | 331 | 335 | 334 | 340 | 378 | 378 |
| 5 | Haryana | * | 329 | 331 | 334 | 335 | 344 | 356 |
| 6 | Himachal Pradesh | * | 310 | 315 | 313 | 320 | 400 | 404 |
| 7 | Jammu & Kashmir | 5.98 | 348 | 352 | 356 | 361 | 359 | 360 |
| 8 | Karnataka | 5.81 | 330 | 332 | 330 | 333 | 379 | 380 |
| 9 | Kerala | 6.56 | 328 | 331 | 320 | 325 | 435 | 433 |
| 10 | Madhya Pradesh | 6.04 | 316 | 317 | 316 | 317 | 365 | 365 |
| 11 | Maharashtra | 5.85 | 321 | 322 | 328 | 330 | 352 | 354 |
| 12 | Manipur | * | 301 | 302 | 285 | 286 | 359 | 363 |
| 13 | Meghalaya | * | 340 | 341 | 328 | 329 | 366 | 365 |
| 14 | Orissa | 6.05 | 295 | 297 | 274 | 276 | 409 | 401 |
| 15 | Punjab | c | 332 | 332 | 331 | 331 | 424 | 427 |
| 16 | Rajasthan | 6.15 | 325 | 326 | 329 | 329 | 351 | 355 |
| 17 | Tamil Nadu | 5.67 | 354 | 358 | 346 | 350 | 417 | 434 |
| 18 | Tripura | * | 322 | 315 | 312 | 299 | 395 | 398 |
| 19 | Uttar Pradesh | 6.60 | 325 | 325 | 322 | 322 | 395 | 395 |
| 20 | West Bengal | 5.73 | 303 | 305 | 278 | 280 | 389 | 391 |
| | **All India** | **5.89** | **324** | **326** | **318** | **319** | **381** | **382** |

| Sl No | State | Linking factor for general Index a | Fuel & Light Index | | Clothing, Bedding & Footwear Index | | Miscellaneous Index | |
|---|---|---|---|---|---|---|---|---|
| | | | March 2003 | April 2003 | March 2003 | April 2003 | March 2003 | April 2003 |
| 1 | 2 | 3 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | Andhra Pradesh | 4.84 | 331 | 331 | 347 | 347 | 321 | 322 |
| 2 | Assam | b | 371 | 374 | 385 | 387 | 321 | 321 |
| 3 | Bihar | 6.22 | 340 | 340 | 353 | 353 | 348 | 349 |
| 4 | Gujarat | 5.34 | 254 | 253 | 330 | 329 | 350 | 350 |
| 5 | Haryana | * | 372 | 375 | 321 | 321 | 288 | 289 |
| 6 | Himachal Pradesh | * | 227 | 227 | 307 | 307 | 350 | 357 |
| 7 | Jammu & Kashmir | 5.98 | 254 | 254 | 378 | 377 | 348 | 346 |
| 8 | Karnataka | 5.81 | 336 | 337 | 323 | 325 | 313 | 312 |
| 9 | Kerala | 6.56 | 339 | 339 | 334 | 335 | 331 | 329 |
| 10 | Madhya Pradesh | 6.04 | 323 | 323 | 324 | 325 | 292 | 293 |
| 11 | Maharashtra | 5.85 | 311 | 309 | 296 | 296 | 302 | 303 |
| 12 | Manipur | * | 417 | 417 | 306 | 311 | 299 | 299 |
| 13 | Meghalaya | * | 362 | 362 | 417 | 418 | 387 | 387 |
| 14 | Orissa | 6.05 | 349 | 349 | 404 | 405 | 362 | 363 |
| 15 | Punjab | c | 374 | 376 | 311 | 311 | 313 | 315 |
| 16 | Rajasthan | 6.15 | 349 | 345 | 318 | 331 | 292 | 291 |
| 17 | Tamil Nadu | 5.67 | 325 | 326 | 337 | 338 | 405 | 406 |
| 18 | Tripura | * | 210 | 206 | 415 | 436 | 328 | 332 |
| 19 | Uttar Pradesh | 6.60 | 305 | 299 | 344 | 344 | 328 | 328 |
| 20 | West Bengal | 5.73 | 356 | 353 | 421 | 420 | 403 | 413 |
| | **All India** | **5.89** | **328** | **327** | **339** | **340** | **334** | **335** |

*a – The indices for a given month of old base (1960-61) can be obtained by multiplying the index number of new base (1986-87) of that month by the relevant linking factors which are applicable to Agricultural Laborers only.*

*b & c – To obtain linking factors for Assam and Punjab, please consult article in February, 1996 issue of the Indian Labour Journal.*

** – Indices compiled and published for the first time w.e.f November, 1995.*

**Consumer Price Index (Cost of Living Index) numbers for Agricultural and Industrial Workers for the month of August 2003**

(Base 1998-99 =100)

| Sl. No | Centre | Linking Factor * | Index Numbers for | | Estimated Indices for | |
|---|---|---|---|---|---|---|
| | | | July 03 | August 03 | July 03 | August 03 |
| 1 | Thiruvananthapuram | 10.39 | 124 | 124 | 1288 | 1288 |
| 2 | Kollam | 10.28 | 124 | 124 | 1275 | 1275 |
| 3 | Punalur | 9.96 | 113 | 113 | 1125 | 1125 |
| 4 | Pathanamthitta | - | 120 | 119 | - | - |
| 5 | Alappuzha | 10.45 | 116 | 115 | 1212 | 1202 |
| 6 | Kottayam | 10.40 | 117 | 117 | 1217 | 1217 |
| 7 | Mundakkayam | 10.12 | 116 | 115 | 1174 | 1164 |
| 8 | Munnar | 10.03 | 115 | 115 | 1153 | 1153 |
| 9 | Eranakulam | 9.92 | 118 | 117 | 1171 | 1161 |
| 10 | Chalakkudy | 10.60 | 116 | 115 | 1230 | 1219 |
| 11 | Thrissur | 10.05 | 116 | 116 | 1166 | 1166 |
| 12 | Palakkad | 10.48 | 116 | 116 | 1216 | 1216 |
| 13 | Malappuram | 10.30 | 119 | 118 | 1226 | 1215 |
| 14 | Kozhikode | 10.08 | 117 | 116 | 1179 | 1169 |
| 15 | Meppady | 10.64 | 113 | 113 | 1202 | 1202 |
| 16 | Kannur | 10.06 | 117 | 117 | 1177 | 1177 |
| 17 | Kasaragod | - | 120 | 120 | - | - |

- *Linking factors approved in G.O (MS) No.7/2002/Plg. dated 21-03-2002 have been used from October 2001. Base for all centres is 1970 = 100.*

The Consumer Price Index (Cost of Living Index) Numbers applicable to employees in employment under the Minimum Wages Act (Central Act XI of 1948) for the month of August 2003 as ascertained by the Director of Economics & Statistics under clause (C) of Section 2 of the Act.

## CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 483 | 486 | 487 | 487 | 489 | 486 | 479 | 488 | 485 | 491 | 490 | 488 |
| | 2. Mundakayam | 486 | 482 | 482 | 483 | 481 | 479 | 476 | 486 | 489 | 496 | 496 | 490 |
| | 3. Kollam | 498 | 501 | 503 | 518 | 518 | 509 | 518 | 513 | 514 | 512 | 534 | 519 |
| | 4. Thiruvanantha puram | 544 | 545 | 553 | 554 | 555 | 556 | 553 | 563 | 555 | 569 | 577 | 571 |
| | Average | 503 | 504 | 506 | 511 | 511 | 508 | 507 | 513 | 511 | 517 | 524 | 517 |
| Tamilnadu | 1. Chennai | 523 | 526 | 528 | 522 | 523 | 523 | 525 | 536 | 536 | 540 | 538 | 536 |
| | 2. Coimbatore | 481 | 479 | 491 | 487 | 485 | 490 | 491 | 500 | 497 | 503 | 497 | 490 |
| | 3. Coonoor | 478 | 488 | 490 | 483 | 483 | 489 | 492 | 501 | 509 | 506 | 508 | 499 |
| | 4. Madurai | 464 | 470 | 476 | 477 | 470 | 470 | 472 | 481 | 480 | 484 | 485 | 482 |
| | 5. Salem | 464 | 472 | 475 | 472 | 467 | 465 | 469 | 484 | 485 | 489 | 490 | 487 |
| | 6.Tiruchirappalli | 548 | 550 | 563 | 573 | 564 | 556 | 541 | 559 | 573 | 572 | 577 | 573 |
| | Average | 493 | 498 | 504 | 502 | 499 | 499 | 498 | 510 | 513 | 516 | 516 | 511 |
| Andra Pradesh | 1. Gudur | 458 | 463 | 470 | 467 | 462 | 464 | 466 | 464 | 467 | 469 | 470 | 471 |
| | 2. Gundur | 481 | 484 | 490 | 492 | 488 | 495 | 499 | 507 | 510 | 514 | 512 | 511 |
| | 3. Hyderabad | 471 | 476 | 476 | 478 | 478 | 481 | 487 | 492 | 495 | 505 | 506 | 501 |
| | 4. Visakhapatanam | 473 | 475 | 479 | 479 | 476 | 475 | 475 | 478 | 481 | 491 | 491 | 492 |
| | 5. Warangal | 506 | 514 | 517 | 507 | 512 | 523 | 525 | 530 | 536 | 538 | 533 | 529 |
| | Average | 478 | 482 | 486 | 485 | 483 | 488 | 490 | 494 | 498 | 503 | 502 | 501 |
| Karnataka | 1. Bangalore | 458 | 457 | 460 | 460 | 463 | 465 | 469 | 475 | 475 | 477 | 481 | 476 |
| | 2. Belgaum | 524 | 523 | 524 | 523 | 522 | 523 | 524 | 527 | 530 | 533 | 544 | 542 |
| | 3. Hubli Dhanwar | 480 | 481 | 484 | 480 | 481 | 487 | 486 | 491 | 495 | 496 | 498 | 495 |
| | 4. Meccara | 463 | 459 | 462 | 463 | 459 | 460 | 460 | 470 | 471 | 474 | 484 | 479 |
| | Average | 481 | 480 | 483 | 482 | 481 | 484 | 485 | 491 | 493 | 495 | 502 | 498 |
| Pondichery | 1. Pondicherry | 516 | 521 | 531 | 531 | 529 | 536 | 533 | 544 | 547 | 547 | 546 | 547 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 562 | 563 | 561 | 551 | 555 | 558 | 564 | 568 | 568 | 569 | 577 | 575 |
| Maharastra | 1. Mumbai | 563 | 563 | 565 | 569 | 574 | 574 | 578 | 585 | 586 | 586 | 589 | 583 |
| | 2. Nagpur | 499 | 500 | 504 | 497 | 493 | 492 | 495 | 496 | 501 | 504 | 510 | 510 |
| | 3. Nasik | 518 | 518 | 519 | 521 | 524 | 516 | 524 | 531 | 535 | 534 | 537 | 534 |
| | 4. Pune | 532 | 534 | 538 | 537 | 540 | 539 | 541 | 553 | 556 | 560 | 563 | 557 |
| | 5. Solapur | 499 | 497 | 492 | 489 | 491 | 494 | 494 | 491 | 491 | 498 | 505 | 502 |
| | Average | 522 | 522 | 524 | 523 | 524 | 523 | 526 | 531 | 534 | 536 | 541 | 537 |
| Haryana | 1. Faridabad | 492 | 491 | 487 | 482 | 482 | 486 | 493 | 494 | 494 | 497 | 505 | 501 |
| | 2. Yamuna Nagar | 459 | 456 | 454 | 446 | 447 | 452 | 454 | 457 | 458 | 458 | 468 | 465 |
| | Average | 476 | 474 | 471 | 464 | 465 | 469 | 474 | 476 | 476 | 478 | 487 | 483 |
| West Bengal | 1. Asansol | 463 | 465 | 467 | 460 | 455 | 453 | 455 | 467 | 471 | 474 | 476 | 478 |
| | 2. Darjeeling | 420 | 411 | 410 | 405 | 410 | 403 | 404 | 420 | 424 | 427 | 424 | 429 |
| | 3. Durgapur | 567 | 571 | 563 | 554 | 552 | 551 | 561 | 566 | 563 | 559 | 562 | 567 |
| | 4. Haldia | 590 | 592 | 590 | 582 | 578 | 575 | 581 | 584 | 584 | 588 | 592 | 590 |
| | 5. Howrah | 550 | 554 | 556 | 546 | 542 | 538 | 541 | 557 | 555 | 557 | 557 | 557 |
| | 6. Jalpaiguri | 427 | 429 | 424 | 416 | 404 | 409 | 410 | 411 | 416 | 418 | 427 | 424 |
| | 7. Kolkata | 538 | 543 | 544 | 530 | 527 | 527 | 533 | 545 | 542 | 541 | 545 | 541 |
| | 8. Raniganj | 425 | 424 | 425 | 414 | 408 | 406 | 410 | 419 | 424 | 421 | 433 | 432 |
| | Average | 498 | 499 | 497 | 488 | 485 | 483 | 487 | 496 | 497 | 498 | 502 | 502 |
| Chandigarh | 1. Chandigarh | 525 | 522 | 520 | 514 | 514 | 514 | 516 | 516 | 519 | 519 | 529 | 533 |
| Uttar Pradesh | 1. Agra | 447 | 444 | 445 | 437 | 445 | 448 | 451 | 449 | 447 | 449 | 457 | 459 |
| | 2. Ghaziabad | 489 | 483 | 481 | 478 | 479 | 484 | 488 | 490 | 493 | 493 | 500 | 501 |
| | 3. Kanpur | 471 | 467 | 468 | 456 | 453 | 458 | 464 | 465 | 463 | 465 | 473 | 475 |
| | 4. Saharaupur | 439 | 446 | 444 | 439 | 440 | 444 | 446 | 450 | 449 | 448 | 460 | 460 |
| | 5. Varanasi | 499 | 498 | 498 | 489 | 484 | 491 | 502 | 498 | 498 | 503 | 509 | 510 |
| | Average | 469 | 468 | 467 | 460 | 460 | 465 | 470 | 470 | 470 | 472 | 480 | 481 |
| Madhya Pradesh | 1. Balaghat | 432 | 445 | 444 | 438 | 432 | 427 | 428 | 433 | 438 | 441 | 449 | 452 |
| | 2. Bhopal | 516 | 517 | 516 | 509 | 508 | 509 | 515 | 520 | 524 | 525 | 534 | 532 |
| | 3. Indore | 491 | 491 | 494 | 492 | 491 | 492 | 506 | 513 | 514 | 518 | 526 | 514 |
| | 4. Jabalpur | 472 | 488 | 483 | 471 | 466 | 468 | 473 | 475 | 480 | 482 | 502 | 499 |
| | Average | 478 | 485 | 484 | 478 | 474 | 474 | 481 | 485 | 489 | 492 | 503 | 499 |
| | **All India** | **485** | **487** | **489** | **484** | **483** | **484** | **487** | **493** | **494** | **497** | **501** | **499** |

## CONSUMER PRICE INDEX AND % VARIATIONS OF INDEX FOR INDUSTRIAL WORKERS

| State | Centre | CPI for the month of | | variation | CPI for the month of | | variatio |
|---|---|---|---|---|---|---|---|
| | | Jul-02 | Jul-03 | | Aug-02 | Aug -03 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 489 | 490 | 0.20 | 492 | 488 | -0.81 |
| | 2. Mundakayam | 476 | 496 | 4.20 | 476 | 490 | 2.94 |
| | 3. Kollam | 504 | 534 | 5.95 | 502 | 519 | 3.39 |
| | 4. Thiruvananthapuram | 557 | 577 | 3.59 | 552 | 571 | 3.44 |
| | Average | 507 | 524 | 3.50 | 506 | 517 | 2.27 |
| 2. Tamilnadu | 1. Chennai | 515 | 538 | 4.47 | 520 | 536 | 3.08 |
| | 2. Coimbatore | 477 | 497 | 4.19 | 482 | 490 | 1.66 |
| | 3. Coonoor | 477 | 508 | 6.50 | 473 | 499 | 5.50 |
| | 4. Madurai | 457 | 485 | 6.13 | 464 | 482 | 3.88 |
| | 5. Salem | 470 | 490 | 4.26 | 467 | 487 | 4.28 |
| | 6.Tiruchirappalli | 530 | 577 | 8.87 | 548 | 573 | 4.56 |
| | Average | 488 | 516 | 5.78 | 492 | 511 | 3.83 |
| 3. Andra Pradesh | 1. Gudur | 457 | 470 | 2.84 | 458 | 471 | 2.84 |
| | 2. Gundur | 480 | 512 | 6.67 | 480 | 511 | 6.46 |
| | 3. Hyderabad | 468 | 506 | 8.12 | 470 | 501 | 6.60 |
| | 4. Visakhapatanam | 470 | 491 | 4.47 | 475 | 492 | 3.58 |
| | 5. Warangal | 503 | 533 | 5.96 | 509 | 529 | 3.93 |
| | Average | 476 | 502 | 5.63 | 478 | 501 | 4.68 |
| 4. Karnataka | 1. Bangalore | 455 | 481 | 5.71 | 456 | 476 | 4.39 |
| | 2. Belgaum | 519 | 544 | 4.82 | 521 | 542 | 4.03 |
| | 3. Hubli Dhanwar | 477 | 498 | 4.40 | 477 | 495 | 3.77 |
| | 4. Meccara | 462 | 484 | 4.76 | 463 | 479 | 3.46 |
| | Average | 478 | 502 | 4.91 | 479 | 498 | 3.91 |
| 5. Pondicherry | 1. Pondicherry | 516 | 546 | 5.81 | 512 | 547 | 6.84 |

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | Jul-02 | Jul-03 | | Aug-02 | Aug -03 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 561 | 577 | 2.85 | 563 | 575 | 2.13 |
| 2. Maharastra | 1. Mumbai | 560 | 589 | 5.18 | 562 | 583 | 3.74 |
| | 2. Nagpur | 493 | 510 | 3.45 | 496 | 510 | 2.82 |
| | 3. Nasik | 514 | 537 | 4.47 | 519 | 534 | 2.89 |
| | 4. Pune | 532 | 563 | 5.83 | 534 | 557 | 4.31 |
| | 5. Solapur | 486 | 505 | 3.91 | 490 | 502 | 2.45 |
| | Average | 517 | 541 | 4.60 | 520 | 537 | 3.27 |
| 3. Haryana | 1. Faridabad | 487 | 505 | 3.70 | 491 | 501 | 2.04 |
| | 2. Yamuna Nagar | 452 | 468 | 3.54 | 458 | 465 | 1.53 |
| | Average | 470 | 487 | 3.62 | 475 | 483 | 1.79 |
| 4. West Bengal | 1. Asansol | 459 | 476 | 3.70 | 463 | 478 | 3.24 |
| | 2. Darjeeling | 393 | 424 | 7.89 | 412 | 429 | 4.13 |
| | 3. Durgapur | 558 | 562 | 0.72 | 564 | 567 | 0.53 |
| | 4. Haldia | 584 | 592 | 1.37 | 589 | 590 | 0.17 |
| | 5. Howrah | 545 | 557 | 2.20 | 548 | 557 | 1.64 |
| | 6. Jalpaiguri | 421 | 427 | 1.43 | 425 | 424 | -0.24 |
| | 7. Kolkata | 537 | 545 | 1.49 | 536 | 541 | 0.93 |
| | 8. Raniganj | 419 | 433 | 3.34 | 423 | 432 | 2.13 |
| | Average | 490 | 502 | 2.55 | 495 | 502 | 1.46 |
| 5. Chandigarh | 1. Chandigarh | 514 | 529 | 2.92 | 521 | 533 | 2.30 |
| 6. Uttar Pradesh | 1. Agra | 442 | 457 | 3.39 | 447 | 459 | 2.68 |
| | 2. Ghaziabad | 483 | 500 | 3.52 | 486 | 501 | 3.09 |
| | 3. Kanpur | 465 | 473 | 1.72 | 470 | 475 | 1.06 |
| | 4. Saharaupur | 436 | 460 | 5.50 | 438 | 460 | 5.02 |
| | 5. Varanasi | 491 | 509 | 3.67 | 495 | 510 | 3.03 |
| | Average | 463 | 480 | 3.54 | 467 | 481 | 2.95 |
| 7. Madhya Pradesh | 1. Balaghat | 428 | 449 | 4.91 | 431 | 452 | 4.87 |
| | 2. Bhopal | 512 | 534 | 4.30 | 515 | 532 | 3.30 |
| | 3. Indore | 496 | 526 | 6.05 | 493 | 514 | 4.26 |
| | 4. Jabalpur | 468 | 502 | 7.26 | 470 | 499 | 6.17 |
| | Average | 476 | 503 | 5.62 | 477 | 499 | 4.61 |
| | **All India** | **481** | **501** | **4.16** | **484** | **499** | **3.10** |

# CONSUMER PRICE INDEX FOR AGRICULTURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sept 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 325 | 328 | 329 | 330 | 330 | 329 | 328 | 331 | 335 | 341 | 343 | 343 |
| 2 | Tamilnadu | 324 | 327 | 340 | 356 | 355 | 355 | 354 | 358 | 359 | 362 | 356 | 354 |
| 3 | Anthrapradesh | 338 | 340 | 345 | 343 | 341 | 342 | 343 | 345 | 347 | 352 | 349 | 349 |
| 4 | Karnataka | 320 | 320 | 322 | 324 | 328 | 329 | 330 | 332 | 334 | 333 | 336 | 335 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 321 | 320 | 321 | 318 | 319 | 320 | 321 | 322 | 325 | 330 | 334 | 333 |
| 6 | Haryana | 333 | 331 | 330 | 325 | 322 | 326 | 329 | 331 | 329 | 332 | 333 | 336 |
| 7 | West Bengal | 309 | 314 | 310 | 304 | 299 | 300 | 303 | 305 | 308 | 308 | 318 | 321 |
| 8 | Uttar Pradesh | 326 | 327 | 324 | 318 | 317 | 323 | 325 | 325 | 322 | 325 | 327 | 328 |
| 9 | Madhya Pradesh | 320 | 321 | 321 | 314 | 309 | 312 | 316 | 317 | 320 | 323 | 322 | 320 |
| 10 | Assam | 331 | 332 | 331 | 329 | 325 | 326 | 329 | 334 | 336 | 337 | 340 | 342 |
| 11 | Bihar | 298 | 300 | 300 | 296 | 293 | 300 | 305 | 304 | 300 | 301 | 305 | 305 |
| 12 | Gujarat | 334 | 333 | 332 | 328 | 326 | 327 | 331 | 335 | 336 | 339 | 343 | 341 |
| 13 | Himachalpradesh | 303 | 307 | 309 | 310 | 308 | 308 | 310 | 315 | 309 | 311 | 320 | 322 |
| 14 | Jammu & Kashmir | 337 | 340 | 342 | 346 | 350 | 349 | 348 | 352 | 353 | 346 | 342 | 344 |
| 15 | Manipur | 299 | 300 | 302 | 300 | 299 | 300 | 301 | 302 | 303 | 305 | 307 | 308 |
| 16 | Meghalaya | 343 | 346 | 343 | 343 | 340 | 340 | 340 | 341 | 348 | 345 | 349 | 348 |
| 17 | Orissa | 301 | 302 | 300 | 294 | 292 | 291 | 295 | 297 | 302 | 310 | 316 | 318 |
| 18 | Punjab | 335 | 333 | 333 | 324 | 324 | 324 | 332 | 332 | 330 | 333 | 337 | 341 |
| 19 | Rajastan | 327 | 327 | 327 | 324 | 323 | 323 | 325 | 326 | 328 | 330 | 326 | 324 |
| 20 | Tripura | 328 | 330 | 334 | 334 | 331 | 323 | 322 | 315 | 315 | 320 | 323 | 323 |
| | **All India** | **321** | **322** | **323** | **321** | **320** | **322** | **324** | **326** | **327** | **330** | **331** | **332** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR AGRICULTURAL LABOURERS

**[Base 1986-87 = 100]**

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Jul-02 | Jul-03 | | Aug-02 | Aug -03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 321 | 335 | 4.36 | 325 | 341 | 4.92 |
| 2 | Tamilnadu | 316 | 359 | 13.61 | 319 | 362 | 13.48 |
| 3 | Anthrapradesh | 331 | 347 | 4.83 | 334 | 352 | 5.39 |
| 4 | Karnataka | 314 | 334 | 6.37 | 314 | 333 | 6.05 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 308 | 325 | 5.52 | 314 | 330 | 5.10 |
| 6 | Haryana | 322 | 329 | 2.17 | 323 | 332 | 2.79 |
| 7 | West Bengal | 297 | 308 | 3.70 | 299 | 308 | 3.01 |
| 8 | Uttar Pradesh | 309 | 322 | 4.21 | 315 | 325 | 3.17 |
| 9 | Madhya Pradesh | 311 | 320 | 2.89 | 314 | 323 | 2.87 |
| 10 | Assam | 320 | 336 | 5.00 | 322 | 337 | 4.66 |
| 11 | Bihar | 288 | 300 | 4.17 | 290 | 301 | 3.79 |
| 12 | Gujarat | 321 | 336 | 4.67 | 325 | 339 | 4.31 |
| 13 | Himachalpradesh | 300 | 309 | 3.00 | 301 | 311 | 3.32 |
| 14 | Jammu & Kashmir | 338 | 353 | 4.44 | 333 | 346 | 3.90 |
| 15 | Manipur | 297 | 303 | 2.02 | 298 | 305 | 2.35 |
| 16 | Meghalaya | 348 | 348 | 0.00 | 344 | 345 | 0.29 |
| 17 | Orissa | 293 | 302 | 3.07 | 295 | 310 | 5.08 |
| 18 | Punjab | 325 | 330 | 1.54 | 328 | 333 | 1.52 |
| 19 | Rajastan | 313 | 328 | 4.79 | 318 | 330 | 3.77 |
| 20 | Tripura | 321 | 315 | -1.87 | 323 | 320 | -0.93 |
| | **All India** | **311** | **327** | **5.14** | **314** | **330** | **5.10** |

## CONSUMER PRICE INDEX FOR RURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sept 02 | Oct 02 | Nov 02 | Dec 02 | Jan 02 | Feb 02 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 327 | 329 | 330 | 331 | 331 | 331 | 330 | 333 | 336 | 342 | 344 | 343 |
| 2 | Tamilnadu | 324 | 327 | 339 | 354 | 352 | 352 | 351 | 355 | 356 | 359 | 354 | 352 |
| 3 | Anthrapradesh- | 338 | 340 | 345 | 344 | 341 | 342 | 344 | 345 | 348 | 353 | 350 | 349 |
| 4 | Karnataka | 321 | 321 | 323 | 325 | 328 | 329 | 331 | 333 | 335 | 334 | 336 | 336 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 321 | 321 | 321 | 319 | 319 | 320 | 322 | 323 | 326 | 330 | 334 | 334 |
| 6 | Haryana | 334 | 333 | 331 | 327 | 324 | 328 | 331 | 332 | 330 | 333 | 333 | 335 |
| 7 | West Bengal | 312 | 316 | 313 | 307 | 302 | 303 | 305 | 308 | 312 | 312 | 319 | 321 |
| 8 | Uttar Pradesh | 330 | 330 | 327 | 322 | 321 | 326 | 328 | 328 | 325 | 328 | 331 | 331 |
| 9 | Madhya Pradesh | 325 | 326 | 326 | 319 | 315 | 318 | 321 | 322 | 325 | 327 | 329 | 327 |
| 10 | Assam | 331 | 332 | 331 | 329 | 325 | 326 | 329 | 334 | 336 | 337 | 341 | 340 |
| 11 | Bihar | 300 | 302 | 302 | 298 | 295 | 301 | 307 | 306 | 302 | 303 | 305 | 307 |
| 12 | Gujarat | 335 | 334 | 334 | 330 | 327 | 328 | 332 | 336 | 337 | 341 | 345 | 345 |
| 13 | Himachalpradesh | 310 | 314 | 314 | 315 | 313 | 312 | 315 | 321 | 316 | 317 | 323 | 325 |
| 14 | Jammu & Kashmir | 329 | 333 | 336 | 338 | 341 | 340 | 340 | 344 | 346 | 340 | 341 | 338 |
| 15 | Manipur | 300 | 301 | 302 | 301 | 299 | 300 | 302 | 303 | 304 | 306 | 307 | 308 |
| 16 | Meghalaya | 340 | 343 | 340 | 341 | 338 | 338 | 338 | 339 | 346 | 343 | 343 | 347 |
| 17 | Orissa | 301 | 302 | 300 | 294 | 293 | 291 | 295 | 297 | 303 | 310 | 314 | 316 |
| 18 | Punjab | 340 | 338 | 337 | 330 | 329 | 330 | 337 | 338 | 336 | 338 | 342 | 342 |
| 19 | Rajastan | 328 | 327 | 328 | 325 | 323 | 323 | 325 | 326 | 328 | 329 | 329 | 325 |
| 20 | Tripura | 321 | 323 | 328 | 328 | 326 | 317 | 315 | 306 | 306 | 311 | 313 | 314 |
| | **All India** | **323** | **324** | **326** | **324** | **322** | **324** | **326** | **328** | **329** | **332** | **334** | **333** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR RURAL LABOURERS

[Base 1986-87 = 100]

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Jul-02 | Jul-03 | | Aug-02 | Aug -03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 324 | 336 | 3.70 | 328 | 342 | 4.27 |
| 2 | Tamilnadu | 316 | 356 | 12.66 | 319 | 359 | 12.54 |
| 3 | Anthrapradesh | 332 | 348 | 4.82 | 335 | 353 | 5.37 |
| 4 | Karnataka | 315 | 335 | 6.35 | 315 | 334 | 6.03 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 309 | 326 | 5.50 | 314 | 330 | 5.10 |
| 6 | Haryana | 323 | 330 | 2.17 | 325 | 333 | 2.46 |
| 7 | West Bengal | 300 | 312 | 4.00 | 302 | 312 | 3.31 |
| 8 | Uttar Pradesh | 312 | 325 | 4.17 | 319 | 328 | 2.82 |
| 9 | Madhya Pradesh | 315 | 325 | 3.17 | 318 | 327 | 2.83 |
| 10 | Assam | 320 | 336 | 5.00 | 322 | 337 | 4.66 |
| 11 | Bihar | 290 | 302 | 4.14 | 293 | 303 | 3.41 |
| 12 | Gujarat | 323 | 337 | 4.33 | 326 | 341 | 4.60 |
| 13 | Himachalpradesh | 306 | 316 | 3.27 | 308 | 317 | 2.92 |
| 14 | Jammu & Kashmir | 331 | 346 | 4.53 | 326 | 340 | 4.29 |
| 15 | Manipur | 297 | 304 | 2.36 | 298 | 306 | 2.68 |
| 16 | Meghalaya | 345 | 346 | 0.29 | 341 | 343 | 0.59 |
| 17 | Orissa | 293 | 303 | 3.41 | 295 | 310 | 5.08 |
| 18 | Punjab | 330 | 336 | 1.82 | 332 | 338 | 1.81 |
| 19 | Rajastan | 315 | 328 | 4.13 | 319 | 329 | 3.13 |
| 20 | Tripura | 315 | 306 | -2.86 | 317 | 311 | -1.89 |
| | **All India** | **313** | **329** | **5.11** | **317** | **332** | **4.73** |

# CONSUMER PRICE INDEX FOR INDUSTRIAL & AGRICULTURAL WORKERS

**(Kerala State) Base 1998-99=100**

| Centre | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thiruvananthapuram | 117 | 117 | 118 | 119 | 120 | 120 | 121 | 122 | 121 | 122 | 124 | 124 |
| Kollam | 118 | 118 | 119 | 121 | 121 | 121 | 121 | 122 | 122 | 122 | 124 | 124 |
| Pathanamthitta | 113 | 113 | 113 | 113 | 114 | 114 | 113 | 112 | 111 | 112 | 113 | 113 |
| Punalur | 115 | 115 | 116 | 116 | 116 | 117 | 117 | 117 | 118 | 119 | 120 | 119 |
| Alappuzha | 113 | 113 | 114 | 114 | 114 | 114 | 114 | 115 | 115 | 116 | 116 | 115 |
| Kottayam | 115 | 115 | 116 | 116 | 116 | 116 | 115 | 116 | 117 | 117 | 117 | 117 |
| Mundakkayam | 114 | 114 | 114 | 115 | 115 | 115 | 114 | 114 | 114 | 115 | 116 | 115 |
| Munnar | 115 | 115 | 115 | 115 | 114 | 114 | 113 | 114 | 114 | 115 | 115 | 115 |
| Ernakulam | 115 | 115 | 116 | 116 | 116 | 116 | 116 | 117 | 117 | 118 | 118 | 117 |
| Chalakkudy | 113 | 113 | 114 | 114 | 114 | 114 | 114 | 115 | 115 | 116 | 116 | 115 |
| Thrissur | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 116 | 115 | 116 | 116 | 116 |
| Palakkad | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 116 | 116 | 116 | 116 | 116 |
| Malappuram | 114 | 114 | 115 | 115 | 116 | 116 | 116 | 117 | 118 | 119 | 119 | 118 |
| Kozhikkode | 113 | 113 | 114 | 114 | 114 | 114 | 113 | 114 | 115 | 116 | 117 | 116 |
| Meppady | 115 | 115 | 115 | 115 | 114 | 114 | 113 | 113 | 112 | 112 | 113 | 113 |
| Kannur | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 116 | 115 | 117 | 117 | 117 |
| Kasargod | 113 | 114 | 115 | 115 | 115 | 116 | 116 | 118 | 117 | 119 | 120 | 120 |
| **State** | **114** | **114** | **115** | **115** | **116** | **116** | **115** | **116** | **116** | **117** | **117** | **117** |

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

| Sl. No | Name of Commodity | Unit | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. RICE - OPEN MARKET** | | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 12.95 | 12.93 | 13.30 | 13.25 | 13.29 | 13.29 | 13.30 | 13.13 | 13.09 | 13.59 | 13.71 | 13.88 |
| 2 | Red - Chamba | Kg | 13.39 | 12.96 | 13.04 | 13.59 | 13.69 | 13.65 | 13.65 | 13.51 | 13.27 | 13.35 | 13.89 | 14.45 |
| 3 | White Andra Vella | Kg | 12.03 | 11.95 | 12.45 | 11.52 | 12.55 | 12.60 | 12.50 | 12.44 | 12.57 | 12.80 | 13.32 | 13.17 |
| **B. PULSES** | | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 30.96 | 30.21 | 30.54 | 30.29 | 29.54 | 29.64 | 29.71 | 29.89 | 30.43 | 30.07 | 29.96 | 30.08 |
| 5 | Black gram split w/o husk | Kg | 33.13 | 32.32 | 31.04 | 29.79 | 28.11 | 27.14 | 27.25 | 27.18 | 27.04 | 26.39 | 26.00 | 26.27 |
| 6 | Dhall(Tur) | Kg | 31.13 | 31.15 | 31.15 | 31.12 | 30.19 | 30.77 | 30.04 | 30.08 | 31.04 | 31.00 | 30.81 | 30.29 |
| **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 14.69 | 14.49 | 13.89 | 13.32 | 13.30 | 13.22 | 13.15 | 13.08 | 13.34 | 13.32 | 13.94 | 15.33 |
| 8 | Milk (Cow's) | Ltr. | 13.00 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.08 |
| 9 | Egg Hen's (White lagon) | Dozen | 15.23 | 14.38 | 16.21 | 16.41 | 16.01 | 16.54 | 14.61 | 15.47 | 15.04 | 18.09 | 17.80 | 15.74 |
| 10 | Mutton with bones | Kg | 121.43 | 122.14 | 121.43 | 121.43 | 123.57 | 123.57 | 125.71 | 125.71 | 126.43 | 125.71 | 125.71 | 126.43 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 71.00 | 71.07 | 71.07 | 71.07 | 71.21 | 71.21 | 71.21 | 71.21 | 71.50 | 71.14 | 71.00 | 71.00 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 69.20 | 69.20 | 69.20 | 69.20 | 68.70 | 66.70 | 66.70 | 66.27 | 65.71 | 66.21 | 66.93 | 67.43 |
| **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 51.04 | 49.57 | 56.93 | 61.61 | 58.75 | 62.55 | 62.11 | 59.23 | 58.30 | 53.88 | 59.55 | 62.90 |
| 14 | Groundnut oil | Kg | 56.20 | 56.38 | 57.88 | 59.53 | 59.13 | 60.66 | 64.96 | 65.96 | 65.86 | 66.37 | 66.03 | 66.66 |
| 15 | Refined oil(Postman) | Kg. | 65.65 | 63.87 | 71.20 | 76.42 | 73.87 | 75.63 | 74.28 | 75.88 | 76.79 | 80.21 | 87.54 | 83.05 |
| 16 | Gingelly oil | Kg. | 56.85 | 58.05 | 59.05 | 60.29 | 62.39 | 64.93 | 68.34 | 69.63 | 70.55 | 69.68 | 69.66 | 69.19 |
| 17 | Coconut without husk | 100 nos | 480.77 | 469.64 | 526.79 | 576.79 | 570.36 | 591.07 | 597.50 | 579.29 | 569.64 | 531.43 | 558.93 | 584.23 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | Sep 02 | Oct 02 | Nov 02 | Dec 02 | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 35.00 | 34.29 | 36.64 | 37.86 | 37.79 | 38.21 | 38.54 | 39.86 | 43.00 | 43.89 | 44.29 | 43.85 |
| 19 | Chillies dry | Kg. | 45.00 | 51.93 | 52.71 | 52.29 | 51.29 | 49.64 | 50.93 | 51.29 | 51.21 | 51.50 | 54.21 | 54.77 |
| 20 | Onion small | Kg. | 16.02 | 19.27 | 22.20 | 21.79 | 11.36 | 11.52 | 11.10 | 11.41 | 15.69 | 15.71 | 14.71 | 12.69 |
| 21 | Tamarind without seeds loose | Kg. | 23.69 | 24.29 | 24.86 | 25.21 | 24.71 | 23.07 | 22.71 | 22.36 | 22.64 | 22.57 | 22.96 | 23.58 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 9.15 | 8.29 | 9.07 | 9.21 | 9.86 | 11.86 | 13.07 | 14.14 | 15.77 | 18.50 | 14.14 | 11.23 |
| 23 | Tapioca Raw | Kg. | 5.62 | 5.82 | 5.89 | 5.86 | 5.96 | 5.96 | 5.88 | 6.13 | 5.96 | 5.89 | 5.71 | 6.27 |
| 24 | Potato | Kg. | 11.09 | 11.99 | 12.13 | 10.59 | 9.29 | 8.46 | 8.36 | 9.07 | 10.56 | 10.46 | 10.89 | 10.31 |
| 25 | Colocassia | Kg. | 14.69 | 13.29 | 13.21 | 12.14 | 11.71 | 12.43 | 12.77 | 14.36 | 14.85 | 15.52 | 16.69 | 16.09 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 8.40 | 8.54 | 10.31 | 7.99 | 6.50 | 5.95 | 5.75 | 6.35 | 7.57 | 8.79 | 8.90 | 8.77 |
| 27 | Brinjal | Kg. | 9.85 | 9.64 | 11.29 | 11.14 | 8.64 | 8.57 | 8.79 | 9.29 | 11.14 | 12.00 | 12.00 | 12.00 |
| 28 | Cucumber | Kg. | 8.23 | 7.93 | 9.14 | 6.57 | 7.00 | 7.64 | 6.50 | 6.43 | 7.43 | 8.07 | 9.36 | 9.31 |
| 29 | Ladies Finger | Kg. | 11.15 | 10.93 | 10.14 | 9.57 | 9.50 | 10.14 | 13.64 | 13.50 | 11.93 | 11.79 | 11.00 | 11.46 |
| 30 | Cabbage | Kg | 7.69 | 8.64 | 9.14 | 8.86 | 8.43 | 8.21 | 7.86 | 7.93 | 8.71 | 15.43 | 13.43 | 11.08 |
| 31 | Bittergourd | Kg. | 12.85 | 14.43 | 14.93 | 13.21 | 12.64 | 12.21 | 12.14 | 13.00 | 14.36 | 17.00 | 17.21 | 16.00 |
| 32 | Tomatto | Kg. | 8.54 | 9.14 | 11.93 | 8.71 | 7.21 | 7.21 | 7.93 | 13.00 | 16.07 | 12.07 | 19.43 | 8.46 |
| 33 | Chillies green | Kg. | 14.69 | 15.00 | 15.57 | 14.43 | 15.57 | 13.86 | 13.50 | 13.00 | 13.79 | 20.29 | 21.86 | 12.62 |
| 34 | Banana green | Kg. | 11.85 | 10.96 | 11.39 | 10.79 | 12.68 | 13.61 | 12.57 | 11.86 | 11.14 | 12.43 | 11.57 | 11.27 |
| 35 | Plantain green | Kg. | 9.46 | 8.89 | 9.57 | 9.07 | 8.93 | 9.36 | 8.57 | 8.68 | 8.29 | 9.00 | 9.18 | 9.08 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.88 | 7.91 | 7.95 | 7.95 | 7.96 | 7.95 | 7.91 | 7.91 | 7.91 | 7.93 | 7.93 | 7.93 |
| 37 | Toilet Soap Lux | 100 gm | 11.71 | 11.86 | 11.89 | 11.75 | 11.79 | 11.96 | 12.11 | 12.21 | 12.25 | 12.29 | 12.32 | 12.32 |
| 38 | Toothpaste Colgate | 100 gm | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.64 | 29.29 | 27.50 | 26.07 | 26.07 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 138.67 | 130.21 | 142.75 | 153.32 | 169.05 | 171.54 | 173.79 | 171.14 | 176.05 | 176.21 | 175.46 | 172.54 |

## Next – generation internet on the anvil

Japan, China and South Korea will jointly develop the next-generation internet technology IPV6(Internet Protocol Version 6), aiming to have the global standard for the technology set in Asia, a report said today. US firms now dominate the market for equipment like routers that serve as the infrastructure for the current IPV4-based internet. By working together, the three countries aim to take the lead in developing technologies for a world in which all equipment is connected to the internet, the Business daily Nihon Keizai Shimbun said.

Japanese government and technology company officials were unable to confirm the report. " The Japanese government has discussed IPV6 with China and South Korea at ministers meetings, but I'm not aware of any new development", said a spokesman for Hitachi, one of the Japanese firms mentioned in the report. "Our company has no specific plans in terms of tripartite development", he said.

Nippon Telegraph and Telephone, Hitachi, Fujitsu, NEC, Matsushita Electric, Mitsubishi Research Institute and Internet Initiative Japan, will participate in the effort, the newspaper said.

*Source:*

## Cyber crime

Cyber crime is defined as any criminal activity which uses network access to commit a criminal act. With the exponential growth of the internet and networking, the opportunities to exploit weaknesses in information security are multiplying.

Attacks may be internal or external, with the former being easier to perpetrate. Cyber crime remains a major area of information security risk. The sophistication of these threats is consistently increasing and the methods employed to combat these threats is consistently increasing and the methods employed to combat these threats must match this level of sophistication.

The threat of cyber attacks is growing every day, due in large part to increasing reliance on e-mail and the internet for conducting business. According to statistics from Carnegie Mellon's CERT Coordination Center, the number of IT security incidents reported has steadily grown from 52,658 in 2001 to 82,094 in 2002. and in just the first quarter of 2003, there were 42,586 reports – setting the pace to double last year's numbers.

Criminals may target organisations information systems and there could be serious financial loss and damage to business operations. Hence it is important to identify the network layout and make sure that the current safeguards are operational. Intrusion detection software should be put in place and there should be access lists to control access to IT infrastructure.

Organisations must work towards minimising the impact of cyber crime by preparing contingency plans and putting in place reasonable safeguards. It is important to put in place mechanisms to collect evidence of malafide actions.

Possible instances of cyber crime could be the targeting of confidential information or defacing organisations websites. Websites of data processing systems could be penetrated and sensitive information may be disclosed. Data could be modified or corrupted. There could be attacks on website, denying services. A malicious code can be sent and replicated, and this can damage systems. Hacking or breaking into an organisations computer system, is another instance of cyber crime.

One can separate today's threats from emerging threats by assigning them to general classes based on how rapidly the threats spread. As we move from class I to III, there is less of a chance that human response can contain the threat. Class I threats spread within days or hours. To date, most threats have been in this category.

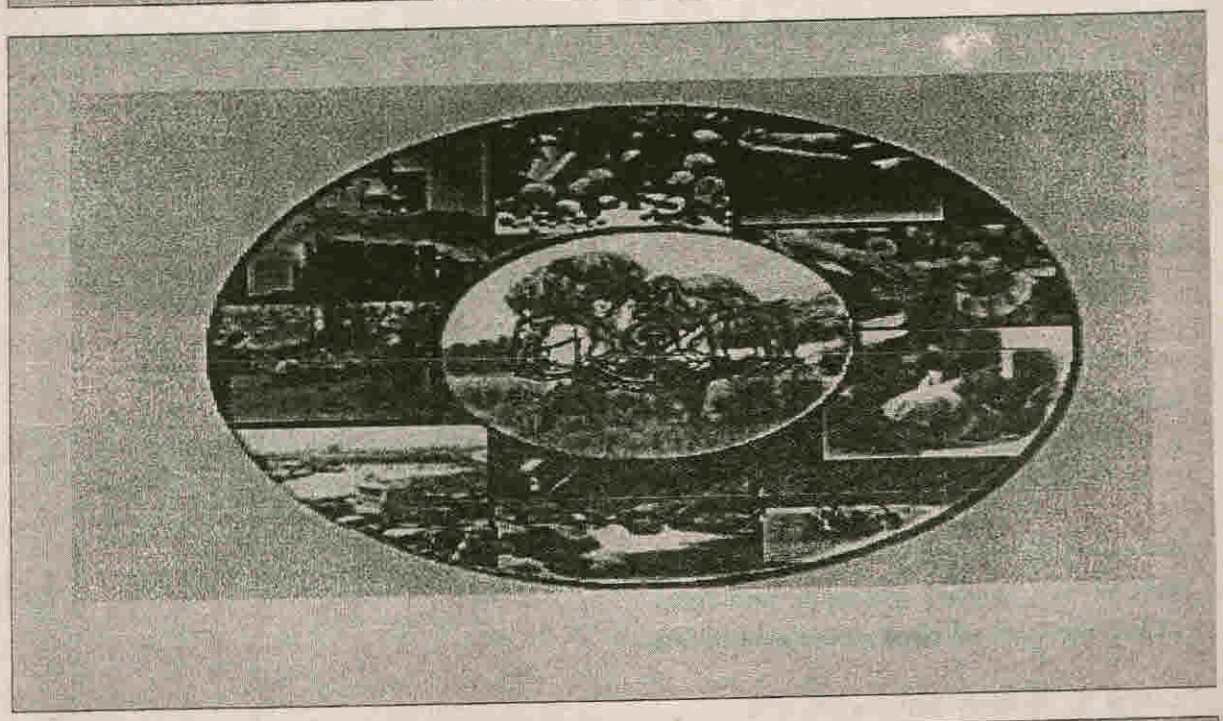
## Philips Internet TV

Dutch Philips Electronics has unveiled a television set featuring a wireless connection to the Internet and personal computers, enabling it to play music, pictures and videos from the web or PCs. The product was shown at the consumer electronics show in Las Vegas, but is not yet on sale.

# EcoStat News

October-December 2003
Volume 3 – Issue – 5 & 6

*For Official Use only*



## Inside this issue

- Population
- News
- Interview
- Prices
- Article
- Coir
- Indices
- Cyber Corner

**Department of Economics & Statistics**
**Government of Kerala**

5&6

# From Editors Desk

*Besides statistical presentations, ecostat news has been highlighting meaningful discussions on economic issues of current interest. "Vision Kerala 2025" document reproduced in this issue provides a SWOT analysis of Kerala economy revealing the new development agenda of the state.*

*The lead article written by P.C. Jain gives an indepth understanding of the concept of "monitoring & evaluation" in implementation of development programmes.*

*The report of Sr. M.A. Raveendran on C.R. Rao, an eminent statistician of India, gives much insight into the process of statistical thinking.*

*This issue of ecostat also contains latest data on poverty indicators in the state and consumer price index for December 2003.*

*It is hoped that contents of ecostat news in this issue would be of some use to planners and data users.*

***M.R. Balakrishnan***
**Director & Chief Editor**



**Design : K. K. Basand Kumar**
**Type setting: Samila Ramachandran**

*Edited printed & published for Department of Economics and Statistics, Government of Kerala.*

# Contents


| | Page |
|---|---|
| Population | 3 |
| Article | 4 |
| News | 17 |
| Coir | 18 |
| Interview | 19 |
| Indices | 25 |
| Prices | 35 |
| Cyber Corner | 37 |

## Projected Population by Sex (2001-2026)

*(unit: '000)*

| Sl No | Year | India | | | Kerala | | |
|---|---|---|---|---|---|---|---|
| | | Persons | Males | Females | Persons | Males | Females |
| 1 | 2001 | 1037952 | 536609 | 501343 | 31968 | 15515 | 16453 |
| 2 | 2002 | 1055051 | 545420 | 509631 | 32357 | 15714 | 16643 |
| 3 | 2003 | 1072580 | 554297 | 518283 | 32711 | 15888 | 16823 |
| 4 | 2004 | 1089915 | 563079 | 526836 | 33072 | 16067 | 17005 |
| 5 | 2005 | 1107064 | 571756 | 535307 | 33425 | 16242 | 17183 |
| 6 | 2006 | 1123993 | 580304 | 543689 | 33763 | 16408 | 17355 |
| 7 | 2007 | 1140715 | 588737 | 551978 | 34094 | 16570 | 17524 |
| 8 | 2008 | 1157245 | 597061 | 560184 | 34422 | 16731 | 17691 |
| 9 | 2009 | 1173458 | 605428 | 568030 | 34741 | 16886 | 17855 |
| 10 | 2010 | 1189793 | 613411 | 576382 | 35049 | 17038 | 18011 |
| 11 | 2011 | 1205874 | 621461 | 584413 | 35345 | 17182 | 18163 |
| 12 | 2012 | 1221839 | 629433 | 592406 | 35631 | 17321 | 18310 |
| 13 | 2013 | 1237638 | 637301 | 600337 | 35908 | 17455 | 18453 |
| 14 | 2014 | 1253748 | 645321 | 608427 | 36188 | 17591 | 18597 |
| 15 | 2015 | 1268576 | 652670 | 615906 | 36429 | 17706 | 18723 |
| 16 | 2016 | 1284216 | 660425 | 623791 | 36688 | 17831 | 18857 |
| 17 | 2017 | 1298982 | 667732 | 631250 | 36922 | 17942 | 18980 |
| 18 | 2018 | 1313035 | 674679 | 638356 | 37132 | 18041 | 19091 |
| 19 | 2019 | 1327318 | 681712 | 645606 | 37346 | 18142 | 19204 |
| 20 | 2020 | 1341255 | 688543 | 652712 | 37551 | 18238 | 19313 |
| 21 | 2021 | 1354852 | 695170 | 659682 | 37749 | 18331 | 19418 |
| 22 | 2022 | 1368132 | 701614 | 666518 | 37938 | 18419 | 19519 |
| 23 | 2023 | 1381090 | 707868 | 673222 | 38118 | 18502 | 19616 |
| 24 | 2024 | 1393667 | 713896 | 679771 | 38290 | 18581 | 19709 |
| 25 | 2025 | 1405833 | 719665 | 686168 | 38455 | 18656 | 19799 |
| 26 | 2026 | 1417888 | 725353 | 692535 | 38619 | 18731 | 19888 |

*Source: Central Statistical Organisation.*

## First phase of central database for investors getting ready

The fraudsters among the intermediaries and investors will have a hard time once the central database of market participants and investors being prepared by Sebi through National Securities Depository Ltd (NSDL) comes into effect.

This database of every person with unique identification number and fingerprints will enable Sebi to easily track any unscrupulous depository participant or investor.

It is called MAPIN Database and requires not one but fingerprints of every person.

The first phase of the programme, which was launched by Sebi and NSDL in the last week of November, is actively progressing.

The basic intention of the process is to develop an inventory of market participants and investors and set up a standard for client code.

Under this phase, intermediaries registered with Sebi and their related persons have to obtain the unique identification numbers during the period from December 1, 2003 to March 31, 2004.

They will not be allowed to transact business without the number after the period.

The database of the investors will be prepared from June, 2004. Being an elaborate process, it could take more time, according to sources.

Five companies namely Integrated Enterprises (India) Ltd, Geojit Securities Ltd, Karvy Consultants Ltd, CMC Ltd and Alankit Assignments Ltd located at different parts of the country have been selected for preparing the database.

The identification number under MAPIN database is permanent and does not change even in the case of individuals who change the organisation they are associated with.

After the build-up of data, NSDL will be able to provide investors the basic information of intermediaries as to whether they are facing any disciplinary action. Similarly, an intermediary can verify the client identity with MAPIN database.

Sebi will be able to update regulatory record of the registered entities in the database so that this information is available for public information through Internet.

The brokers and depository participants will be allowed to update the address of the investors in the database.

The process of allotting identification number through identity cards began on Dec 1.

*Source: The New Indian Express, Dec. 13.*

## Indian banks need to firm up global growth plans: Experts

Indian banking entities have to firm up business plans for global expansion while the sector needs consolidation, including mergers and acquisitions, to exploit growth opportunities in retail and corporate segment, banking experts said today.

Besides catering to NRIs, Indian companies are expanding abroad, which need financial services, and there was no other option but to work out business plans for international expansion, State Bank of India chairman A.K. Purwar said while addressing bank economists conference here today.

SBI has presence in 28 countries with 58 branches but it was not sufficient as a support base and about six Indian banks should emerge to look to outside business, Purwar said.

These entities need internal resilience to expand and benefit from opportunities and for this consolidation of operations was a must, he added.

Purwar said the Union Government and Reserve Bank of India were working on guidelines to facilitate consolidation in the Indian banking system.

ICICI Bank managing director and CEO K.V. Kamath said corporates were approaching with investment plans and banks expect credit lending to this segment to pick up 12 months from now.

Banks would have to grapple with challenge of size and costs while managing business expansion, he said adding banks should facilitate two-way trade as part of plans to grow international business, Kamath said.

He said the bank plans to have presence in six countries this year and in 10-15 more by next year.

Referring to recent move by HSBC to pick up 20 percent stake in UTI Bank Ltd, Kamath said "We are witnessing some initial activity and foreign investment in Indian banks could be considered serious only when someone comes up with over $500 million on the table for acquisitions".

ICICI Bank, which acquired NBFCs like ITC Finance and Bank of Madura, was not currentlylooking at fresh acquisitions for growth, Kamath said.

Leo Puri, Principal of Mckinsey and company, the global consulting firm, said that Indian Banks would have to face hurdles in internationalising their operations because of low capital base. "It is up to the policy makers to express clearly as how to recapitalise the banking system to help them grow to global standards", he said.

Though the Indian banks reduced their bad exposure to a great extent as compared to other nations, their exposure in terms of lending to consumer as well as housing is still considered to be very low as compared to some other countries in this region, he said. In housing, Indian banks have a penetration of only 2 percent of the GDP as compared to 68 pc of banks in Singapore.

Puri also observed that there is growing gap of modernisation and expansion between public and private sector banks in India and this might lead to certain disparities in moving global operations.

Central Bank of India CMD Dalbir Singh said that there was a need to adopt an appropriate mindset and approach to meet the emerging challenges in the banking sector. In the next 5 to 10 years, Indian banks would have to face greater challenges in consumer business, treasury management, higher risk taking attitude and generate confidence among corporate clients, he said.

## 'Capital Inflows from Abroad can Destabilise Economy'

There is much hoopla over foreign capital inflows into the country. Foreign institutional investors (FIIs) have poured around $14 billion so far in the calendar year. Most commentators in the media have taken this as a sign of the confidence of global investing community in the Indian economy. Yet, there is a contrarian view that warns against the destablising impact of the financial flows into the economy via distortions in the monetary, fiscal and trade channels. It is to these destablising aspects of financial flows that the eminent economist, Dr. Philip Nachane alerted the optimists in his address 'Foreign inflows and their impact on the economy'. He was speaking at a seminar, 'The facets of Indian economy' organised by the Akbar Peerbhoy College of Commerce and Economics, Mumbai, on August 30.

He disputed the Robichek Lawson thesis that says trade deficits are not to worry about as these do not spill over into fiscal deficits. But Dr. Nachane showed how in the UK in 1992 such flows worsened fiscal deficits and triggered off capital flight to lead to the collapse of the Exchange Rate Mechanism (ERM). Later Mexico in 1994 suffered more or less the same fate. He also pointed out limits to sterilisation of flows by the Reserve Bank of India without distorting exchange rate and inflation rate. His objection to financial capital flow into the country rests on the fact that such flows tend to destabilise forex market operations through currency appreciation and interest rate mechanism.

A trade-off between the two leads to instability in interest rate. As he observed, "With foreign capital inflows the task of maintaining the nominal exchange rate within a corridor typically leads to an unacceptable instability in the short-term interest rates which is likely to jeopardise the stability of the financial market".

Rajendra Singh, Principal Secretary, Maharashtra Government pointed out that despite hard times, Maharashtra fared better than most other states in terms of major economic and social criteria. Dr. Ishaq Jamkhanwala warned against the destabilising effects of fiscal profligacy and called for restraints on unproductive expenditure at both, national as well as states levels. He also appealed to politicians to give due thought to this aspect. Dr. D.K. Bhatia former advisor to RBI dealt in detail with financial and monetary policies with emphasis on inflation targeting, bank supervision etc.

*Source: Economic Times, Sept. 1.*

## 2 lakh house holds in BPL list

Out of the 57,28,291 households in the state, 10.2 lakh have been identified as below the poverty line eligible to be assisted by various anti-poverty programmes of the Central Rural Development Ministry, as per the first-ever BPL census conducted in the State based on relative deprivation.

Unlike the previous BPL census which used income and expenditure for identifying the rural poor, the methodology used by the current census was score-based ranking of socio-economic indicators.

Similarly the 'exclusion criteria' has not been adopted in the current census as in the case of previous BPL censuses in 1992 and 1997 which excluded those above a particular income ceiling from the BPL population.

In the current census, the entire rural population has been graded on the basis of socio-economic indicators.

The census, jointly funded by the Central Government and the Asian Development Bank, was carried out by the State Rural Development Department.

The profile of the rural Kerala as presented in the census will be considered as the database for assessing area-specific and people-specific requirements and for planning in rural Kerala.

The Ministry would provide 'BPL Cards' to all the BPL households identified in this census which would form the basis for targeting beneficiaries under the welfare programmes of different Central Ministries.

The cut-off line was fixed as per the directive of the Central Government that the number of persons below the BPL must be in tune with the findings of the National Sample Survey Organisation (NSSO) survey on consumer expenditure conducted in 1999-2000. But, the State has the right to fix its own cut-off line for identifying beneficiaries for the State-sponsored poverty eradication programmes.

As per the present census, the rural households in the State will be categorised into 'very poor', 'poor', 'not-so-poor' and 'non-poor' on the basis of relative deprivation.

The 13 indicators used in the survey, as suggested by the Central Government, were 'size of operational holding of land', 'type of house', 'availability of clothing', 'food security', 'sanitation', 'ownership of consumer durable', 'literacy status', 'status of household labour force', 'means of livelihood', 'education status of children', 'nature of debt', 'reason for migration', and 'preference of Government assistance'.

In addition, the State Government has included some State specific indices like computer literacy, employment registration, infant mortality, school dropouts, debts, and membership in Government schemes like Kudumbasree.

The scores of each and every household in a village will be displayed at a prominent place in the village to ensure transparency and to reduce the possibility of errors.

The Kudumbasree has been entrusted with the digitisation of the data collected in the census. Once that is completed, the Planning Board will carry out the validation and updating of data collected.

Once the BPL list is approved by the State, no addition may be made in the list till the results of a subsequent BPL census are available.

*Source: The New Indian Express, January 11,2004.*

## Food expenditure on a decline: NSSO

The average monthly per capita consumption expenditure for urban and rural areas stood at Rs. 933 and Rs. 498 and the share of food expenditure was on the decline during 2001-02.

The National Sample Survey Organisation report 'Household consumer expenditure and employment-unemployment situation in India 2001-02', also found that the average expenditure was 87 percent higher in the urban areas as compared to rural areas.

Interestingly, the food expenditure in the monthly per capita consumption expenditure for the rural and urban population declined to 56 percent and 44 percent in 2001-02 as compared to 64 and 56 percent respectively in the year-ago period.

The report said 43 percent of the rural population were employed and 36 percent of the urbanites had jobs.

Of the Rs 498 average monthly per capita consumption expenditure in rural areas, as much as Rs 276 went for food and the remaining Rs 222 for the non-food.

For rural India, food expenditure included Rs 96 for cereals, Rs 93 for milk, milk products, vegetables and edible oils.

*Source: The Indian Express, Dec 18, 2003.*

## Economy has enough resilience to absorb oil price shock: Reddy

Reserve Bank of India Governor Y.V. Reddy dispelled doubts over Indian economy's preparedness to meet the oil price increase and said it had enough resilience to absorb the shock.

"The economy has enough resilience, the system has enough resilience. We have built mechanisms for absorbing such shocks, even though this is not much of a shock," Reddy told reporters after the RBI board meeting here on Thursday. He was answering to reporters queries on whether inflation is a concern and whether the RBI will change its outlook in the context of recent rise in petroleum prices.

He said in spite of the recent increase in petrol and diesel prices, there was no need to revisit the inflation issue.

"Our own record in the last few years shows that the economy has very successfully absorbed such oil price increases with virtually no disruption. We are still confident that we will be able to absorb that and as of now, considering the current outlook, there is no need to revisit inflation issue," Reddy said.

He said RBI's inflation projection as stated in the November 3 mid-term credit policy review remained unchanged. "Our inflation assumptions for the current year remains what has been announced on November 3. But we are keeping a close watch," he added.

State-owned oil companies had earlier this week increased the retail prices of petrol and diesel by about Re 1 per litre.

The increase is expected to exert an upward pressure on inflation, which has already been moving up sharply in recent weeks.

According to the latest available data, for the weekended November 29, the annual inflation based on Wholesale Price Index rose to 5.25 percent from 5.24 percent in the previous week.

Reddy's remarks had an immediate impact on the Government bond prices as they extended their gains.

*Source: The New Indian Express, Dec 19, 2003.*

## Vision Kerala – 2025
## A new development agenda

Every country needs a vision, which stirs the imagination and motivates all segments of society to greater effort for further development. It is an essential step in building a political consensus on a broad national development strategy that encompasses the roles and responsibilities of different sections in the economy, such as governments at various layers, private sector, people's organisations etc. The planning Commission Committee on Vision 2020 has already prepared a Vision Document for the country. States like Andhra Pradesh, Assam, Chattisgarh, and Jharkhand have also prepared such documents. By taking the spirit of the honorable President's concept Kerala State Planning Board has also initiated the preparation of a perspective plan for 2025.

Kerala's development experience poses an interesting riddle to economists world over and it is a stark reality that no other single state in any country received the rare privilege of being praised and quoted frequently in international development circles; the latest in the World Development Report 2003. However, since the late 1970s many scholars and activists within Kerala as well as outside have been sounding an alarm; that is the Kerala model moving towards a crisis. This raises the question of sustainability of the Kerala model to face the real situations in this dynamic world. Kerala was a forerunner in the development of physical and social infrastructure, and human development, but

was lagging behind in economic growth and employment. Kerala is unsuccessful in transforming the leverages attained under the social service sectors to the productive sector for the overall development.

Kerala could not transform its high social standards to the forces of production. Our development planning over the last five decades could not also make significant impact on such a transformation. While reviewing the development pattern of the State over the last couple of decades it could be seen that the major glut in the smooth and balanced development of the State economy was mainly lack of a perspective plan with a vision on the part of planners, policy makers, administrators, as well as politicians and academicians. Countries worldwide have taken strong initiatives in breaking their developmental bottlenecks with a long term perspective. Major attempt have not yet been made to remodel the State economy to cater the needs of the people at both the ends of the income ladder including the middle income class, under the globalised regime.

Our honorable President Dr. A.P.J. Abdul Kalam's concept of 'India Vision-2020' has already triggered a new discipline of development waves around nook and corner of the country. It is not too late for us to look into this matter by taking advantage of the already developed service sectors. The 'Kerala Vision 2025' is not only an intervention at the department and grass root levels but also a mission that thrives for overall development of the State economy by making positive changes in strategic areas.

**Forecasted Production Trends of Important Crops in Kerala**

| Crops | Production (in Tonnes) | |
|---|---|---|
| | 2001-02 | 2020-21 |
| Paddy | 703504 | 331619 |
| Coconut* | 5479 | 6587 |
| Arecanut* | 16687 | 18543 |
| Cashew | 65867 | 68620 |
| Pepper | 58240 | 151879 |
| Coffee | 66690 | 304685 |
| Tapioca | 2455880 | 1812391 |
| Rubber | 580350 | 954840 |
| Tea | 66090 | 60831 |

** - Production in million nuts*

**The Vision**

Our vision of Kerala's future should be both comprehensive and harmonious and it should encompass all the myriad aspects that constitute the life of Keralites. It must be based on an objective assessment of facts and a realistic appraisal of possibilities, yet it must raise beyond the limitations of past trends, immediate preoccupations and pressing challenges to perceive the emerging opportunities and concealed potentials. The ultimate goal of the 'Vision 2025' is to make the State economy a fully developed one by 2025 or if earlier. To achieve this, each rupee spared by the Government need to be monitored for the extent of actuation on both capital mobilisation as well as the socio-economic promotion. It requires a 'circulation tracing' of the various sectors and subsectors.

The basic feature of Kerala development model is an unbalanced development pattern, with advanced demographic/ social service sectors and underdeveloped production sectors. The ultimate mission of Kerala vision 2025 is to make all sectors and subsectors to a fully progressed one by 2025 to cater the needs and aspirations of the then society. Such a long-term perspective requires a well-planned development approach with rationally targeted goals and suitable strategies including contingency plans. One of the prime steps to be taken in the formulation of Vision 2025 is the setting up of need and capacity based targets for AD 2025. such long-term targets are to be divided into short periods. This kind of stratification helps in necessary mid term appraisals at regular intervals. While setting targets all development indicators are to be quantified with sub-sector break ups.

**SWOT Analysis**

The overall vision for 2025 is to be streamlined in such a manner that each and every sector should be given proper attention. Setting up of goals, targets and strategy in each sector is to be supplemented by contingency plans. The prime issue to be tackled in this endeavour is none other than proper utilisation of natural and human resources. Revision and modification of existing mode of operations through interventions and application of innovative and modern technologies are warranted in each and every line of departments. Rather than sectoral interventions major policy changes are to be ensured in following areas.

- Employment and poverty,
- Regional disparity and backwardness,
- Financing the perspective plan,
- Policy and programme implementation, and
- Technological changes.

Before embarking on a vision exercise it is important to assess the State's potential in terms of its inherent strengths and weaknesses. The SWOT analysis presented herein is not intended to be exhaustive. However, it is indicative of some of the primary issues that the State will need to content with, going forward.

## Major Targets

| Development parameters | India | | Kerala |
|---|---|---|---|
| | 2002 | 2020 | 2020 |
| Percentage of people below poverty line | 26.0 | 13.0 | 12.72 |
| Male adult literacy rate (%) | 68.0 | 96.0 | 94.2 |
| Female adult literacy rate (%) | 44.0 | 94.0 | 87.9 |
| Public expenditure on education (% of GNP) | 3.2 | 4.9 | 3.96 |
| Life expectancy at birth (Years) | 64.0 | 69.0 | 72.0 |
| Infant mortality rate (per 1000 live births) | 71.0 | 22.5 | 16 |
| Public expenditure on health (% of GNP) | 0.8 | 3.4 | 0.85 |
| Telephones (per 1000 population) | 34.0 | 203.0 | 85.0 |
| Sectoral compositions GDP (%) | | | |
| a) Agriculture | 28.0 | 6.0 | 24.5 |
| b) Industry | 26.0 | 34.0 | 22.0 |
| c) Services | 46.0 | 60.0 | 53.5 |

**Strength**

- Bio-wealth (Micro organisms to the plant and animal kingdom).

  The Westen Ghats is one of the 25 ecological hot spots of the World, just 8 degrees away from the equator, the forest of Kerala are known for their rich bio-diversity and endemism of many species. The 'biomass wealth of Kerala includes locational specific resources such as flora and fauna, nutrient rich soil. Rainfall (3000 mm) and water resources round the year bright sunlight, hills, ocean, and beaches etc. Protection, production, processing, and marketing of the bio wealth in the form of agro-related activities is one of the potential strengths of the State. Bio wealth to Kerala is just like petroleum reserves to Gulf countries. Hypothetical zero intervention by mankind in this fertile land will make it full of bio-reserves including plants and animals within couple of years.
- The infrastructure strength included a number of airports, harbours, better transportation and communication networks etc. Road transportation networks in Kerala is one of the best in the country. At the same time Kerala is a forerunner in the information communication technology.
- Human resources
- Kerala is well known for its knowledge society (high levels of literacy) and other demographic/ health gains. Skilled manpower and general English education of the work force make the human resources internationally competitive.
- Non Resident Indian Population

The NRIs (numbering 13.86 lakhs) constitute around 4.4 percent of the Kerala population and the people working abroad amounts to 10 percent of workforce of Kerala. At the same time NRI remittances constituted 22 percent of the State Income and 179 percent of value added in manufacturing.

**Weakness**

- One of the serious locational disadvantages of Kerala is its poorly endowed natural energy resources such as petroleum, coal etc.
- Lack of fine tuning over the years make the system and in particular the governance of low quality that is reflected through the service delivery.
- Low productivity of the production sector affects their sustenance.
- The quality of education system existing in the State is not of competitive in international standards.

**Opportunity**

- One of the strengths as well as the opportunities is in the information communication technology.
- Telemedicine has to play an important role in Kerala.
- As discussed earlier infrastructure strength including transportation and communication networks including IT has immense opportunities in making Kerala development destination.
- One of the traditional strength of Kerala in the health sector is Ayurveda, which has to play pivotal role in the new era.
- The God's own country's natural beauty as could be seen in the eastern mountains, western beaches and the backwaters along with rich bio-wealth and cultural heritage make Kerala a place of immense potentiality in the tourism sector.
- Kerala is an investor friendly economy.
- Biotechnology and organic farming.
- Modernisation of traditional industries and handicrafts.

**Threats**

- Increasing numbers of population (even though the growth rate is falling) and its pressure on scarce land resources will impede development initiatives to a grater extent. At the same time demographic transitions in the form of aging population and the resultant pressure on working population will create a development dilemma.
- Major crops produced in the State, which are facing international competition included spices and plantation crops and in particular from Indonesia, Malaysia, Thailand, Philippines, Sri Lanka, Brazil, and Guatemala.
- Declining opportunities for migration in the Middle East will affect the State's labour class and also the foreign remittances.
- Environmental problems including deforestation, destruction of wetland ecosystems and water bodies, and pollution will affect the sustainability of development efforts.
- Consumer market.

While framing a vision document for 25 years the 'Business as Usual Approach (BAU) is not the main strategy but has been the 'Best Case Scenario' (BCS) approach. For which the efficiency of service sectors and the productivity of production sectors are to be at least doubled.

*Source: Kerala Calling, 2003.*

## The first scientific census of Travancore

The first census in the State of Travancore was taken in 1875 followed by another in 1881. Even though five censuses were taken, the first census, which was synchronous through out the State as regards to both time and date, was the census of 1921, which was the sixth of its kind in the state.

During the last five censuses the population count was taken at three different times.

1. Travelers at one time.
2. People at houses and rest houses at another time.
3. People at hospitals, jails etc. at another time.

This was pointed out as a major defect of the censuses. So with the sanction of the Census Commissioner for India the time for the population

count in the sixth census was made between 7 a.m and 9 a.m in the morning of March 18, 1921. So we can say that this was the first census which started on the same date and time through out the state and coincided with the rest of the country.

Regarding the censuses of 1921 there are so many points that have to be mentioned to consider it superior and systematic to the other five censuses.

In the previous censuses only 19 municipal towns were enumerated. But in 1921, 19 other places declared as towns under Police Regulation were also taken into account separately.

In the last two censuses the *Kara* or the "Residential Village" was taken as the unit for census operations both in rural areas and towns. But each *Kara* boundaries were not properly defined or surveyed. Also the local villagers knowledge of their "Kara" boundaries was found to be conflicting because of variations observed in the number of *Karas* from census to census. But for want of a better unit this process had been continued till the divisions of the *Karas* into smaller areas was accomplished in the next settlement. In municipal towns the *Kara* was the unit for census operations in the early five censuses.

But in 1921 well-defined 'wards' into which the towns have been divided for administrative purposes were taken as units. Unlike the previous censuses, the presidents of the municipal councils were appointed as charge superintendents in the 1921 census.

Two agencies were employed for house numbering namely the Village Revenue Officers for rural areas and Municipal and conservancy staff for towns. The abstracts from house lists that were forwarded to the charge superintendents were reviewed and necessary corrections incorporated. In the previous censuses house lists were prepared for each unit and from these block lists were prepared to be attached to enumeration books. But in the 1921 census block lists were prepared in the first place to be attached to the enumeration book.

It is necessary for a state to know the number of persons emigrate to other parts of India and abroad. Since it is not possible to get details of such emigrants from countries not under British sovereignty additional columns were opened in the enumeration schedule of the state to note the name, age, sex and destination of persons who have left the state service since the last census.

Under the existing rules. the superintendent of each province had to send to the superintendent of other provinces particulars of persons who were born in those provinces and enumerated in his own instructions were given to note the enumeration of Hindus so as to know the persons who returned were a Malayali or non-Malayali so that separate statistics can be collected for both. The study of the demographical peculiarities of the tribes was still more fascinating due to the effect of the 'Nair Regulation', and of the advancement of female education, which brought thorough change in their civil conditions, birth and death rates etc. The mother-tongue was taken as the guide for classifying. Hindus as Malayalis and non-Malayalis. But this has some difficulties and the number enumerated was not absolutely correct due to the *Marumakkathayam* that prevailed among some non-Malayalis. Even though there were such problems, the difference noticed between the Malayalis and non-Malayalis in various respects justified the division.

Unlike the earlier periods where the census of railway travelers and employees were taken by the railway authorities, special arrangements were made to take their census by state agency itself.

It was in the census of 1921 that schoolteachers were tried as enumerators and supervisors for the first time. Due to the spread of education, large number of schoolteachers who were more qualified than the village officers was available as enumerators. The number of enumerators was 9147 and each had 438 persons to be enumerated as against 1600 in USA and 1030 in England in the 1910 and 1911 respectively. The time allotted was two weeks for towns and one week for small towns, which was much lesser when compared to that of the United States. The charge superintendents opined that the work done and the figures collected by the schoolteachers were more perfect and accurate than the 1911 census. The test schedules prepared by the enumerators, after scrutiny by the supervisors according to the instructions of the charge superintendents were sent to the central office for review. The reviews were returned to the charge superintendents for information and guidance. They were also instructed to give the abstract of the results of the preliminary enumeration with gender wise figures. They were again reviewed and if there are any abnormal variations it is pointed out for local

verification and modification. Special clerks were appointed under the superintendents for checking and correcting the mistakes before they were issued for final counting.

In earlier census, it was Division Peshkars, who were equivalent of the Collectors of British India, who had the power to appoint enumerators. In 1911, since they had to appoint a large number of enumerators, even a few days before the final census the appointments were not over. So in 1921 the charge superintendents were given the power to do so and before the final census the statements regarding the appointment had to be submitted. The number of enumerators was 31724 of which the government employees were the majority. The superintendents in this census had the general opinion that their work was made much easier and the instructions were complete and they were given well in advance.

The instructions given to the people not to leave their houses during census time were obeyed by the public at large and the general attitude of them to the census was favourable. But, due to political, social and economic unrest that took place all over India, especially the agitation for communal representation in public bodies in Southern India forced the members of certain castes caused some problems. This was seen not only among the public but also among the enumerators and copyists in the tabulation office.

The charge superintendents who had to telegraph one week before the final census about the completion of arrangements did it accordingly. After the final census the provisional totals were received promptly from the superintendents. The Census Commissioner for India was able to receive the results of the census within fifteen hours of the taking of the census. Even though totals were communicated within the shortest time it did not affect the accuracy because the difference between the provisional final totals was only 96 which was the lowest figure ever observed in this state.

Earlier the slip copying was done at the headquarters of taluks under Tahsildars who were the charge superintendents. But in 1921 it was conducted at the central office. The advantage of having control under the direct supervision of Census Commissioner for India was possible only in the central office. There were a large number of educated persons to get the work done. But the system of having the work done in a central office also had its drawback.

When a large number of people, especially youths with democratic views and who were unaware of official discipline were brought together concerted action on their part became possible.

However when we trace back history and chronologically calculate the different censuses that had been conducted in our state till 1921 we can without any doubt and hesitation regard the census of 1921 as the first authentic one.

Source: Kerala Calling, 2003.

## MONITORING & EVALUATION OF DEVELOPMENT PROGRAMMES

**(P.C.Jain, Additional Director)**

### *1. Introduction:*

Monitoring & Evaluation (M&E) is relatively a newcomer in the development scenario. Although "Monitoring" is as old as the concept of management, "Evaluation" had its origin only in the early fifties. Now a day M&E has been accepted as an effective tool for objective- oriented management of development programmes. Three factors contributed to the emergence of M&E as a relevant and useful concept in development management. In order to ensure that the benefit of development reach the poor there was a need to reorient conventional developmental strategies to go beyond the "growth" criteria and to focus simultaneously on a set of socio-political objectives such as productive employment, quality of life, beneficiary participation, environmental protection etc. Thus M&E have been developed as a measuring tool and as an aid in "learning process" of development programmes which contained the above revised objectives. The second factor accounting for growing interest in M&E had been the need for a tool that would enable development planners to and decision makers to draw lessons for better formulation and implementation of development programmes in future. The third factor supporting the concept of M&E had been the need for ensuring optimum use of limited resources and also the emphasis on the quality of development efforts.

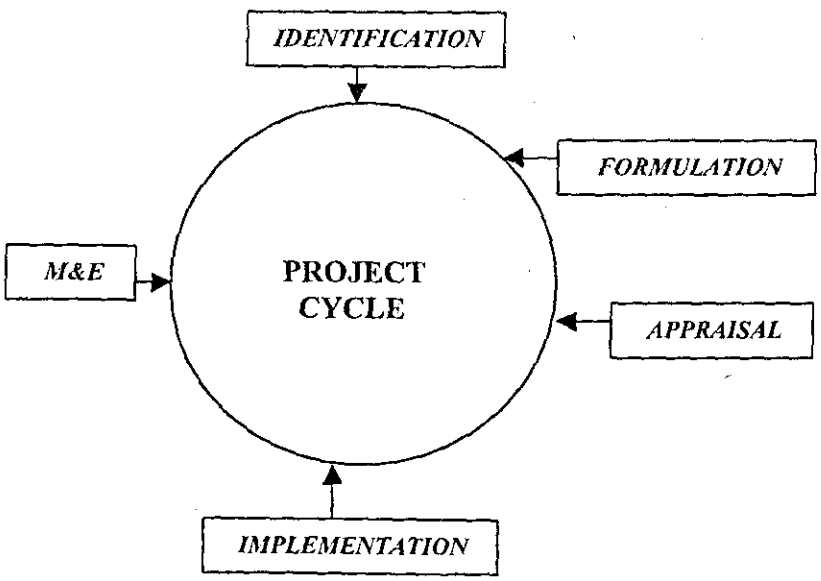
*2. The concept:*

The UN defined monitoring as "periodic measurement of programme inputs activities and outputs during programme implementation. According to World Bank monitoring is an internal activity gathering information essential for management decisions. The ILO describes monitoring as an activity to ensure that input deliveries, work schedule, targeted output proceed according to plan. In effect monitoring is a continuous or periodic review of implementation of activities, its components, inputs, outputs, time schedule, milestones achieved. The purpose of monitoring is to achieve efficient and effective project performance by enabling project management at all levels to keep them informed about the progress, shortfalls, constraints, etc in implementation of each project component. Thus project is a part of management information system and an internal activity. Monitoring is to be performed by the managers, supervisors and functionaries at management hierarchy. Monitoring includes measuring, recording, collecting ,processing and communicating information for management decision making.

Evaluation is a process which attempts to determine as systematically and objectively as possible the relevance, effectiveness and impact of activities in the light of the objectives. It is learning and action oriented management tool and an organization process for improving ongoing programmes, future planning, programming and decision making. Evaluation is carried out during project implementation (concurrent evaluation) , immediately after completion (terminal evaluation) and after several years after completion (expost evaluation). "Concurrent evaluation" is continuous analysis of implementation of the outputs, effects and impacts of a project. The distinction between " terminal" and "expost" evaluation is only in timing. It is done to assess the achievement of overall results of the project in terms of hierarchy of its objectives and learn lessons for future planning. Evaluation is a learning process.

*3. The project cycle:.*

Thus M&E developed as an important link in the project cycle. The project cycle covers the process from an initial project idea to its preparation, implementation, and evaluation. The process is considered as cycle because one stage normally leads to the other. The project cycle is given below. The five broad stages in a project cycle are identification, formulation, appraisal, implementation and M&E.



The objective of *'identification'* is to identify the specific project idea, locate the priority area and to define broadly the need, scope geographical coverage, components, resources and agency of implementation. The identification process consists of finding out the best alternatives for achieving the specific objectives and making the same a formal proposal. The proposals generated under the formulation stage would also examine aspects like priority, technical feasibility, economic viability etc. Identification of issues and problems related to management, finance, institutional aspects etc may also be taken care of at the identification stage.

The objective of *'formulation'* stage is to elaborate further complement and confirm the proposals made during the stage of identification. Full description of the proposed work and measures will be done to rove the technical and financial feasibility. Comprehensive proposals for organisation and management and an economic analysis would be done at this stage. The formulation stage establishes the project concept and scope with more definiteness. The feasibility study done at the formulation stage would specify the technical and policy issues to be resolved by the funding and implementing agencies.

*Appraisal* is a systematic review of formulations to be carried out by the team of financing agency or government to provide an independent judgement of the advisability of financing the project. Appraisal involves review of feasibility study and comments by associating departments and agencies. This process includes field appraisal, appraisal reports, and negotiation and loan agreements.

The *implementation* stage represents the culmination point of the whole process of identification, formulation and appraisal. During implementation the actual works would be executed and the investment made. The result of implementation would be the physical achievements and utilization of the resources or fund.

*Monitoring & Evaluation* (M&E) provides feed back to the implementation process. M&E is an equally important point in the project cycle. The policy makers who had identified the issues, developed programmes to tackle the same gets the feed back as to what had happened in the field while implementing the project by the implementing agency.

***Key M&E terms:***

A lot of terms are used in the literature on monitoring and evaluation. A *programme* is an organized set of activities, which is oriented to the attainment of specific objectives. (Eg.. Poverty Alleviation Programme of GOI) A *project* is an undertaking which is designed to achieve certain specific objectives within a given period of time.(Eg. IRDP, JGSY etc) Projects are part of a programme. A *process* is an organizational operation of a continuous and supporting nature. *Inputs* are a set of resources like goods, funds, services, manpower, technology etc. The results of a project are classified as outputs effects and impacts. *Outputs* are the outcome of activities like physical outcome, services provided etc. Effects are the outcome of the use of the project outputs. Project effects usually start emerging during the implementation period but becomes full only after the completion of the project. *Impact* is the out It is the outcome of project effects. It is an expression of the changes actually produced.

5. ***Monitoring process:***

Monitoring is a process of control and direction to achieve efficiency in implementing project activities. Monitoring can be considered to be based on three major components; information generation system, information processing and communicating system and decision making and follow up action. Information generated or collected should be authentic, adequate and timely. Monitoring id fully based on information collection, compilation, processing and communication. The three basic question of an information generation system is that what information is needed?, who will collect the information? And in what form?. The information needed generally are target activities, Inputs provided, actual progress and the factors influencing progress. Monitoring process is based on three major components namely Information Generating System (IGS), Information Processing and Communication System (IPCS) and Decision-Making and Follow-up Action (DMFA).

Modern management system works on an information system based on adequate, authentic and timely information. Monitoring also based on a regulated system of information collection, compilation, processing and communication. Hence monitoring has been described as an information gathering system even. Information on targeted

activities, inputs provided, progresses of activities, the factors influencing causing delay in implementation etc are the general information required in monitoring. The periodicity of review may vary from day to day observations to week or months depending on the size, coverage, nature and total time span of the programmes. . The information generating system would be more effective if an appropriate field management system is evolved with required field staff, supervisors and a system of maintaining up-to-date records.

The data collected will have to be interpreted to get meaningful information. Information on physical implementation, its timely progress, effective utilisation of inputs, deviations from project priorities and time frame, field problems etc have to be processed from the data collected. The information thus processed should be communicated on time to the decision-making units. Monitoring information can be communicated to various levels in the programme hierarchy according to the urgency of corrective intervention.

The decisions for corrective action are taken on the basis of monitoring information. Like up ward communication-monitoring process also envisages communication of executive decisions to the field for on the spot corrections.

The monitoring process could be of two types- extensive monitoring and intensive monitoring. Extensive monitoring (Telescopic Monitoring) will have to be made use in projects with large area of coverage. This type of monitoring is usually done at higher levels for deciding the operational strategy of projects. Extensive monitoring concentrates on target achievements and resource utilization under different components of the project. Intensive monitoring (microscopic monitoring) is applied to projects in which day to day record of physical implementation of inter-related activities are monitored. Executives directly involved in field implementation do microscopic monitoring. It follows a close-loop system of self-regulatory flow of information on a day to day basis.

***M&E indicators:***

Indicators are specific objectively verifiable measures of changes or results expressed from an activity. In other words indicators are designed to provide a standard against which to measure, assess, show the progress of an action towards delivery of inputs, production of outputs, and achieving its objectives. Indicators may be direct or indirect. Ideally indicators should be valid, reliable, sensitive and specific. Indicators are only reflections of the real situation and a partial measure of a complex situation. Indicators are also viewed as markers of progress towards reaching intermediate or ultimate goals.

Monitoring indicators are generally three types; input indicators, operational indicators and efficiency indicators. Evaluation indicators are two types; impact indicators and indicators of external conditions. Major elements of input indicators are the staff, equipment, credit facilities and the institutional arrangements. The operational indicators include aspects like measure of execution, timeliness, quality and cost. Performance indicators compare activity results with targets. Efficiency indicators relate inputs and outputs. Impact indicators include immediate impact, direct impact and indirect impact. Indicators of external conditions include prices, market conditions, input availability and climate.

***The impact indicators:***

Monitoring process has to measure the impact of development investment upon economies and societies with which we deal. We have to make a distinction between the direct impact and indirect impact of a programme. The direct impact of a programme is its effect up on the people and places it is aimed at in terms of its objectives. The indirect impact is a wider effect upon the local economy and society. Measurement of direct impact involves the question of specificity of objectives, specificity of target groups, identification of potential indicators or proxy indicators. Indirect impacts often appear as unforeseen problems or as unexpected bonus after implementation. The economic effect of a programme may be the changes in the level of employment, income, investment, or prices. The social effects of a programme are long term and difficult to reverse. Large changes in distribution of benefits can lead to changes in the relative position of different social groups within society, reinforcement of existing positions, protests or resentments. The health impact of a programme is another important aspect of any programme. Poverty is a great facilitator of illness and illness can reduce people to poverty. So the link between wealth and health may be an important impact indicator to be studied by the

monitoring agency. Environment impact is another aspect of interest for monitoring agency. The impact of the programme on soil, water, natural vegetation, ecological system etc must be taken care of in the monitoring process.

***Evaluation:***

Evaluation is a systematic appraisal of the worth or value of some programme with a purpose of assessing the performance of a programme in terms of the total objectives. Evaluation is usually postmortem of performance unlike appraisal, which is concurrent. Evaluation involves the following major steps.

1. Detailed description of the project
2. Measurable objectives
3. Criteria for judging achievements
4. Indices for measuring the degree of success
5. A system for collection of primary and secondary data
6. A system for information processing and communication to policy making points.

The following criteria could be followed in the evaluation process;

1. Effort
2. Performance
3. Adequacy
4. Efficiency
5. Process

The "effort" aspect focuses on the quantity and quality of programme inputs including information on clients, organizational support, resources, programmatic sanctions etc. Capacity for efforts is a key feature of the level of effort criteria. The level of "performance" reflects on programmatic outputs. It is the measurement of the consequences of efforts. Performance evaluation requires clarity on immediate goals and the service delivery. "Adequacy" focuses on the relationship of programme effort and performance to the larger environment. It can be conceptualized as the rate of programme effectiveness multiplied times the number of persons in need of this programme. "Efficiency" refers to the relationship among efforts, performance and adequacy and is measured by examining strategies for minimizing efforts while maximizing programme performance and adequacy. In effect it represents the ratio between effort and performance or output divided by inputs. The "process" level focuses on mechanisms by which effort is translated into outcome. The process can be viewed as the study of the means whereby a programme produces its results.

***The distinctions:***

Terminology likes "Progress Reporting and Evaluation are distinguished with the concept of monitoring in table 1 & 2 below.

**Table-1 Progress Reporting & Monitoring**

| Progress Reporting | Monitoring |
|---|---|
| Adhoc | Continuous |
| For Small Projects | For Big Projects |
| Comprehensive | Selective |
| Reporting function | Ask Why? How? |
| For Administrator | For Manager |
| Primary level | Multiple level |
| Passive | Regulatory |

**Table-2 Monitoring & Evaluation**

| Monitoring | Evaluation |
|---|---|
| Continuous | At a point of time |
| Immediate use | Future planning |
| Implementing agency | Outside agency |
| Quick | In-depth |
| Full Coverage | Sample Coverage |
| Corrective | Learning Process |
| Symptomatic | Diagnostic |
| In-Programme | After-Programme |

## Grading for SSLC Examination

| | | |
|---|---|---|
| A+ grade | | 90 to 100 percent |
| A grade | - | 80 to 89 percent |
| B+ grade | - | 70 to 79 percent |
| B grade | - | 60 to 69 percent |
| C+ grade | - | 500 to 59 percent |
| C grade | - | 40 to 49 percent |
| D+ grade | - | 30 to 39 percent |
| D grade | - | 20 to 29 percent |
| E grade | - | Less than 20 percent |

Those above D+ will be eligible for higher studies.

## Top brands advertising on TV

| October Brands | Spends (Rs Cr) | November Brands | Spends (Rs Cr) |
|---|---|---|---|
| Airtel Cellular Phone Service | 8.6 | Pepsodent Germi Check | 8.0 |
| Colgate Dental Cream | 8.1 | Reid & Taylor | 7.7 |
| Brooke Bond Red Label | 6.9 | Nirma | 7.6 |
| Coca Cola | 6.9 | Colgate Dental Cream | 7.2 |
| Tide | 5.8 | Surf Excel | 5.5 |
| Pepsodent Germi Check | 5.7 | Krack Sr Cream | 5.3 |
| LG Flatron | 5.6 | Tata Indicom CDMA Mobile Service | 5.1 |
| Reliance India Mobile | 5.5 | Coca Cola | 5.0 |
| Pepsi | 5.3 | Fair & Lovely Savly | 5.0 |
| Samsung Plano | 5.0 | VIP Luggage | 5.0 |
| Others | 64.61 | Others | 55.41 |

*Source: Economic Times, Dec 22.*

## Summary of Export of Coir Products (October - 2003)

Quantity in Tonnes — Value in Rs. Million

| Sl No | Name of Items | October 2003 | | October 2002 | |
|---|---|---|---|---|---|
| | | Quantity | Value | Quantity | Value |
| 1 | Coir Fibre | 55.00 | 0.731 | 97.04 | 1.122 |
| 2 | Coir Yarn | 1180.14 | 33.532 | 1377.47 | 37.444 |
| 3 | Handloom Mat | 2981.44 | 179.274 | 2439.41 | 144.599 |
| 4 | Powerloom Mat | 135.53 | 8.985 | 302.44 | 18.314 |
| 5 | Tufted Mat | 1397.18 | 73.740 | 446.66 | 24.128 |
| 6 | Handloom Matting | 251.84 | 15.858 | 343.12 | 20.816 |
| 7 | Powerloom Matting | 47.22 | 2.992 | 15.14 | 0.897 |
| 8 | Geo Textile | 308.23 | 13.621 | 289.23 | 13.085 |
| 9 | Coir Rugs & Carpet | 119.42 | 9.485 | 129.17 | 9.117 |
| 10 | Coir Rope | 64.24 | 2.129 | 78.57 | 2.537 |
| 11 | Curled Coir | 0.00 | 0.000 | 38.00 | 0.673 |
| 12 | Rubberised Coir | 27.90 | 1.409 | 77.06 | 5.860 |
| 13 | Coir Pith | 2324.98 | 17.266 | 1706.64 | 12.471 |
| 14 | Coir Other Sorts | 9.95 | 0.584 | 1.50 | 0.072 |
| | **Total** | **8903.07** | **359.606** | **7341.45** | **291.135** |

## Summary of Export of Coir Products

Quantity in Tonnes — Value in Rs. Million

| Sl No | Name of Items | April - October 2003 | | April - October 2003 | |
|---|---|---|---|---|---|
| | | Quantity | Value | Quantity | Value |
| 1 | Coir Fibre | 586.15 | 6.861 | 623.89 | 6.424 |
| 2 | Coir Yarn | 7319.20 | 198.573 | 6055.23 | 158.142 |
| 3 | Handloom Mat | 19837.20 | 1189.766 | 19093.17 | 1207.879 |
| 4 | Powerloom Mat | 475.48 | 32.324 | 892.16 | 53.512 |
| 5 | Tufted Mat | 6867.84 | 373.562 | 3371.52 | 178.781 |
| 6 | Handloom Matting | 2665.37 | 167.297 | 2882.57 | 195.137 |
| 7 | Powerloom Matting | 147.11 | 9.236 | 109.81 | 7.024 |
| 8 | Geo Textile | 1566.32 | 71.350 | 1158.50 | 56.451 |
| 9 | Coir Rugs & Carpet | 755.75 | 52.093 | 999.73 | 68.437 |
| 10 | Coir Rope | 99.08 | 2.903 | 145.25 | 4.096 |
| 11 | Curled Coir | 0.00 | 0.000 | 355.87 | 5.909 |
| 12 | Rubberised Coir | 271.66 | 19.879 | 280.25 | 21.966 |
| 13 | Coir Pith | 15729.83 | 108.801 | 12980.20 | 97.940 |
| 14 | Coir Other Sorts | 278.15 | 10.077 | 296.41 | 10.957 |
| | **Total** | **56599.14** | **2242.722** | **49244.56** | **2072.655** |

*Source: Coir News, December 2003.*

# Statistical Thinking

*[Report on talks given by C.R. Rao in TVM]*

*By M.A. Ravindran, Price Supervisory Officer, Palakkad.*

## Part I

The report of the International Conference held in Kochi on 'Statistics and Business', dispatched earlier, had been concluded with a quotation from C.R. Rao's book.

### Dr. C. R. Rao – The Greatest Statistical Thinker

Dr. Calyampudy Radhakrishna Rao, 83, of Karnataka, is the most eminent statistician living today and he is the greatest statistical thinker of the present day world. He earned his PhD and ScD at Cambridge, U.K. In an informal chat in the faculty of statistics of the Kerala University on 20 Feb 2003, the energetic, exuberant and sharp-witted octogenarian told us the story of his getting his first doctorate. [The most uncanny feature of his charming characteristics is the way he regards even a Price Supervisory Officer as his equal]. When 2000-year old skeletons were excavated in North Africa, the European anthropologists sought the help of Indian Statisticians in studying their relevance to the present population. J.C. Trevor, a Cambridge anthropologist, personally invited Prof. P.C. Mahalanobis to conduct the study. He in turn sent his pupil C.R. Rao, already a master of multivariate analysis, together with R.K. Mookherji to investigate the skeletons and make the study. It was in the year 1946. [Rao was born on 10 Sep. 1920]. When Rao finished his report it took a nature of a doctoral thesis and Cambridge University conferred on him a doctorate for it. Mookherji also got a doctorate. Their thesis were later on expanded and the Cambridge book, 'Ancient Inhabitants of Jobel Moya', jointly by Rao, Mookherji and Trevor came out in 1955. This happens to be Rao's first book. Since then, universities of 16 countries have conferred on him honorary doctorates which number to 28. now he has a total no. of 14 books and about 350 research papers to his credit. His contribution to the science of statistics is epochal. He has originated four theorems:

1. Rao-Blachwell Theorem, 2. Fischer-Rao Theorem, 3. Rao-Rubin Theorem and 4. Kagan-Linnik-Rao Theorem.

Besides, he has propounded 22 statistical theories and they are also known in his name:

1. Cramer-Rao Bound, 2. Rao-Blackwellization, 3. Fischer-Rao Metric, 4. Rao Distance, 5. Rao's Score Test, 6. Neyman-Rao Test, 7. Rao's Least Squares, 8. Rao's U-Test, 9. Rao's F-Test, 10. Rao's Paradox in multivariate Analysis, 11. Rao's Paradox in Sample Surveys, 12. Rao's Damage Model, 13. Rao's Second Order Efficiency, 14. Hamming-Rao Bound, 15. Rao-Guttman Relationships, 16. Rao's Canonical Factors, 17. Rao-Yanoi g-Inverse, 18. Khatri-Rao Product, 19. Rao Inequality, 20. Khatri-Rao Inequality, 21. Rao's Quadratic Entropy, and 22. Rao's Axioms of Entropy.

He has held several important positions. From 1949 to 1963 he was Head of the Research & Training School of Indian Statistical Institute. Then he became its Director. After retirement he became President of the International Statistical Institute and National Professor in India. The Government of India had earlier honored Dr. Rao with the title of Padma Vibhushan, 'for his outstanding contributions to Science and Engineering.'

Of late, the President of United States ceremoniously awarded him the National Medal of Science. This was performed on 12 July 2002. the President's citation read: 'for his pioneering contributions to the foundations of statistical theory and multivariate statistical methodology and their applications leading to the enriching of physical, biological, mathematical, economic and engineering sciences'..

At present he is Emeritus Eberly Professor of Statistics and Director of Center for Multivariate Analysis, Pennsylvania State University, USA.

Dr. Rao came to the capital of Kerala twice recently. He was in Trivandrum on 23 & 24 Dec 2002 and 19 & 20 Feb 2003.

On the Christmas Eve of 2002 Dr. Rao talked on ' Statistics in the Twenty-first Century' and on 19 Feb 2003 his topic was ' Statistics and Creation of New Knowledge'. Both the discourses were given in the Senate Chamber.

But Dr. Rao's expositions, though very brilliant, are not readily understandable because of the abstruse character of his topics. A pre-taste of the historical and philosophical aspects of the science of statistics is, therefore, necessary, if one is really to profit from his ideas. We, especially well equipped as statisticians, can read out, this reporter may warn, a challenge issued to Keralites in there lectures.

The following is a feeble attempt to present his ideas clothed in everyday language.

**Creation of New Knowledge**

Chance is inherent in all natural phenomena. What is chance? It is like the drawing of a number in lottery. From the time of Aristotle, philosophers were aware of the role of chance in human life. They knew that the Universe worked in mathematical precision. But that was from the viewpoint of the controller of the Universe. Human existence and natural laws are not based on mathematical precision. To us humans, the natural phenomena are replete with what they, the philosophers, call chance. For, the possibilities of human intellect are limited. We are not capable of knowing what will happen the next hour. We are not certain whether we will be living or dead tomorrow. Human intellect is also handicapped with what they call the malady of forgetfulness. We can't remember what we ate for breakfast, say, last Sunday. [Of course, unless we keep an exact diary of what we ate and when]. Quite uncertain about the past and future, we float blissfully in the present. Like our intellect. our perception also works in a limited circle. We can see only seven colours (from red to violet) and their combinations. The umpteen ultra-violet and infrared rays are beyond our perception. So also with sound. Thus, we live in a relative world of crass uncertainty, giving up ourselves to the mercy of chance.

> *[The next day (ie. On 20 Feb 2003), alluding to this point of his, I queried:*
> *"Yet, Sir, human life thrives on earth. How?" And pat came the reply:*
> *"With the power of forecasting". His words reverberated in my brain like a thunderbolt. Utterly flabbergasted, I sank into the chair].*

Yes, we are constantly forecasting under the medley of uncertainties, relying on order in disorder. We take decisions with a set of assumptions. We assume, for example, that the world will be existing like this and we will be living in it tomorrow. The philosophers did not make a study of uncertainty and chance. Uncertainty was baffling to the scientists also. It was only in the 20th century that a couple of bold thinkers started exploring the intricacies of uncertainty – and they were statisticians. They found that the cause of uncertainty was fivefold:

**1.** Lack of information, **2.** Lack of correctness in information. **3.** Lack of knowledge (in handling available information). **4.** Catastrophes (of natural phenomena), **5.** vagaries (of human behavior)

They realised that the quantification of, or specifying the amount of, uncertainty could be of help in finding order in disorder. They succeeded in specifying the amount of uncertainty in a meaningful way with the help of calculus of probability. History says calculus of probability originated in games of chance. In Europe, they recorded the results of a month's roulette playing at Monte Carlo and studied them as a set of quantified uncertainties. This study resulted in their arriving at some techniques for solving complicated numerical problems. These are known as simulation or Monte Carlo techniques. In 1927 LHC Tippet realised, after Karl Pearson's biometric tables, that random numbers were essential for investigations and so he produced a set of 41,600 numbers. This was a small 26-page book. The book of random numbers is the

*20th century's invention for investigating chance and solving problems of the real world.*

Thus they were able to quantify uncertainty and this paved the way for devising methods to reduce and control uncertainty. As they succeeded in the quantification of uncertainty, they realised that chance deals with order in disorder. And what is order in disorder? Here's an example. The male and female children in each family are born in different ratios. In one family it may be 1 to 5 and in another 4 to 2. *This is disorder. But quantify the no. of male and female children in a* wide area, e.g. a village, and take the ratio. It is always 50 to 50. Male and female population of the world is always fifty-fifty. This is order-order in disorder. In India, Prof. P.C. Mahalanobis exploited the Monte Carlo technique and the random technique and evolved Random Sampling Experiments. He taught the world that simulation using random numbers enables us to solve complicated problems such as computing complicated integrals, calculating areas of complex figures and, what's more, estimation of unknown parameters. With this, the scope of random numbers and the concept of chance became unlimited. Now chance is no longer to be worried about. It is a way to present our knowledge. For, quantification of uncertainty means the expression and conveying our knowledge. It doesn't stop there. Quantification helps us to take uncertainty itself into account, which process leads to making decisions. So, quantification of uncertainty is now a full-fledged discipline. It enables bold excursions into the secrets of Nature, because natural laws are probabilistic. The old saying, 'Lies, dammed lies and statistics' is gone now. People criticised descriptive statistics with there words. But now the growth of analytical statistics has reversed the saying as 'Truth, exact truth and statistics!' By the second half of the 20th century all methods of acquiring knowledge became essentially statistical. Nobody can deny the fact that statistical science has now opened up new ways of acquiring knowledge, of understanding nature and of taking optimal decisions in or lives. All scientists and all philosophers agree with it. Dr. Rao says, statistical thinking is an important ingredient of creativity. For, in its large repertoire of techniques are included those of data analysis and reasoning. In addition to the traditional Descriptive Data Analysis (DDA) and Inferential Data Analysis (IDA), now Extraordinary Data Analysis (EDA) inaugurated by Turkey in 1968 is in wide use. Of course, the analysis of colossal data is a laborious task. But, with the advent of Data Mining it has become comparatively easy. In statistics, as in logic, there are two kinds of reasoning: Deductive reasoning and Inductive reasoning. Mathematics is deductive logic and statistics is mostly inductive logic. The words 'deduction' and 'induction' are very abstruse terms. They cannot be defined easily. But they can be explained by analogy: King and Beggar are equals. Can it ever be so? It can be, if all the kingliness of King and all the beggarliness of Beggar are deducted. They are human beings. This kind of logic is called deductive reasoning. [Not deducted or deductible reasoning, of course].

*If 2 + 2 = 5, then 5 is 4*
*Substract 3. 5 – 3 = 2.*
*Then 2 is 1. King and Beggar are 2.*
*Therefore they are one.*

Now, what's inductive reasoning? King met beggar on street. Beggar bore a striking resemblance to King. So King asked him, "Hey, was your mother employed in the palace?" And Beggar answered, "No, but my father was". This answer of Beggar flashes a new knowledge to us, doesn't it? We get the new knowledge, that wonderful knowledge, by a special process taking place in the brain and that special thought process is what the logicians call inductive reasoning. And this is the basis of statistical thinking.

*[Dr. Rao has said that forecasting is a natural endowment of human intellect, and it is on its strength that human life thrives on earth. Now he says inductive reasoning is an endowment of human brain. If so, all statistical processes starting from collection of data (we collect data through our*

*senses) and advancing through quantification of uncertainties, forecasting, finding order in disorder, random sampling, multivariate methodology, DDA, IDA, EDA, Data Mining, deductive reasoning and inductive reasoning and culminating in creation of new knowledge are all naturally taking place in our brains. Are all the methods invented by statisticians also natural endowments of human brain? Agitated in mind, I put the question:*

*"Sir, is normal thinking statistical?"*

*"Ah, that's a thought".*

*"Then what's the difference between normal thinking and statistical thinking?"*

*"You can see the stars with your naked eyes. But if you take the aid of a telescope, your vision is enlarged, isn't it?"*

*At this aphoristic words of the statistical preceptor of the world, again a thunderbolt rolled in my intellect and ideas began to rain into my mind in torrents. I have no twenty-twenty vision and so I have to wear glasses. To read the inscription on a tablet we've to use a magnifying glass. To see micro-objects we've to use microscopes. To see distant things we've to watch them through binoculars. And in order to have a clearer, larger and nearer vision of the stars we have to take the aid of telescopes.]*

As human intellect is imperfect as already shown at the outset, we have to take the aid of statistical methods or statistical thinking to see the 'state of affairs' (sthithis) in their true entirety. Hence statistical thinking is a stepping-stone to creation of knowledge, and what is more, to creativity (Rao uses the word creativity in a wider sense – its scope ranges from the sargatmakam to the Srishtiparam) and creativity is a stepping-stone to development and progress, welfare and prosperity.

**Part II**

**Statistics in 21st Century**

Upto now we had been discussing the achievements of statistical thinking in the 20th century. Now let's see what is in store for statistics in the days to come. We've seen that quantification of uncertainty not only helps us to create knowledge, but also to express and to convey to others the knowledge thus created. Over and above that, quantification leads to taking uncertainty itself into account, which in turn facilitates making unerring decisions – optimal decisions. The knowledge acquired by inductive reasoning might not be unerring knowledge. It might still be uncertain. But if the amount of uncertainty is quantified, it becomes useful knowledge. Then it is useable knowledge. Such knowledge can be used in decision-making under uncertainty. As a result, statistics become inevitable in solving practical problems in any area of human endeavour. So statistics is no longer simply applied mathematics. It is evolving as a metascience. Its object is logic and methodology of other sciences – the logic of decision-making and that of experimenting in them. Rao sees the future of statistics in its communication with research workers in other branches of learning. It is the statistician that the present age turns for what is more essential in all its most important activities. This is what Dr. Rao means by 'putting chance to work'. The major part of the December discourse was highly theoretical – concerning the future of theories as well as theories of future. His conclusion was, "If there is a problem to be solved, seek statistical advice, instead of appointing a committee of experts. Statistics can throw more light than the collective wisdom of the articulate few." He says this with numerous examples and technical explanations.

Thus the statistical science with its panoply of theories comes up trumps in the moment of truth, in a twilight world of truth and half-truth.

**The Challenge**

Dr. C.R. Rao had not come to the capital intentionally to issue a challenge to the people of Kerala, nor was there a willful attempt from his part to do so. But we, well equipped as statisticians, can discern the emergence of a challenge in his utterances. "If there is a problem to be solved, seek

statistical advice", were his oft-repeated words. Is there a greater problem here than that of the ills of Kerala economy? "The more prosperous a country, the better is its statistics", many is the time this reporter heard him utter these mutually qualifying clauses, too. On solving problems he further adds, "In the present times we have to face several challenges in an administrative, political and scientific environment, which is not entirely favorable for systematic and rational approach to solution of problems".

In this context, it would be worth our while to turn back the pages of history and see what Prof. Prasantha Chandra Mahalanobis, the father of Indian statistics did in the pre-Independence days. He sensed independence. Recognising statistics as the key technology for planning, he pioneered the statistical movement. He established Indian Statistical Institute in 1931, he started the Indian Statistical journal "Samkhya" in 1933, he inaugurated systematic agricultural sample surveys in 1937, and then sample surveys for socio-economic data also. (These sample surveys are still going on as TRS & NSS). He brought up an array of statisticians like R.C. Bose, S.S. Bose, S.N. Roy, K.B. Madhava, H.K. Nandi and U.S. Nair (U. Sivaraman Nair). [Rao is in the array of second generation statisticians. The first generation masters are all dead and gone.] Prof. Mahalanobis predicted the Bengal famine of 1943. But the British authorities didn't heed. So, then on, he stressed more on agricultural statistics. There occurred food scarcity in India during 1965-70. This reporter remembers how anti-socials snatched food packets from the hands of school-going college-going students. Wheat was imported from the US under PL-480 program. Thus Keralites learned to eat wheat. Only statistics could attack the food problem on all fronts. And the result? The granaries of India are full to the brim. The force behind the roaring success of the green revolution and the white revolution was statistical thinking. Mahalanobis died on 1972. But India strengthened statistics to solve national problems. Now statistics is an integral part of national planning. The quality of statistical data at macro-level has become excellent. The support from Government was the secret behind the success of the statistical movement. The learned Prime Minister Nehru was all help to the cause of statistics. Even before independence the British could not be callous to statistical thinking. So Mahalanobis could bring about the Hiraeud and Damodar Valley Multipurpose Hydel Projects in those olden days. And the achievements of the five-year plans are common man's knowledge.

The story doesn't end there. Statistical thinking in India had second thoughts on planning itself from the seventh five-year plan period when they began to play with the idea of local level planning. Earlier, the 1976-77 budget had an appendix entitled 'Strategy for Integrated Rural Development'. The Integrated Rural Development (IRDP) was thus started on the last lap of the fifth plan period, i.e. 1978-79. In 1977 Ashok Mehta Commission had recommended reconstruction of the Panchayat Raj, so that channel for people's participation in the process of growth would be assured. The commission saw that there was scope for decision-making in the district level. Then the Dantwala Committee recommended Block as unit for planning. The idea of rural development with people's participation in panchayat level was mooted in the seventh plan period (1985-90). In 1992, Parliament passed the 73rd amendment motion of the Constitution for strengthening panchayats for micro-level planning. Thus, the idea of local level planning is a product, an offspring, a child of statistical thinking in India. In 1994, the Kerala Panchayat Raj and Nagarapalika Bills were enacted by the Kerala Assembly. The local level planning process started here in 1996-97.

Planners in Kerala showed exceptional foresightedness. The 1976-77 Budget strategy of integrated rural development and the Ashok Metha Commission report had played heavily upon the reasoning of planning experts in Kerala and they had put on their thinking-caps right on time. As early as 1980, they had pleaded the spatial planning

should go parallel with local level planning. But two parallel lines never meet on earth. So, in the nineties they realised that the spatial plan should go hand in hand with the local level plan. When local level planning actually started in 1997-98, they said that the spatial plan should be dovetailed with the local level plan. And as local level planning in Kerala picked up steam, modern planning experts would say that a local level plan without an inbuilt spatial plan would be like an un-reinforced concrete structure. Even as the 73rd constitutional amendment was in the offing, they effected a test dose to local bodies by allotting to each of them an amount of one million rupees as United Funds. This was in 1990-91. The next year, 125 panchayats were selected under self-reliant Village Scheme and an allotment of upto Rs. 2 crore were given for planning and implementing schemes of their choice in their respective areas. In such experimentations, foresighted as they were, the planners guaranteed statistical expertise by placing the concerned Taluk Statistical Officer on the Planning and Implementation Committee.

But, alas, the local level or the decentralised planning started in 1997-98, had not such statistical backing. In his earlier article this reporter had cited various statistical methods intended for bettering industrial production. They were based on the 'Orthogonal Arrays' introduced by C.R. Rao for improving manufactured goods and increasing productivity without additional injection of capital. Rao. Who spent his entire career promoting statistics and their usefulness in society, has since developed the 'Orthogonal Arrays' and has evolved methods for optimum uses of resources in economic planning. For, statistics is the means for making short and long range plans for specified social and economic development. So, planning can no more be a hit-and-miss affair. It is high time micro-level statistics had their sway in Kerala. In his December lecture, Rao had reiterated that statistical thinking in the 21st century cannot remain confined on statisticians only, but will have to pervade the entire population. Like reading, writing arithmetic, statistical awareness is essential for complete literacy of 21st century citizen.

Friends jib at this report thus: "If we go on stressing upon statistical thinking, the people of agricultural department will say agricultural thinking is better. The Revenue people will say revenue thinking is all the more better and those in the livestock department will say that the livestock thinking is the best". Most welcome, friends! If they get inspired and pull their weight, bravos to them. Bu howsoever they might try, their thinking will remain sectoral. Only statistics is all-embracing. And, then, the several ideologies of the wide world, grandiose though they all are, will be labeled sectarian these days. Only statistics is all encompassing.

*[At this juncture I'd like to reminisce about my encounter with Sri. Abdul Thaha, the harbinger of spatial planning of Kerala. After retirement, he had become the Director of National Institute of Rural Development in Hyderabad. I was in a delegation sent on a study tour of irrigation projects in Andhra Pradesh, by the CADA. We stayed at WALAMTARI (Water and Land Management Training and Research Institute) hostel, Himayat Nagar. I made a detour to Rajendra Nagar and met him there, large as life.*

*"Sir, what is the secret behind the success of the Germans and Japanese?"*

*"In their countries they acted onnadankam"].*

Onnadankam is a Malayalam idiom and 'to act onnadakom' means to 'act as one man'. If a people want to act as one man, first they must learn to think as one man. The idea of decentralised planning has been heartily welcomed by all sections of the people of Kerala. If local level planning is the worthy child of the worthy father Statistics, the latter must rescue its offspring. This is the challenge the community of statisticians has to meet. It is high time statistical thinking got deeply embedded in the consciousness of Kerala. Statistical thinking is the best panacea.

**Consumer Price Index (Cost of Living Index) numbers for Agricultural and Industrial Workers for the month of December 2003**

**(Base 1998-99 =100)**

| Sl. No | Centre | Linking Factor * | Index Numbers for | | Estimated Indices for | |
|---|---|---|---|---|---|---|
| | | | November 03 | December 03 | November 03 | December 03 |
| 1 | Thiruvananthapuram | 10.39 | 123 | 124 | 1278 | 1288 |
| 2 | Kollam | 10.28 | 124 | 125 | 1275 | 1285 |
| 3 | Punalur | 9.96 | 115 | 115 | 1145 | 1145 |
| 4 | Pathanamthitta | - | 118 | 119 | - | - |
| 5 | Alappuzha | 10.45 | 116 | 117 | 1212 | 1223 |
| 6 | Kottayam | 10.40 | 118 | 119 | 1227 | 1238 |
| 7 | Mundakkayam | 10.12 | 115 | 115 | 1164 | 1164 |
| 8 | Munnar | 10.03 | 114 | 114 | 1143 | 1143 |
| 9 | Eranakulam | 9.92 | 118 | 118 | 1171 | 1171 |
| 10 | Chalakkudy | 10.60 | 117 | 118 | 1240 | 1251 |
| 11 | Thrissur | 10.05 | 118 | 119 | 1186 | 1196 |
| 12 | Palakkad | 10.48 | 116 | 116 | 1216 | 1216 |
| 13 | Malappuram | 10.30 | 119 | 120 | 1226 | 1236 |
| 14 | Kozhikode | 10.08 | 117 | 118 | 1179 | 1189 |
| 15 | Meppady | 10.64 | 115 | 116 | 1224 | 1234 |
| 16 | Kannur | 10.06 | 119 | 120 | 1197 | 1207 |
| 17 | Kasaragod | - | 122 | 123 | - | - |

- *Linking factors approved in G.O (MS) No.7/2002/Plg. dated 21-03-2002 have been used from October 2001. Base for all centres is 1970 = 100.*

The Consumer Price Index (Cost of Living Index) Numbers applicable to employees in employment under the Minimum Wages Act (Central Act XI of 1948) for the month of August 2003 as ascertained by the Director of Economics & Statistics under clause (C) of Section 2 of the Act.

## CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS

(Base 1982 = 100)

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
| **Southern States** | | | | | | | | | | | | | |
| Kerala | 1. Aluva | 489 | 486 | 479 | 488 | 485 | 491 | 490 | 488 | 488 | 496 | 500 | 499 |
| | 2. Mundakayam | 481 | 479 | 476 | 486 | 489 | 496 | 496 | 490 | 493 | 491 | 492 | 494 |
| | 3. Kollam | 518 | 509 | 518 | 513 | 514 | 512 | 534 | 519 | 526 | 526 | 539 | 530 |
| | 4. Thiruvanantha puram | 555 | 556 | 553 | 563 | 555 | 569 | 577 | 571 | 563 | 555 | 566 | 572 |
| | Average | 511 | 508 | 507 | 513 | 511 | 517 | 524 | 517 | 518 | 517 | 524 | 524 |
| Tamilnadu | 1. Chennai | 523 | 523 | 525 | 536 | 536 | 540 | 538 | 536 | 536 | 533 | 534 | 535 |
| | 2. Coimbatore | 485 | 490 | 491 | 500 | 497 | 503 | 497 | 490 | 495 | 495 | 500 | 501 |
| | 3. Coonoor | 483 | 489 | 492 | 501 | 509 | 506 | 508 | 499 | 493 | 492 | 495 | 497 |
| | 4. Madurai | 470 | 470 | 472 | 481 | 480 | 484 | 485 | 482 | 485 | 488 | 492 | 492 |
| | 5. Salem | 467 | 465 | 469 | 484 | 485 | 489 | 490 | 487 | 493 | 486 | 489 | 486 |
| | 6.Tiruchirappalli | 564 | 556 | 541 | 559 | 573 | 572 | 577 | 573 | 573 | 573 | 583 | 576 |
| | Average | 499 | 499 | 498 | 510 | 513 | 516 | 516 | 511 | 513 | 511 | 516 | 515 |
| Andra Pradesh | 1. Gudur | 462 | 464 | 466 | 464 | 467 | 469 | 470 | 471 | 469 | 476 | 476 | 475 |
| | 2. Gundur | 488 | 495 | 499 | 507 | 510 | 514 | 512 | 511 | 504 | 501 | 504 | 502 |
| | 3. Hyderabad | 478 | 481 | 487 | 492 | 495 | 505 | 506 | 501 | 502 | 504 | 503 | 497 |
| | 4. Visakhapatanam | 476 | 475 | 475 | 478 | 481 | 491 | 491 | 492 | 488 | 490 | 488 | 488 |
| | 5. Warangal | 512 | 523 | 525 | 530 | 536 | 538 | 533 | 529 | 528 | 520 | 521 | 511 |
| | Average | 483 | 488 | 490 | 494 | 498 | 503 | 502 | 501 | 498 | 498 | 498 | 495 |
| Karnataka | 1. Bangalore | 463 | 465 | 469 | 475 | 475 | 477 | 481 | 476 | 480 | 481 | 486 | 485 |
| | 2. Belgaum | 522 | 523 | 524 | 527 | 530 | 533 | 544 | 542 | 544 | 544 | 544 | 544 |
| | 3. Hubli Dhanwar | 481 | 487 | 486 | 491 | 495 | 496 | 498 | 495 | 496 | 496 | 498 | 503 |
| | 4. Meccara | 459 | 460 | 460 | 470 | 471 | 474 | 484 | 479 | 480 | 478 | 481 | 486 |
| | Average | 481 | 484 | 485 | 491 | 493 | 495 | 502 | 498 | 500 | 500 | 502 | 505 |
| Pondichery | 1. Pondicherry | 529 | 536 | 533 | 544 | 547 | 547 | 546 | 547 | 544 | 544 | 555 | 549 |

*Contd.*

*Consumer Price Index for Industrial Workers (Contd.)*

**(Base 1982 = 100)**

| States | Centre | Consumer Price Index Number for the month of | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
| **Northern States** | | | | | | | | | | | | | |
| Delhi | 1. Delhi | 555 | 558 | 564 | 568 | 568 | 569 | 577 | 575 | 573 | 581 | 574 | 576 |
| Maharastra | 1. Mumbai | 574 | 574 | 578 | 585 | 586 | 586 | 589 | 583 | 583 | 585 | 587 | 589 |
| | 2. Nagpur | 493 | 492 | 495 | 496 | 501 | 504 | 510 | 510 | 509 | 510 | 508 | 506 |
| | 3. Nasik | 524 | 516 | 524 | 531 | 535 | 534 | 537 | 534 | 534 | 532 | 534 | 545 |
| | 4. Pune | 540 | 539 | 541 | 553 | 556 | 560 | 563 | 557 | 556 | 558 | 564 | 566 |
| | 5. Solapur | 491 | 494 | 494 | 491 | 491 | 498 | 505 | 502 | 504 | 509 | 515 | 517 |
| | Average | 524 | 523 | 526 | 531 | 534 | 536 | 541 | 537 | 537 | 539 | 542 | 545 |
| Haryana | 1. Faridabad | 482 | 486 | 493 | 494 | 494 | 497 | 505 | 501 | 510 | 511 | 508 | 504 |
| | 2. Yamuna Nagar | 447 | 452 | 454 | 457 | 458 | 458 | 468 | 465 | 467 | 475 | 476 | 466 |
| | Average | 465 | 469 | 474 | 476 | 476 | 478 | 487 | 483 | 489 | 493 | 492 | 485 |
| West Bengal | 1. Asansol | 455 | 453 | 455 | 467 | 471 | 474 | 476 | 478 | 479 | 487 | 490 | 484 |
| | 2. Darjeeling | 410 | 403 | 404 | 420 | 424 | 427 | 424 | 429 | 430 | 435 | 436 | 430 |
| | 3. Durgapur | 552 | 551 | 561 | 566 | 563 | 559 | 562 | 567 | 565 | 579 | 576 | 571 |
| | 4. Haldia | 578 | 575 | 581 | 584 | 584 | 588 | 592 | 590 | 593 | 602 | 612 | 595 |
| | 5. Howrah | 542 | 538 | 541 | 557 | 555 | 557 | 557 | 557 | 552 | 572 | 575 | 565 |
| | 6. Jalpaiguri | 404 | 409 | 410 | 411 | 416 | 418 | 427 | 424 | 429 | 437 | 433 | 429 |
| | 7. Kolkata | 527 | 527 | 533 | 545 | 542 | 541 | 545 | 541 | 535 | 549 | 561 | 547 |
| | 8. Raniganj | 408 | 406 | 410 | 419 | 424 | 421 | 433 | 432 | 435 | 439 | 447 | 443 |
| | Average | 485 | 483 | 487 | 496 | 497 | 498 | 502 | 502 | 502 | 513 | 516 | 508 |
| Chandigarh | 1. Chandigarh | 514 | 514 | 516 | 516 | 519 | 519 | 529 | 533 | 535 | 538 | 538 | 538 |
| Uttar Pradesh | 1. Agra | 445 | 448 | 451 | 449 | 447 | 449 | 457 | 459 | 460 | 466 | 468 | 464 |
| | 2. Ghaziabad | 479 | 484 | 488 | 490 | 493 | 493 | 500 | 501 | 502 | 501 | 495 | 494 |
| | 3. Kanpur | 453 | 458 | 464 | 465 | 463 | 465 | 473 | 475 | 483 | 491 | 485 | 476 |
| | 4. Saharaupur | 440 | 444 | 446 | 450 | 449 | 448 | 460 | 460 | 460 | 466 | 461 | 459 |
| | 5. Varanasi | 484 | 491 | 502 | 498 | 498 | 503 | 509 | 510 | 508 | 517 | 517 | 513 |
| | Average | 460 | 465 | 470 | 470 | 470 | 472 | 480 | 481 | 483 | 488 | 485 | 481 |
| Madhya Pradesh | 1. Balaghat | 432 | 427 | 428 | 433 | 438 | 441 | 449 | 452 | 449 | 457 | 455 | 452 |
| | 2. Bhopal | 508 | 509 | 515 | 520 | 524 | 525 | 534 | 532 | 532 | 537 | 534 | 531 |
| | 3. Indore | 491 | 492 | 506 | 513 | 514 | 518 | 526 | 514 | 513 | 515 | 516 | 513 |
| | 4. Jabalpur | 466 | 468 | 473 | 475 | 480 | 482 | 502 | 499 | 501 | 504 | 506 | 498 |
| | Average | 474 | 474 | 481 | 485 | 489 | 492 | 503 | 499 | 499 | 503 | 503 | 499 |
| | **All India** | **483** | **484** | **487** | **493** | **494** | **497** | **501** | **499** | **499** | **503** | **504** | **502** |

## CONSUMER PRICE INDEX AND % VARIATIONS OF INDEX FOR INDUSTRIAL WORKERS

| State | Centre | CPI for the month of | | variation | CPI for the month of | | variatio |
|---|---|---|---|---|---|---|---|
| | | Nov-02 | Nov-03 | | Dec-02 | Dec-03 | |
| **Southern States** | | | | | | | |
| 1. Kerala | 1. Aluva | 487 | 500 | 2.67 | 487 | 499 | 2.46 |
| | 2. Mundakayam | 482 | 492 | 2.07 | 483 | 494 | 2.28 |
| | 3. Kollam | 503 | 539 | 7.16 | 518 | 530 | 2.32 |
| | 4. Thiruvananthapuram | 553 | 566 | 2.35 | 554 | 572 | 3.25 |
| | Average | 506 | 524 | 3.56 | 511 | 524 | 2.60 |
| 2. Tamilnadu | 1. Chennai | 528 | 534 | 1.14 | 522 | 535 | 2.49 |
| | 2. Coimbatore | 491 | 500 | 1.83 | 487 | 501 | 2.87 |
| | 3. Coonoor | 490 | 495 | 1.02 | 483 | 497 | 2.90 |
| | 4. Madurai | 476 | 492 | 3.36 | 477 | 492 | 3.14 |
| | 5. Salem | 475 | 489 | 2.95 | 472 | 486 | 2.97 |
| | 6.Tiruchirappalli | 563 | 583 | 3.55 | 573 | 576 | 0.52 |
| | Average | 504 | 516 | 2.32 | 502 | 515 | 2.42 |
| 3. Andra Pradesh | 1. Gudur | 470 | 476 | 1.28 | 467 | 475 | 1.71 |
| | 2. Gundur | 490 | 504 | 2.86 | 492 | 502 | 2.03 |
| | 3. Hyderabad | 476 | 503 | 5.67 | 478 | 497 | 3.97 |
| | 4. Visakhapatanam | 479 | 488 | 1.88 | 479 | 488 | 1.88 |
| | 5. Warangal | 517 | 521 | 0.77 | 507 | 511 | 0.79 |
| | Average | 486 | 498 | 2.47 | 485 | 495 | 2.06 |
| 4. Karnataka | 1. Bangalore | 460 | 486 | 5.65 | 460 | 485 | 5.43 |
| | 2. Belgaum | 524 | 544 | 3.82 | 523 | 544 | 4.02 |
| | 3. Hubli Dhanwar | 484 | 498 | 2.89 | 480 | 503 | 4.79 |
| | 4. Meccara | 462 | 481 | 4.11 | 463 | 486 | 4.97 |
| | Average | 483 | 502 | 4.09 | 482 | 505 | 4.78 |
| 5. Pondicherry | 1. Pondicherry | 531 | 555 | 4.52 | 531 | 549 | 3.39 |

*Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)*

| State | Centre | CPI for the month of | | % variation | CPI for the month of | | % variation |
|---|---|---|---|---|---|---|---|
| | | Nov-02 | Nov-03 | | Dec-02 | Dec-03 | |
| **Northern States** | | | | | | | |
| 1. Delhi | 1. Delhi | 561 | 574 | 2.32 | 551 | 576 | 4.54 |
| 2. Maharastra | 1. Mumbai | 565 | 587 | 3.89 | 569 | 589 | 3.51 |
| | 2. Nagpur | 504 | 508 | 0.79 | 497 | 506 | 1.81 |
| | 3. Nasik | 519 | 534 | 2.89 | 521 | 545 | 4.61 |
| | 4. Pune | 538 | 564 | 4.83 | 537 | 566 | 5.40 |
| | 5. Solapur | 492 | 515 | 4.67 | 489 | 517 | 5.73 |
| | Average | 524 | 542 | 3.44 | 523 | 545 | 4.21 |
| 3. Haryana | 1. Faridabad | 487 | 508 | 4.31 | 482 | 504 | 4.56 |
| | 2. Yamuna Nagar | 454 | 476 | 4.85 | 446 | 466 | 4.48 |
| | Average | 471 | 492 | 4.57 | 464 | 485 | 4.53 |
| 4. West Bengal | 1. Asansol | 467 | 490 | 4.93 | 460 | 484 | 5.22 |
| | 2. Darjeeling | 410 | 436 | 6.34 | 405 | 430 | 6.17 |
| | 3. Durgapur | 563 | 576 | 2.31 | 554 | 571 | 3.07 |
| | 4. Haldia | 590 | 612 | 3.73 | 582 | 595 | 2.23 |
| | 5. Howrah | 556 | 575 | 3.42 | 546 | 565 | 3.48 |
| | 6. Jalpaiguri | 424 | 433 | 2.12 | 416 | 429 | 3.13 |
| | 7. Kolkata | 544 | 561 | 3.13 | 530 | 547 | 3.21 |
| | 8. Raniganj | 425 | 447 | 5.18 | 414 | 443 | 7.00 |
| | Average | 497 | 516 | 3.79 | 488 | 508 | 4.02 |
| 5. Chandigarh | 1. Chandigarh | 520 | 538 | 3.46 | 514 | 538 | 4.67 |
| 6. Uttar Pradesh | 1. Agra | 445 | 468 | 5.17 | 437 | 464 | 6.18 |
| | 2. Ghaziabad | 481 | 495 | 2.91 | 478 | 494 | 3.35 |
| | 3. Kanpur | 468 | 485 | 3.63 | 456 | 476 | 4.39 |
| | 4. Saharaupur | 444 | 461 | 3.83 | 439 | 459 | 4.56 |
| | 5. Varanasi | 498 | 517 | 3.82 | 489 | 513 | 4.91 |
| | Average | 467 | 485 | 3.85 | 460 | 481 | 4.65 |
| 7. Madhya Pradesh | 1. Balaghat | 444 | 455 | 2.48 | 438 | 452 | 3.20 |
| | 2. Bhopal | 516 | 534 | 3.49 | 509 | 531 | 4.32 |
| | 3. Indore | 494 | 516 | 4.45 | 492 | 513 | 4.27 |
| | 4. Jabalpur | 483 | 506 | 4.76 | 471 | 498 | 5.73 |
| | Average | 484 | 503 | 3.82 | 478 | 499 | 4.40 |
| | **All India** | **489** | **504** | **3.07** | **484** | **502** | **3.72** |

## CONSUMER PRICE INDEX FOR AGRICULTURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 330 | 329 | 328 | 331 | 335 | 341 | 343 | 343 | 340 | 339 | 341 | 340 |
| 2 | Tamilnadu | 355 | 355 | 354 | 358 | 359 | 362 | 356 | 354 | 356 | 349 | 350 | 351 |
| 3 | Anthrapradesh | 341 | 342 | 343 | 345 | 347 | 352 | 349 | 349 | 348 | 347 | 348 | 349 |
| 4 | Karnataka | 328 | 329 | 330 | 332 | 334 | 333 | 336 | 335 | 334 | 336 | 338 | 341 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 319 | 320 | 321 | 322 | 325 | 330 | 334 | 333 | 333 | 334 | 333 | 334 |
| 6 | Haryana | 322 | 326 | 329 | 331 | 329 | 332 | 333 | 336 | 336 | 339 | 337 | 339 |
| 7 | West Bengal | 299 | 300 | 303 | 305 | 308 | 308 | 318 | 321 | 321 | 324 | 326 | 320 |
| 8 | Uttar Pradesh | 317 | 323 | 325 | 325 | 322 | 325 | 327 | 328 | 328 | 333 | 330 | 327 |
| 9 | Madhya Pradesh | 309 | 312 | 316 | 317 | 320 | 323 | 322 | 320 | 320 | 322 | 318 | 315 |
| 10 | Assam | 325 | 326 | 329 | 334 | 336 | 337 | 340 | 342 | 342 | 345 | 345 | 344 |
| 11 | Bihar | 293 | 300 | 305 | 304 | 300 | 301 | 305 | 305 | 305 | 311 | 315 | 313 |
| 12 | Gujarat | 326 | 327 | 331 | 335 | 336 | 339 | 343 | 341 | 341 | 342 | 338 | 337 |
| 13 | Himachalpradesh | 308 | 308 | 310 | 315 | 309 | 311 | 320 | 322 | 322 | 320 | 320 | 320 |
| 14 | Jammu & Kashmir | 350 | 349 | 348 | 352 | 353 | 346 | 342 | 344 | 344 | 347 | 343 | 343 |
| 15 | Manipur | 299 | 300 | 301 | 302 | 303 | 305 | 307 | 308 | 308 | 308 | 310 | 307 |
| 16 | Meghalaya | 340 | 340 | 340 | 341 | 348 | 345 | 349 | 348 | 348 | 350 | 354 | 352 |
| 17 | Orissa | 292 | 291 | 295 | 297 | 302 | 310 | 316 | 318 | 318 | 322 | 320 | 314 |
| 18 | Punjab | 324 | 324 | 332 | 332 | 330 | 333 | 337 | 341 | 341 | 342 | 340 | 341 |
| 19 | Rajastan | 323 | 323 | 325 | 326 | 328 | 330 | 326 | 324 | 324 | 321 | 317 | 319 |
| 20 | Tripura | 331 | 323 | 322 | 315 | 315 | 320 | 323 | 323 | 323 | 324 | 323 | 321 |
| | **All India** | **320** | **322** | **324** | **326** | **327** | **330** | **331** | **332** | **332** | **333** | **333** | **332** |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR AGRICULTURAL LABOURERS

**Base 1986-87 = 100]**

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Nov-02 | Nov -03 | | Dec -02 | Dec-03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 329 | 341 | 3.65 | 330 | 340 | 3.03 |
| 2 | Tamilnadu | 340 | 350 | 2.94 | 356 | 351 | -1.40 |
| 3 | Anthrapradesh | 345 | 348 | 0.87 | 343 | 349 | 1.75 |
| 4 | Karnataka | 322 | 338 | 4.97 | 324 | 341 | 5.25 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 321 | 333 | 3.74 | 318 | 334 | 5.03 |
| 6 | Haryana | 330 | 337 | 2.12 | 325 | 339 | 4.31 |
| 7 | West Bengal | 310 | 326 | 5.16 | 304 | 320 | 5.26 |
| 8 | Uttar Pradesh | 324 | 330 | 1.85 | 318 | 327 | 2.83 |
| 9 | Madhya Pradesh | 321 | 318 | -0.93 | 314 | 315 | 0.32 |
| 10 | Assam | 331 | 345 | 4.23 | 329 | 344 | 4.56 |
| 11 | Bihar | 300 | 315 | 5.00 | 296 | 313 | 5.74 |
| 12 | Gujarat | 332 | 338 | 1.81 | 328 | 337 | 2.74 |
| 13 | Himachalpradesh | 309 | 320 | 3.56 | 310 | 320 | 3.23 |
| 14 | Jammu & Kashmir | 342 | 343 | 0.29 | 346 | 343 | -0.87 |
| 15 | Manipur | 302 | 310 | 2.65 | 300 | 307 | 2.33 |
| 16 | Meghalaya | 343 | 354 | 3.21 | 343 | 352 | 2.62 |
| 17 | Orissa | 300 | 320 | 6.67 | 294 | 314 | 6.80 |
| 18 | Punjab | 333 | 340 | 2.10 | 324 | 341 | 5.25 |
| 19 | Rajastan | 327 | 317 | -3.06 | 324 | 319 | -1.54 |
| 20 | Tripura | 334 | 323 | -3.29 | 334 | 321 | -3.89 |
| | **All India** | **323** | **333** | **3.10** | **321** | **332** | **3.43** |

## CONSUMER PRICE INDEX FOR RURAL LABOURERS

| Sl. No. | Centre | Base 1986-87 = 100] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan 02 | Feb 02 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
| **Southern States** | | | | | | | | | | | | | |
| 1 | Kerala | 331 | 331 | 330 | 333 | 336 | 342 | 344 | 343 | 340 | 340 | 342 | 341 |
| 2 | Tamilnadu | 352 | 352 | 351 | 355 | 356 | 359 | 354 | 352 | 354 | 348 | 349 | 350 |
| 3 | Anthrapradesh | 341 | 342 | 344 | 345 | 348 | 353 | 350 | 349 | 348 | 348 | 348 | 349 |
| 4 | Karnataka | 328 | 329 | 331 | 333 | 335 | 334 | 336 | 336 | 335 | 337 | 338 | 342 |
| **Northern States** | | | | | | | | | | | | | |
| 5 | Maharashtra | 319 | 320 | 322 | 323 | 326 | 330 | 334 | 334 | 333 | 334 | 333 | 334 |
| 6 | Haryana | 324 | 328 | 331 | 332 | 330 | 333 | 333 | 335 | 338 | 340 | 338 | 340 |
| 7 | West Bengal | 302 | 303 | 305 | 308 | 312 | 312 | 319 | 321 | 324 | 327 | 329 | 323 |
| 8 | Uttar Pradesh | 321 | 326 | 328 | 328 | 325 | 328 | 331 | 331 | 332 | 336 | 333 | 330 |
| 9 | Madhya Pradesh | 315 | 318 | 321 | 322 | 325 | 327 | 329 | 327 | 325 | 327 | 324 | 322 |
| 10 | Assam | 325 | 326 | 329 | 334 | 336 | 337 | 341 | 340 | 342 | 345 | 345 | 344 |
| 11 | Bihar | 295 | 301 | 307 | 306 | 302 | 303 | 305 | 307 | 307 | 313 | 317 | 314 |
| 12 | Gujarat | 327 | 328 | 332 | 336 | 337 | 341 | 345 | 345 | 343 | 344 | 340 | 339 |
| 13 | Himachalpradesh | 313 | 312 | 315 | 321 | 316 | 317 | 323 | 325 | 327 | 325 | 325 | 324 |
| 14 | Jammu & Kashmir | 341 | 340 | 340 | 344 | 346 | 340 | 341 | 338 | 338 | 343 | 338 | 337 |
| 15 | Manipur | 299 | 300 | 302 | 303 | 304 | 306 | 307 | 308 | 309 | 309 | 311 | 307 |
| 16 | Meghalaya | 338 | 338 | 338 | 339 | 346 | 343 | 343 | 347 | 346 | 348 | 352 | 350 |
| 17 | Orissa | 293 | 291 | 295 | 297 | 303 | 310 | 314 | 316 | 318 | 322 | 320 | 314 |
| 18 | Punjab | 329 | 330 | 337 | 338 | 336 | 338 | 342 | 342 | 345 | 347 | 344 | 346 |
| 19 | Rajastan | 323 | 323 | 325 | 326 | 328 | 329 | 329 | 325 | 323 | 320 | 317 | 319 |
| 20 | Tripura | 326 | 317 | 315 | 306 | 306 | 311 | 313 | 314 | 315 | 316 | 314 | 312 |
| | **All India** | **322** | **324** | **326** | **328** | **329** | **332** | **334** | **333** | **334** | **335** | **335** | 334 |

## CONSUMER PRICE INDEX AND % VARIATIONS FOR RURAL LABOURERS

**Base 1986-87 = 100]**

| Sl. No. | Centre | Index for | | % Variation | Index for | | % Variation |
|---|---|---|---|---|---|---|---|
| | | Nov-02 | Nov -03 | | Dec -02 | Dec-03 | |
| | **Southern States** | | | | | | |
| 1 | Kerala | 330 | 342 | 3.64 | 331 | 341 | 3.02 |
| 2 | Tamilnadu | 339 | 349 | 2.95 | 354 | 350 | -1.13 |
| 3 | Anthrapradesh | 345 | 348 | 0.87 | 344 | 349 | 1.45 |
| 4 | Karnataka | 323 | 338 | 4.64 | 325 | 342 | 5.23 |
| | **Northern States** | | | | | | |
| 5 | Maharashtra | 321 | 333 | 3.74 | 319 | 334 | 4.70 |
| 6 | Haryana | 331 | 338 | 2.11 | 327 | 340 | 3.98 |
| 7 | West Bengal | 313 | 329 | 5.11 | 307 | 323 | 5.21 |
| 8 | Uttar Pradesh | 327 | 333 | 1.83 | 322 | 330 | 2.48 |
| 9 | Madhya Pradesh | 326 | 324 | -0.61 | 319 | 322 | 0.94 |
| 10 | Assam | 331 | 345 | 4.23 | 329 | 344 | 4.56 |
| 11 | Bihar | 302 | 317 | 4.97 | 298 | 314 | 5.37 |
| 12 | Gujarat | 334 | 340 | 1.80 | 330 | 339 | 2.73 |
| 13 | Himachalpradesh | 314 | 325 | 3.50 | 315 | 324 | 2.86 |
| 14 | Jammu & Kashmir | 336 | 338 | 0.60 | 338 | 337 | -0.30 |
| 15 | Manipur | 302 | 311 | 2.98 | 301 | 307 | 1.99 |
| 16 | Meghalaya | 340 | 352 | 3.53 | 341 | 350 | 2.64 |
| 17 | Orissa | 300 | 320 | 6.67 | 294 | 314 | 6.80 |
| 18 | Punjab | 337 | 344 | 2.08 | 330 | 346 | 4.85 |
| 19 | Rajastan | 328 | 317 | -3.35 | 325 | 319 | -1.85 |
| 20 | Tripura | 328 | 314 | -4.27 | 328 | 312 | -4.88 |
| | **All India** | **326** | **335** | **2.76** | **324** | **334** | **3.09** |

## CONSUMER PRICE INDEX FOR INDUSTRIAL & AGRICULTURAL WORKERS

**(Kerala State) Base 1998-99=100**

| Centre | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thiruvananthapuram | 120 | 120 | 121 | 122 | 121 | 122 | 124 | 124 | 124 | 123 | 123 | 124 |
| Kollam | 121 | 121 | 121 | 122 | 122 | 122 | 124 | 124 | 124 | 123 | 124 | 125 |
| Pathanamthitta | 114 | 114 | 113 | 112 | 111 | 112 | 113 | 113 | 113 | 113 | 115 | 115 |
| Punalur | 116 | 117 | 117 | 117 | 118 | 119 | 120 | 119 | 119 | 118 | 118 | 119 |
| Alappuzha | 114 | 114 | 114 | 115 | 115 | 116 | 116 | 115 | 115 | 115 | 116 | 117 |
| Kottayam | 116 | 116 | 115 | 116 | 117 | 117 | 117 | 117 | 117 | 117 | 118 | 119 |
| Mundakkayam | 115 | 115 | 114 | 114 | 114 | 115 | 116 | 115 | 115 | 115 | 115 | 115 |
| Munnar | 114 | 114 | 113 | 114 | 114 | 115 | 115 | 115 | 115 | 114 | 114 | 114 |
| Ernakulam | 116 | 116 | 116 | 117 | 117 | 118 | 118 | 117 | 117 | 117 | 118 | 118 |
| Chalakkudy | 114 | 114 | 114 | 115 | 115 | 116 | 116 | 115 | 115 | 116 | 117 | 118 |
| Thrissur | 115 | 115 | 115 | 116 | 115 | 116 | 116 | 116 | 116 | 117 | 118 | 119 |
| Palakkad | 115 | 115 | 115 | 116 | 116 | 116 | 116 | 116 | 116 | 116 | 116 | 116 |
| Malappuram | 116 | 116 | 116 | 117 | 118 | 119 | 119 | 118 | 118 | 118 | 119 | 120 |
| Kozhikkode | 114 | 114 | 113 | 114 | 115 | 116 | 117 | 116 | 116 | 116 | 117 | 118 |
| Meppady | 114 | 114 | 113 | 113 | 112 | 112 | 113 | 113 | 113 | 113 | 115 | 116 |
| Kannur | 115 | 115 | 115 | 116 | 115 | 117 | 117 | 117 | 117 | 118 | 119 | 120 |
| Kasargod | 115 | 116 | 116 | 118 | 117 | 119 | 120 | 120 | 120 | 120 | 122 | 123 |
| **State** | **116** | **116** | **115** | **116** | **116** | **117** | **117** | **117** | **117** | **117** | **118** | **119** |

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

| Sl. No | Name of Commodity | Unit | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **A. RICE - OPEN MARKET** | | | | | | | | | | | | | | |
| 1 | Red - Matta | Kg | 13.29 | 13.29 | 13.30 | 13.13 | 13.09 | 13.59 | 13.71 | 13.88 | 13.83 | 13.78 | 13.75 | 13.85 |
| 2 | Red - Chamba | Kg | 13.69 | 13.65 | 13.65 | 13.51 | 13.27 | 13.35 | 13.89 | 14.45 | 14.67 | 14.42 | 14.50 | 14.42 |
| 3 | White Andra Vella | Kg | 12.55 | 12.60 | 12.50 | 12.44 | 12.57 | 12.80 | 13.32 | 13.17 | 13.13 | 13.08 | 12.96 | 12.86 |
| **B. PULSES** | | | | | | | | | | | | | | |
| 4 | Green gram | Kg | 29.54 | 29.64 | 29.71 | 29.89 | 30.43 | 30.07 | 29.96 | 30.08 | 29.43 | 28.07 | 27.43 | 27.50 |
| 5 | Black gram split w/o husk | Kg | 28.11 | 27.14 | 27.25 | 27.18 | 27.04 | 26.39 | 26.00 | 26.27 | 25.29 | 25.11 | 25.46 | 24.96 |
| 6 | Dhall(Tur) | Kg | 30.19 | 30.77 | 30.04 | 30.08 | 31.04 | 31.00 | 30.81 | 30.29 | 30.54 | 31.65 | 33.03 | 33.19 |
| **C. OTHER FOOD ITEMS** | | | | | | | | | | | | | | |
| 7 | Sugar(O.M) | Kg. | 13.30 | 13.22 | 13.15 | 13.08 | 13.34 | 13.32 | 13.94 | 15.33 | 14.64 | 14.63 | 14.59 | 14.02 |
| 8 | Milk (Cow's) | Ltr. | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.04 | 13.08 | 13.04 | 13.04 | 13.04 | 14.00 |
| 9 | Egg Hen's (White lagon) | Dozen | 16.01 | 16.54 | 14.61 | 15.47 | 15.04 | 18.09 | 17.80 | 15.74 | 16.59 | 17.59 | 18.91 | 19.32 |
| 10 | Mutton with bones | Kg | 123.57 | 123.57 | 125.71 | 125.71 | 126.43 | 125.71 | 125.71 | 126.43 | 128.57 | 127.86 | 128.57 | 128.57 |
| 11 | Tea (Kannan Devan) | 1/2 kg | 71.21 | 71.21 | 71.21 | 71.21 | 71.50 | 71.14 | 71.00 | 71.00 | 71.50 | 71.29 | 71.29 | 71.29 |
| 12 | Coffee Powder (Brook Bond Gr.Label) | 1/2 kg | 68.70 | 66.70 | 66.70 | 66.27 | 65.71 | 66.21 | 66.93 | 67.43 | 67.36 | 67.82 | 67.54 | 67.86 |
| **D. OIL AND OIL SEEDS** | | | | | | | | | | | | | | |
| 13 | Coconut oil | Kg | 58.75 | 62.55 | 62.11 | 59.23 | 58.30 | 53.88 | 59.55 | 62.90 | 65.68 | 70.32 | 74.32 | 70.43 |
| 14 | Groundnut oil | Kg | 59.13 | 60.66 | 64.96 | 65.96 | 65.86 | 66.37 | 66.03 | 66.66 | 64.98 | 68.14 | 68.05 | 67.95 |
| 15 | Refined oil(Postman) | Kg. | 73.87 | 75.63 | 74.28 | 75.88 | 76.79 | 80.21 | 87.54 | 83.05 | 89.77 | 89.95 | 90.65 | 90.15 |
| 16 | Gingelly oil | Kg. | 62.39 | 64.93 | 68.34 | 69.63 | 70.55 | 69.68 | 69.66 | 69.19 | 67.02 | 67.38 | 68.32 | 69.55 |
| 17 | Coconut without husk | 100 nos | 570.36 | 591.07 | 597.50 | 579.29 | 569.64 | 531.43 | 558.93 | 584.23 | 615.36 | 638.21 | 711.07 | 684.29 |

*Monthly retail prices of certain essential commodities for the last one year (Contd.)*

| Sl. No | Name of Commodity | Unit | Jan 03 | Feb 03 | Mar 03 | Apr 03 | May 03 | Jun 03 | Jul 03 | Aug 03 | Sep 03 | Oct 03 | Nov 03 | Dec 03 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **E. SPICES AND CONDIMENTS** | | | | | | | | | | | | | | |
| 18 | Corriandar | Kg. | 37.79 | 38.21 | 38.54 | 39.86 | 43.00 | 43.89 | 44.29 | 43.85 | 43.43 | 42.64 | 40.50 | 39.00 |
| 19 | Chillies dry | Kg. | 51.29 | 49.64 | 50.93 | 51.29 | 51.21 | 51.50 | 54.21 | 54.77 | 54.21 | 52.50 | 52.36 | 53.21 |
| 20 | Onion small | Kg. | 11.36 | 11.52 | 11.10 | 11.41 | 15.69 | 15.71 | 14.71 | 12.69 | 11.82 | 13.85 | 13.47 | 13.39 |
| 21 | Tamarind without seeds loose | Kg. | 24.71 | 23.07 | 22.71 | 22.36 | 22.64 | 22.57 | 22.96 | 23.58 | 23.86 | 23.96 | 24.64 | 25.14 |
| **F. TUBERS** | | | | | | | | | | | | | | |
| 22 | Chenai | Kg. | 9.86 | 11.86 | 13.07 | 14.14 | 15.77 | 18.50 | 14.14 | 11.23 | 10.57 | 10.14 | 10.43 | 11.71 |
| 23 | Tapioca Raw | Kg. | 5.96 | 5.96 | 5.88 | 6.13 | 5.96 | 5.89 | 5.71 | 6.27 | 6.25 | 5.71 | 5.68 | 5.57 |
| 24 | Potato | Kg. | 9.29 | 8.46 | 8.36 | 9.07 | 10.56 | 10.46 | 10.89 | 10.31 | 9.36 | 9.06 | 9.13 | 9.67 |
| 25 | Colocassia | Kg. | 11.71 | 12.43 | 12.77 | 14.36 | 14.85 | 15.52 | 16.69 | 16.09 | 17.79 | 15.57 | 14.79 | 14.14 |
| **G. VEGETABLES** | | | | | | | | | | | | | | |
| 26 | Onion big | Kg. | 6.50 | 5.95 | 5.75 | 6.35 | 7.57 | 8.79 | 8.90 | 8.77 | 8.95 | 12.41 | 12.04 | 11.34 |
| 27 | Brinjal | Kg. | 8.64 | 8.57 | 8.79 | 9.29 | 11.14 | 12.00 | 12.00 | 12.00 | 15.36 | 12.86 | 13.57 | 14.00 |
| 28 | Cucumber | Kg. | 7.00 | 7.64 | 6.50 | 6.43 | 7.43 | 8.07 | 9.36 | 9.31 | 7.43 | 6.57 | 7.29 | 7.43 |
| 29 | Ladies Finger | Kg. | 9.50 | 10.14 | 13.64 | 13.50 | 11.93 | 11.79 | 11.00 | 11.46 | 11.86 | 12.93 | 13.50 | 12.00 |
| 30 | Cabbage | Kg | 8.43 | 8.21 | 7.86 | 7.93 | 8.71 | 15.43 | 13.43 | 11.08 | 10.64 | 10.14 | 9.07 | 9.07 |
| 31 | Bittergourd | Kg. | 12.64 | 12.21 | 12.14 | 13.00 | 14.36 | 17.00 | 17.21 | 16.00 | 16.43 | 13.50 | 13.86 | 14.43 |
| 32 | Tomatto | Kg. | 7.21 | 7.21 | 7.93 | 13.00 | 16.07 | 12.07 | 19.43 | 8.46 | 11.00 | 10.36 | 11.93 | 14.29 |
| 33 | Chillies green | Kg. | 15.57 | 13.86 | 13.50 | 13.00 | 13.79 | 20.29 | 21.86 | 12.62 | 18.36 | 13.21 | 13.29 | 14.07 |
| 34 | Banana green | Kg. | 12.68 | 13.61 | 12.57 | 11.86 | 11.14 | 12.43 | 11.57 | 11.27 | 14.93 | 12.21 | 14.04 | 14.50 |
| 35 | Plantain green | Kg. | 8.93 | 9.36 | 8.57 | 8.68 | 8.29 | 9.00 | 9.18 | 9.08 | 9.54 | 9.07 | 9.39 | 9.14 |
| **H. MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | |
| 36 | Washing Soap (501 Half Bar) | 1/2 Bar | 7.96 | 7.95 | 7.91 | 7.91 | 7.91 | 7.93 | 7.93 | 7.93 | 7.95 | 7.95 | 7.95 | 7.98 |
| 37 | Toilet Soap Lux | 100 gm | 11.79 | 11.96 | 12.11 | 12.21 | 12.25 | 12.29 | 12.32 | 12.32 | 12.29 | 12.36 | 12.32 | 12.29 |
| 38 | Toothpaste Colgate | 100 gm | 29.64 | 29.64 | 29.64 | 29.64 | 29.29 | 27.50 | 26.07 | 26.07 | 26.07 | 26.07 | 25.71 | 25.71 |
| 39 | Cement - Sankar (Ord.Paper Bag) | each | 169.05 | 171.54 | 173.79 | 171.14 | 176.05 | 176.21 | 175.46 | 172.54 | 160.04 | 149.79 | 166.96 | 177.68 |

## IT Landscape of Key Indian Cities

| City | Focus | Prominent firms | Employees |
|---|---|---|---|
| Delhi (includes Gurgaon & Noida) | Call centres, transaction processing, chip design, software | GE, American Express, STMicroelectronics, Wipro Spectramind, Convergys, Daksh, Exl | 73,000 |
| Mumbai | Financial research, back office, software | TCS, Mphasis, I-flex, Morgan Stanley, Citigroup | 62,050 |
| Bangalore | Chip design, software, bio-informatics, call centres, IT consulting, tax processing | Infosys, Wipro, Intel, IBM, SAP, SAS, Dell, Tisco, TI, Motorola, HP, Oracle, Yahoo, AOL, E&Y, Accenture | 109,500 |
| Hyderabad | Software, back office, product design | HSBC, Satyam, Microsoft | 36,500 |
| Chennai | Software, transaction processing, animation | Cognizant, Worls Bank, Standard Chartered, Polaris, EDS, Pentamedia | 51,100 |
| Kolkata | Consulting, software | PWC, IBM, ITC Infotech, TCS | 7,300 |
| Pune | Call centres, chip design, embedded software | Msource, C-DAC, persistent Systems, Zensar | 7,300 |

*Source: Nasscom and Fortune.*

### Pedestal Printers

Printronix Inc. has launched the latest addition to its matrix printer family: the Zero Tear (www.printronix.com/ zerotear) pedestal printers. Printronix created the Zero Tear printers for applications requiring precise accounting of all forms that are simply too expensive to waste. These models (P500ZT) allow users to print from the first to the last line on every form and then tear it off without losing any forms in between. The Zero Tear line matrix printers offer a tremendous consumable cost savings over serial matrix printers.

The Zero Tear's spool ribbons are up to 8 times less expensive than the ribbon catridges found on serial matrix printers. In addition, serial matrix print heads are consumables that need frequent replacements and typically cost $400 or more, plus the serial matrix printer's consumable cost can be up to 12 times more expensive than Printronix's Zero Tear Printer.

For high volume applications, this will give the Zero Tear printers the edge when comparing total cost of ownership. The P5005ZT 500 line per minute (1pm) printer is $5,820, and the P5010ZT 1,000 1pm printer id $8,275.

### Configuration management

Atlanta-based Spectrum Software, Inc., a system designer and developer of software productivity tools, has made available its Spectrum SCM 2.0. This product release provides powerful new features unlike any other peer CM solution currently available. Spectrum SCM is a flexible, process based system that can be used to manage the entire project life cycle. Spectrum SCM provides comprehensive source configuration management for any 'e-Asset' from origination through delivery, maintenance and support. Spectrum SCM is the first truly integrated, platform independent, full-featured (Version Control, Issue Tracking, Change Management, Process Management/ Control, Work flow, Release Management, Parallel Development) source configuration management system in the market place that provides full CM functionality with one fully integrated SCM system.

Printed and Published by Department of Economics & Statistics, Government of Kerala

466