

REPORT ON AYACUT VERIFICATION OF MINOR IRRIGATION PROJECTS IN KOTTAYAM DISTRICT



REPORT ON THE EVALUATION SURVEY OF MINOR IRRIGATION. PROJECTS IN KOTTAYAM DISTRICT

I. Introduction:

A survey to evaluate the function of the Minor Irrigation projects was conducted in Kottayam District during 1984. This was done as per the decision taken by the committee constituted to review the progress of Ayacut verification and collection of accurate data relating to M.I. works. For this study two out of 13, class-I M.I. works and 36 out of 360, class II M.I. works had been selected. Period of origin of the schemes of the above selected projects, area benefitted by them by way of irrigation or flood protection, original cost, date of completion, type of constructions and cost of maintenance were covered by the survey.

M. I. projects are classified into two, 1. Class I projects which costs about 2 lakhs and above, 2. Class II Projects which cost less than 2 lakhs.

Formally class-I and class-II M.I. works had been executed by Irrigation Division of P.W.D. and since 1976 Government, had decided that class-II M.I. works should be taken up only with people's participation. But now it is done by p.W.D. with Government funds for the maintenance of class-I works, Government had sanctioned an amount of Rs. 500/- per hectare of the benefitted area. But for class-II projects the annual sanction is at the rate of %. 25/- per hectare of the benefitted area.

II. Sample design and Method of selection:

According to the records in the P.W.D. there are 13, class-I projects and 360 class-II projects covering an area of about 5096.18 hectares. M.I. works covering an area of about 10% of the total area had been selected at simple random. 2, class-I works and 36 class-II works had been selected for the study. The field work of the survey was conducted by Junior Statistical Inspectors under the supervision of the District Statistical Officer and the Assistant Director in the headquarters.

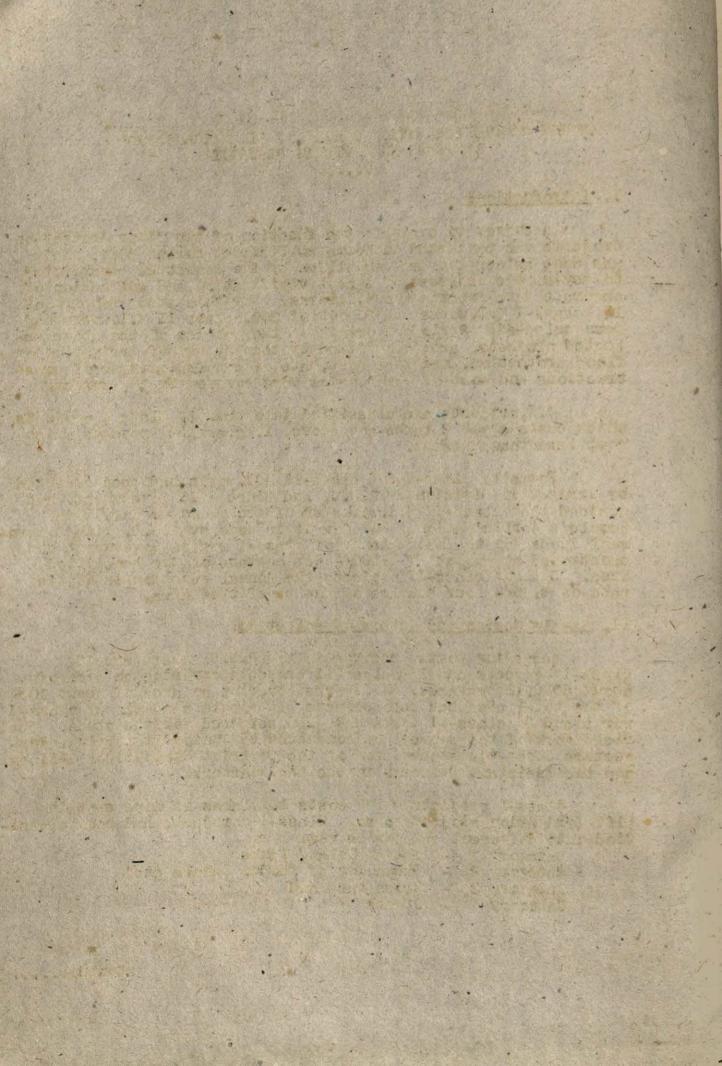
Class-I projects which sosts Rs. 2 lakhs or more contain lift Irrigation projects also. Class-II projects had been classified into different categories viz.

Category 2 - Chira, Kulam, Tanks Category 2 - Deepening of Thodu, Canals etc.

Category 3 -Cross bar

Category 4 - Others

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Following are the details of selection made for the conduct of the survey:

Category	Total No.in the District	vered by	Total No. in the category selected	Area covered by the sele- cted projects (Hect.)
Class-I:				
1. M.I.projects 2. Life Irrigation 1 projects	6 7	852.89 250.98	1	147.08 20.03
Total:	13	1103.87	2.	167.11
Class-II:				
1. Chira/Kulam/Taluk 2. Thodu 3. Cross bar 4. Others	75 62 134 89	371.41 1167.27 813.32 1640.31	8 6 13 9	75.36 157.28 57.21 89.53
Total:	360	3992.31	36	,379.38
Grand Total:	373	5096.18	38	546.49

III. Schedule and Questionnaire:

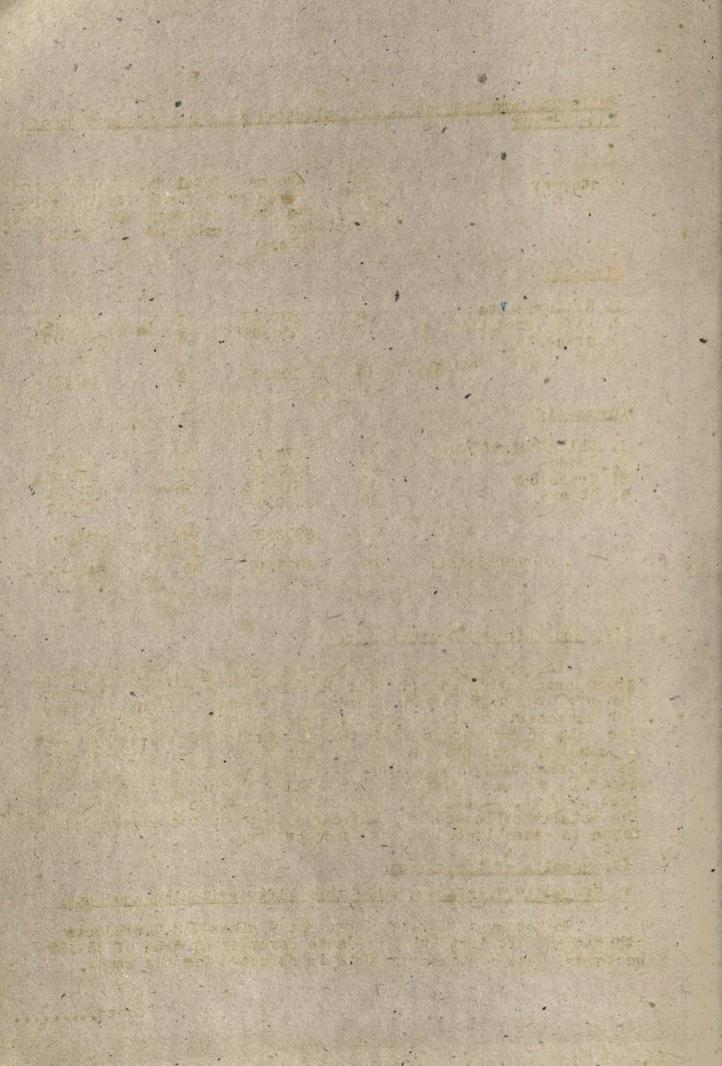
The proforma used for the collection of details of crops grown area irrigated and other details are appended. There are two proforma used for this purpose. Schedule-I is used mainly for canvassing basic details relating to M.I. projects, viz., the date of commencement, number of beneficiaries original cost of construction, expenditure for maintenance etc. Schedule-II is for recording area of land irrigated or brought under flood control from each survey number falling in the Ayacut region of each project. Irrigation particulars crop-wise are also collected. The details collected for the year 1983-84 in the prescribed proforma is consolidated at the headquarters.

IV. Results of the survey:

1. Class-I M. I. projects other than lift irrigation projects:

In Kottayam District there are 6 class-I M.I.projects other than lift irrigation projects covering an area of 852.89 hectares. One of these projects is selected for the study.

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The selected project is improvement of Kaniyanthodu in Idayanapuram in Vaikom Taluk. The area covered by this project is 147.08
hectares. The important crop covered by this project is paddy.
irrigated area (crop-wise) is furnished below:

Name of crop	Area irri- gated by the project (Hts.)	8	Area not benefit- ted (Hts.)	1
1. Paddy. 2. Annual crops	82.32	71	32.95	29
3. Perennial crops	21.18	67	10.63	33
Total:	103.50	70.4	43.58	29,6

1(b) Class-I Lift Irrigation projects:

Out of the 7 lift irrigation projects in Kottayam covering an area of about 250-98 hts. one project viz. Kidangoor L. I. Project, covering an area of about 20.03 Hts. is selected for the study. About 12.20 hts. of paddy fields are benefitted by the scheme. This is only 60.9% of the total area under the Ayacut of this project.

II. Class-II - M. I. Projects:

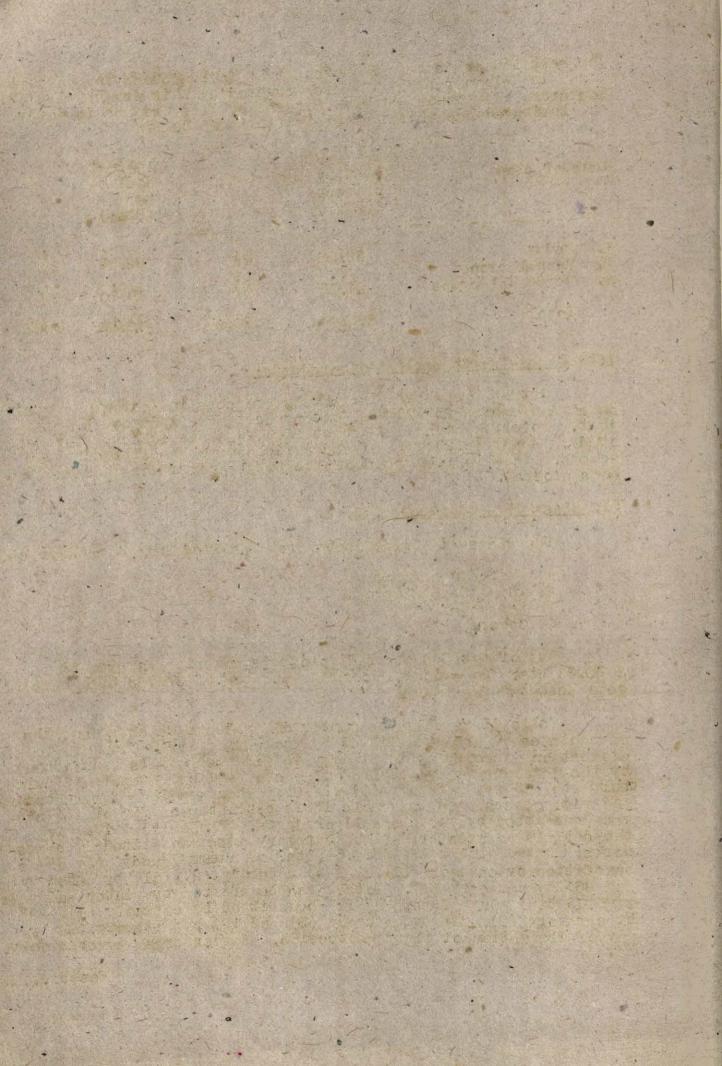
The class-II M. I. projects are clarified into 4 categories.

- 1. Chira/Kulam/Tank
- 2. Thodu-Doenening etc.
- 3. Cross bar and
- 4. Others

Out of the 350 class-II projects covering an area of 3992.31 hts. 36 projects overing an area of 379.38 hts. have been selected for study.

Table-II reveals the number of projects selected and the percentages of area benefitted by the way of irrigation or flood protection. According to it only 48% of the land is benefitted by the category (i) viz. Chira/kulam etc. 96% by category (2) viz. thodu etc. 85% by category (3) viz. Cross bar and 68% of by category (4) viz. others. On the whole it is estimated as 78% of the area the details of area crop-wise, category wise benefitted by class-II benefitted by category (1), 37% by category (2), 21% by category (3) and 36% by category (4). Total area benefitted by winter paddy is 2596.16 hts. Out of this 5% is benefitted by category (1), 29% by category (2), 24% by category (3) and 42% by category (4) by way of irrigation or flood protection. Summer crops covered only

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111.73 hts. of which 43% is benefitted by category (2), 39% by category (3) and 18% by category (4). About 181.39 hts. of land was covered by seasonal, annual and perennial crops. 13% of this is benefitted by category (1). 37% by category (2), 37% by category (3) and 13% by category (4). Area of land under paddy (season-wise) benefitted by class-II works are given below(in hts.)

Cate- gory	Chira/ kulam/ tank		Tho du	, I	Cross	bar	· · · otł	ners
Season	I	FP	I	FP	I	FP	I	FP
Autumn Winter Summer	155.55 136.70		1052.66 743.50 47.85		611.58 623.87 43.96	:: ::	392.70 428.50 19.92	640.15 663.59
Total:	292.25		1884.01	••	1279.41		841.12	1303.74

I - Irrigated. FP - Flood protected.

Total not area irrigated is 3233.4 hts. of 90.43% is the area covered by paddy. This is 2924.17 hts.

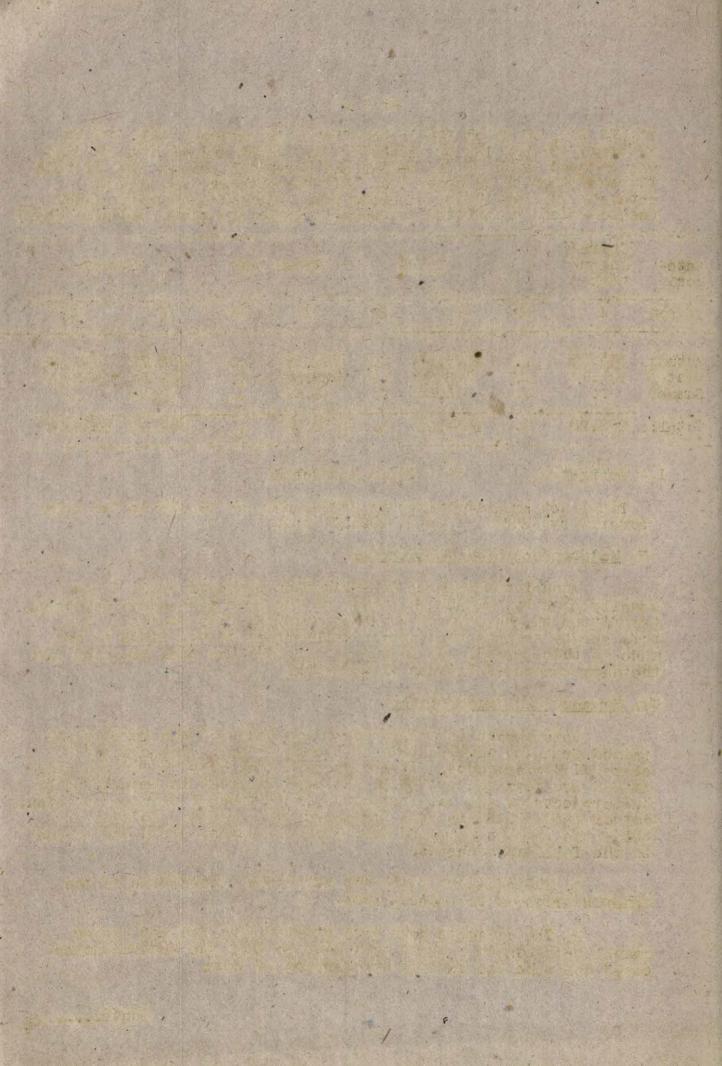
V. Maintenance of M. I. projects:

Annual maintenance of irrigation projects class I are usually done by PWD and an amount at the rate of Rs.500/- per hect. benefitted by the project is sanctioned for this purpose. But this survey reveals that proper utilisation of the funds is not made in this regard. An amount of Rs.85,445 has been reported for the maintenance of 9 class II projects.

VI. Summary and conclusions:

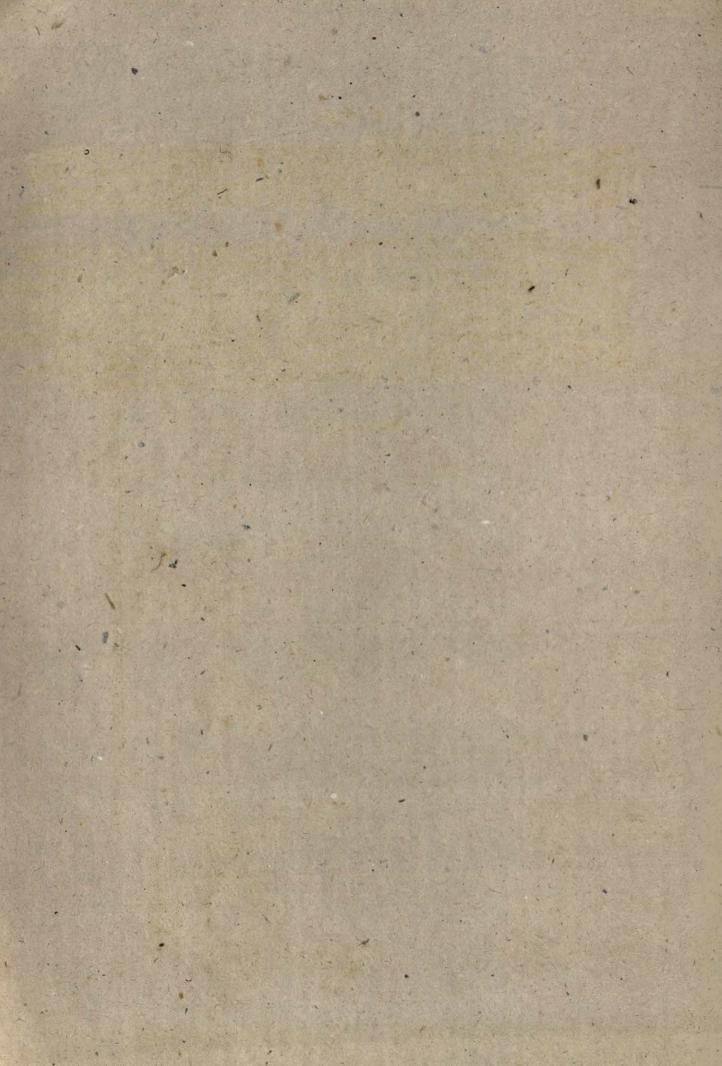
This report is presented on the basis of the results obtained from the verification of 2 class-I M.I. projects and 36 class-II M.I.projects. It is observed that only 78% of the area Ayacot are reported by PWD in Kottayam District is benefitted by M.I.projects by way of irrigation facilities or flood protection. Out of this 90.43% is area irrigated under paddy. This is far below the results expected from these projects. This may be due to the following seasons.

- 1. The projects could not serve the necessities of the beneficiaries of the Ayacut area.
- 2. The projects have been started long age and proper annual maintenance had not been done so that the beneficiaries could not make the maximum utilisation of them.



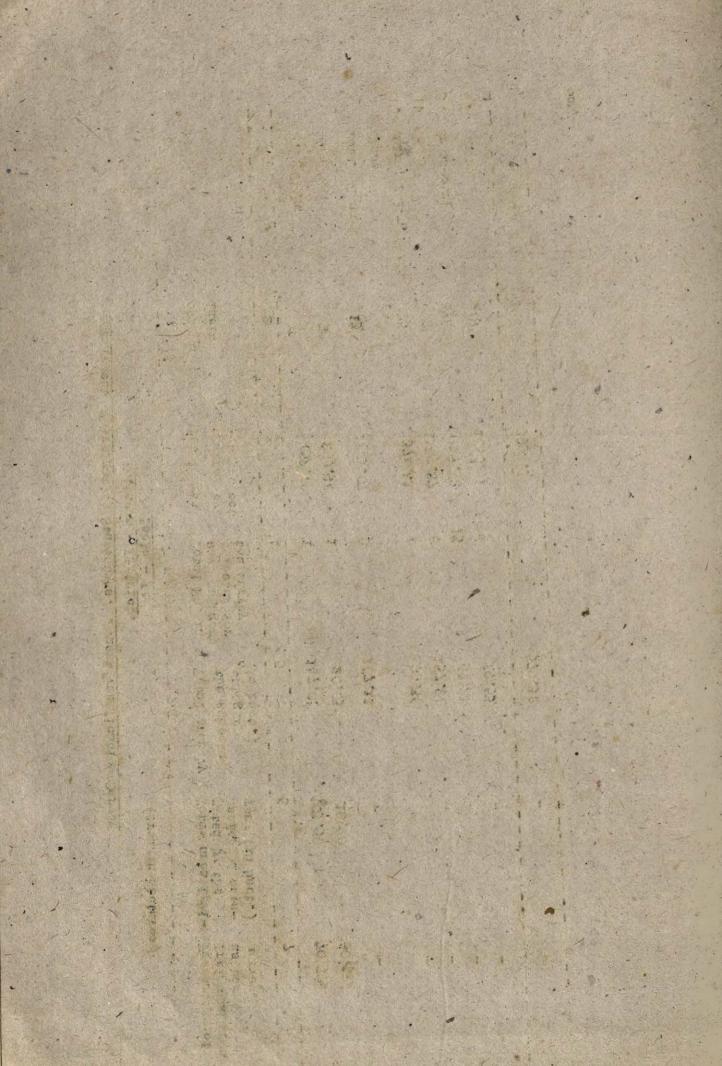
3. The rate of amount sanctioned as grant for the maintenance of the projects are very old and with this meagre rate proper maintenance cannot be done at present and (4) proper monitoring of maintenance is not done by the Irrigation Department or Panchayat Department.

With a view to overcome all these draw backs and for the proper utilisation of the facilities provided by the M.I.projects effective steps are to be taken. Annual maintenance should be done, if required with necessary alteration so that more area can be brought under cultivation by the beneficiaries of these projects. Government should enhance the rate of grant sanctioned for the maintenance of the projects. Yearly maintenance and control should be vested upon the committee formed with Government officials as well as representatives of local people.



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36	9	6	m o) <u> </u>		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total No. in each category selected for the survey	Table - I
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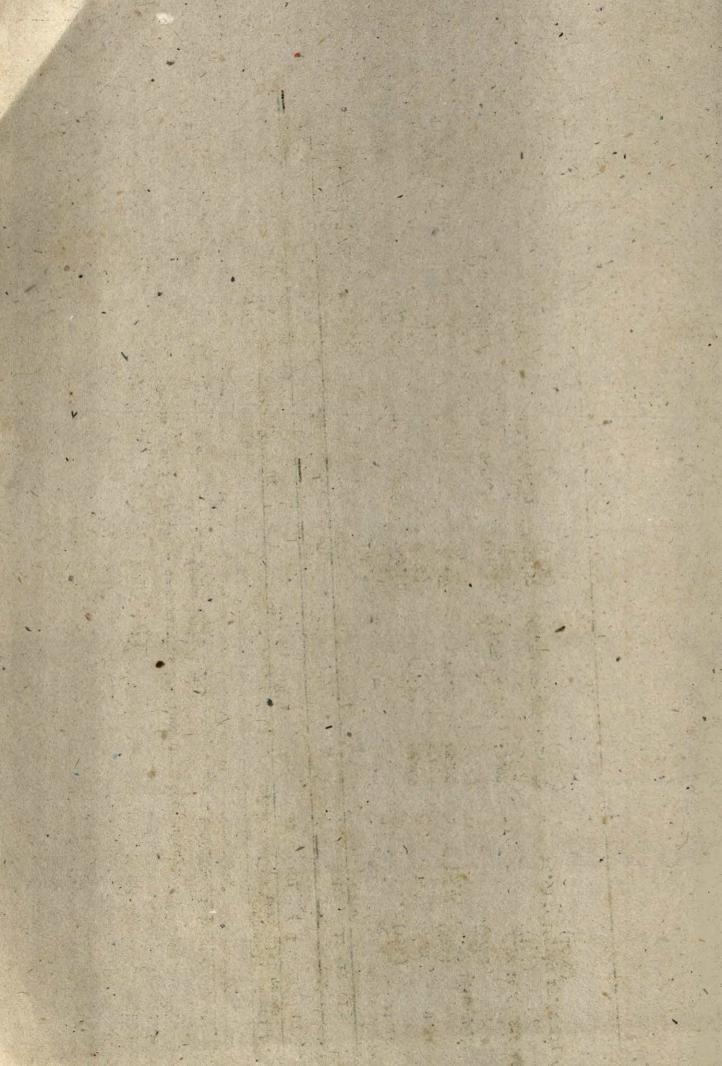
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Gross area irrigated - ordp wise as obtained from the survey.

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	7.00	136.70 - (5%) 743.50 - (29%)	5 6	Tinter I F.P
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	(43%) 43.96 (39%) 19.92 (16%)	47.65	6 3	Summer
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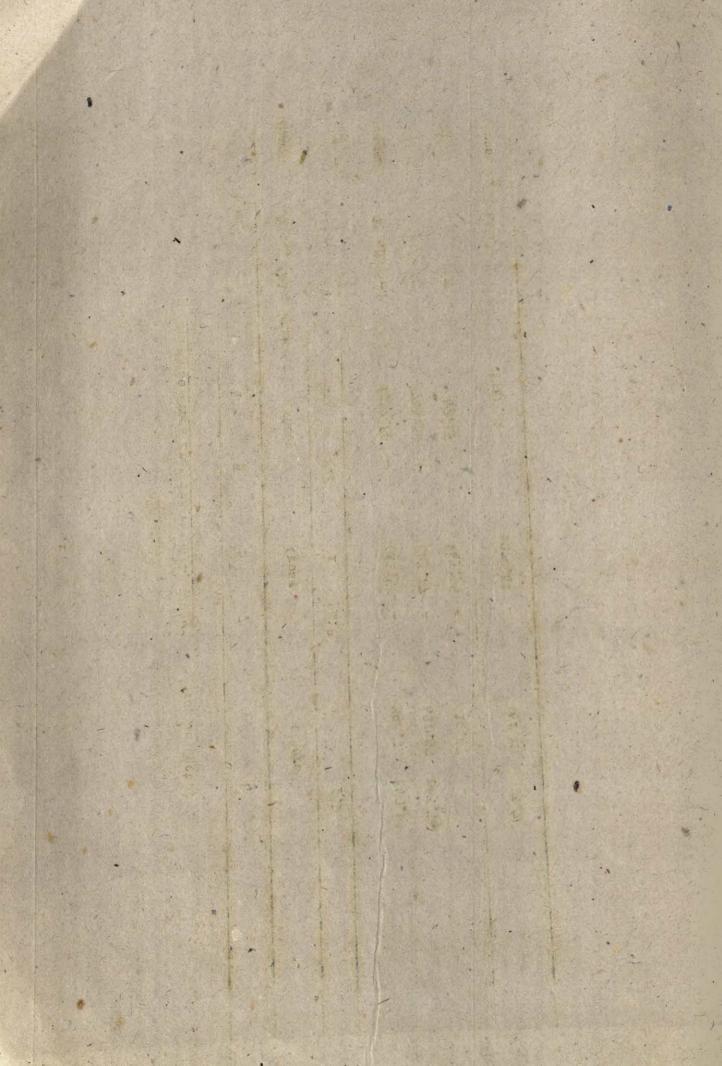


Table V

Kottayan District

Het area irrigated - Crop-vise as obtained from the laddy

Total	Others	Cross bor	Toda	Chiro, Kulom,	Type of work	
2260,51 663.59 217.57 178.75 16:04 49.60 124.05 - 202.50 19.06 - 100.36	428.50 563.59 276.93 104.60 15.02 49.60 61.09 - 160.40 - 160.40 - 108.44	653.17 26.95 1.02 - 21.20 - 30.00 11.30 53.94	1352.66 - 10.64 26.20 - 31-16 5 - 31-16 5 - 9.36	155 19.00 3.60 3.1070	I TO UI TED UL I TED TOUR TO I THE UI SEE I	a foldy Other sessonal crops Annual crop Perignial crop , a

irrigated : 90.43% Percentage of Net area irrigated under raddy to the total net area Pote 1 Mes area series

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Total net area imigated: 3233.47

Total net area irrigated under modely : 2924.17 Hoc - zet area arrivated today and

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Number of Class II - Minor Trigation works incurred maintenance expenditure during the last 4 years

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ilo. Chiro, Wilom, Tank Thodu Cross Line Expenditure (95.) No. Expenditure No. (25.) 2 3 4 5 6	62700 -
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Total Mo. of works which undertook maintenance - 9
Total expenditure - 85445/-





