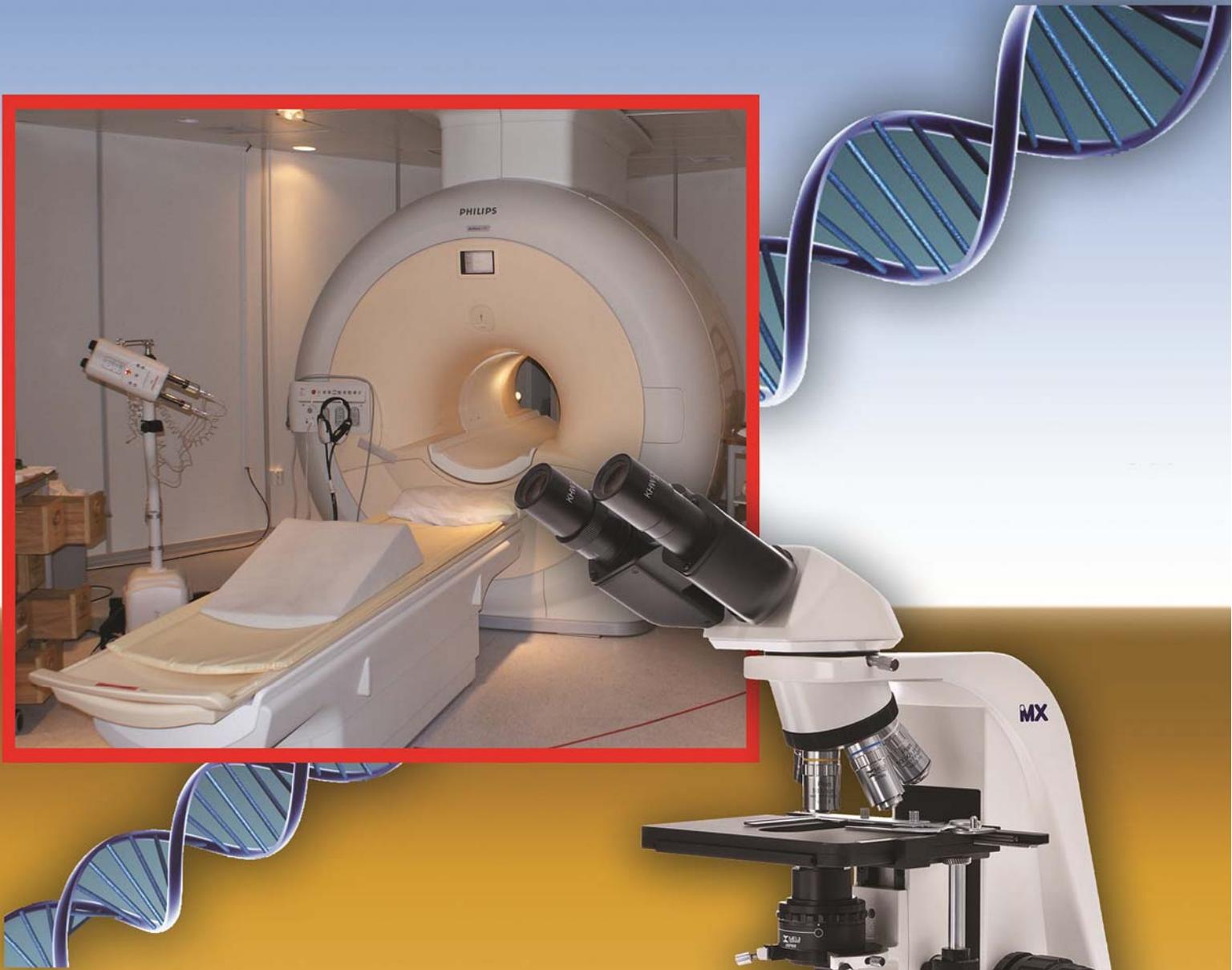


REPORT ON PRIVATE MEDICAL LABORATORIES IN KERALA 2014



**GOVERNMENT OF KERALA
DIRECTORATE OF ECONOMICS AND STATISTICS
THIRUVANANTHAPURAM**



Government of Kerala

***Report on
Private Medical Laboratories
in Kerala***

**Survey Design Division
Directorate of Economics & Statistics
November 2014**

Preface

The Department of Economics and Statistics is conducting surveys and studies on subjects of importance for planning and development purposes. Medical laboratories have very significant role in supporting the medical institutions in diagnosing and treatment of diseases. Drastic increase in such institutions with modern technologies has taken place in recent years. In this context, the Government have accorded sanction to conduct a survey on Private Medical Laboratories in the State and subsequently department has conducted a complete enumeration of all the Private Medical Laboratories, where tests are done on biological specimens, in order to get information about the health of a patient.

Through the survey, an effort was made to ascertain the total number of registered and unregistered Private Medical Laboratories in the State, details of availability of the equipments used, the facilities available and the number and qualifications of the staff working in these institutions.

The schedule for data collection was prepared by the Survey Design Division of the department and finalized by the Survey Coordination Committee of the Department under the chairmanship of Sri.A.Rajan, Joint Director. I thank all the members of the committee for their sincere efforts.

This report was prepared by the Survey Design Division of the Directorate of Economics & Statistics under the guidance of Dr.C.Sureshkumar, Director(SDRT) and Sri.A.P.Harilal, Joint Director. At district level, the survey was supervised by the Deputy Directors and Research Officers of the district offices and at Taluk level, Taluk Statistical Officers and Statistical Inspectors. The data collection was carried out by the Statistical Investigators, who were the eyes and ears of the survey, working in the various Taluk Statistical Offices. I acknowledge the tireless work done by all of them to make the survey a success.

The technical assistance provided by Dr.Sunija.S, Director and Shri.Jaichand.J, Junior Scientific Officer of the State Public Health Laboratory, Kerala are duly acknowledged. Admirable cooperation extended by the owners and staff of the Private Medical Laboratories is also acknowledged.

I hope that this report will be useful to the planners, policy makers, academicians and researchers. Suggestions for improvement of the content of the report will be highly appreciated.

04.11.2014

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Highlights

1. General characteristics of Private Medical Laboratories in Kerala

- ✓ There is a total of 4168 Private Medical Laboratories across the State. Thrissur district tops with 12% (503) of the total number of labs followed by Malappuram (477).
- ✓ Among the municipal corporations, Thiruvananthapuram tops with 134 Private Medical Laboratories followed by Kozhikode with 101 and least number of labs in Kollam with 60 laboratories.
- ✓ Among municipalities, Manjeri tops with 41 Private Medical Laboratories followed by Alappuzha with 38 and least number of labs in Eloor and Thrikkakkara with 3 each.
- ✓ Out of 4168 Private Medical Laboratories in the State, 3635 are functioning in rented buildings.
- ✓ Around 81% of the Private Medical Laboratories in the State are functioning in buildings with area ranges from 101 to 500 sqft.
- ✓ 35% of the Private Medical Laboratories are functioning in the State without any registration.
- ✓ 1524 Private Medical Laboratories in the State are using the waste disposal facility provided by IMA viz. IMAGE. 72% of the Private Medical Laboratories in the State are still doing Local Disposal as a waste treatment plan.

- ✓ 93% or a total of 3887 Private Medical Laboratories in the State have no Accreditation/Certification from any of the agencies.
- ✓ 26% or 1080 of the Private Medical Laboratories in the State do not perform any Internal/External Quality checking of the working capacity of the laboratory equipments and the quality of the laboratory tests.
- ✓ Only 9% or 389 Private Medical Laboratories use Bio-safety Cabinet in their labs.
- ✓ Only a 5% or 203 Private Medical Laboratories in the State are equipped with 'immunoassay analyzer'.

2. Facilities Available in the Private Medical Laboratories

- ✓ Radioimmunoassay (RIA) facility is available only in 1% or 45 Private Medical Laboratories in the State.
- ✓ 40% of the Private Medical Laboratories in the State offers ECG facility and 1% of the Private Medical Laboratories offers EEG facility..
- ✓ 23% of the Private Medical Laboratories in the State do not outsource any tests while 59% outsource within State, 10% outside State and 8% within & outside State.
- ✓ 8% or 351 of the Private Medical Laboratories have X-Ray/Digital X-Ray facility. Out of this, only 35% or 123 laboratories are using TLD Badge in their laboratory.
- ✓ 1027 Private Medical Laboratories in the State offers home visit for blood sample collection.

3. Financial aspects.

- ✓ The ascertained value of fixed assets of Private Medical Laboratories in the State amounts to around 440 Crore rupees.
- ✓ An amount of Rs.597.3 million is the outstanding loan amount of the Private Medical Laboratories. In addition to this, an amount of Rs. 395.7 million reported as other liabilities.
- ✓ The total income generated by the Private Medical Laboratories in the State during the financial year 2012-13 is Rs.3795.5 million and the total expenditure reported by the firms is Rs.2403.3 million.

4. Number of staffs and qualifications

- ✓ Out of the total 3328 non-technical staffs, 1258 are males and 2070 are females. (In other words, the ratio of male to female is 38:62).
- ✓ 11,093 technical staffs working in the Private Medical Laboratories in the State, out of which 8,985 are females.
- ✓ 374 or 3.4% of them have no technical educational qualification, but only experience.
- ✓ 6,861 persons or 62% of the technical staff are diploma holders.
- ✓ 81% (or 9037 persons) working in the Private Medical Laboratories in the State are laboratory technicians out of which 7891 are females and 6% (or 617 persons) are X-Ray technicians out of which 388 are females.

- ✓ Many of the Private Medical Laboratories, which offers different courses, do not have separate teaching staff post, and these are managed by the regular technical staff.

Chapter 1

Introduction

1.1. Survey on Private Medical Laboratories in Kerala

1.1.1 Kerala has achieved remarkable progress in social development, which is reflected in many development indicators like life expectancy, health standards, literacy rate etc. In the matter of maintaining high health standards, Kerala is a model to the developing countries of the world.

1.1.2 Even though the per capita income of Kerala is much less compared to the developed countries, social standards of the State are equal or above to that of developed countries. This is due to the accessibility and coverage of medical care facilities in Kerala. There is a general view that the private medical institutions in the State fulfill more than 75% of the medical needs of the State.

1.1.3 Medical laboratories have very significant role in supporting the medical institutions in diagnosing and treatment of diseases. Drastic increase in such institutions with modern technologies has taken place in recent years. A complete enumeration of these institutions was carried out through the survey and all the registered and unregistered laboratories were surveyed.

1.2. Definition

1.2.1 The term Private Medical Laboratories used for the survey is a laboratory, which is working in private sector, where tests are done on biological specimens in order to get information about the health of a patient. Such laboratories may or may not contain radiology facilities such as X-Ray

and scanning, but X-Ray and scanning centers where, laboratory tests are not done are not included in the survey.

1.3. Objectives

1.3.1 The main objectives of the Survey was to

- i. Ascertain the total number of registered and unregistered Private Medical Laboratories in Kerala
- ii. Training facilities available/offered by these institutions
- iii. Collect the details of availability of the equipments used in these institutions
- iv. Ascertain the facilities available in these institutions
- v. Collect the number of people utilizing the services of the Private medical laboratories
- vi. Details regarding the Income/Expenditure of these institutions
- vii. Collect the details regarding the number and qualifications of the persons working in these institutions

1.4. Methodology

1.4.1 List of all private medical laboratories were identified and data collected by visiting all Grama Panchayath/ Municipalities/Corporations by local enquiry. The details of workers, facilities, assets etc were collected from these institutions by direct enquiries by the investigators of the Department in addition to their normal duties.

1.4.2 Survey on Private Medical Laboratories started in the month of November 2013 and field work completed by the middle of February 2014. Data entry was done through online web portal using the online data entry software prepared by the Computer Division of the department. Data entry work completed by the end of March 2014.

1.4.3 Taluk Statistical Officers and Statistical Inspectors were the primary supervisors of the work. The full responsibility of conducting the survey in each district was vested upon the Deputy Directors in the districts.

Chapter 2

Characteristics of Labs

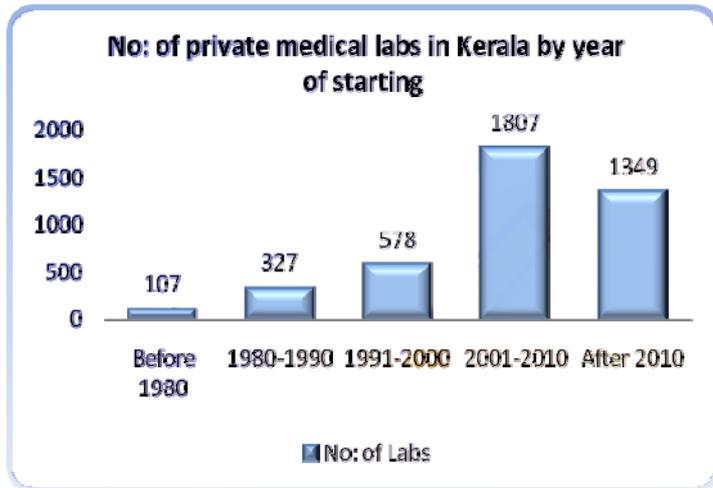
2.1. An overview of the Private Clinical Labs in the State

2.1.1 It is found that there are a total of 4168 Private Medical Laboratories across the State. Thrissur district tops with 12% (503) of the total number of labs followed by Malappuram (477) and Ernakulam (464). The least number of labs are functioning in Wayanad (61) which is only 1% of the total labs in the State. District-wise data are given below.

Statement-2.1: Number of private medical labs in Kerala

Sl No	District	No: of Labs
1	Kasargod	71
2	Kannur	217
3	Wayanad	61
4	Kozhikode	417
5	Malappuram	477
6	Palakkad	278
7	Thrissur	503
8	Ernakulam	464
9	Idukki	102
10	Kottayam	308
11	Alappuzha	332
12	Pathanamthitta	164
13	Kollam	363
14	Thiruvananthapuram	411
Total		4168

2.1.2 The year of starting of the Lab by the present owner was collected and it was found that 43% of the Private Medical Laboratories in Kerala either started by its new owner or established between 2001 and 2010. Also, only 3% of the Private Medical Laboratories were established or started by the latest owner/management before 1980. District wise details are presented in Table-1.



2.1.3 In the case of type of ownership of labs, the survey results shows that 87% of the Private Medical Laboratories in the State are operating on rented buildings and 12% of them are in owned buildings. District wise details are shown in Table-2.

Statement-2.2: Type of ownership of Private Medical Laboratories in Kerala

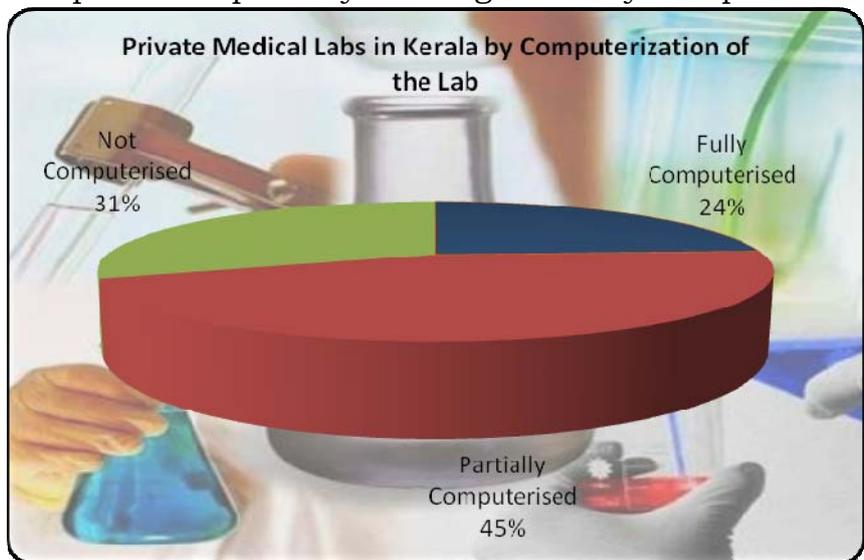
Type of Ownership	No: of Labs
Owned	512
Rented	3635
Others	21
Total	4168

2.1.4 In the case of type of building, 86% of the Private Medical Laboratories are functioning in pucca structures and 14% of them are in semi-pucca structure. Also, only 3% of the Private Medical Laboratories in the State are fully air-conditioned and 11% partially air-conditioned.

2.1.5 Around 81% of the Private Medical Laboratories in the State are functioning in buildings with area ranges from 101 to 500 sqft and around 4% of the Private Medical Laboratories in the State are functioning in buildings with area less than 100sqft. Only 17 Private Medical Laboratories in the State are functioning in buildings with area more than 4000sqft, among which 4 of them are in Thiruvananthapuram. See table-3 for more details.

2.1.6 Regarding computerization of Labs, 24% of them are fully computerized and 46% of them are computerized partially. Among the fully computerized

labs in the State, 17% of them are in Ernakulam followed by 14% in Kollam. In the case of within district data, 40% of the Private Medical Laboratories in the Kollam district are fully computerized



and 36% of them are computerized partially. See table-4 for District-wise details.

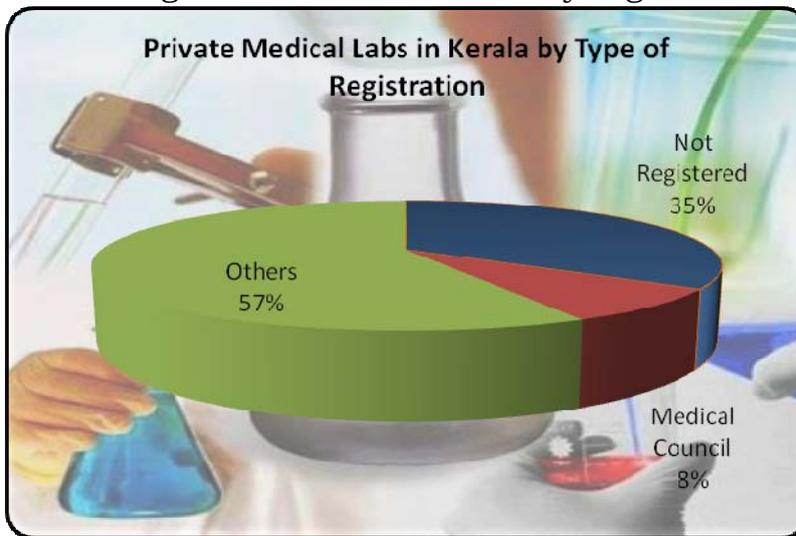
2.1.7 In the case of publishing of cost of individual test documents to public, generally, in almost 61% of the labs in the State, the cost of individual test documents are made available to the public. It is interesting to see that, in Thiruvananthapuram, the capital city of the State, only 33% of the Private Medical Laboratories are publishing cost of individual test documents to public where as in Kannur, 82% of the Labs are publishing cost of individual test documents to public. For district wise statement, see Table-5.

2.2. License, Registration and Maintenance of accounts.

2.2.1 The survey results show that 88% of the Private Medical Laboratories in the State have license from local bodies whereas 12% of the Private Medical Laboratories in the State are either functioning without license or not renewed their license with local body. However, many of the Private Medical Laboratories informed that they have applied for renewal of the license.

2.2.2 It is widely discussed and alleged that the health department continues to have zero control over private clinical laboratories functioning across the State. The absence of a regulatory mechanism to govern registration and setting up of private medical laboratories was found and highlighted in the survey results.

2.2.3 The survey results show that 35% of the Private Medical Laboratories are functioning in the State without any registration. In the case of Malappuram



District, 58% of the Private Medical Laboratories are not registered anywhere. At State level, around 8% of them are registered with Medical Council and 57% of the Private Medical Laboratories claims that they have

registration with many other agencies. For district wise statement, see Table-7.

2.2.4 In any institution, whether financial institution or non-financial institution, it's important to keep accounts accurate and up to date for drawing up 'true and fair' annual accounts. Financial accounts are a historical record of

business' performance over a past period - usually one financial year. In the case of Private Medical Laboratories in the State, the ratio of “maintenance of accounts to non-maintenance of accounts” is highest in Wayanad district where the ratio is 97:03 and least in Alappuzha district with ratio 77:23. At the State level, the said ratio is 82:18. See table-8 for details.

2.3. Ownership and Type of Private Medical Laboratories.

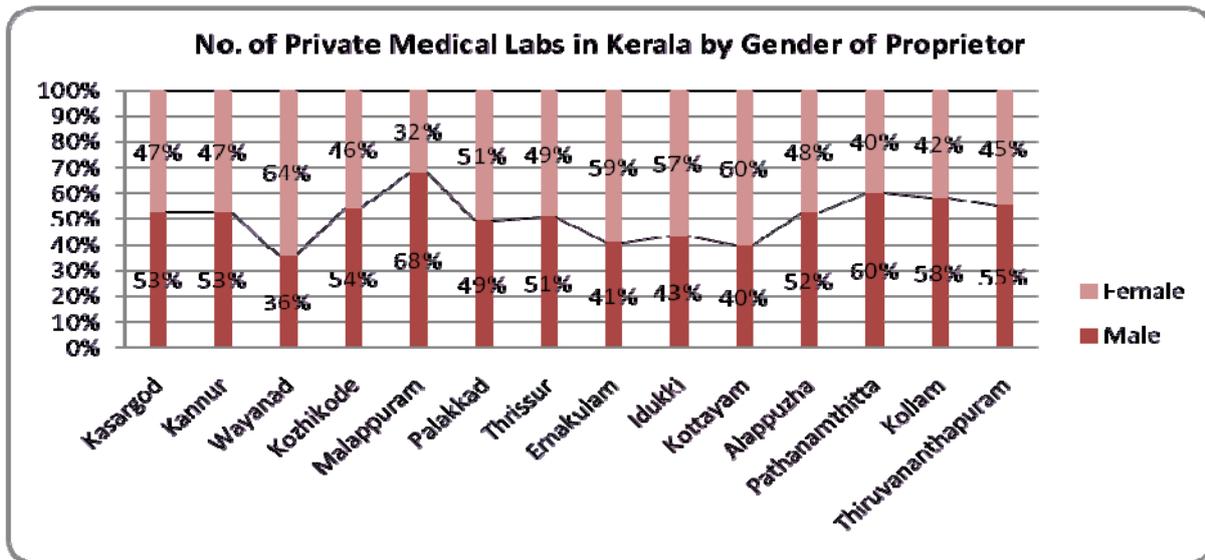
2.3.1 Type of ownership of Labs in the State was studied by considering the different types as Proprietorship, Partnership, Charitable Society, Co-operative Sector, Trusteeship, Limited Companies and Others. The survey result shows that 83% of the Private Medical Laboratories in the State works under proprietorship and 12% under partnership. Detailed district wise details are included in the Table-10.

Statement-2.3: No. of Private Medical Laboratories in Kerala by Ownership of Lab

Type of Ownership	No: of Labs
Proprietorship	3453
Partnership	510
Charitable Society	21
Co-operative Sector	35
Trusteeship	5
Limited Companies	131
Others	13
Total	4168

2.3.3 As mentioned in the previous para, there are 3453 owners of Private Medical Laboratories in the State. As per the survey, out of these, 1805 of them

are males and 1648 of them are females. The male to female ratio is highest in Malappuram where, the ratio is 68:32 and lowest in Wayanad where it is 36:64. Detailed district wise details are included in the Table-11.



2.3.4 In addition to the gender aspect of the owner of the lab, the social status also covered in the survey. The result shows that, out of 3453 owners, 94 of them belong to SC category and only 7 belong to ST category. For district wise details, see Table-12.

2.4. Waste disposal methods used in the Private Medical Laboratories

2.4.1 All potential waste that arise as part of laboratory operations needs to be assessed and an appropriate disposal plan must be selected prior to it actually being generated. It is the clear responsibility of lab owners as well as workers to ensure the safe and correct type of disposal of all wastes produced in the course of their work.

2.4.2 Major types of waste disposal plans used in the Private Medical Laboratories are Local disposal, IMAGE and incineration. Incineration is a

waste treatment process that involves the combustion of organic substances contained in waste materials. Incineration of waste materials converts the waste into ash, flue gas, and heat. An incinerator is a furnace for burning waste under high temperature.

2.4.3 As per the results of the survey, 1524 Private Medical Laboratories in the State are using the facility provided by IMA viz IMAGE. 72% of the Private Medical Laboratories in the State are still doing Local Disposal as a waste treatment plan. Only four Private Medical Laboratories in the State are using Incinerator.

Statement-2.4: No. of Private Medical Laboratories in Kerala by Type of waste disposal facility used.

Type of Waste Disposal Facility	No: of Labs	Percentage
IMAGE	1182	28.36%
Local Disposal	2640	63.34%
Incinerator	2	0.05%
IMAGE & Local Disposal	342	8.21%
IMAGE & Incinerator	0	0.00%
Local Disposal & Incinerator	2	0.05%
All the Three	0	0.00%
Total	4168	100.00%

2.4.4 As mentioned in the previous para, 72% of the Private Medical Laboratories are still practicing local disposal of Bio-Medical waste, which is so shocking and will lead to many health hazards. The local disposal of waste is further studied by classifying it into two major categories viz. waste pit burial and open burning. Out of the Private Medical Laboratories, which are using local disposal, around 36% of the Private Medical Laboratories are using waste pit burial alone and 35% using open burning. District wise details are presented in the Table-14.

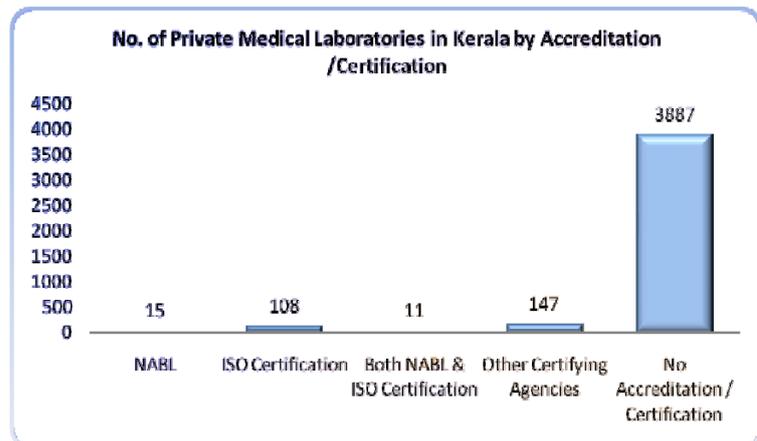
Statement-2.5: No. of Private Medical Laboratories in Kerala by Type of local disposal of waste.

Type of Local Disposal Facility	No: of Labs	Percentage
Waste Pit Burial	1082	36.26%
Open Burning	1055	35.36%
Waste Pit Burial & Open Burning	847	28.38%
Total	2984	100.00%

2.4.5 At State level, 91% of the Private Medical Laboratories are using needle destroyer. In the case of districts, Thiruvananthapuram, Kollam and Idukki are with a fair number while in Kannur, the ratio is the lowest with 83:17. District wise details are presented in the Table-15.

2.5. Accreditation and Quality checking

2.5.1 The survey studied whether the Private Medical Laboratories operating in the State have NABL accreditation (*National Accreditation Board for Testing and Calibration Laboratories (NABL) is an autonomous body under the aegis of Department of Science & Technology, Government of India, and is registered under the Societies Act*), ISO certification or certified by any other certifying agencies.

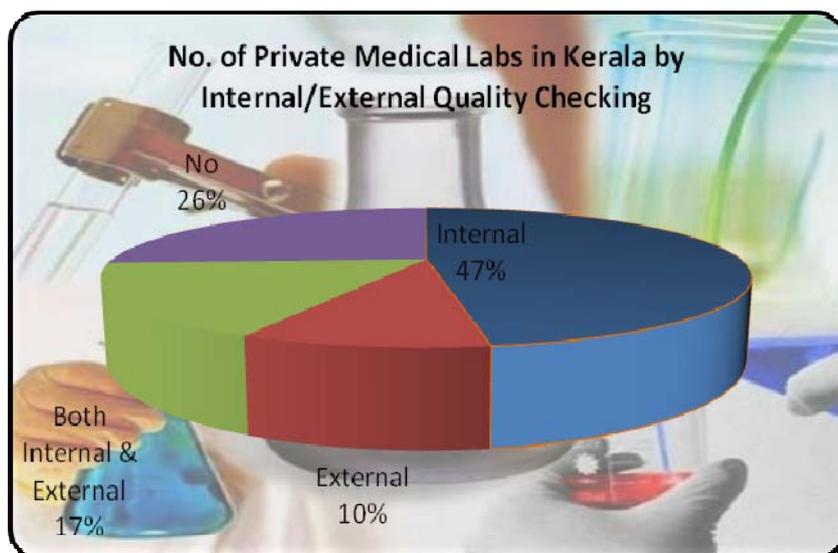


2.5.2 As per the survey, 93% or a total of 3887 Private Medical Laboratories in the State have no Accreditation / Certification from any of the agencies. Detailed district wise/item wise details are included in the Table-16.

2.5.3 Another important aspect collected through the survey is the Internal/External Quality checking of the working capacity of the laboratory equipments and the quality of the laboratory tests. If these are done with the help of the arrangements available in the lab itself, it is termed as 'Internal Quality Check' and if it is done with the help of any outside agency, it is termed as 'External Quality Check'.

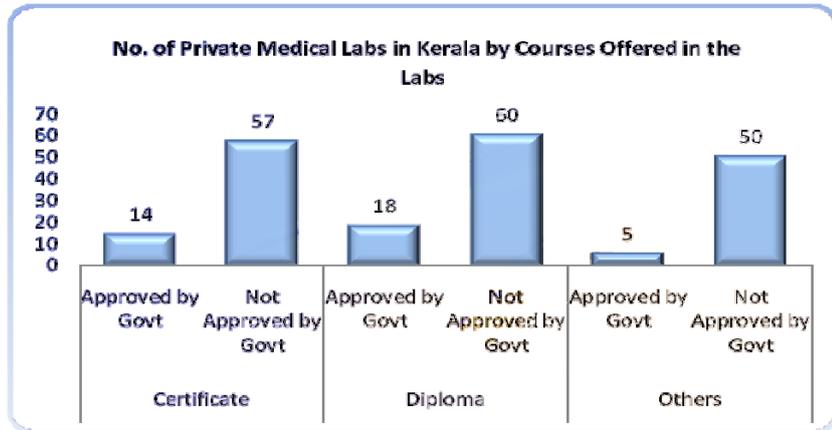
2.5.4 The Survey results show that, at State level, 26% or 1080 of the Private Medical Laboratories

in the State do not perform any Internal/External Quality checking of the working capacity of the laboratory equipments and the quality of the laboratory tests. In the case of within



district data, the number of labs which do not perform any Internal/External Quality checking is maximum in Thiruvananthapuram (43%) followed by Kottayam (40%). For district wise details, see Table-17.

2.5.5 It is observed that 204 Private Medical Laboratories in the State offers different technical courses. The data is presented in the chart below. For district wise



details,

see

Table-18.

Chapter 3

Medical Equipments used in Labs

3.1. Medical Equipments used in Labs.

3.1.1 There are a large number of medical equipments that are used in the clinical laboratories. Including all such equipments in the purview of the survey is not practical and cumbersome. Hence, a selected number of equipments, which are more important and inevitable, are included in the schedule for data collection.

3.1.2 In the case of Hematology analyzers, data collected in respect of 3-part analyzer and 5-part analyzer. The survey results show that, out of total Private Medical Laboratories in the State, 71% of the Labs do not use Hematology analyzers. 887 laboratories use 3-part analyzer, 275 laboratories use 5-part analyzer and 53 use both. For district wise data, refer Table-19.

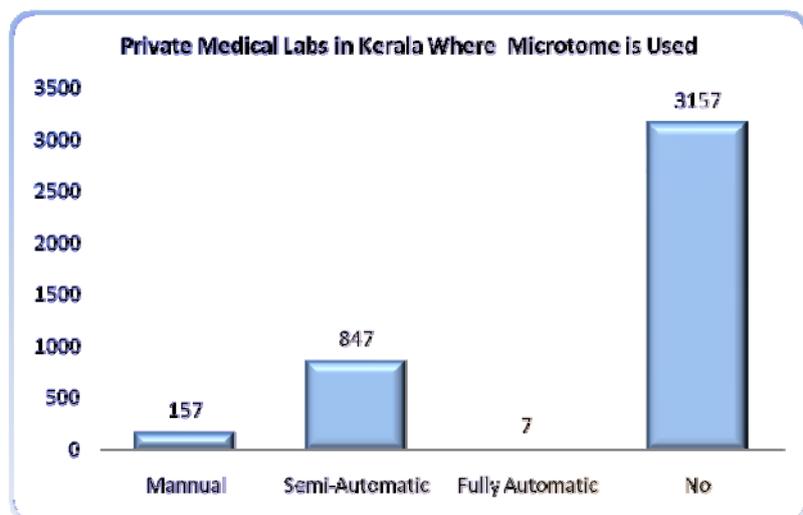
Statement 3.1: No. of Private Medical Labs in Kerala Where Hematology Analyzer is used

District	Total
3-Part Analyzer	887
5-Part Analyzer	275
Both 3 & 5 Part Analyzer	53
No	2953
Total	4168

3.1.3 A Gamma Counter is a machine to measure gamma radiation emitted by a radionuclide. In medicine, they are used in radio binding assays and in radioimmunoassay (RIA). As per the survey, only 3% of the Private Medical Laboratories in the State use Gamma Counters. If we see this at district level, Malappuram stood highest with 5% of the labs using Gamma Counters. For district wise data, refer Table-20.

3.1.4 The primary purpose of a Bio-safety Cabinet is to serve as a means to protect the laboratory worker and the surrounding environment from pathogens. At State level, 9% or 389 Private Medical Laboratories use Bio-safety Cabinet in their labs. In the case of Kannur district, the said figure is 15% and in Palakkad and Pathanamthitta, only 5%. District wise data may be seen from Table-21.

3.1.5 Microtome is used in histopathology laboratories for cutting tissue specimens in order to examine the specimen microscopically. In the survey, information collected about different kinds of microtome such as manual, semi-automatic and fully automatic. There are only 7 Private Medical Laboratories in the State that uses fully automatic microtome (Kottayam-2, Malappuram-2, Thiruvananthapuram-2 and Alappuzha-1). 20% of the Private Medical Laboratories in the State use semi-automatic machines while only 4% use manual. Detailed district wise /item wise details are included in the Table-22.



3.1.6 A biochemistry analyser is a medical laboratory instrument designed to measure different chemicals and other characteristics in a number of biological samples quickly, with minimal human assistance. Biochemistry Analyzer is classified into two types viz. semi-automatic and fully automatic and surveyed. AS per the Survey, 64% of the labs use semi-automatic Biochemistry analyzer, 10% fully automatic and 4% both. For district wise data, refer Table-23.

Statement 3.2: No. of Private Medical Labs in Kerala where Biochemistry Analyzer is used

Semi-Automatic	2679	64%
Fully Automatic	401	10%
Semi & Fully Automatic	172	4%
No	916	22%
Total	4168	100%

3.1.7 An immunoassay analyzer is used in clinical laboratories to run automated biochemical tests to detect the presence and concentration of substances in the sample. Only a 5% or 203 Private Medical Laboratories in the State are equipped with the machine 'immunoassay analyzer'. Please refer table 25 for details.

3.1.8 A water bath is a device that maintains water at a constant temperature. It is used in the microbiological and biochemistry laboratories for incubations. 59% of the Private Medical Laboratories in the State found to be using water bath while 41% do not. In Thrissur district, out of the total labs, 71% are using the device. Data pertaining to other districts may be seen at Table-26.

3.1.9 A hot air oven is a piece of electric equipment used to sterilize items at high temperature. It is often found in laboratories to sterilize glassware. As per survey results, only 32% of the Private Medical Laboratories in the state are

using the device and in the case of Auto Claves, 17% of the labs use the device. In the case of Incubators, 63% of the Private Medical Laboratories in the State are using the device. For district wise details, please see Tables 27, 29 and 28 respectively.

3.1.10 Another important machine in a laboratory is the Blood Gas Analyser and Microbiology Analyzer. The survey results show that only 4% of the Private Medical Laboratories in the State have Blood Gas Analyser. In the case of Pathanamthitta district, only 1% of the labs own Blood Gas Analyzer. Data pertaining to other districts may be seen at Table-30. In the case of Microbiology Analyzer, only 3% of the Private Medical Laboratories in the State are using it. Please refer table 31 for details.

3.1.11 ELISA stands for enzyme linked immunosorbent assay. In short, it is a test to detect the presence of antigens of pathogens or for immune response to things attacking the body such as virus, bacteria and allergens. The results of the survey reveal that only 5% of the Private Medical Laboratories in the state are using ELISA reader in their labs. It is also to be emphasized at this point that in Idukki, none of the labs are equipped with ELISA Reader. Details pertaining to other districts may be seen from Table-32.

3.1.12 Electrophoresis Apparatus: is an instrument used to separate different types of proteins in a solution like serum, by subjecting it to an electric field. This enables the detection and quantification of the proportion of the different proteins in serum for the diagnosis of various disease conditions. As per the survey results, none of the Private Medical Laboratories in Kasaragod are using the device, whereas one lab is equipped with the machine each in Pathanamthitta and Kannur districts. For district wise details please see Table-33.

3.1.13 Elisa plate washer is an instrument used for washing the wells of an ELISA plate during the performance of the ELISA test. Only 2% (or 79) of the Private Medical Laboratories in the State are having ELISA Plate washer and

only 1% (or 58) of the Private Medical Laboratories are having Automated Tissue Processor. 10% of the Private Medical Laboratories in the State are using Electrolyte Analyzers. For district wise details, please see Tables 34, 36 and 35 respectively.

Chapter 4

Laboratory Facilities

4.1 Facilities Available in the Private Medical Laboratories

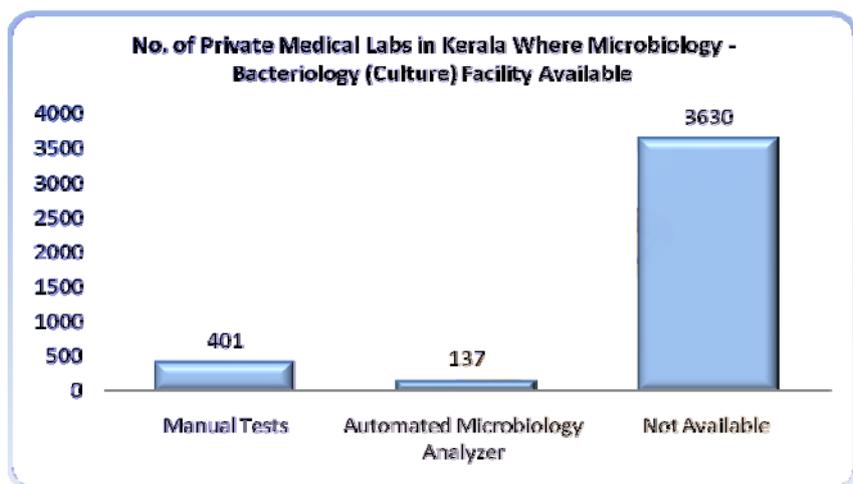
4.1.1 A medical laboratory or clinical laboratory is a laboratory where tests are done on biological specimens in order to get information about the health of a patient. Such laboratories may be having departments such as microbiology, hematology, clinical biochemistry, immunology, histology, cytology etc.

4.1.2 As in the case of equipments, there are a large number of clinical tests available in the laboratories. Data collected for Microbiology, Bio-chemistry, Histopathology, Cytology, Radioimmunoassay, ECG, EEG, TMT/Echo/Dopler and Molecular Diagnosis.

4.2 Microbiology facilities

4.2.1 Microbiology deals with diseases caused by infectious agents such as bacteria, viruses, fungi and parasites. Data collected for Microbiology by classifying it into three categories viz. Bacteriology (Culture), Serology and TB Culture.

4.2.2 Bacteriology is the study of bacteria. This subdivision of microbiology involves the identification, classification, and characterization of bacterial species. Bacteriology (culture) facility is subdivided



into 2 categories viz. manual testing and tests using Automated Microbiology Analyzer, and data collected based on that. As per the survey results, 13% of the Private Medical Laboratories in the State provides Bacteriology (Culture) facility out of which 3% is using Automated Microbiology Analyzer and 10% manual. For district wise details please see Table-39.

4.2.3 Serology is the scientific study or diagnostic examination of blood serum, in particular with consideration to the response of the immune system to pathogens or foreign substances. Different options of serology tests like Card tests, ELISA tests and test using Automated Immunoanalyzer or Automated ELISA Processor were considered for the survey. As per the survey results, in 38% of the Private Medical Laboratories do not offer serology facility while 53% are using card test facility. For district wise details, please see table-40.

Statement-4.1: No. of Private Medical Laboratories in Kerala by Type of Serology Facility used.

Type of Serology Facility	No: of Labs	Percentage
Card Tests	2212	53%
ELISA Tests	63	2%
Automated Immunoanalyzer or Automated ELISA Processor	48	1%
Card & ELISA Tests	127	3%
Card Tests & Automated Immunoanalyzer	45	1%
ELISA Tests & Automated Immunoanalyzer	7	0%
All the Three	62	1%
No	1604	38%
Total	4168	100%

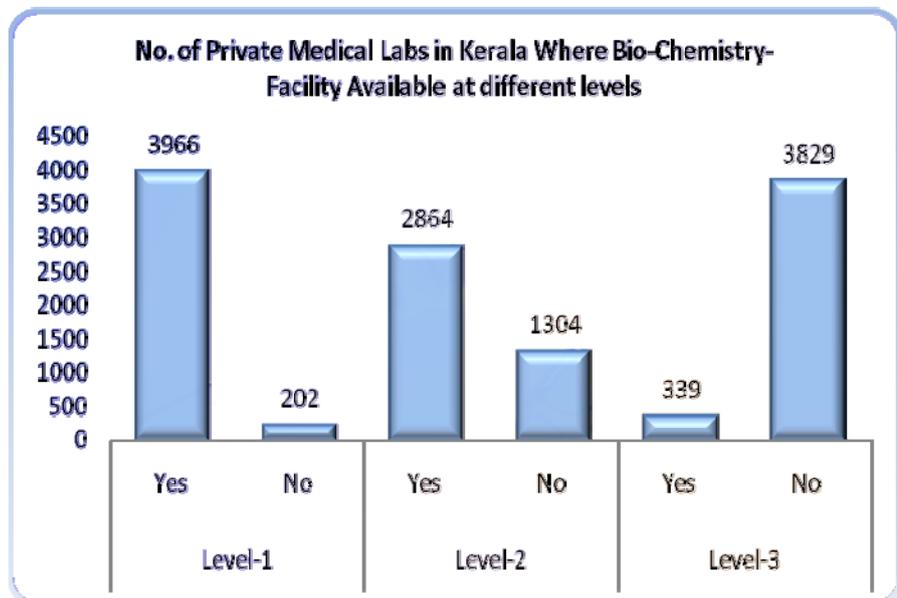
4.2.4 In almost 94.5% of the Private Medical Laboratories in the State, TB Culture facility is not available. However, 2.5% of the Private Medical Laboratories in the State offers TB Culture facility using Automated Microbiology Analyzer. District wise data is presented in Table-41.

4.3 Bio-chemistry facilities

4.3.1 Clinical biochemistry is that branch of laboratory medicine in which chemical and biochemical methods are applied to the study of disease. Biochemistry laboratory tests are done for the estimation of different biochemical parameters like glucose, urea, cholesterol etc., in blood and other body fluids.

4.3.2 For ease of data collection, bio-chemistry is classified into three levels viz. Level-1 (Glucose, Urea, Creatinine, Bilirubin etc.), Level-2 (Lipid Profile, Enzymes etc.) and Level-3 (electrophoresis, hormones, blood gas etc.).

4.3.3 As per the survey, Level-1 of bio-chemistry facility is available in 95% of the Private Medical Laboratories in the State and Level-2 of bio-chemistry facility is available in 69% of the Private Medical



Laboratories in the State where as Level-3 of bio-chemistry facility is available only in 8% of the Private Medical Laboratories in the State. For district wise details, please see Tables 42, 43 and 44 respectively.

4.4 Other test facilities

4.4.1 Radioimmunoassay (RIA) is a very sensitive in vitro assay technique used to measure concentrations of antigens (for example, hormone levels in the blood) by use of antibodies labeled with radio isotopes. The technique of radioimmunoassay has revolutionized research and clinical practice in many areas, like blood banking, diagnosis of allergies, endocrinology etc. The survey results show that the facility is available only in 1% or 45 Private Medical Laboratories in the State. In the case of districts, from Wayanad, Idukki, Alappuzha and Pathanamthitta, no laboratories were reported and the maximum number of laboratories reported from Thiruvananthapuram. For district wise details, please see table-45.

4.4.2 Histopathology is the examination of tissues from the body under a microscope to spot the signs and characteristics of disease. The main use of histopathology is in clinical medicine where it typically involves the examination of a biopsy (i.e. a surgically removed sample or specimen taken from a patient for the purposes of detailed study) by a specialist physician called a pathologist. At State level, only in 2% of the Private Medical Laboratories are having the Histopathology (Biopsy) facility. Maximum number of labs offering the facility is in Thiruvananthapuram and Thrissur. For district wise details, please see table-46.

4.4.3 As per the survey results, only in 2% of the Private Medical Laboratories in the State offer Tread mill test (TMT), Echocardiography and Doppler test facilities. Maximum number of labs offering the facility is in Thiruvananthapuram and Ernakulum. For district wise details, please see table-47.

4.4.4 An electrocardiogram (ECG) is a simple, painless test that records the heart's electrical activity and an electroencephalogram (EEG) is a test used to

detect abnormalities related to electrical activity of the brain. As per the survey results, 40% of the Private Medical Laboratories in the State offers ECG facility and 1% of the Private Medical Laboratories offers EEG facility. In Kasaragod, only in 8% of the labs have the ECG facility. In the case of EEG facility, none of the Private Medical Laboratories in Kasaragod, Wayanad and Idukki districts have EEG facility. For district wise details, please see tables 48 & 49.

4.4.5 Cytology is the medical and scientific study of cells. Cytology is a branch of pathology that studies and diagnoses diseases on the cellular level. It is usually used to aid in the diagnosis of cancer, but also helps in the diagnosis of certain infectious diseases and other inflammatory conditions. 3% or 122 Private Medical Laboratories in the State are offering cytology facility. In the case of districts, cytology facility is available in none of the Private Medical Laboratories in Idukki. Table-50 gives district wise details.

4.4.6 Molecular diagnostics is a technique used to analyse biological markers in the genome and proteome—the individual's genetic code and how their cells express their genes as proteins—by applying molecular biology to medical testing. Only 7 Private Medical Laboratories in the State have Molecular diagnostic facility available of which two each at Malappuram and Ernakulam and one each at Kozhikod, Kottayam and Thiruvananthapuram. For district wise details, please see table-51.

4.4.7 It has become a common practice to outsource many of the laboratory tests in the State. There are many benefits while outsourcing laboratory tests. Laboratory outsourcing saves total cost, investment and manpower. In-house laboratory functions are characterized by relatively high fixed costs, high capital investment and associated benefits and salaries, with assets and manpower are usually under-utilized.

4.4.8 23% of the Private Medical Laboratories in the State do not outsource any tests while 59% outsource within State, 10% outside State and 8% within

& outside State. In the case of Kasaragod district, 23% of the laboratory tests are outsourced to outside State and 21% within & outside State. Table -52 gives the district wise data.

Statement-4.2: No. of Private Medical Labs in Kerala Which Outsources any of the Testing Facilities

Type of outsourcing	No: of Labs	Percentage
Within State	2458	59%
Outside State	397	10%
Within & Outside State	335	8%
No	978	23%
Total	4168	100%

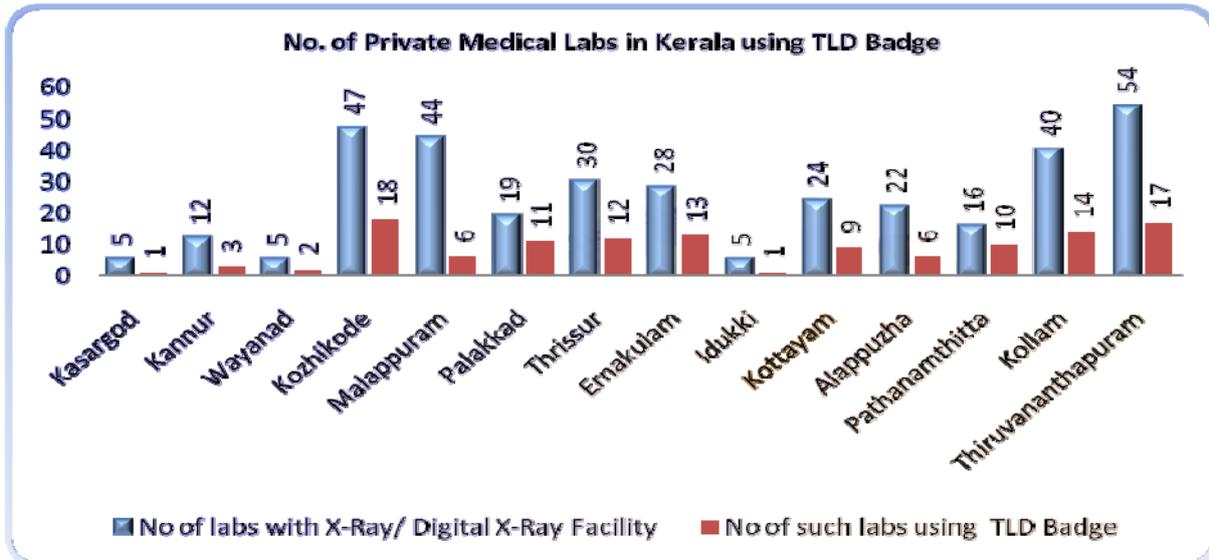
4.5 Radiology facilities

4.5.1 Radiology is a medical specialty that employs the use of imaging techniques such as X-ray radiography, ultrasound, computed tomography (CT), magnetic resonance imaging (MRI) etc., to both diagnose and treat disease visualised within the human body. Generally, radiology services will not be available in all the medical laboratories and usually it will function separately in a separate building under the banner X-Ray/Scanning centers. However, in the purview of survey on Private Medical Laboratories in Kerala, such X-Ray/Scanning centers are not included.

4.5.2 An ultrasound scan is a painless test that uses sound waves to create images of organs and structures inside your body and is a very commonly used test. Only in 188 or 5% of the Private Medical Laboratories in the State have ultrasound scanning facility available along with other medical tests. District wise data is presented in the Table-53.

4.5.3 In the case of X-Ray/Digital X-Ray, at State level, 8% of the Private Medical Laboratories provides the facility. In the case of CT scan, the said number is 55 or 1% and in the case of MRI scan, the number is 26 or less than 1% at the State level. For district wise details, please see tables 54, 55 & 56.

4.5.4 A thermo luminescent dosimeter, or TLD, is a type of radiation



dosimeter. It is used to measure external individual doses from X, beta and gamma radiations. The TLD badges to be used only by persons directly working with radiation sources such as X-ray units, radioisotopes etc. As per the previous para, 8% or 351 of the Private Medical Laboratories have X-Ray/Digital X-Ray facility. Out of those Laboratories having X-Ray/Digital X-Ray facility, only 35% or 123 laboratories are using TLD Badge in their laboratory. In the case of Pathanamthitta, 10 out of 16 Private Medical Laboratories are using TLD badge where as in Malappuram, only 6 out of 44 Private Medical Laboratories have TLD badge. In general, a total of 135 Private Medical Laboratories in the State are using TLD badge. For district wise details, please see table 57.

4.6 Other Facilities

4.6.1 Apart from laboratory and radiology facilities, some of the laboratories are providing many other facilities like Speech Therapy, Physiotherapy, Audiology, Home Service, Consulting Clinic, Infertility Clinic, Mobile Laboratories, Mobile Mortuary, Blood Bank, Medical shop, Optometry, Ambulance etc.

4.6.2 Among the Private Medical Laboratories in the State, only 7 labs provides speech therapy and 6 labs provide Audiology, out of which, in both the cases, 2 are in Malappuram District. (Audiology is a branch of science that studies hearing, balance, and related disorders.). Please see Tables 58 & 60.

4.6.3 Physiotherapy facility is available in 18 Private Medical Laboratories and 14 labs provide mobile laboratory facilities. 6 Private Medical Laboratories provides mobile mortuary facility and 2 labs in Palakkad provide blood bank facility.

4.6.4 Medical shops are operating along with 161 Private Medical Laboratories and 54 labs provide ambulance facility. Optometry facility is available in 11 Private Medical Laboratories in the State.

4.6.5 Some of the Private Medical Laboratories in the State offers home visit for blood sample collection and test results. A total of 1027 Private Medical Laboratories in the State offers home visit for blood sample collection. While in Alappuzha district 39% of the labs offer the facility, the said percentage is only 14% in Malappuram and 17% in Kasaragod. Please see table-61 for district wise data.

Chapter 5

Financial Aspects

5.1 Financial aspects.

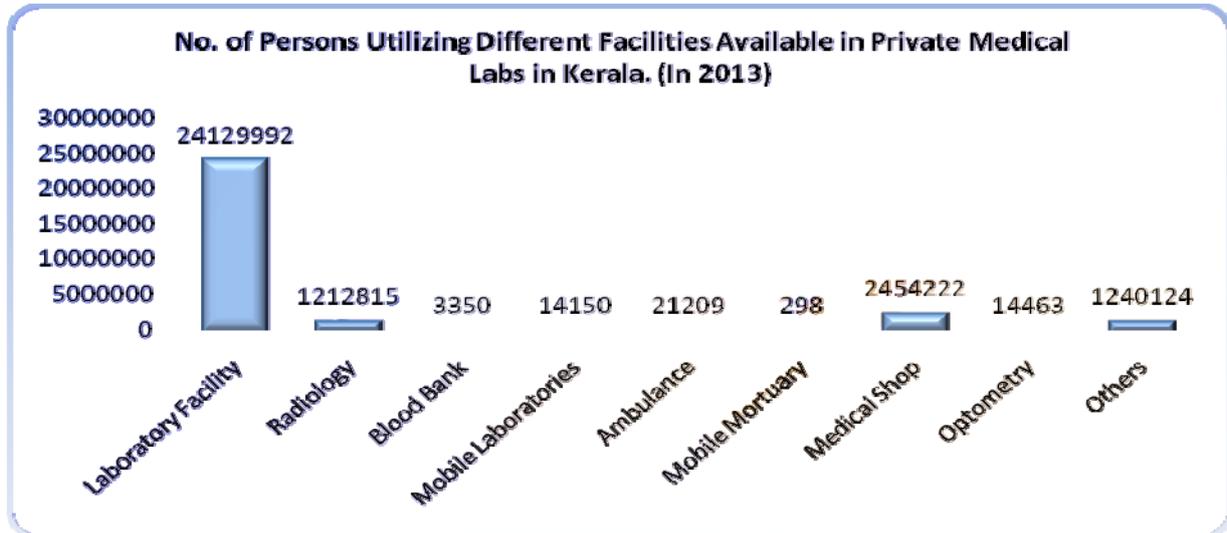
5.1.1 Financial accounts are a historical record of business' performance over a past period - usually one financial year. In any institution, whether financial institution or non-financial institution, it's important to keep accounts accurate and up to date for drawing up 'true and fair' annual accounts. The income as well as expenditure incurred in a lab mainly depends upon the number of persons utilizing different facilities available in the lab. Also, an accurate figure can be ascertained only if account is properly maintained in the institution. As discussed earlier, in the Private Medical Laboratories in the State, the ratio of “maintenance of accounts to non-maintenance of accounts” is 82:18. It is to be borne in mind that, getting information on income and expenditure from any institution is a cumbersome job. However, best efforts are made to get the data almost accurately.

5.2 Persons Utilizing Different Facilities Available in the Laboratories

5.2.1 As mentioned in the previous para, the income as well as expenditure incurred in a lab mainly depends upon the number of persons utilizing different facilities available in the lab. The survey results reveal that, during the year 2013, a total of 2,90,90,623 persons utilized the different facilities offered in the Private Medical Laboratories in the State. Out of this, the maximum number of people utilized the facilities are from Malappuram (49,61,959) followed by Thrissur (37,13,794).

5.2.2 A total of 2,41,29,992 persons utilized the laboratory facilities and 12,12,815 persons utilized radiology facilities that are available in the Private

Medical Laboratories in the State during the year 2013. It is also to be highlighted that in Malappuram district, around 9,42,151 persons utilized the medical shop facility that was available along with the Private Medical



Laboratories in the district during the year 2013. District wise details of persons utilizing the different facilities during the month of November 2013 and during the year 2013 are presented in the table 70.

5.3 Assets and liabilities

5.3.1 Fixed asset of an institution is an asset that is not consumed or sold during the normal course of business, such as land, buildings, equipment, machinery, vehicles, Furniture & fixtures, and other such items. The term fixed does not necessarily mean immovable; any asset expected to last, or be in use for, more than one year is considered a fixed asset. Fixed assets enable their owner to carry on its operations.

5.3.2 The value (as on the date of survey) of fixed assets like land, buildings, equipments, vehicles, Furniture & fixtures and other items were ascertained. As per the survey results, the ascertained value of fixed assets of Private Medical Laboratories in the State amounts to around 440 crore rupees. 55% of

this amount is the share of equipments and 24% is that of land. In the case of districts, Thrissur tops with 58.4 crores followed by Thiruvananthapuram with 55.2 crores. For district wise details, please see table-71.

Statement-5.1: Value of fixed assets of Private Medical Laboratories in Kerala

Item	Value	Percentage
Land	103,88,90,986	23.59%
Building	47,42,21,395	10.77%
Equipments	242,66,39,938	55.09%
Vehicles	6,80,51,167	1.55%
Furniture & Fixtures	34,56,48,977	7.85%
Others	5,10,27,745	1.16%
Total	440,44,80,208	100.00%

5.3.3 As we all know, in finance, a loan is a debt provided by one entity (organization or individual) to another entity at an interest rate. In the survey on Private Medical Laboratories in the State, an effort was made to collect the Loan and Other Liabilities of Private Medical Labs in Kerala. As per the results, the total loan taken amount to Rs. 80,69,02,971/- out of which an amount of Rs. 19,42,29,975/- was repaid. An amount of Rs.59,73,51,349/- stood as loan outstanding . In addition to the loan amount, an amount of Rs. 39,56,83,735/- reported as other liabilities.

5.3.4 Out of the total loan amount, 19% was taken by the Private Medical Laboratories of Kottayam district followed by Kozhikode with 13%. In the case of loan repayment, the Private Medical Laboratories in Palakkad repaid almost 42% of the loan taken. For district wise details, please see table-73.

5.4 Expenditure and Income details

5.4.1 In general, Income is the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms and expenditure, is the payment of cash or cash-equivalent for goods or services, or a charge against available funds in settlement of an obligation.

5.4.2 In the Survey on Private Medical Laboratories in Kerala -2013, income and expenditure for the last month and for the financial year 2012-13 were collected. The items covered under expenditure are Salaries/Wages /Charges for Professionals/Consultants, Electricity Charges, Water charges, Medical Equipments –Repair and Maintenance, Reagents and Chemicals, Telephone/Internet Charges, Building Rent / Maintenance, Tax, Transportation Expenses (Including expenses on fuel), Waste disposal and other expenses.

5.4.3 As per the survey results, the total income generated by the Private Medical Laboratories in the State during the financial year 2012-13 is Rs.379.5 Crores and the total expenditure reported by the firms is Rs.240.3 Crores. In the case of Kottayam District, total expenditure for 2012-13 is 52% of the total income generated (i.e. percentage of expenditure over income) and in case of Alappuzha the said figure is 57%. The said figure for Kasaragod and Malappuram is 77% and 71% respectively where as the State level figure is 63%. It can be seen that all the Private Medical Laboratories in the State are working profitably.

5.4.4 Out of the total income generated by the Private Medical Laboratories in the State, 16.49% is the share from Thiruvananthapuram followed by Ernakulam with 16.36%. The share of Wayanad is 0.81% and that of Kasaragod is 1.09%. Though, the highest number of Private Medical

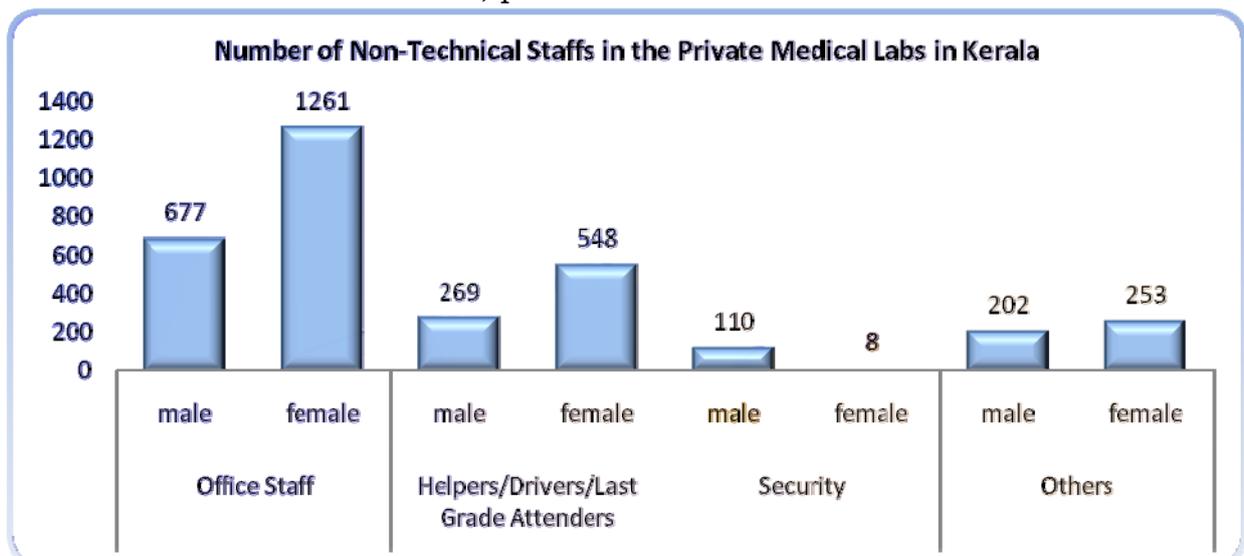
Laboratories in the State is in Thrissur (503), the share of income contributed by Thrissur is only 12.08%. For district wise details, please see table-72.

Chapter 6 Work Force

6.1 Details of staff and their qualifications (in concerned profession)

6.1.1 The staffs working in the Private Medical Laboratories in the State are classified into technical and non-technical. Office Staff, Helpers/Drivers/Last grade attenders, Security etc. are classified as Non-technical staffs. Out of the total 3328 non-technical staffs, 1258 are males and 2070 are females. (In other words, the ratio of male to female is 38:62).

6.1.2 Out of total 1938 office staff, 1261 are females, and out of 118 security officials, only 8 of them are females. In most of the labs, security officials are hired from various institutions. Out of total 1258 male non-technical staff, 54% of them are office staff and 21% are Helpers/Drivers/Last grade attenders. In the case of females, out of 2070 non-technical staff, 61% of them are office staff and 26% are Helpers and Last grade attenders. Male to female ratio of non-technical staff is found least in Kannur with 24:76 and highest in Idukki with 53:47. For district wise details, please see table-74.



6.1.3 Laboratory technicians, X-Ray Technician, Scanning Technician, Nurses, Biochemist, Microbiologist, Pathologist, Radiologist, Physiotherapist, Doctors, Other Technical Staff and Teaching Staff are categorized as technical staff.

6.1.4 One of the major issues found during the survey was that lab technicians without proper qualifications are working in some labs. Also there is a misconception that, in the absence of enough qualified people in the industry, a qualified supervisor is enough to guide the other staff in a laboratory, who are efficient, but not qualified. This is a serious issue as doctors depend on the diagnosis from the labs.

6.1.5 The survey results show that, there are 11,093 technical staffs working in the Private Medical Laboratories in the State, out of which 8,985 are females. 374 or 3.4% of them have no technical educational qualification, but only experience. 6,861 persons or 62% of the technical staff are diploma holders.

Statement-6.1: No. of Technical Staff working in Private Medical Labs in Kerala by educational qualification

Educational Qualification	No of technical staff		
	Male	Female	Total
VHSC/Certificate Courses	184	1690	1874
Diploma	928	5933	6861
Degree	434	736	1170
Post Graduates	445	369	814
Experience Only	117	257	374
Total	2108	8985	11093

6.1.6 81% (or 9037 persons) working in the Private Medical Laboratories in the State are laboratory technicians out of which 7891 are females and 6% (or 617 persons) are X-Ray technicians out of which 388 are females. Other details are presented in the statement below.

Statement-6.2: No. of Technical Staff working in Private Medical Laboratories in Kerala by category.

Category	Male	Female	Total
Laboratory Technicians	1146	7891	9037
X-Ray Technicians	229	388	617
Scanning Technicians	84	68	152
Nurses	9	126	135
Biochemist	63	88	151
Microbiologist	29	96	125
Pathologist	32	39	71
Radiologist	93	47	140
Physiotherapist	14	6	20
Doctors (Full time)	69	28	97
Doctors (Part time)	254	63	317
Other Technical Staffs	70	108	178
Teaching Staffs	16	37	53
Total	2108	8985	11093

6.1.7 In the case of laboratory technicians working in the Private Medical Laboratories, the maximum number are in Ernakulum (1151) followed by Thrissur(1132). Also the result shows that, 68.30% or 6,172 of the laboratory

technicians are diploma holders while, 3.16% of them are reported to be having only experience. Post graduates contribute only 1.52% while Degree holders are 7.58%. In the case of Ernakulum district, where number of lab technicians are maximum, male to female Ratio of lab technicians is 6:94 where as in the case of Kasaragod district, the said ratio is 35:65. From the State average ratio of 13:87, we can conclude that females dominate the field. Please see table-75 for district wise data.

Statement-6.3: No. of laboratory technicians working in Private Medical Laboratories in Kerala by Qualification.

Qualification	Lab Technicians		
	Male	Female	Total
VHSC/Certificate Courses	141	1616	1757
	8.03%	91.97%	100.00%
Diploma	689	5483	6172
	11.16%	88.84%	100.00%
Degree	186	499	685
	27.15%	72.85%	100.00%
Post Graduates	48	89	137
	35.04%	64.96%	100.00%
Experience Only	82	204	286
	28.67%	71.33%	100.00%
Total	1146	7891	9037
	12.68%	87.32%	100.00%

6.1.8 As mentioned earlier, many of the Private Medical Laboratories in State have X-Ray and Scanning facilities. At State level, there are 617 X-Ray technicians and 152 scanning technicians are available.70% of the X-Ray technicians and 49% of the scanning technicians are diploma holders. 7% of the X-Ray technicians and 3% of the scanning technicians have only

experience and do not have any technical qualifications. For district wise details. See Tables 76 & 77.

Statement-6.4: No. of X-Ray & Scanning technicians working in Private Medical Laboratories in Kerala by Qualification.

Qualification	X-Ray Technicians			Scanning Technicians		
	Male	Female	Total	Male	Female	Total
VHSC/Certificate Courses	33	38	71	4	9	13
	46.48%	53.52%	100.00%	30.77%	69.23%	100.00%
Diploma	158	276	434	46	28	74
	36.41%	63.59%	100.00%	62.16%	37.84%	100.00%
Degree	21	38	59	23	20	43
	35.59%	64.41%	100.00%	53.49%	46.51%	100.00%
Post Graduates	3	7	10	11	6	17
	30.00%	70.00%	100.00%	64.71%	35.29%	100.00%
Experience Only	14	29	43	0	5	5
	32.56%	67.44%	100.00%	0.00%	100.00%	100.00%
Total	229	388	617	84	68	152
	37.12%	62.88%	100.00%	55.26%	44.74%	100.00%

6.1.9 It's a general view that, nurses do not have much role in the Private Medical Laboratories. As per the survey results, there are 135 nurses working in the Private Medical Laboratories in the State out of which, 9 are male. Details are presented in table-78.

6.1.10 In the case of total number of Bio-Chemists, it is 151, out of which, 58% or 88 are females.70% or 105 Bio-Chemists working in the Private Medical

Laboratories are Post Graduates and rest graduates. In the case of number of Microbiologists, it is 125, out of which, 77% or 96 of them are females. 71% or 89 of them are post graduates and rest graduates. Please see table-79 & 80 for district wise details.

Statement-6.5: No. of Biochemists & Microbiologists working in Private Medical Laboratories in Kerala by Qualification.

Qualification	Biochemist			Microbiologist		
	Male	Female	Total	Male	Female	Total
Degree	16	30	46	8	28	36
	34.78%	65.22%	100.00%	22.22%	77.78%	100.00%
Post Graduates	47	58	105	21	68	89
	44.76%	55.24%	100.00%	23.60%	76.40%	100.00%
Total	63	88	151	29	96	125
	41.72%	58.28%	100.00%	23.20%	76.80%	100.00%

6.1.11 There are 71 pathologists working in the Private Medical Laboratories in the State, out of which 39 are females. No pathologists are available in Idukki and Alappuzha districts. In the case of Radiologists, the number is 140, out of which 47 are females.

6.1.12 As we all know, Physiotherapists help people affected by injury, illness or disability through movement and exercise. Also, we have seen that there is only 18 Private Medical Laboratories in the State offering physiotherapy in their firm. The survey results shows that there are 20 physiotherapists (regular or part-time) working in these labs, out of which only 6 of them are females. Please see table-83 for district wise details.

6.1.13 As we have seen earlier, some of the Private Medical Laboratories in the State are having consultation facility. The details of availability of doctors are

given in the following statement. Please see table-84 & 85 for district wise details.

Statement-6.6: No. of doctors (Full-time & Part-time) working in Private Medical Laboratories in Kerala by Qualification.

Qualification	Doctors (Full time)			Doctors Part time)		
	Male	Female	Total	Male	Female	Total
Degree	27	6	33	88	28	116
	81.82%	18.18%	100.00%	75.86%	24.14%	100.00%
Post Graduates	42	22	64	166	35	201
	65.63%	34.38%	100.00%	82.59%	17.41%	100.00%
Total	69	28	97	254	63	317
	71.13%	28.87%	100.00%	80.13%	19.87%	100.00%

6.1.14 As said earlier, under the category of technical staff, we included a limited number of categories. The others are grouped into other technical staff and surveyed. As per the result, there is 178 other technical staff working in the Private Medical Laboratories in the State, out of which 108 of them are females. Please see table-86 for district wise details.

6.1.15 Earlier in chapter 2, we have seen that 204 Private Medical Laboratories in the State offers different technical courses. As per the result of the survey, there is only 53 teaching staff working in the Private Medical Laboratories of the State. Prima facie this looks senseless, but true. Because many of the Private Medical Laboratories have no separate teaching staff post, and these are managed by the regular technical staff. Please see table-87 for district wise details.



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Table 1: No of private medical labs in Kerala by year of starting

Sl No.	District	Before 1980	1980-1990	1991-2000	2001-2010	After 2010	Total
1	Kasargod	1	2	11	36	21	71
2	Kannur	11	28	48	81	49	217
3	Wayanad	3	6	12	26	14	61
4	Kozhikode	9	43	67	188	110	417
5	Malappuram	7	33	60	197	180	477
6	Palakkad	5	22	60	112	79	278
7	Thrissur	13	56	52	236	146	503
8	Ernakulam	11	29	48	180	196	464
9	Idukki	1	6	7	42	46	102
10	Kottayam	13	19	28	151	97	308
11	Alappuzha	17	26	44	135	110	332
12	Pathanamthitta	2	5	19	76	62	164
13	Kollam	8	20	47	159	129	363
14	Thiruvananthapuram	6	32	75	188	110	411
	Total	107	327	578	1807	1349	4168

Table 2: No. of Private Medical Labs in Kerala by Type of Ownership

Sl No.	District	Owned	Rented	Others	Total
1	Wayanad	2	59	0	61
2	Kasargod	3	68	0	71
3	Idukki	11	90	1	102
4	Pathanamthitta	15	149	0	164
5	Kannur	16	200	1	217
6	Palakkad	60	217	1	278
7	Kottayam	38	268	2	308
8	Alappuzha	50	281	1	332
9	Kollam	60	303	0	363
10	Thiruvananthapuram	51	358	2	411
11	Kozhikode	21	391	5	417
12	Ernakulam	79	384	1	464
13	Malappuram	27	448	2	477
14	Thrissur	79	419	5	503
	Total	512	3635	21	4168

Table 3: No. of Private Medical Labs in Kerala by Area of the Lab (In Sqft.)

Sl No.	District	Less than 100	101-500	501-1000	1001-2000	2001-4000	More than 4000	Total
1	Kasargod	0	64	5	2	0	0	71
2	Kannur	7	157	37	10	4	2	217
3	Wayanad	6	52	1	1	0	1	61
4	Kozhikode	8	374	23	7	3	2	417
5	Malappuram	34	403	22	14	2	2	477
6	Palakkad	25	228	18	5	2	0	278
7	Thrissur	10	407	61	19	4	2	503
8	Ernakulam	10	362	62	24	5	1	464
9	Idukki	3	92	7	0	0	0	102
10	Kottayam	14	238	38	13	3	2	308
11	Alappuzha	7	297	16	10	2	0	332
12	Pathanamthitta	5	121	27	7	3	1	164
13	Kollam	8	295	35	20	5	0	363
14	Thiruvananthapuram	28	304	43	25	7	4	411
	Total	165	3394	395	157	40	17	4168

Table 4: No. of Private Medical Labs in Kerala by Computerization of the Lab

Sl No.	District	Fully Computerised	Partially Computerised	Not Computerised	Total
1	Kasargod	22	37	12	71
2	Kannur	70	85	62	217
3	Wayanad	18	27	16	61
4	Kozhikode	77	229	111	417
5	Malappuram	101	215	161	477
6	Palakkad	56	97	125	278
7	Thrissur	58	265	180	503
8	Ernakulam	169	193	102	464
9	Idukki	18	57	27	102
10	Kottayam	70	177	61	308
11	Alappuzha	86	166	80	332
12	Pathanamthitta	48	73	43	164
13	Kollam	145	131	87	363
14	Thiruvananthapuram	74	146	191	411
	Total	1012	1898	1258	4168

Table 5: No. of Private Medical Labs in Kerala by Cost of Individual Test Document Available to Public

Sl No.	District	Yes	No	Total
1	Kasargod	39	32	71
2	Kannur	178	39	217
3	Wayanad	56	5	61
4	Kozhikode	341	76	417
5	Malappuram	378	99	477
6	Palakkad	93	185	278
7	Thrissur	313	190	503
8	Ernakulam	313	151	464
9	Idukki	60	42	102
10	Kottayam	126	182	308
11	Alappuzha	261	71	332
12	Pathanamthitta	69	95	164
13	Kollam	172	191	363
14	Thiruvananthapuram	136	275	411
	Total	2535	1633	4168

Table 6: No. of Private Medical Labs in Kerala by License from Local body

Sl No.	District	Yes	No	Total
1	Kasargod	61	10	71
2	Kannur	208	9	217
3	Wayanad	54	7	61
4	Kozhikode	408	9	417
5	Malappuram	368	109	477
6	Palakkad	219	59	278
7	Thrissur	470	33	503
8	Ernakulam	406	58	464
9	Idukki	83	19	102
10	Kottayam	245	63	308
11	Alappuzha	284	48	332
12	Pathanamthitta	151	13	164
13	Kollam	337	26	363
14	Thiruvananthapuram	371	40	411
	Total	3665	503	4168

Table 7: No. of Private Medical Labs in Kerala by Type of Registration

Sl No.	District	Not Registered	Medical Council	Others	Total
1	Kasargod	27	14	30	71
2	Kannur	95	10	112	217
3	Wayanad	8	4	49	61
4	Kozhikode	150	23	244	417
5	Malappuram	275	4	198	477
6	Palakkad	109	17	152	278
7	Thrissur	108	47	348	503
8	Ernakulam	142	71	251	464
9	Idukki	32	4	66	102
10	Kottayam	51	20	237	308
11	Alappuzha	128	29	175	332
12	Pathanamthitta	60	18	86	164
13	Kollam	150	31	182	363
14	Thiruvananthapuram	101	47	263	411
	Total	1436	339	2393	4168

Table 8: No. of Private Medical Labs in Kerala by Maintenance of Account

Sl No.	District	Yes	No	Total
1	Kasargod	59	12	71
2	Kannur	174	43	217
3	Wayanad	59	2	61
4	Kozhikode	374	43	417
5	Malappuram	386	91	477
6	Palakkad	226	52	278
7	Thrissur	408	95	503
8	Ernakulam	405	59	464
9	Idukki	82	20	102
10	Kottayam	242	66	308
11	Alappuzha	255	77	332
12	Pathanamthitta	129	35	164
13	Kollam	308	55	363
14	Thiruvananthapuram	322	89	411
	Total	3429	739	4168

Table 9: No. of Private Medical Labs in Kerala Having Branches Inside/Outside Kerala

Sl No.	District	Yes	No	Total
1	Kasargod	6	0	6
2	Kannur	16	0	16
3	Wayanad	7	0	7
4	Kozhikode	33	9	34
5	Malappuram	26	1	26
6	Palakkad	24	2	24
7	Thrissur	83	1	83
8	Ernakulam	64	3	64
9	Idukki	9	0	9
10	Kottayam	53	0	53
11	Alappuzha	45	2	45
12	Pathanamthitta	24	0	24
13	Kollam	35	0	35
14	Thiruvananthapuram	51	3	53
	Total	476	21	479

Table 10: No. of Private Medical Labs in Kerala by Ownership of Lab

Sl No.	District	Proprietorship	Partnership	Charitable Society	Co-operative Sector	Trusteeship	Limited Companies	Others	Total
1	Kasargod	57	14	0	0	0	0	0	71
2	Kannur	171	34	5	3	1	1	2	217
3	Wayanad	53	7	0	0	0	1	0	61
4	Kozhikode	318	86	5	3	1	4	0	417
5	Malappuram	363	108	2	3	0	1	0	477
6	Palakkad	247	28	0	1	0	2	0	278
7	Thrissur	392	69	3	14	0	23	2	503
8	Ernakulam	372	49	1	0	1	38	3	464
9	Idukki	90	9	1	0	0	1	1	102
10	Kottayam	259	23	3	5	0	18	0	308
11	Alappuzha	308	13	0	2	0	8	1	332
12	Pathanamthitta	145	14	1	0	0	4	0	164
13	Kollam	318	25	0	1	0	18	1	363
14	Thiruvananthapuram	360	31	0	3	2	12	3	411
	Total	3453	510	21	35	5	131	13	4168

Table 11: No. of Private Medical Labs in Kerala by Gender of Proprietor

Sl No.	District	Male	Female	Total
1	Kasargod	30	27	57
2	Kannur	90	81	171
3	Wayanad	19	34	53
4	Kozhikode	172	146	318
5	Malappuram	247	116	363
6	Palakkad	122	125	247
7	Thrissur	199	193	392
8	Ernakulam	152	220	372
9	Idukki	39	51	90
10	Kottayam	103	156	259
11	Alappuzha	161	147	308
12	Pathanamthitta	87	58	145
13	Kollam	185	133	318
14	Thiruvananthapuram	199	161	360
	Total	1805	1648	3453

Table 12: No. of Private Medical Labs in Kerala by Social Status of Proprietor

Sl No.	District	SC	ST	Others	Total
1	Kasargod	4	0	53	57
2	Kannur	2	1	168	171
3	Wayanad	0	0	53	53
4	Kozhikode	9	2	307	318
5	Malappuram	6	0	357	363
6	Palakkad	5	0	242	247
7	Thrissur	16	1	375	392
8	Ernakulam	7	0	365	372
9	Idukki	8	0	82	90
10	Kottayam	4	1	254	259
11	Alappuzha	4	0	304	308
12	Pathanamthitta	2	0	143	145
13	Kollam	7	1	310	318
14	Thiruvananthapuram	20	1	339	360
	Total	94	7	3352	3453

Table 13: No. of Private Medical Labs in Kerala by Type of Waste Disposal Facility Used

Sl No.	District	IMAGE	Local Disposal	Incinerator	IMAGE & Local Disposal	IMAGE & Incinerator	Local Disposal & Incinerator	All the Three	Total
1	Kasargod	19	46	0	6	0	0	0	71
2	Kannur	58	137	0	22	0	0	0	217
3	Wayanad	16	41	1	3	0	0	0	61
4	Kozhikode	68	324	0	24	0	1	0	417
5	Malappuram	130	322	1	24	0	0	0	477
6	Palakkad	43	230	0	5	0	0	0	278
7	Thrissur	172	305	0	26	0	0	0	503
8	Ernakulam	132	254	0	78	0	0	0	464
9	Idukki	26	71	0	5	0	0	0	102
10	Kottayam	127	168	0	12	0	1	0	308
11	Alappuzha	93	228	0	11	0	0	0	332
12	Pathanamthitta	69	77	0	18	0	0	0	164
13	Kollam	132	219	0	12	0	0	0	363
14	Thiruvananthapuram	97	218	0	96	0	0	0	411
	Total	1182	2640	2	342	0	2	0	4168

Table 14: No. of Private Medical Labs in Kerala by Type of waste disposal-Local Disposal Facility Used

Sl No.	District	Waste Pit Burial	Open Burning	Waste Pit Burial & Open Burning	Total
1	Kasargod	29	16	7	52
2	Kannur	78	49	32	159
3	Wayanad	26	7	11	44
4	Kozhikode	120	125	104	349
5	Malappuram	127	133	86	346
6	Palakkad	80	87	68	235
7	Thrissur	118	128	85	331
8	Ernakulam	124	110	98	332
9	Idukki	26	26	24	76
10	Kottayam	67	69	45	181
11	Alappuzha	91	103	45	239
12	Pathanamthitta	20	45	30	95
13	Kollam	89	59	83	231
14	Thiruvananthapuram	87	98	129	314
	Total	1082	1055	847	2984

Table 15: No. of Private Medical Labs in Kerala Where Needle Destroyer is Used

Sl No.	District	Yes	No	Total
1	Kasargod	65	6	71
2	Kannur	181	36	217
3	Wayanad	51	10	61
4	Kozhikode	370	47	417
5	Malappuram	423	54	477
6	Palakkad	248	30	278
7	Thrissur	454	49	503
8	Ernakulam	436	28	464
9	Idukki	98	4	102
10	Kottayam	284	24	308
11	Alappuzha	301	31	332
12	Pathanamthitta	154	10	164
13	Kollam	348	15	363
14	Thiruvananthapuram	397	14	411
	Total	3810	358	4168

Table 16: No. of Private Medical Labs in Kerala by Accreditation / certification

Sl No.	District	NABL	ISO Certification	Both NABL & ISO Certification	Other Certifying Agencies	No Accreditation/ Certification	Total
1	Kasargod	0	2	0	3	66	71
2	Kannur	0	5	0	6	206	217
3	Wayanad	0	5	0	4	52	61
4	Kozhikode	3	8	0	2	404	417
5	Malappuram	0	16	0	10	451	477
6	Palakkad	1	7	0	14	256	278
7	Thrissur	0	7	0	26	470	503
8	Ernakulam	7	8	1	28	420	464
9	Idukki	0	2	0	14	86	102
10	Kottayam	2	3	2	10	291	308
11	Alappuzha	1	13	0	6	312	332
12	Pathanamthitta	0	6	0	4	154	164
13	Kollam	0	12	1	11	339	363
14	Thiruvananthapuram	1	14	7	9	380	411
	Total	15	108	11	147	3887	4168

Table 17: No. of Private Medical Labs in Kerala by Internal/External Quality Checking

Sl No.	District	Internal	External	Both Internal & External	No	Total
1	Kasargod	33	4	13	21	71
2	Kannur	135	16	37	29	217
3	Wayanad	22	13	14	12	61
4	Kozhikode	239	35	59	84	417
5	Malappuram	214	33	74	156	477
6	Palakkad	116	38	22	102	278
7	Thrissur	269	43	95	96	503
8	Ernakulam	212	61	129	62	464
9	Idukki	64	20	8	10	102
10	Kottayam	141	15	28	124	308
11	Alappuzha	151	53	50	78	332
12	Pathanamthitta	69	13	38	44	164
13	Kollam	156	22	100	85	363
14	Thiruvananthapuram	161	38	35	177	411
	Total	1982	404	702	1080	4168

Table 18: No. of Private Medical Labs in Kerala by Courses Offered in the Labs

Sl No.	District	Certificate		Diploma		Others		Total
		Approved by Govt	Not Approved by Govt	Approved by Govt	Not Approved by Govt	Approved by Govt	Not Approved by Govt	
1	Kasargod	1	3	0	2	0	2	8
2	Kannur	0	0	0	1	0	0	1
3	Wayanad	0	0	0	0	0	0	0
4	Kozhikode	0	1	0	1	0	0	2
5	Malappuram	0	0	0	0	0	0	0
6	Palakkad	1	0	0	1	0	0	2
7	Thrissur	0	13	2	14	0	13	42
8	Ernakulam	1	33	3	32	3	31	103
9	Idukki	0	0	0	0	0	0	0
10	Kottayam	1	0	4	0	2	0	7
11	Alappuzha	5	3	3	2	0	1	14
12	Pathanamthitta	1	0	4	2	0	0	7
13	Kollam	1	0	2	2	0	1	6
14	Thiruvananthapuram	3	4	0	3	0	2	12
	Total	14	57	18	60	5	50	204

Table 19: No. of Private Medical Labs in Kerala Where Hematology Analyzer is Used

Sl No.	District	3 Part Analyzer	5Part Analyzer	Both 3 & 5 Part Analyzer	No	Total
1	Kasargod	16	2	2	51	71
2	Kannur	45	18	1	153	217
3	Wayanad	21	3	0	37	61
4	Kozhikode	95	44	1	277	417
5	Malappuram	143	42	9	283	477
6	Palakkad	37	11	1	229	278
7	Thrissur	90	23	7	383	503
8	Ernakulam	101	30	16	317	464
9	Idukki	11	11	1	79	102
10	Kottayam	78	14	3	213	308
11	Alappuzha	42	18	4	268	332
12	Pathanamthitta	32	3	0	129	164
13	Kollam	79	20	4	260	363
14	Thiruvananthapuram	97	36	4	274	411
	Total	887	275	53	2953	4168

Table 20: No. of Private Medical Labs in Kerala by Where Gamma Counter is Used

Sl No.	District	Yes	No	Total
1	Kasargod	1	70	71
2	Kannur	4	213	217
3	Wayanad	2	59	61
4	Kozhikode	11	406	417
5	Malappuram	22	455	477
6	Palakkad	6	272	278
7	Thrissur	19	484	503
8	Ernakulam	7	457	464
9	Idukki	1	101	102
10	Kottayam	7	301	308
11	Alappuzha	5	327	332
12	Pathanamthitta	1	163	164
13	Kollam	6	357	363
14	Thiruvananthapuram	15	396	411
	Total	107	4061	4168

Table 21: No. of Private Medical Labs in Kerala Where Bio-Safety Cabinet is Used

Sl No.	District	Yes	No	Total
1	Kasargod	7	64	71
2	Kannur	32	185	217
3	Wayanad	5	56	61
4	Kozhikode	29	388	417
5	Malappuram	42	435	477
6	Palakkad	15	263	278
7	Thrissur	38	465	503
8	Ernakulam	46	418	464
9	Idukki	12	90	102
10	Kottayam	32	276	308
11	Alappuzha	30	302	332
12	Pathanamthitta	9	155	164
13	Kollam	38	325	363
14	Thiruvananthapuram	54	357	411
	Total	389	3779	4168

Table 22: No. of Private Medical Labs in Kerala Where Microtome is Used

Sl No.	District	Manual	Semi-Automatic	Fully Automatic	No	Total
1	Kasargod	4	19	0	48	71
2	Kannur	9	47	0	161	217
3	Wayanad	3	13	0	45	61
4	Kozhikode	10	95	0	312	417
5	Malappuram	14	84	2	377	477
6	Palakkad	16	60	0	202	278
7	Thrissur	15	83	0	405	503
8	Ernakulam	15	116	0	333	464
9	Idukki	1	25	0	76	102
10	Kottayam	16	56	2	234	308
11	Alappuzha	9	68	1	254	332
12	Pathanamthitta	8	27	0	129	164
13	Kollam	12	74	0	277	363
14	Thiruvananthapuram	25	80	2	304	411
	Total	157	847	7	3157	4168

Table 23: No. of Private Medical Labs in Kerala Where Biochemistry Analyzer is Used

Sl No.	District	Semi-Automatic	Fully Automatic	Semi & Fully Automatic	No	Total
1	Kasargod	42	12	6	11	71
2	Kannur	120	26	11	60	217
3	Wayanad	40	4	9	8	61
4	Kozhikode	288	39	11	79	417
5	Malappuram	308	37	23	109	477
6	Palakkad	142	25	10	101	278
7	Thrissur	358	37	29	79	503
8	Ernakulam	338	47	16	63	464
9	Idukki	86	3	2	11	102
10	Kottayam	215	21	15	57	308
11	Alappuzha	189	41	7	95	332
12	Pathanamthitta	102	9	5	48	164
13	Kollam	255	34	9	65	363
14	Thiruvananthapuram	196	66	19	130	411
	Total	2679	401	172	916	4168

Table 24: No. of Private Medical Labs in Kerala Where Centrifuge is Used

Sl No.	District	Yes	No	Total
1	Kasargod	66	5	71
2	Kannur	213	4	217
3	Wayanad	59	2	61
4	Kozhikode	407	10	417
5	Malappuram	466	11	477
6	Palakkad	270	8	278
7	Thrissur	493	10	503
8	Ernakulam	454	10	464
9	Idukki	100	2	102
10	Kottayam	302	6	308
11	Alappuzha	326	6	332
12	Pathanamthitta	157	7	164
13	Kollam	356	7	363
14	Thiruvananthapuram	392	19	411
	Total	4061	107	4168

Table 25: No. of Private Medical Labs in Kerala Where Immunoassay Analyzer is Used

Sl No.	District	Yes	No	Total
1	Kasargod	7	64	71
2	Kannur	10	207	217
3	Wayanad	5	56	61
4	Kozhikode	15	402	417
5	Malappuram	33	444	477
6	Palakkad	7	271	278
7	Thrissur	25	478	503
8	Ernakulam	24	440	464
9	Idukki	8	94	102
10	Kottayam	12	296	308
11	Alappuzha	12	320	332
12	Pathanamthitta	11	153	164
13	Kollam	14	349	363
14	Thiruvananthapuram	20	391	411
	Total	203	3965	4168

Table 26: No. of Private Medical Labs in Kerala Where Water Bath is Used

Sl No.	District	Yes	No	Total
1	Kasargod	35	36	71
2	Kannur	109	108	217
3	Wayanad	25	36	61
4	Kozhikode	162	255	417
5	Malappuram	271	206	477
6	Palakkad	175	103	278
7	Thrissur	359	144	503
8	Ernakulam	286	178	464
9	Idukki	57	45	102
10	Kottayam	211	97	308
11	Alappuzha	224	108	332
12	Pathanamthitta	71	93	164
13	Kollam	236	127	363
14	Thiruvananthapuram	238	173	411
	Total	2459	1709	4168

Table 27: No. of Private Medical Labs in Kerala Where Hot Air Oven is Used

Sl No.	District	Yes	No	Total
1	Kasargod	28	43	71
2	Kannur	89	128	217
3	Wayanad	15	46	61
4	Kozhikode	131	286	417
5	Malappuram	162	315	477
6	Palakkad	67	211	278
7	Thrissur	164	339	503
8	Ernakulam	140	324	464
9	Idukki	35	67	102
10	Kottayam	120	188	308
11	Alappuzha	96	236	332
12	Pathanamthitta	48	116	164
13	Kollam	148	215	363
14	Thiruvananthapuram	100	311	411
	Total	1343	2825	4168

Table 28: No. of Private Medical Labs in Kerala Where Incubator is Used

Sl No.	District	Yes	No	Total
1	Kasargod	62	9	71
2	Kannur	167	50	217
3	Wayanad	52	9	61
4	Kozhikode	325	92	417
5	Malappuram	332	145	477
6	Palakkad	136	142	278
7	Thrissur	302	201	503
8	Ernakulam	228	236	464
9	Idukki	66	36	102
10	Kottayam	180	128	308
11	Alappuzha	194	138	332
12	Pathanamthitta	87	77	164
13	Kollam	266	97	363
14	Thiruvananthapuram	246	165	411
	Total	2643	1525	4168

Table 29: No. of Private Medical Labs in Kerala Where Autoclave is Used

Sl No.	District	Yes	No	Total
1	Kasargod	13	58	71
2	Kannur	45	172	217
3	Wayanad	12	49	61
4	Kozhikode	67	350	417
5	Malappuram	77	400	477
6	Palakkad	37	241	278
7	Thrissur	88	415	503
8	Ernakulam	56	408	464
9	Idukki	10	92	102
10	Kottayam	66	242	308
11	Alappuzha	62	270	332
12	Pathanamthitta	28	136	164
13	Kollam	87	276	363
14	Thiruvananthapuram	71	340	411
	Total	719	3449	4168

Table 30: No. of Private Medical Labs in Kerala Where Blood Gas Analyzer is Used

Sl No.	District	Yes	No	Total
1	Kasargod	3	68	71
2	Kannur	18	199	217
3	Wayanad	2	59	61
4	Kozhikode	18	399	417
5	Malappuram	14	463	477
6	Palakkad	10	268	278
7	Thrissur	21	482	503
8	Ernakulam	6	458	464
9	Idukki	3	99	102
10	Kottayam	13	295	308
11	Alappuzha	9	323	332
12	Pathanamthitta	1	163	164
13	Kollam	18	345	363
14	Thiruvananthapuram	21	390	411
	Total	157	4011	4168

Table 31: No. of Private Medical Labs in Kerala Where Microbiology Analyzer is Used

Sl No.	District	Yes	No	Total
1	Kasargod	6	65	71
2	Kannur	12	205	217
3	Wayanad	1	60	61
4	Kozhikode	15	402	417
5	Malappuram	9	468	477
6	Palakkad	4	274	278
7	Thrissur	13	490	503
8	Ernakulam	15	449	464
9	Idukki	1	101	102
10	Kottayam	10	298	308
11	Alappuzha	11	321	332
12	Pathanamthitta	2	162	164
13	Kollam	13	350	363
14	Thiruvananthapuram	9	402	411
	Total	121	4047	4168

Table 32: No. of Private Medical Labs in Kerala Where ELISA Reader is Used

Sl No.	District	Yes	No	Total
1	Kasargod	6	65	71
2	Kannur	14	203	217
3	Wayanad	5	56	61
4	Kozhikode	19	398	417
5	Malappuram	23	454	477
6	Palakkad	9	269	278
7	Thrissur	24	479	503
8	Ernakulam	27	437	464
9	Idukki	0	102	102
10	Kottayam	18	290	308
11	Alappuzha	19	313	332
12	Pathanamthitta	6	158	164
13	Kollam	18	345	363
14	Thiruvananthapuram	25	386	411
	Total	213	3955	4168

Table 33: No. of Private Medical Labs in Kerala by Where Electrophoresis Apparatus is Used

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	2	59	61
4	Kozhikode	9	408	417
5	Malappuram	7	470	477
6	Palakkad	6	272	278
7	Thrissur	9	494	503
8	Ernakulam	13	451	464
9	Idukki	5	97	102
10	Kottayam	10	298	308
11	Alappuzha	2	330	332
12	Pathanamthitta	1	163	164
13	Kollam	3	360	363
14	Thiruvananthapuram	8	403	411
	Total	76	4092	4168

Table 34: No. of Private Medical Labs in Kerala Where ELISA Plate Washer is Used

Sl No.	District	Yes	No	Total
1	Kasargod	2	69	71
2	Kannur	6	211	217
3	Wayanad	1	60	61
4	Kozhikode	5	412	417
5	Malappuram	11	466	477
6	Palakkad	3	275	278
7	Thrissur	6	497	503
8	Ernakulam	6	458	464
9	Idukki	0	102	102
10	Kottayam	9	299	308
11	Alappuzha	10	322	332
12	Pathanamthitta	1	163	164
13	Kollam	5	358	363
14	Thiruvananthapuram	14	397	411
	Total	79	4089	4168

Table 35: No. of Private Medical Labs in Kerala Where Electrolyte Analyzer is Used

Sl No.	District	Yes	No	Total
1	Kasargod	7	64	71
2	Kannur	31	186	217
3	Wayanad	4	57	61
4	Kozhikode	49	368	417
5	Malappuram	57	420	477
6	Palakkad	22	256	278
7	Thrissur	58	445	503
8	Ernakulam	46	418	464
9	Idukki	10	92	102
10	Kottayam	36	272	308
11	Alappuzha	21	311	332
12	Pathanamthitta	7	157	164
13	Kollam	25	338	363
14	Thiruvananthapuram	29	382	411
	Total	402	3766	4168

Table 36: No. of Private Medical Labs in Kerala Where Automated Tissue Processor is Used

Sl No.	District	Yes	No	Total
1	Kasargod	1	70	71
2	Kannur	7	210	217
3	Wayanad	2	59	61
4	Kozhikode	3	414	417
5	Malappuram	3	474	477
6	Palakkad	4	274	278
7	Thrissur	9	494	503
8	Ernakulam	1	463	464
9	Idukki	2	100	102
10	Kottayam	6	302	308
11	Alappuzha	4	328	332
12	Pathanamthitta	0	164	164
13	Kollam	8	355	363
14	Thiruvananthapuram	8	403	411
	Total	58	4110	4168

Table 37: No. of Private Medical Labs in Kerala Where Refrigerator is Used

Sl No.	District	Yes	No	Total
1	Kasargod	71	0	71
2	Kannur	212	5	217
3	Wayanad	60	1	61
4	Kozhikode	406	11	417
5	Malappuram	465	12	477
6	Palakkad	271	7	278
7	Thrissur	489	14	503
8	Ernakulam	457	7	464
9	Idukki	97	5	102
10	Kottayam	306	2	308
11	Alappuzha	325	7	332
12	Pathanamthitta	160	4	164
13	Kollam	358	5	363
14	Thiruvananthapuram	405	6	411
	Total	4082	86	4168

Table 38: No. of Private Medical Labs in Kerala Where Clinical Pathology Facility available

Sl No.	District	Yes	No	Total
1	Kasargod	70	1	71
2	Kannur	215	2	217
3	Wayanad	60	1	61
4	Kozhikode	415	2	417
5	Malappuram	477	0	477
6	Palakkad	278	0	278
7	Thrissur	491	12	503
8	Ernakulam	456	8	464
9	Idukki	98	4	102
10	Kottayam	308	0	308
11	Alappuzha	332	0	332
12	Pathanamthitta	164	0	164
13	Kollam	363	0	363
14	Thiruvananthapuram	410	1	411
	Total	4137	31	4168

Table 39: No. of Private Medical Labs in Kerala Where Microbiology - Bacteriology (Culture) Facility available

Sl No.	District	Level1 (Manual)	Automated Microbiology Analyzer	No	Total
1	Kasargod	13	3	55	71
2	Kannur	31	5	181	217
3	Wayanad	7	3	51	61
4	Kozhikode	69	8	340	417
5	Malappuram	36	22	419	477
6	Palakkad	21	8	249	278
7	Thrissur	39	15	449	503
8	Ernakulam	50	24	390	464
9	Idukki	8	2	92	102
10	Kottayam	18	18	272	308
11	Alappuzha	25	16	291	332
12	Pathanamthitta	12	3	149	164
13	Kollam	22	6	335	363
14	Thiruvananthapuram	50	4	357	411
	Total	401	137	3630	4168

Table 40: No. of Private Medical Labs in Kerala Where Microbiology - Serology Facility available

Sl No.	District	Card Tests	ELISA Tests	Automated Immuno analyzer or Automated ELISA Processor	Card & ELISA Tests	Card Tests & Automated Immuno analyzer	ELISA Tests & Automated Immuno analyzer	All the Three
1	Kasargod	37	1	0	3	3	0	1
2	Kannur	94	2	0	11	1	0	3
3	Wayanad	35	2	0	1	0	0	0
4	Kozhikode	224	1	5	14	10	2	8
5	Malappuram	293	10	7	10	4	2	5
6	Palakkad	194	2	1	11	1	0	5
7	Thrissur	270	7	3	20	12	0	12
8	Ernakulam	202	19	4	12	3	2	6
9	Idukki	53	1	2	1	0	1	1
10	Kottayam	167	4	7	11	0	0	3
11	Alappuzha	153	6	2	6	3	0	3
12	Pathanamthitta	83	1	2	3	0	0	4
13	Kollam	223	1	5	9	4	0	2
14	Thiruvananthapuram	184	6	10	15	4	0	9
	Total	2212	63	48	127	45	7	62

Table 41: No. of Private Medical Labs in Kerala Where Microbiology - TB Culture Facility Available

Sl No.	District	Level1 (Manual)	Automated Microbiology Analyzer	No	Total
1	Kasargod	2	2	67	71
2	Kannur	8	3	206	217
3	Wayanad	5	2	54	61
4	Kozhikode	22	6	389	417
5	Malappuram	6	24	447	477
6	Palakkad	8	6	264	278
7	Thrissur	18	11	474	503
8	Ernakulam	12	25	427	464
9	Idukki	1	1	100	102
10	Kottayam	7	11	290	308
11	Alappuzha	7	7	318	332
12	Pathanamthitta	4	2	158	164
13	Kollam	6	2	355	363
14	Thiruvananthapuram	17	4	390	411
	Total	123	106	3939	4168

Table 42: No. of Private Medical Labs in Kerala Where Bio-Chemistry - Level-1 (Glucose, Urea, Creatinine, Bilirubin etc.) Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	69	2	71
2	Kannur	210	7	217
3	Wayanad	57	4	61
4	Kozhikode	406	11	417
5	Malappuram	455	22	477
6	Palakkad	265	13	278
7	Thrissur	475	28	503
8	Ernakulam	436	28	464
9	Idukki	96	6	102
10	Kottayam	288	20	308
11	Alappuzha	318	14	332
12	Pathanamthitta	149	15	164
13	Kollam	354	9	363
14	Thiruvananthapuram	388	23	411
	Total	3966	202	4168

Table 43: No. of Private Medical Labs in Kerala Where Bio-Chemistry- Level-2 (Lipid Profile, Enzymes etc.) Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	44	27	71
2	Kannur	139	78	217
3	Wayanad	41	20	61
4	Kozhikode	285	132	417
5	Malappuram	322	155	477
6	Palakkad	162	116	278
7	Thrissur	383	120	503
8	Ernakulam	359	105	464
9	Idukki	82	20	102
10	Kottayam	213	95	308
11	Alappuzha	222	110	332
12	Pathanamthitta	102	62	164
13	Kollam	265	98	363
14	Thiruvananthapuram	245	166	411
	Total	2864	1304	4168

Table 44: No. of Private Medical Labs in Kerala Where Bio-Chemistry- Level-3 (Electrophoresis, Hormones, Blood gas etc.) Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	6	65	71
2	Kannur	25	192	217
3	Wayanad	7	54	61
4	Kozhikode	26	391	417
5	Malappuram	44	433	477
6	Palakkad	20	258	278
7	Thrissur	48	455	503
8	Ernakulam	27	437	464
9	Idukki	5	97	102
10	Kottayam	16	292	308
11	Alappuzha	24	308	332
12	Pathanamthitta	9	155	164
13	Kollam	35	328	363
14	Thiruvananthapuram	47	364	411
	Total	339	3829	4168

Table 45: No. of Private Medical Labs in Kerala Where Radioimmunoassay Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	1	70	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	5	412	417
5	Malappuram	5	472	477
6	Palakkad	1	277	278
7	Thrissur	8	495	503
8	Ernakulam	5	459	464
9	Idukki	0	102	102
10	Kottayam	5	303	308
11	Alappuzha	0	332	332
12	Pathanamthitta	0	164	164
13	Kollam	5	358	363
14	Thiruvananthapuram	9	402	411
	Total	45	4123	4168

Table 46: No. of Private Medical Labs in Kerala Where Histopathology (Biopsy) Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	2	69	71
2	Kannur	3	214	217
3	Wayanad	0	61	61
4	Kozhikode	7	410	417
5	Malappuram	4	473	477
6	Palakkad	2	276	278
7	Thrissur	12	491	503
8	Ernakulam	6	458	464
9	Idukki	2	100	102
10	Kottayam	7	301	308
11	Alappuzha	2	330	332
12	Pathanamthitta	2	162	164
13	Kollam	5	358	363
14	Thiruvananthapuram	13	398	411
	Total	67	4101	4168

Table 47: No. of Private Medical Labs in Kerala Where TMT/ ECHO/Doppler Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	3	214	217
3	Wayanad	1	60	61
4	Kozhikode	6	411	417
5	Malappuram	6	471	477
6	Palakkad	1	277	278
7	Thrissur	6	497	503
8	Ernakulam	15	449	464
9	Idukki	3	99	102
10	Kottayam	6	302	308
11	Alappuzha	4	328	332
12	Pathanamthitta	4	160	164
13	Kollam	8	355	363
14	Thiruvananthapuram	14	397	411
	Total	77	4091	4168

Table 48: No. of Private Medical Labs in Kerala Where ECG Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	6	65	71
2	Kannur	58	159	217
3	Wayanad	17	44	61
4	Kozhikode	181	236	417
5	Malappuram	158	319	477
6	Palakkad	80	198	278
7	Thrissur	247	256	503
8	Ernakulam	162	302	464
9	Idukki	31	71	102
10	Kottayam	127	181	308
11	Alappuzha	171	161	332
12	Pathanamthitta	63	101	164
13	Kollam	144	219	363
14	Thiruvananthapuram	221	190	411
	Total	1666	2502	4168

Table 49: No. of Private Medical Labs in Kerala Where EEG Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	5	412	417
5	Malappuram	5	472	477
6	Palakkad	1	277	278
7	Thrissur	6	497	503
8	Ernakulam	5	459	464
9	Idukki	0	102	102
10	Kottayam	1	307	308
11	Alappuzha	3	329	332
12	Pathanamthitta	3	161	164
13	Kollam	15	348	363
14	Thiruvananthapuram	12	399	411
	Total	57	4111	4168

Table 50: No. of Private Medical Labs in Kerala Where Cytology Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	1	70	71
2	Kannur	9	208	217
3	Wayanad	3	58	61
4	Kozhikode	20	397	417
5	Malappuram	6	471	477
6	Palakkad	6	272	278
7	Thrissur	13	490	503
8	Ernakulam	13	451	464
9	Idukki	0	102	102
10	Kottayam	15	293	308
11	Alappuzha	8	324	332
12	Pathanamthitta	2	162	164
13	Kollam	6	357	363
14	Thiruvananthapuram	20	391	411
	Total	122	4046	4168

Table 51: No. of Private Medical Labs in Kerala Where Molecular Diagnosis Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	0	217	217
3	Wayanad	0	61	61
4	Kozhikode	1	416	417
5	Malappuram	2	475	477
6	Palakkad	0	278	278
7	Thrissur	0	503	503
8	Ernakulam	2	462	464
9	Idukki	0	102	102
10	Kottayam	1	307	308
11	Alappuzha	0	332	332
12	Pathanamthitta	0	164	164
13	Kollam	0	363	363
14	Thiruvananthapuram	1	410	411
	Total	7	4161	4168

Table 52: No. of Private Medical Labs in Kerala Which Outsources any of the Testing Facilities

Sl No.	District	Within State	Outside State	Within & Outside State	No	Total
1	Kasargod	22	16	15	18	71
2	Kannur	108	31	27	51	217
3	Wayanad	35	7	0	19	61
4	Kozhikode	232	45	30	110	417
5	Malappuram	258	64	60	95	477
6	Palakkad	175	28	37	38	278
7	Thrissur	288	44	40	131	503
8	Ernakulam	277	40	34	113	464
9	Idukki	61	11	3	27	102
10	Kottayam	187	31	18	72	308
11	Alappuzha	226	20	23	63	332
12	Pathanamthitta	131	3	10	20	164
13	Kollam	253	27	18	65	363
14	Thiruvananthapuram	205	30	20	156	411
	Total	2458	397	335	978	4168

Table 53: No. of Private Medical Labs in Kerala Where Ultra Sonogram Scanning Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	3	214	217
3	Wayanad	1	60	61
4	Kozhikode	13	404	417
5	Malappuram	28	449	477
6	Palakkad	9	269	278
7	Thrissur	17	486	503
8	Ernakulam	23	441	464
9	Idukki	1	101	102
10	Kottayam	16	292	308
11	Alappuzha	12	320	332
12	Pathanamthitta	12	152	164
13	Kollam	18	345	363
14	Thiruvananthapuram	35	376	411
	Total	188	3980	4168

Table 54: No. of Private Medical Labs in Kerala Where X-Ray/ Digital X-Ray Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	5	66	71
2	Kannur	12	205	217
3	Wayanad	5	56	61
4	Kozhikode	47	370	417
5	Malappuram	44	433	477
6	Palakkad	19	259	278
7	Thrissur	30	473	503
8	Ernakulam	28	436	464
9	Idukki	5	97	102
10	Kottayam	24	284	308
11	Alappuzha	22	310	332
12	Pathanamthitta	16	148	164
13	Kollam	40	323	363
14	Thiruvananthapuram	54	357	411
	Total	351	3817	4168

Table 55: No. of Private Medical Labs in Kerala Where CT Scanning Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	3	474	477
6	Palakkad	2	276	278
7	Thrissur	0	503	503
8	Ernakulam	2	462	464
9	Idukki	1	101	102
10	Kottayam	11	297	308
11	Alappuzha	4	328	332
12	Pathanamthitta	4	160	164
13	Kollam	12	351	363
14	Thiruvananthapuram	15	396	411
	Total	55	4113	4168

Table 56: No. of Private Medical Labs in Kerala Where MRI Scanning Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	0	217	217
3	Wayanad	0	61	61
4	Kozhikode	3	414	417
5	Malappuram	1	476	477
6	Palakkad	0	278	278
7	Thrissur	0	503	503
8	Ernakulam	3	461	464
9	Idukki	1	101	102
10	Kottayam	1	307	308
11	Alappuzha	1	331	332
12	Pathanamthitta	2	162	164
13	Kollam	6	357	363
14	Thiruvananthapuram	8	403	411
	Total	26	4142	4168

Table 57: No. of Private Medical Labs in Kerala Where TLD (Thermo Luminescent Dosimeter) Badge is Used

Sl No.	District	Yes	No	Total
1	Kasargod	1	70	71
2	Kannur	4	213	217
3	Wayanad	2	59	61
4	Kozhikode	18	399	417
5	Malappuram	6	471	477
6	Palakkad	12	266	278
7	Thrissur	13	490	503
8	Ernakulam	14	450	464
9	Idukki	1	101	102
10	Kottayam	11	297	308
11	Alappuzha	7	325	332
12	Pathanamthitta	11	153	164
13	Kollam	18	345	363
14	Thiruvananthapuram	17	394	411
	Total	135	4033	4168

Table 58: No. of Private Medical Labs in Kerala Where Speech Therapy Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	0	217	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	2	475	477
6	Palakkad	1	277	278
7	Thrissur	1	502	503
8	Ernakulam	0	464	464
9	Idukki	0	102	102
10	Kottayam	1	307	308
11	Alappuzha	0	332	332
12	Pathanamthitta	0	164	164
13	Kollam	1	362	363
14	Thiruvananthapuram	1	410	411
	Total	7	4161	4168

Table 59: No. of Private Medical Labs in Kerala Where Physiotherapy Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	2	215	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	5	472	477
6	Palakkad	2	276	278
7	Thrissur	3	500	503
8	Ernakulam	1	463	464
9	Idukki	0	102	102
10	Kottayam	0	308	308
11	Alappuzha	1	331	332
12	Pathanamthitta	1	163	164
13	Kollam	1	362	363
14	Thiruvananthapuram	2	409	411
	Total	18	4150	4168

Table 60: No. of Private Medical Labs in Kerala Where Audiology Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	2	475	477
6	Palakkad	1	277	278
7	Thrissur	0	503	503
8	Ernakulam	1	463	464
9	Idukki	0	102	102
10	Kottayam	0	308	308
11	Alappuzha	0	332	332
12	Pathanamthitta	0	164	164
13	Kollam	0	363	363
14	Thiruvananthapuram	1	410	411
	Total	6	4162	4168

Table 61: No. of Private Medical Labs in Kerala Where Home Service Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	12	59	71
2	Kannur	53	164	217
3	Wayanad	11	50	61
4	Kozhikode	87	330	417
5	Malappuram	66	411	477
6	Palakkad	104	174	278
7	Thrissur	126	377	503
8	Ernakulam	164	300	464
9	Idukki	16	86	102
10	Kottayam	61	247	308
11	Alappuzha	130	202	332
12	Pathanamthitta	60	104	164
13	Kollam	68	295	363
14	Thiruvananthapuram	69	342	411
	Total	1027	3141	4168

Table 62: No. of Private Medical Labs in Kerala Where Consulting Clinic Available

Sl No.	District	Yes	No	Total
1	Kasargod	2	69	71
2	Kannur	17	200	217
3	Wayanad	2	59	61
4	Kozhikode	17	400	417
5	Malappuram	55	422	477
6	Palakkad	21	257	278
7	Thrissur	33	470	503
8	Ernakulam	20	444	464
9	Idukki	3	99	102
10	Kottayam	6	302	308
11	Alappuzha	6	326	332
12	Pathanamthitta	2	162	164
13	Kollam	7	356	363
14	Thiruvananthapuram	8	403	411
	Total	199	3969	4168

Table 63: No. of Private Medical Labs in Kerala Where Infertility Clinic Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	0	477	477
6	Palakkad	1	277	278
7	Thrissur	1	502	503
8	Ernakulam	0	464	464
9	Idukki	0	102	102
10	Kottayam	0	308	308
11	Alappuzha	0	332	332
12	Pathanamthitta	0	164	164
13	Kollam	0	363	363
14	Thiruvananthapuram	0	411	411
	Total	3	4165	4168

Table 64: No. of Private Medical Labs in Kerala Where Mobile Laboratories Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	1	416	417
5	Malappuram	0	477	477
6	Palakkad	4	274	278
7	Thrissur	1	502	503
8	Ernakulam	4	460	464
9	Idukki	0	102	102
10	Kottayam	0	308	308
11	Alappuzha	0	332	332
12	Pathanamthitta	1	163	164
13	Kollam	1	362	363
14	Thiruvananthapuram	1	410	411
	Total	14	4154	4168

Table 65: No. of Private Medical Labs in Kerala Where Mobile Mortuary Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	0	217	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	0	477	477
6	Palakkad	0	278	278
7	Thrissur	0	503	503
8	Ernakulam	0	464	464
9	Idukki	0	102	102
10	Kottayam	0	308	308
11	Alappuzha	2	330	332
12	Pathanamthitta	1	163	164
13	Kollam	1	362	363
14	Thiruvananthapuram	2	409	411
	Total	6	4162	4168

Table 66: No. of Private Medical Labs in Kerala Where Blood Bank Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	0	217	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	0	477	477
6	Palakkad	2	276	278
7	Thrissur	0	503	503
8	Ernakulam	0	464	464
9	Idukki	0	102	102
10	Kottayam	0	308	308
11	Alappuzha	0	332	332
12	Pathanamthitta	0	164	164
13	Kollam	0	363	363
14	Thiruvananthapuram	0	411	411
	Total	2	4166	4168

Table 67: No. of Private Medical Labs in Kerala Where Medical Shop Available

Sl No.	District	Yes	No	Total
1	Kasargod	3	68	71
2	Kannur	13	204	217
3	Wayanad	0	61	61
4	Kozhikode	3	414	417
5	Malappuram	53	424	477
6	Palakkad	12	266	278
7	Thrissur	28	475	503
8	Ernakulam	10	454	464
9	Idukki	2	100	102
10	Kottayam	4	304	308
11	Alappuzha	8	324	332
12	Pathanamthitta	5	159	164
13	Kollam	9	354	363
14	Thiruvananthapuram	11	400	411
	Total	161	4007	4168

Table 68: No. of Private Medical Labs in Kerala Where Optometry Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	0	71	71
2	Kannur	1	216	217
3	Wayanad	0	61	61
4	Kozhikode	0	417	417
5	Malappuram	4	473	477
6	Palakkad	1	277	278
7	Thrissur	2	501	503
8	Ernakulam	0	464	464
9	Idukki	0	102	102
10	Kottayam	1	307	308
11	Alappuzha	0	332	332
12	Pathanamthitta	1	163	164
13	Kollam	0	363	363
14	Thiruvananthapuram	1	410	411
	Total	11	4157	4168

Table 69: No. of Private Medical Labs in Kerala Where Ambulance Facility Available

Sl No.	District	Yes	No	Total
1	Kasargod	1	70	71
2	Kannur	0	217	217
3	Wayanad	0	61	61
4	Kozhikode	1	416	417
5	Malappuram	2	475	477
6	Palakkad	2	276	278
7	Thrissur	0	503	503
8	Ernakulam	4	460	464
9	Idukki	2	100	102
10	Kottayam	6	302	308
11	Alappuzha	4	328	332
12	Pathanamthitta	8	156	164
13	Kollam	13	350	363
14	Thiruvananthapuram	11	400	411
	Total	54	4114	4168

Table 70: No. of Persons Utilizing Different Facilities Available in Private Medical Labs in Kerala. (In Numbers)

Sl No.	District	Laboratory Facility		Radiology		Blood Bank	
		Last Month	Last Year	Last Month	Last Year	Last Month	Last Year
1	Kasargod	34,020	3,42,142	970	11,040	0	0
2	Kannur	1,09,201	12,94,039	1,595	19,079	0	0
3	Wayanad	30,645	3,65,699	679	7,265	0	0
4	Kozhikode	1,82,626	21,92,734	6,981	85,997	0	0
5	Malappuram	2,62,008	32,47,511	13,039	1,85,308	0	0
6	Palakkad	1,01,416	11,57,867	5,673	68,658	380	3,350
7	Thrissur	2,35,083	30,39,524	12,960	1,48,648	0	0
8	Ernakulam	2,29,014	28,03,641	5,703	63,335	0	0
9	Idukki	55,821	4,69,432	951	14,826	0	0
10	Kottayam	1,59,048	20,75,975	7,004	71,092	0	0
11	Alappuzha	1,47,047	15,82,778	5,365	84,326	0	0
12	Pathanamthitta	76,079	9,35,160	4,368	61,709	0	0
13	Kollam	1,82,543	20,86,686	17,211	1,37,654	0	0
14	Thiruvananthapuram	2,13,000	25,36,804	22,151	2,53,878	0	0
	Total	20,17,551	2,41,29,992	1,04,650	12,12,815	380	3,350

Table 70: Contd...

Sl No.	District	Mobile Laboratories		Ambulance		Mobile Mortuary		Medical Shop	
		Last Month	Last Year	Last Month	Last Year	Last Month	Last Year	Last Month	Last Year
1	Kasargod	0	0	10	150	0	0	1,800	17,252
2	Kannur	10	100	0	0	0	0	10,872	1,19,855
3	Wayanad	0	0	0	0	0	0	0	0
4	Kozhikode	820	10,165	12	180	0	0	1,256	16,186
5	Malappuram	0	0	270	2,575	0	0	86,469	9,42,151
6	Palakkad	70	464	11	105	0	0	16,566	2,16,954
7	Thrissur	20	250	0	0	0	0	29,121	3,49,232
8	Ernakulam	128	2,886	140	1,622	0	0	14,080	1,85,050
9	Idukki	0	0	57	573	0	0	1,022	12,110
10	Kottayam	0	0	149	1,989	0	0	13,750	1,27,496
11	Alappuzha	0	0	29	345	9	95	15,370	1,76,500
12	Pathanamthitta	4	22	98	1,098	5	50	6,568	74,440
13	Kollam	21	198	547	8,682	5	50	12,111	1,39,488
14	Thiruvananthapuram	13	65	323	3,890	7	103	6,881	77,508
	Total	1,086	14,150	1,646	21,209	26	298	2,15,866	24,54,222

Table 70: Contd...

Sl No.	District	Optometry		Others		Total	
		Last Month	Last Year	Last Month	Last Year	Last Month	Last Year
1	Kasargod	0	0	1,719	16,992	38,519	3,87,576
2	Kannur	260	3,110	10,946	1,20,262	1,32,884	15,56,445
3	Wayanad	0	0	36	146	31,360	3,73,110
4	Kozhikode	0	0	11,525	79,840	2,03,220	23,85,102
5	Malappuram	620	7,055	57,238	5,77,359	4,19,644	49,61,959
6	Palakkad	35	175	7,049	61,245	1,31,200	15,08,818
7	Thrissur	93	918	12,966	1,75,222	2,90,243	37,13,794
8	Ernakulam	0	0	5,168	59,128	2,54,233	31,15,662
9	Idukki	0	0	176	1,353	58,027	4,98,294
10	Kottayam	150	2,000	2,119	23,333	1,82,220	23,01,885
11	Alappuzha	0	0	2,787	38,825	1,70,607	18,82,869
12	Pathanamthitta	125	960	474	7,651	87,721	10,81,090
13	Kollam	0	0	2,884	33,222	2,15,322	24,05,980
14	Thiruvananthapuram	2,528	245	3,907	45,546	2,48,810	29,18,039
	Total	3,811	14,463	1,18,994	12,40,124	24,64,010	2,90,90,623

Table 71: Value of Fixed Assets of Private Medical Labs in Kerala (In Rupees)

Sl No.	District	Land	Building	Equipments	Vehicles	Furniture & Fixtures	Others	Total
1	Kasargod	2,00,000	2,50,000	3,36,84,000	13,00,000	63,96,500	4,40,700	4,22,71,200
2	Kannur	2,66,04,145	3,04,05,240	13,44,52,565	6,89,533	2,56,00,353	12,95,380	21,90,47,216
3	Wayanad	3,00,000	1,50,000	3,07,49,000	0	39,56,900	3,05,750	3,54,61,650
4	Kozhikode	8,40,50,000	2,38,80,000	25,47,43,073	22,60,000	3,16,81,872	68,96,819	40,35,11,764
5	Malappuram	6,73,85,001	2,69,55,100	25,47,92,476	40,48,000	4,43,05,337	56,06,205	40,30,92,119
6	Palakkad	4,84,25,000	3,10,10,000	8,90,50,947	26,86,150	1,06,44,468	8,98,636	18,27,15,201
7	Thrissur	24,75,16,000	6,49,27,649	21,62,89,019	60,75,525	4,24,02,644	72,06,556	58,44,17,393
8	Ernakulam	10,76,35,840	4,91,73,406	18,91,13,602	1,70,47,317	6,36,31,767	60,00,429	43,26,02,361
9	Idukki	1,13,00,000	57,00,000	3,89,87,188	10,98,408	53,54,961	8,47,000	6,32,87,557
10	Kottayam	12,62,00,000	9,55,65,000	17,45,93,573	1,05,16,634	2,24,62,132	42,31,277	43,35,68,616
11	Alappuzha	5,74,45,000	3,23,10,000	19,70,96,797	22,30,000	1,98,23,673	25,10,767	31,14,16,237
12	Pathanamthitta	4,02,40,000	2,08,15,000	12,87,92,642	30,20,000	1,60,57,899	76,43,594	21,65,69,135
13	Kollam	15,82,90,000	5,01,15,000	27,87,38,650	94,55,000	2,60,30,800	17,75,600	52,44,05,050
14	Thiruvananthapuram	6,33,00,000	4,29,65,000	40,55,56,406	76,24,600	2,72,99,671	53,69,032	55,21,14,709
	Total	103,88,90,986	47,42,21,395	242,66,39,938	6,80,51,167	34,56,48,977	5,10,27,745	440,44,80,208

Table 72: Expenditure And Income Details of Private Medical Labs in Kerala. (In Rupees)

Sl No.	District	Salaries/Wages /Charges for Professionals/Consultants		Electricity Charges	
		Monthly	2012-13	Monthly	2012-13
1	Kasargod	8,40,950	1,02,83,600	1,39,760	16,97,100
2	Kannur	55,46,823	5,24,19,133	6,68,903	78,93,993
3	Wayanad	7,70,800	88,29,600	78,790	9,64,880
4	Kozhikode	66,85,696	9,42,72,109	9,60,273	94,48,260
5	Malappuram	88,29,736	9,87,40,365	9,99,043	1,16,34,635
6	Palakkad	31,61,345	3,96,84,873	4,05,135	41,72,952
7	Thrissur	1,05,06,849	11,69,28,778	12,11,618	1,55,72,862
8	Ernakulam	1,36,94,824	15,51,83,078	15,27,039	1,60,65,718
9	Idukki	20,87,052	1,11,01,321	1,34,799	14,10,113
10	Kottayam	70,74,605	8,94,28,123	12,74,660	1,51,91,414
11	Alappuzha	45,09,440	4,75,13,205	7,27,263	76,87,042
12	Pathanamthitta	34,49,819	3,95,82,205	5,62,562	61,05,237
13	Kollam	74,07,446	8,71,88,863	15,69,691	1,81,44,280
14	Thiruvananthapuram	1,26,66,772	15,08,93,565	26,76,758	3,18,14,828
	Total	8,72,32,157	100,20,48,818	1,29,36,294	14,78,03,314

Table 72 Contd...					
Sl No.	District	Water Charges		Medical Equipments–Repair and Maintenance	
		Monthly	2012-13	Monthly	2012-13
1	Kasargod	6,370	97,500	38,450	6,94,800
2	Kannur	16,634	2,02,104	2,73,203	39,10,370
3	Wayanad	3,855	50,160	27,391	3,87,200
4	Kozhikode	89,661	11,53,177	3,76,398	53,40,699
5	Malappuram	55,014	5,75,884	6,14,273	84,77,683
6	Palakkad	22,117	2,58,450	2,85,980	31,63,917
7	Thrissur	47,883	5,06,580	7,22,784	75,04,335
8	Ernakulam	1,07,805	10,80,154	8,50,033	1,07,87,670
9	Idukki	7,036	73,526	42,129	9,66,501
10	Kottayam	56,451	12,09,028	3,67,034	54,96,797
11	Alappuzha	21,989	2,06,516	2,67,092	37,42,646
12	Pathanamthitta	28,780	3,48,601	1,97,685	25,00,864
13	Kollam	39,168	5,69,193	11,24,983	1,35,47,135
14	Thiruvananthapuram	1,32,763	15,77,184	14,03,711	1,55,20,057
	Total	6,35,526	79,08,057	65,91,146	8,20,40,674

Table 72 Contd...					
Sl No.	District	Reagents and Chemicals		Telephone/Internet Charges	
		Monthly	2012-13	Monthly	2012-13
1	Kasargod	11,21,000	1,35,93,730	27,080	3,24,700
2	Kannur	35,80,229	5,42,53,314	1,24,035	13,83,162
3	Wayanad	7,10,714	79,62,749	21,725	2,62,150
4	Kozhikode	34,48,238	4,57,09,494	1,92,963	24,97,392
5	Malappuram	56,76,468	6,40,91,741	1,97,873	21,62,073
6	Palakkad	19,07,246	2,26,40,891	1,04,060	11,93,350
7	Thrissur	78,02,414	8,50,68,138	3,24,457	41,15,982
8	Ernakulam	1,30,29,180	17,32,08,498	4,78,892	53,67,601
9	Idukki	7,46,460	76,72,064	35,345	3,56,459
10	Kottayam	49,04,532	5,55,87,164	2,06,395	31,09,420
11	Alappuzha	24,31,300	2,47,07,635	1,32,341	14,98,340
12	Pathanamthitta	18,24,447	2,05,21,324	1,07,566	14,69,839
13	Kollam	35,76,572	4,09,99,445	1,97,997	22,56,501
14	Thiruvananthapuram	1,09,77,844	12,55,97,665	3,10,009	34,94,301
	Total	6,17,36,644	74,16,13,852	24,60,738	2,94,91,270

Table 72 Contd...					
Sl No.	District	Building Rent / Maintenance		Tax	
		Monthly	2012-13	Monthly	2012-13
1	Kasargod	2,37,120	28,11,600	2,320	48,717
2	Kannur	10,18,530	99,42,544	47,726	3,85,811
3	Wayanad	1,99,625	23,98,600	1,110	1,36,105
4	Kozhikode	15,11,210	1,79,48,565	29,093	8,34,268
5	Malappuram	29,60,426	2,71,81,328	2,66,205	23,06,633
6	Palakkad	7,72,389	1,16,09,368	29,490	7,59,386
7	Thrissur	26,68,515	2,07,51,941	1,61,068	1,10,66,454
8	Ernakulam	31,48,871	3,62,17,669	1,11,477	12,72,246
9	Idukki	2,91,890	27,74,689	2,670	49,408
10	Kottayam	18,72,856	1,62,28,664	7,09,926	94,56,045
11	Alappuzha	9,93,407	98,13,288	31,558	3,06,857
12	Pathanamthitta	7,59,825	93,29,260	57,548	10,48,195
13	Kollam	13,88,977	1,52,51,980	50,658	16,34,791
14	Thiruvananthapuram	26,78,442	3,12,72,400	4,96,478	36,07,394
	Total	2,05,02,083	21,35,31,896	19,97,327	3,29,12,310

Table 72 Contd...					
Sl No.	District	Transportation Expenses(Including expenses on fuel)		Waste disposal	
		Monthly	2012-13	Monthly	2012-13
1	Kasargod	32,900	4,66,000	25,059	3,02,158
2	Kannur	66,917	8,61,500	88,244	10,38,760
3	Wayanad	7,850	97,800	15,604	1,75,720
4	Kozhikode	2,64,784	31,92,771	1,53,518	15,08,029
5	Malappuram	2,68,400	28,22,337	1,79,414	19,74,768
6	Palakkad	1,38,936	14,57,724	77,329	8,93,748
7	Thrissur	4,40,059	47,67,395	1,90,708	22,38,005
8	Ernakulam	6,75,246	1,31,84,456	2,34,179	26,57,998
9	Idukki	24,594	2,59,385	22,802	2,44,848
10	Kottayam	2,25,388	24,51,983	1,55,677	18,24,765
11	Alappuzha	1,23,089	12,58,100	1,08,212	11,07,374
12	Pathanamthitta	1,59,430	20,33,211	68,145	8,10,340
13	Kollam	2,21,650	24,18,121	1,73,831	20,84,010
14	Thiruvananthapuram	4,62,632	49,96,676	4,33,286	50,39,459
	Total	31,11,875	4,02,67,459	19,26,008	2,18,99,982

Table 72 Contd...					
Sl No.	District	Others		Total	
		Monthly	2012-13	Monthly	2012-13
1	Kasargod	1,46,800	17,51,700	26,17,809	3,20,71,605
2	Kannur	3,05,885	24,72,594	1,17,37,129	13,47,63,285
3	Wayanad	9,148	93,676	18,46,612	2,13,58,640
4	Kozhikode	7,85,730	1,15,42,175	1,44,97,564	19,34,46,939
5	Malappuram	4,50,991	46,32,213	2,04,97,843	22,45,99,660
6	Palakkad	1,82,172	18,58,778	70,86,199	8,76,93,437
7	Thrissur	15,41,192	1,78,40,254	2,56,17,547	28,63,60,724
8	Ernakulam	14,41,542	1,61,48,036	3,52,99,088	43,11,73,124
9	Idukki	5,53,935	66,15,699	39,48,712	3,15,24,013
10	Kottayam	5,37,023	79,96,080	1,73,84,547	20,79,79,483
11	Alappuzha	1,64,460	16,75,320	95,10,151	9,95,16,323
12	Pathanamthitta	3,43,337	31,03,436	75,59,144	8,68,52,512
13	Kollam	1,52,347	17,83,375	1,59,03,320	18,58,77,694
14	Thiruvananthapuram	6,61,358	62,84,269	3,29,00,053	38,00,97,798
	Total	72,75,920	8,37,97,605	20,64,05,718	240,33,15,237

Table 72 Contd...			
Sl No.	District	Income Received	
		Monthly	2012-13
1	Kasargod	35,05,015	4,15,32,667
2	Kannur	1,69,41,879	20,47,27,834
3	Wayanad	20,85,195	3,06,21,270
4	Kozhikode	2,63,48,205	29,10,73,692
5	Malappuram	3,10,44,772	31,85,28,334
6	Palakkad	1,25,31,486	12,85,08,283
7	Thrissur	3,77,28,793	45,85,94,992
8	Ernakulam	5,46,44,069	62,10,44,945
9	Idukki	44,70,596	5,28,12,214
10	Kottayam	3,36,49,634	39,65,52,609
11	Alappuzha	1,55,36,052	17,58,45,089
12	Pathanamthitta	1,54,36,020	14,09,29,108
13	Kollam	2,91,58,561	30,88,71,671
14	Thiruvananthapuram	4,77,42,070	62,58,76,718
	Total	33,08,22,347	379,55,19,426

Table 73: Details of Loan and Other Liabilities of Private Medical Labs in Kerala (In Rupees)

Sl No.	District	Loan Availed	Amount Repaid	Loan Outstanding	Other Liabilities	Total
1	Kasargod	58,18,500	23,18,895	40,85,800	22,000	1,22,45,195
2	Kannur	3,76,55,000	1,46,91,160	1,85,53,700	4,50,000	7,13,49,860
3	Wayanad	36,30,000	13,11,500	20,60,500	6,84,000	76,86,000
4	Kozhikode	10,89,03,410	1,19,43,992	9,29,23,658	81,00,060	22,18,71,120
5	Malappuram	5,22,38,000	1,36,73,509	3,60,38,846	1,82,88,411	12,02,38,766
6	Palakkad	2,84,20,000	1,20,20,052	1,68,14,948	31,50,000	6,04,05,000
7	Thrissur	5,29,21,171	1,38,30,894	4,38,25,499	2,20,86,294	13,26,63,858
8	Ernakulam	7,24,51,000	2,37,19,042	5,25,23,708	8,53,75,646	23,40,69,396
9	Idukki	78,55,000	16,07,000	62,99,250	16,90,000	1,74,51,250
10	Kottayam	15,55,01,753	2,18,25,435	13,27,47,056	69,63,905	31,70,38,149
11	Alappuzha	3,14,82,000	67,69,390	1,46,81,651	76,31,276	6,05,64,317
12	Pathanamthitta	8,49,35,000	2,56,98,946	5,06,65,733	1,14,32,000	17,27,31,679
13	Kollam	9,62,46,000	1,72,10,700	7,35,40,300	13,95,000	18,83,92,000
14	Thiruvananthapuram	6,88,46,137	2,76,09,460	5,25,90,700	22,84,15,143	37,74,61,440
	Total	80,69,02,971	19,42,29,975	59,73,51,349	39,56,83,735	199,41,68,030

Table 74: Details of Number of Non-Technical Staffs in the Private Medical Labs in Kerala(In Numbers)

Sl No.	District	Office Staff		Helpers/Drivers /Last Grade Attenders		Security		Others		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	16	14	2	6	0	0	2	1	20	21
2	Kannur	32	80	2	23	0	0	2	13	36	116
3	Wayanad	7	9	2	7	1	0	1	4	11	20
4	Kozhikode	59	81	11	44	6	0	12	24	88	149
5	Malappuram	66	118	15	48	9	1	18	15	108	182
6	Palakkad	20	42	12	20	2	0	2	4	36	66
7	Thrissur	84	171	26	68	8	0	38	42	156	281
8	Ernakulam	91	170	47	84	10	3	54	51	202	308
9	Idukki	11	9	4	1	0	0	5	8	20	18
10	Kottayam	58	190	30	82	10	0	18	26	116	298
11	Alappuzha	33	33	18	31	10	2	7	20	68	86
12	Pathanamthitta	33	60	20	36	7	0	7	2	67	98
13	Kollam	56	104	27	32	20	0	9	15	112	151
14	Thiruvananthapuram	111	180	53	66	27	2	27	28	218	276
	Total	677	1261	269	548	110	8	202	253	1258	2070

Table 75:No. of Laboratory Technicians Working in the Private Medical Labs in Kerala according to their Qualifications

Sl No.	District	VHSC/Certificate Courses		Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	4	31	7	61	7	6	0	3	53	34	71	135
2	Kannur	5	130	46	256	15	28	2	7	0	0	68	421
3	Wayanad	2	14	3	80	0	1	1	0	0	0	6	95
4	Kozhikode	11	142	86	553	18	26	6	11	4	6	125	738
5	Malappuram	27	122	117	532	44	40	10	5	8	18	206	717
6	Palakkad	16	121	45	262	8	16	1	1	2	13	72	413
7	Thrissur	22	277	64	614	11	65	2	6	5	66	104	1028
8	Ernakulam	5	172	40	790	19	74	2	19	1	29	67	1084
9	Idukki	1	15	15	124	3	3	2	2	0	0	21	144
10	Kottayam	2	86	32	507	10	48	7	15	0	0	51	656
11	Alappuzha	11	150	47	384	10	51	3	6	3	8	74	599
12	Pathanamthitta	5	34	29	243	13	37	5	4	2	6	54	324
13	Kollam	13	148	43	455	9	62	4	4	4	19	73	688
14	Thiruvananthapuram	17	174	115	622	19	42	3	6	0	5	154	849
	Total	141	1616	689	5483	186	499	48	89	82	204	1146	7891

Table 76:No. of X-Ray Technicians Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No	District Name	VHSC/Certificate Courses		Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	1	1	2	0	1	3	0	0	8	18	12	22
2	Kannur	1	1	3	8	0	0	0	0	0	0	4	9
3	Wayanad	0	0	3	5	0	0	0	0	0	0	3	5
4	Kozhikode	0	2	16	27	2	0	0	0	0	1	18	30
5	Malappuram	6	1	23	30	3	1	0	0	2	0	34	32
6	Palakkad	5	1	12	7	0	0	0	0	0	0	17	8
7	Thrissur	4	12	11	29	0	3	0	0	1	2	16	46
8	Ernakulam	0	8	5	45	0	6	0	0	0	4	5	63
9	Idukki	0	0	2	1	0	1	0	0	0	0	2	2
10	Kottayam	2	0	8	21	0	0	0	0	0	3	10	24
11	Alappuzha	3	4	16	21	0	1	0	0	0	0	19	26
12	Pathanamthitta	1	0	10	16	2	2	0	0	1	0	14	18
13	Kollam	2	2	26	32	5	5	1	1	1	0	35	40
14	Thiruvananthapuram	8	6	21	34	8	16	2	6	1	1	40	63
	Total	33	38	158	276	21	38	3	7	14	29	229	388

Table 77 :No. of Scanning Technicians Working in the Private Medical Labs in Kerala according to their Qualifications

Sl No.	District	VHSC/Certificate Courses		Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	0	0	0	0	0	0	0	0	0	0
2	Kannur	0	0	0	2	0	0	0	0	0	0	0	2
3	Wayanad	0	0	0	0	1	2	0	0	0	0	1	2
4	Kozhikode	0	0	1	2	1	0	0	1	0	0	2	3
5	Malappuram	2	1	8	1	0	3	1	0	0	2	11	7
6	Palakkad	1	0	0	3	0	0	0	0	0	0	1	3
7	Thrissur	0	2	0	1	0	0	0	0	0	0	0	3
8	Ernakulam	0	1	3	3	7	3	0	2	0	3	10	12
9	Idukki	0	0	4	0	0	0	0	0	0	0	4	0
10	Kottayam	1	1	8	1	2	0	0	0	0	0	11	2
11	Alappuzha	0	0	1	3	0	0	0	0	0	0	1	3
12	Pathanamthitta	0	0	8	4	1	0	0	0	0	0	9	4
13	Kollam	0	0	9	4	3	4	1	0	0	0	13	8
14	Thiruvananthapuram	0	4	4	4	8	8	9	3	0	0	21	19
	Total	4	9	46	28	23	20	11	6	0	5	84	68

Table 78:No. of Nurses Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	0	0	0	0	0	0	0	0
2	Kannur	0	7	0	3	0	1	0	1	0	12
3	Wayanad	0	0	0	0	0	0	0	0	0	0
4	Kozhikode	0	0	0	1	0	0	0	0	0	1
5	Malappuram	1	10	0	11	0	0	0	0	1	21
6	Palakkad	3	9	0	0	0	0	0	0	3	9
7	Thrissur	1	8	0	1	1	1	0	0	2	10
8	Ernakulam	1	11	0	3	0	6	0	0	1	20
9	Idukki	0	2	0	1	0	0	0	0	0	3
10	Kottayam	0	5	0	1	0	0	0	0	0	6
11	Alappuzha	0	2	0	1	1	0	0	1	1	4
12	Pathanamthitta	0	7	1	1	0	0	0	0	1	8
13	Kollam	0	11	0	3	0	0	0	0	0	14
14	Thiruvananthapuram	0	6	0	12	0	0	0	0	0	18
	Total	6	78	1	38	2	8	0	2	9	126

Table 79:No. of Biochemist Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Degree		Post Graduates		Total	
		Male	Female	Male	Female	Male	Female
1	Kasargod	1	1	0	1	1	2
2	Kannur	0	1	6	3	6	4
3	Wayanad	0	0	0	0	0	0
4	Kozhikode	3	5	14	7	17	12
5	Malappuram	4	2	4	7	8	9
6	Palakkad	0	1	0	0	0	1
7	Thrissur	4	8	6	7	10	15
8	Ernakulam	1	3	6	10	7	13
9	Idukki	0	0	0	0	0	0
10	Kottayam	0	3	5	9	5	12
11	Alappuzha	0	0	0	4	0	4
12	Pathanamthitta	0	2	1	2	1	4
13	Kollam	0	1	1	2	1	3
14	Thiruvananthapuram	3	3	4	6	7	9
	Total	16	30	47	58	63	88

Table 80: No. of Microbiologist Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Degree		Post Graduates		Total	
		Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	0	5	0	5
2	Kannur	1	5	2	12	3	17
3	Wayanad	0	0	0	1	0	1
4	Kozhikode	2	1	2	10	4	11
5	Malappuram	2	3	4	2	6	5
6	Palakkad	0	3	1	0	1	3
7	Thrissur	1	9	1	7	2	16
8	Ernakulam	1	2	3	11	4	13
9	Idukki	0	0	1	0	1	0
10	Kottayam	1	1	4	4	5	5
11	Alappuzha	0	0	0	0	0	0
12	Pathanamthitta	0	1	1	6	1	7
13	Kollam	0	0	0	3	0	3
14	Thiruvananthapuram	0	3	2	7	2	10
	Total	8	28	21	68	29	96

Table 81:No. of Pathologist Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Degree		Post Graduates		Total	
		Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	2	0	2	0
2	Kannur	0	0	4	0	4	0
3	Wayanad	0	0	1	0	1	0
4	Kozhikode	0	1	2	5	2	6
5	Malappuram	0	1	1	1	1	2
6	Palakkad	0	0	0	3	0	3
7	Thrissur	0	2	6	4	6	6
8	Ernakulam	1	1	4	4	5	5
9	Idukki	0	0	0	0	0	0
10	Kottayam	3	2	3	2	6	4
11	Alappuzha	0	0	0	0	0	0
12	Pathanamthitta	0	0	1	3	1	3
13	Kollam	1	1	2	1	3	2
14	Thiruvananthapuram	0	0	1	8	1	8
	Total	5	8	27	31	32	39

Table 82:No. of Radiologist Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Degree		Post Graduates		Total	
		Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	0	0	0	0
2	Kannur	0	0	0	2	0	2
3	Wayanad	0	0	0	0	0	0
4	Kozhikode	2	1	8	0	10	1
5	Malappuram	6	1	3	2	9	3
6	Palakkad	1	3	0	0	1	3
7	Thrissur	5	0	4	0	9	0
8	Ernakulam	8	1	13	2	21	3
9	Idukki	0	0	1	0	1	0
10	Kottayam	3	3	2	3	5	6
11	Alappuzha	1	1	2	1	3	2
12	Pathanamthitta	0	0	6	4	6	4
13	Kollam	3	3	2	4	5	7
14	Thiruvananthapuram	1	2	22	14	23	16
	Total	30	15	63	32	93	47

Table 83:No. of Physiotherapist Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	0	0	0	0	0	0	0	0
2	Kannur	0	0	2	1	0	0	0	0	2	1
3	Wayanad	0	0	0	0	0	0	0	0	0	0
4	Kozhikode	0	0	0	0	0	0	0	0	0	0
5	Malappuram	0	0	3	0	0	0	0	0	3	0
6	Palakkad	0	0	1	1	0	0	0	0	1	1
7	Thrissur	0	0	0	0	0	0	0	0	0	0
8	Ernakulam	0	0	0	0	1	1	0	0	1	1
9	Idukki	0	0	0	0	0	0	0	0	0	0
10	Kottayam	0	0	0	0	0	0	0	0	0	0
11	Alappuzha	1	0	2	0	0	0	0	0	3	0
12	Pathanamthitta	0	0	0	0	0	0	1	0	1	0
13	Kollam	1	0	0	0	0	0	0	0	1	0
14	Thiruvananthapuram	1	0	0	0	1	3	0	0	2	3
	Total	3	0	8	2	2	4	1	0	14	6

Table 84:No. of Doctors (Full time) Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Degree		Post Graduates		Total	
		Male	Female	Male	Female	Male	Female
1	Kasargod	1	0	0	0	1	0
2	Kannur	5	0	2	0	7	0
3	Wayanad	1	0	0	0	1	0
4	Kozhikode	0	1	5	2	5	3
5	Malappuram	6	1	4	0	10	1
6	Palakkad	2	0	4	1	6	1
7	Thrissur	2	0	5	1	7	1
8	Ernakulam	3	2	2	7	5	9
9	Idukki	2	0	0	0	2	0
10	Kottayam	2	1	5	1	7	2
11	Alappuzha	0	0	0	1	0	1
12	Pathanamthitta	1	0	0	0	1	0
13	Kollam	1	0	7	2	8	2
14	Thiruvananthapuram	1	1	8	7	9	8
	Total	27	6	42	22	69	28

Table 85:No. of Doctors (Part time) Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	Degree		Post Graduates		Total	
		Male	Female	Male	Female	Male	Female
1	Kasargod	1	0	1	0	2	0
2	Kannur	10	2	13	2	23	4
3	Wayanad	1	0	1	0	2	0
4	Kozhikode	0	0	9	0	9	0
5	Malappuram	37	8	46	8	83	16
6	Palakkad	6	5	9	0	15	5
7	Thrissur	10	3	45	10	55	13
8	Ernakulam	9	4	14	6	23	10
9	Idukki	0	0	1	0	1	0
10	Kottayam	1	0	3	0	4	0
11	Alappuzha	5	1	6	2	11	3
12	Pathanamthitta	0	1	6	0	6	1
13	Kollam	0	1	6	2	6	3
14	Thiruvananthapuram	8	3	6	5	14	8
	Total	88	28	166	35	254	63

Table 86 :No. of Other Technical Staffs Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	VHSC/Certificate Courses		Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	0	2	1	5	0	0	0	0	0	0	1	7
2	Kannur	0	0	7	7	0	2	0	0	0	0	7	9
3	Wayanad	0	0	0	0	0	0	1	0	0	0	1	0
4	Kozhikode	0	0	0	2	0	0	0	0	0	3	0	5
5	Malappuram	0	0	8	4	5	3	0	0	14	6	27	13
6	Palakkad	0	0	1	4	0	2	0	0	0	0	1	6
7	Thrissur	0	5	2	17	0	3	0	0	0	0	2	25
8	Ernakulam	0	6	1	6	5	1	2	1	3	5	11	19
9	Idukki	0	0	0	0	0	0	0	0	0	0	0	0
10	Kottayam	0	0	1	3	2	1	0	0	2	3	5	7
11	Alappuzha	2	2	0	0	0	0	0	0	0	0	2	2
12	Pathanamthitta	0	0	0	4	0	0	0	0	0	0	0	4
13	Kollam	0	0	1	0	0	0	0	0	0	0	1	0
14	Thiruvananthapuram	4	9	1	2	6	0	0	0	1	0	12	11
	Total	6	24	23	54	18	12	3	1	20	17	70	108

Table 87:No. of Teaching Staffs Working in the Private Medical Labs in Kerala based on their Qualifications

Sl No.	District	VHSC/Certificate Courses		Diploma		Degree		Post Graduates		Experience Only		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Kasargod	0	0	0	0	0	0	0	0	0	0	0	0
2	Kannur	0	0	0	0	0	0	0	0	0	0	0	0
3	Wayanad	0	0	0	0	0	0	0	0	0	0	0	0
4	Kozhikode	0	0	0	4	0	0	1	0	0	0	1	4
5	Malappuram	0	0	0	0	0	0	0	0	0	0	0	0
6	Palakkad	0	0	0	0	0	0	0	0	0	0	0	0
7	Thrissur	0	0	0	0	0	0	0	0	0	0	0	0
8	Ernakulam	0	0	0	2	0	2	1	2	0	0	1	6
9	Idukki	0	0	0	0	0	0	0	0	0	0	0	0
10	Kottayam	0	0	0	2	1	0	4	5	0	0	5	7
11	Alappuzha	0	2	1	4	0	2	1	1	0	0	2	9
12	Pathanamthitta	0	0	1	0	0	5	2	0	0	0	3	5
13	Kollam	0	0	0	1	1	2	0	0	0	0	1	3
14	Thiruvananthapuram	0	1	1	1	1	1	1	0	0	0	3	3
	Total	0	3	3	14	3	12	10	8	0	0	16	37



PRINTED & PUBLISHED BY
DIRECTORATE OF ECONOMICS AND STATISTICS
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