Evaluation Study No. 6

AGRICULTURAL ACTIVITIES-VILLIANUR BLOCK

An Evaluation Report

ISSUED BY :
BUREAU OF STATISTICS & EVALUATION
GOVERNMENT OF PONDICHERRY
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INTRODUCTION

The "Report on the agricultural activities, Villianur Block" is the sixth issue in the Evaluation series of the Bureau of Statistics and Evaluation, Pondicherry. The object of this study is to find out the extent of achievement by the block agencies in the field of agriculture during the year 1968-69.

The willing co-operation extended by the Project Executive Officer in providing all facilities for this study is gratefully acknowledged. The comments of the Project Executive Officer, Pondicherry, are also given at the end of this report.

It is hoped that the present report will be useful for all those who are concerned with the evaluation of plan schemes.

Pondicherry,
13th November, 1969.

S. MUTHUBASAVAN.
Director.

STUDY OF VILLIANUR BLOCK

Introduction :

The Government of Pondicherry in their letter No. 664/Fin/F.1/68 dated the 16th May, 1968 have recommended eight Plan schemes to be taken up for evaluation by this Bureau. The Villianur Community Development Project is one such scheme taken up for evaluation. The study has however been restricted to the Agricultural practices in the Block.

Object of the study :

The main object of the study is to find out the extent of achievement by the block agencies in the field of agriculture during the year 1968-69. For this purpose it was decided to collect necessary data from a sample of cultivators in the Block area through a field enquiry.

Sampling design :

The sampling design is a stratified, two-stage one, the villages being the first-stage units and the households the second-stage sampling units. The seven rural communes of Pondicherry region were grouped into three strata, and a sample of 25 villages (allocated among the three strata in proportion to 1961 population) were selected at random with equal probability. In each sample village a complete list of households was prepared, and twelve households were selected by the method of circular systematic sampling, making a total of 300 households for all the 25 villages. The non-cultivator households in the sample were substituted by cultivator households, wherever necessary.

Schedules :

The schedule/questionnaire was suitably structured for this survey. This includes also questions on the reaction of cultivators to the improved practices and their suggestions regarding location of distributing centres of agricultural inputs, agency of distribution and procedure of supply.

Field Work :

The Statistical Inspectors of the Bureau visited the households of the selected cultivators, canvassed the schedule and recorded the data. Their work was supervised by the Evaluation Officer and the Research Assistant. The reference period for the survey is the agricultural year ending on 30th June 1969. The field work was done by six Statistical Inspectors. In this report, certain terms have been used which have the meaning as explained below.

Concepts and definitions :

1. Beneficiary cultivator : A beneficiary cultivator is one who has obtained aid from the block agency in respect of any one or more of the following :—

(a) Improved seeds
(b) Fertilisers
(c) Manures
(d) Improved implements
(e) Pesticides
(f) Erection of pumpsets/borewells and
(g) Purchase of bulls.

2. Improved seeds :

*(i) Government source :*This refers to the seed obtained from recognised or accepted official sources like Government Departments, Seed Farms, and Registered Growers.

(ii) Natural spread : After a particular improved variety has been released for general cultivation, it spreads extensively from year to year through natural propagation. This is known as natural spread.

History of Pondicherry Block :

The Community Development Programme was initiated in this territory in 1955. There are now 3 5/6 blocks—namely Pondicherry double block, Karaikal single block, Mahe half-a-block and Yanam one-third block. These blocks cover 99.5% of the

total area of the territory, 100% of villages and 89% of population. The reduction is because Pondicherry town is to be excluded from the Computation.

The National Extension Service Block was inaugurated in Pondicherry region in May 1955 with its headquarters at Villianur. It is a double block with one administrative unit covering an area of 28,890 hectares. There are 267, villages in the block with a total population of 2,18,140. It consists of the entire Pondicherry region excluding Pondicherry town. This block was converted into a Community Development Block in October 1957, six months ahead of the usual tenure of three years. From 2nd October, 1960 to 1st October 1965 it was in Stage II status. Since 2nd October 1965 it is a Post-Stage II Block.

People in this block are mainly engaged in agriculture. There are about 28,800 landowners of whom about 18,500 possess less than 50 "ares" (1.2 acres) of land. The net area shown is 49,317 acres. Three crops of paddy are raised in this region.

The following table gives the staff position of the block as on 31st March, 1969 :—

S. No.	Particulars	Number sanctioned	Number in position		
			Total	Trained	Untrained
1	2	3	4	5	6
1.	Project Executive Officer	1	1	—	1
2.	Gramasevaks ...	30	30	30	—
3.	Gramasevikas ...	4	4	4	—
4.	Extension Officer (Agriculture) ...	2	2	1	1
5.	Extension Officer (Animal Husbandry)...	1	1	—	1
6.	Extension Officer (Industries) ...	1	1	—	1
7.	Social Education Organiser ...	2	2	2	—
8.	Mukhya Sevika ...	2	2	2	—
9.	Engineering Supervisor ...	2	2	—	2
10.	Extension Officer (Statistics) ...	1	1	—	1

Physical achievements :

Various schemes are being implemented by the Block in different sectors like agriculture, animal husbandry, health and rural sanitation, social education etc. As the study is concerned only with the agricultural sector, the achievements regarding the programmes relating to agriculture alone are dealt with in this report. The important schemes in this sector are distribution of improved seeds, fertilisers, manures, improved implements and pesticides, loans to agriculturists for purchase of electric motors, sinking of borewells, purchase of bullocks and cart. The physical achievements pertaining to the above schemes for the year 1968-69 are given in the following table .—

Sl. No.	Particulars	Unit	Achievements in 1968-69
1	2	3	4
	A. Distribution of improved seeds		
1.	*Cereals:*		
	(a) Paddy	Quintal	3,590.00
	(b) Other cereals	,,	81.20
	Total (cereals)	,,	3,671.20
2.	Groundnut	Kg.	20,783.00
3.	Vegetable seeds	,,	370.10
	B. Distribution of fertilisers and manures		
1.	Ammonium sulphate	Quintal	9,545.00
2.	Urea	,,	5,388.00
3.	Superphosphate	,,	953.50
4.	Ammonium phosphate	,,	104.00
5.	Nitro phosphate	,,	154.00
6.	Other chemical fertilisers	,,	16,890.00
	Total (fertilisers)	,,	33,034.50
7.	Green manure seeds :		
	(a) Daincha	Kg.	12,686.00
	(b) Others	,,	4,853.00

1	2	3	4
	C. Distribution of improved implements		
1.	Iron ploughs and Bose ploughs	Nos.	1,277
2.	Cultivators	,,	2
3.	Sprayers	,,	15
4.	Burmese Setturns	,,	88
	D. Agricultural demonstrations:		
1.	Composite demonstrations held	Nos.	60
	E. Other items:		
1.	Chemical pesticides distributed	Kg.	16,414
2.	New compost pits dug	Nos.	1,476
3.	Area under green manuring	Hectares	4,331
4.	Area under package practices and intensive cultivation:		
	(a) Paddy	Hectares	22,273
5.	Fruit trees planted	Nos.	33,973
6.	Area under vegetables	Hectares	527

Under Intensive Agricultural Area Programme, the total amount of loans disbursed to agriculturists during 1968-69 is Rs. 48,500. Out of this Rs. 46,000 was for purchase of bullocks and carts and Rs. 2,500 for digging of wells. The number of persons who applied for loans during 1968-69 is 38 out of which 33 actually got the loans. Of this 31 are for purchase of bullocks and carts and 2 are for digging wells. Reasons for not disbursing the loans to the remaining five applicants were collected and are given in the following statement.

Sl. No.	Date of application.	Reasons for not disbursing the loans.
1	2	3
1.	23—8—68	Documents of the lands to be mortgaged in favour of the Government were not in order.

1	2	3
2.	10—6—68	The application which was sent to the Revenue Department for enquiries was received back on 20—2—69. Funds were not available in 1968-69 budget. The loan will be disbursed during 1969-70.
3.	19—9—68	The party who was called on 5—2—69 did not turn up.
4.	26—12—68	The application which was sent to the Revenue Department for enquiries was received back on 29—4—69. The loan will be disbursed during 1969-70.
5.	3—1—69	The application was sent to the Revenue Department for enquiries on 20—5—69. No Reply was received. The loan will be disbursed during 1969-70.

Under the Community Development Programme, loans were also given to agriculturists for purchase of electric motors and sinking of borewells. The total amount of loans disbursed under this head during 1968-69 was Rs. 20,000. The number of applicants for the same was ten out of which two did not get the loans due to non-availability of funds. Their applications were forwarded to the Agriculture Department for necessary action.

While perusing the above table, it may be found that, in one case, the loan was not disbursed because the documents to be mortgaged in favour of the Government were not regular, in three cases because of shortage of funds and in another case the party did not turn up. In the last case, the party might not have been interested because the loan might not serve the purpose for which it was applied, probably due to late sanction. This party who had applied for the loan on 19—9—1968 was called only on

on 5—2—1969 after a lapes of 4½ months from the date of his application. The distribution of persons who have applied and got the loans according to the time-lag between the date of application and date of receipt of the loan is given in the following table :—

Sl. No.	Time-lag	No. of applicants	Percentage of Col. (3) to total
1	2	3	4
1.	Up to 3 months	3	8
2.	Above 3 but below 6 months	14	34
3.	Above 6 but below 9 months	23	56
4.	Above 9 but below 12 months	1	2
	Total	41	100

It may be seen from the above table that the time-lag was more than 6 months in 58% of the cases. The time taken for scrutiny of the applications, verification of the title deeds, Government sanction etc., is unduly great and the same needs to be reduced. The reason adduced by the Block Office for the undue delay in disbursing the loans is that the Revenue Department was taking much time for verification and enquiry. Necessary steps should be taken by the authorities concerned to minimize the time for verification of the title deeds, enquiries, etc., and to send back the applications within 15 days to the block.

Findings of the survey :

As mentioned earlier, 300 cultivators selected from 25 villages were contacted and information as to whether they have obtained any aid from the Block, particulars regarding quantity of improved seeds, fertilizers, manures and pesticides applied in their holdings during 1968-69, area on which they have applied the inputs, their reaction to the improved practices and their suggestions, were collected from the selected cultivators. The results of the survey are given in the following paragraphs.

Size of operational holding :

The distribution of sample cultivators according to the size of their operational holdings (owned and leased-in land) is shown in the table below.

Sl. No. 1	Size-group (in acres) 2	Number of households 3	Percentage to total 4
1.	Less than 2 acres	102	34.00
2.	2 to 4 acres	91	30.34
3.	4 to 6 acres	36	12.00
4.	6 to 8 acres	25	8.33
5.	8 to 10 acres	16	5.33
6.	10 and above	3	10.00
	Total	300	100.00

It may be seen that about three fourths of the cultivators have less than 6 acres of land and that only 10% have 10 acres and above.

Area under different crops :

The following table deals with the area under each crop (irrigated and un-irrigated) in the operational holdings of sample cultivators for the year 1968-69.

Sl. No. 1	Name of crop 2	Area in acres: Irrigated 3	Un-irrigated 4	Total 5	Percentage of Col. (5) to Total 6
1.	Paddy	1,029.83	7.83	1,037.66	55.36
2.	Ragi	212.80	5.50	218.30	11.65
3.	Cumbu	135.21	9.00	144.21	7 69
4.	Groundunt	143.45	87.35	230 80	12 32
5.	Sugarcane	154.25	--	154.25	8.23
6.	Others	57.35	31.75	89.10	4.75
	Total	1,732.89	141.43	,874.32	100.00

It may be seen that more than half the area was under paddy crop, about 12% under groundnut and 8% under sugarcane. It may also be noted that more than 90% of the area was irrigated.

Beneficiaries and non-beneficiaries :

Out of 300 sample cultivators, 247 cultivators (82.33%) have obtained one or more aids from the block, only one cultivator (0.33%) obtained all the aids, whereas 53 cultivators (17.67%) have not obtained any aid. The number and percentage of beneficiaries by type of aid are given in detail in the table below.

Percentage of beneficiaries by type of aid

Sl. No.	Type of aid	No. of beneficiaries	% of beneficiaries to total cultivators.
1	2	3	4
1.	One or more aids	247	82.33
2.	All the aids	1	0.33
3.	No aid	53	17.67
4.	Improved seeds	137	45.66
5.	Chemical fertilisers	228	76.00
6.	Manures	155	51.66
7.	Pesticides	209	69.66
8.	Improved implements	147	49.00
9.	Erection of pumpsets/borewells	6	2.00
10.	Purchase of bulls	7	2.33

The percentage of beneficiaries for improved seeds is 45.66. Chemical fertilizers accounts for the highest percentage (76.00%) followed by pesticides (69.66%).

Distribution of cultivators adopting improved practices during 1968-69 :

The results of the survey indicated that 54% of the sample cultivators adopted improved seeds in their holdings. Chemical fertilisers were used by 87.67%, green manure by 36.33% and chemical pesticides by 80.67% of the cultivators. These particulars are given in detail in the following table.

Sl. No.	Improved practices	Number of cultivators adopting	Percentage to total
1	2	3	4
1.	Improved seeds	162	54.00
2.	Chemical fertilisers	263	87.67
3.	Green manure	109	36.33
4.	Chemical pesticides	242	80.67

Improved seeds :

The distribution of cultivators using improved seeds crop-wise for 1968-69 is shown below.

Sl. No.	Crop	Total No. of cultivators growing the crop.	No. of cultivators using improved seeds	Percentage of Col. (4) to Col. (3)
1	2	3	4	5
1.	Paddy	246	114	46.34
2.	Ragi	128	7	5.47
3.	Cumbu	46	33	71.74
4.	Groundnut	84	22	26.19
5.	Sugarcane	23	10	43.48
6.	Other crops	73	4	5.48
7.	Anyone of more crops	300	162	54.00

It may be seen from the above table that out of 246 cultivators growing paddy, 114 cultivators (46.34%) used improved seeds. The percentage of cultivators using improved seeds is highest for cumbu (71.74%), followed by paddy (46.34%) and sugarcane (43.48%).

Area under improved seeds :

The following table deals with the area under improved seeds (crop-wise).

Sl. No.	Crop	Area under the crop (acres)	Area under improved seed (acres)	Percentage of col. (4) to col. (3)
1	2	3	4	5
1.	Paddy	1,037.66	371.21	35.77
2.	Ragi	218.30	12.00	5.49
3.	Cumbu	144.21	70.06	48 58
4.	Groundnut	230.80	42.25	18.31
5.	Sugarcane	154.25	74.00	47.97
6.	Others	89.10	7.00	7.86
	Total	1,874.32	576.52	31.83

Only 31.83% of the total area was covered by improved seeds. 35.77% of the area under paddy, 48.58% of the area under cumbu, 47.97% of the area under sugarcane were under improved seeds. In the case of groundnut and ragi the percentage area covered by improved seeds was only 18.31% and 5.49% respectively. Efforts should be made by the Department to popularise the use of improved seeds. The percentage area covered is very low in the case of ragi and groundnut. In the case of paddy the percentage area covered is not satisfactory.

The area under improved seeds supplied by Government source only is dealt with in the following table.

Sl. No.	Crop	Total area under improved seeds (acres)	Area under improved seeds supplied by Govt source (acres)	Percentage of Col. (4) to Col. (3)
1	2	3	4	5
1.	Paddy	371.21	58.85	15,85
2.	Ragi	12.00	—	—
3.	Cumbu	70.06	58.06	82.88
4.	Groundnut	42.25	5.00	11.83
5.	Sugarcane	74.00	28.00	37.84
6.	Others	7.00	6.00	85.71
	Total	576.52	155.91	27.04

About 27% of the area under improved seeds was covered by improved seeds supplied by Government source. The remaining 73% of the area was under natural spread. As regards paddy, 15.85% of the area under improved paddy was under seeds obtained through Government source. In the case of ragi, the area reported to be under improved strains was wholly under seeds obtained through natural spread.

Fertilisers, manures and pesticides :

As has been stated earlier, 87.67% of sample cultivators have applied chemical fertilisers, while 36.33% applied green manure and 80.67% used pesticides in their holdings in 1968-69 These particulars are given in detail in the following table for each type of fertiliser, manure etc.

Sl. No.	Particulars	Number of cultivators using	Percentage of Col. (3) to total cultivators
1	2	3	4
1.	Ammonium sulphate	202	67.33
2.	Superphosphate	21	7.00
3.	Urea	76	25.33
4.	Mixed fertilisers	184	61.33
5.	One or more fertilisers	263	87.67
6.	Oilcake	65	21.66
7.	Green manure	109	36.33
8.	Farmyard manure	268	89.33
9.	One or more types of manures	284	94.47
10.	Pesticides	242	80.67

Ammonium sulphate was commonly used by the cultivators (67.33%) followed by mixed fertilisers (61.33%). But superphosphate which is an improved input was adopted only by 7% of cultivators. Efforts should be made to popularise this input. Majority of cultivators (89.33%) used farm yard manure. But green manure was used only by 36.33% of cultivators. This should be popularised more extensively.

Area under chemical fertilisers :

The percentage of area under the different crops manured by chemical fertilisers is given in the following table.

Sl. No.	Crop	Percentage area under chemical fertilisers				
		Ammonium sulphate	Superphosphate	Urea	Mixed fertilisers	One or more fertilisers
1	2	3	4	5	6	7
1.	Paddy	76.23	14.05	15.07	54.62	81.90
2.	Ragi	33.09	—	11.22	48.19	58.65
3.	Cumbu	38.45	—	5.20	39.17	50.35
4.	Groundnut	9.81	1.84	0.86	8.58	12.39
5.	Sugarcane	7.13	—	4.54	60.59	66.42
6.	Others	9.54	—	6.17	18.51	24.68

It may be seen that 81.90% of the area under paddy received various chemical fertilisers. When the area benefited by the different fertilisers is considered separately, it is found that 76.23% of the paddy area was treated with ammonium sulphate, 14.05% of the area by superphosphate, 15.07% by urea and 54.62% by mixed fertilisers.

Area under manures :

The percentage area under the different crops treated with manures is given in the following table.

Sl. No.	Crop	Percentage area under manures			
		Green manure	Oilcake	Other manures	One or more manures
1	2	3	4	5	6
1.	Paddy	46.49	18.19	73.24	79.38
2	Ragi	—	9.87	46.44	49.06
3.	Cumbu	—	4.19	38.73	41.85
4.	Groundnut	—	3.89	42.24	45.29
5.	Sugarcane	1.29	18.47	25.60	33.71
6.	Others	—	7.56	41.30	44.95

It may be seen from the above table that 46.49% of the paddy area was treated with green manure. It may be noted that the use of other manures like farm yard manure continued to be very popular with the cultivators. The use of farm yard manure is not considered as an improved agricultural practice and as such, the data in respect of these manures are not considered for the present study. It is, however, interesting to note that the farm yard manure was used in 73.24% of the paddy area.

Area under chemical pesticides :

The percentage area under the different crops brought under chemical pesticides is shown in the following table.

Sl. No.	Crop	Percentage area under chemical pesticides
1	2	3
1.	Paddy	80.39
2.	Ragi	24.76
3.	Cumbu	24.38
4.	Groundnut	40.14
5.	Sugarcane	11.66
6.	Others	19.42

Chemical pesticides were used in 80.39% of the area under paddy which accounts for the highest percentage when compared to all other crops.

PART II

Reaction of cultivators to the various improved agricultural practices :

As already mentioned, the schedule used for the survey was so designed as to obtain the views of the cultivators about the various improved agricultural practices. Information was obtained on their knowledge about improved agricultural practices, their acceptance and adoption of the improved practices, reasons for the non-adoption of any of the practices and their suggestions for the better propagation of the practices. The results of this opinion survey are summarised in the paragraphs that follow.

Extent of adoption of improved practices :

The percentage of cultivators who were conversant with the various improved agricultural practices and of those who accepted and adopted them at least once, is given in the following table.

Sl. No.	Particulars	Improved seed	Ammonium sulphate	Super phosphate	Green manure	Chemical pesticides
1	2	3	4	5	6	7
1.	Percentage of cultivators conversant with improved practices.	87.66	89.00	72.33	88.66	94.33
2.	Percentage of cultivators accepting the utility of practices.	81.33	79.00	65.33	81.33	89.00
3.	Percentage of cultivators adopting the improved practices.	80.00	79.00	63.00	81.33	89.00

[*No. B :* Percentages have been worked out on the total number of cultivators (300)].

The table reveals that 87.66% of cultivators were conversant with the utility of improved seeds. 81.33% accepted it, and 80% actually adopted it in practice. 72.33% of cultivators were conversant with utility of superphosphate, 65.33% accepted it, and 63% actually adopted it in practice. In the case of chemical pesticides, 94.33% of cultivators were conversant with the practice and 89% actually adopted it.

Distribution of cultivators not adopting improved practices by reasons :

The percentage of cultivators not adopting the improved practices by reasons is given in the following table.

Sl. No.	Particulars	Improved seed	Ammonium sulphate	Super phosphate	Green manure	Chemical pesticides
1	2	3	4	5	6	7
1.	Lack of finances	83.33	88.89	72.97	92.87	87.88
2.	Found not beneficial	1.67	1.59	7.21	3.57	3.03
3.	Absence of irrigation	4.99	3.17	2.70	—	—
4.	Non availability of material	1.67	—	12.62	—	—
5.	Procedure for obtaining aid cumbersome	3.33	3.17	2.70	1.78	3.03
6.	Aid not locally available	1.67	1.59	0.90	—	3.03
7.	Size of holding small	1.67	—	—	—	—
8.	Others	1.67	1.59	0.90	1.78	3.03
	Total	100.00	100.00	100.00	100.00	100.00

It may be seen that financial difficulty was reported to be the principal cause for the non-adoption of the improved agricultural practices by the cultivators. More than 80% of the cultivators who have not adopted the respective improved practice, have quoted this reason for non-adoption.

Suggestions of cultivators for better propagation of improved agricultural practices (Table in Appendix—I) :

The views of the cultivators were sought regarding the location of the centre for the distribution of the improved inputs (seeds, fertilisers and pesticides), the agency for their distribution, the manner of supply, the adequacy of the inputs supplied, and the method to be adopted for educating the cultivators on the improved agricultural techniques. The views expressed by the cultivators are summarised below.

(1) Location of the distributing centre : More than 43% of the cultivators wanted the distributing centre to be located at the co-operative society. The second preference was the Gram Sevak's headquarter.

(2) Agency for distribution : More than 54% of the cultivators suggested the distribution of the agricultural inputs through the co-operative society. Gram Sevak was preferred as the agency for distribution by 31% of cultivators.

(3) Procedure of supply : The cultivators were asked to state whether the improved inputs should be distributed by (i) credit or (ii) subsidy or (iii) exchange for other produce. Subsidised distribution of the seeds, fertilisers and pesticides was favoured by more than 50% of the cultivators. The next preference was for credit supply and this was favoured by about 25% of the cultivators. The suggestion to obtain inputs in exchange for other produce did not appeal to the cultivators as attractive.

(4) Adequacy of inputs supplied : In respect of improved seeds, 67.66% of the total cultivators reported that they could get them to meet their entire requirements. 27.67% of the cultivators did not get the required quantity of improved seeds to meet their need in full. 4.67% felt that the seeds supplied to them had to be substituted by other varieties.

As regards chemical fertilisers 70.33% of cultivators reported that the supply made could meet their requirements. Additional quantity was needed by about 25% of the cultivators. Nearly 5% of cultivators felt the need to substitute the fertilisers supplied to them by other varieties.

In respect of chemical pesticides, 66.67% of the cultivators got adequate supply, 32.66% needed additional quantity and only 0.67% desired substitution of pesticides supplied to them by other varieties.

(5) Methods of advice adopted by the Department : The survey made an assessment of the views of the cultivators on the following different methods through which the departmental advice on the use of improved agricultural techniques should be propagated :—

(a) Propaganda
(b) Field demonstration
(c) Training camps
(d) Audio-visual aids.

The data collected from the survey revealed that more than 85% of the cultivators suggested propaganda and demonstration in the fields as methods of extension education by the department.

Periodicity of visit of Village Level Workers : Information regarding the periodicity of visit of Village Level Workers to the villages selected for the survey, was also collected and is given in the following table.

	Particulars	No. of cultivators reporting	Percentage to total
1	2	3	4
1.	Daily	3	1.00
2.	Thrice a week	14	4.67
3.	Twice a week	12	4.00
4.	Once a week	108	36.00
5.	Fortnightly	87	29.00
6.	Monthly	24	8.00
7.	Rare	14	4.66
8.	Not visiting	26	8.67
9.	Cultivators not reporting	12	4.00
	Total	300	100.00

It may be seen that the maximum number of cultivators (36%) have reported that the Village Level Workers were visiting the villages once a week. 4.66% reported that the Village Level Workers were rarely visiting and 8.67% reported that they were not visiting the villages at all.

Summary of findings :

A summary of the important findings of the study is given below :—

1. 82.33% of the sample cultivators were beneficiary cultivators, as they have obtained one or more aids and the remaining 17.67% were non-beneficiaries.

2. 54% of the sample cultivators used improved seeds or seedlings in their holdings in 1968-69. As regards cultivators growing paddy, 46.34% of them adopted improved strains.

3. 87.67% of the sample cultivators used chemical fertilisers, 36.33% green manure and 80.67% chemical pesticides during 1968-69.

4. Only 31.83% of the total area in the holdings of sample cultivators was covered by improved seeds. Taking into consideration the area under paddy alone, 35.77% of the paddy area was treated with improved strains.

5. In respect of area under paddy, 81.90% received chemical fertilisers, 46.49% was treated with green manure and 80.39% with chemical pesticides.

6. More than 80% of the cultivators were conversant with the utility of improved agricultural practices (except superphosphate 72%) and majority of them have adopted the improved methods in practice at least once.

7. Financial difficulty was ascribed as the main hurdle for the non-adoption of improved practices. Some of the other reasons reported were non-beneficial factor of the inputs, absence of irrigation facilities and difficulty in obtaining the inputs.

8. More than 54% of the cultivators suggested the distribution of the agricultural inputs through the co-operative society.

9. Subsidised distribution of the seeds, fertilisers and pesticides was favoured by more than 50% of cultivators.

10. About two-thirds of the cultivators have reported that they could get the agricultural inputs to meet their full requirements.

11. More than 85% of the cultivators suggested propaganda and demonstration in the fields as methods of extension education by the department.

12. 4.66% of cultivators reported that the Village Level Workers were rarely visiting the villages and 8.67% reported that the Village Level Workers were not at all visiting the villages.

13. As regards disbursement of loans to agriculturist, the time taken for scrutiny of the applications, verification of title deeds, etc., is unduly long. It is found that in 58% of the cases the time taken was more than 6 months. Necessary steps should

be taken to minimise the time-lag and try to disburse the loans to the applicants at least within one month from the date of application.

14. From the findings of the survey it may be said that the achievements of the Block in respect of chemical fertilisers and pesticides are quite satisfactory. Most of the cultivators were conversant with the utility of these inputs and majority of them were actually adopting them in practice. In other words, the cultivators are highly fertiliser minded and pesticide conscious. However, it must be pointed out that in respect of improved seeds and green manure the achievements of the Block cannot be said to be quite satisfactory. The percentage of areas under these two practices is not encouraging. Moreover, the quality of improved seeds supplied to the cultivators was reported to be "good" only by 44% of cultivators. About 11% of cultivators have reported that the seeds supplied to them were not satisfactory. The remaining 45% have not expressed any opinion about the quality of the seeds.

APPENDIX—I

TABLE No. 1

Quantity of improved seeds obtained and sown in 1968-69 by the sample cultivators

Sl. No.	Crop		Quantity of improved seeds obtained			Percentage of Col. (3) to Col. (5)
			Govt. source	Natural spread	Total	
1	2		3	4	5	6
1.	Paddy	Kg.	2,015.00	8,969.00	10,984.00	18.34
2.	Ragi	,,	—	100.00	100.00	—
3.	Cumbu	,,	88.50	59.00	147.50	60.00
4.	Groundnut	,,	380.00	2,510.00	2,890.00	13.15
5.	Sugarcane	Nos.	5,60,000	7,60,000	13,20,000	42.42
6.	Others	Kg.	19.00	9.00	28.00	67.85

TABLE No. 2

Quantity of fertilisers, manures and pesticides obtained and applied in 1968-69 by the sample cultivators

Sl. No.	Particulars	Unit	Quantity obtained
1	2	3	4
1.	*Chemical fertilisers* ·		
	(i) Ammonium Sulphate	Kg.	72,450
	(ii) Super Phosphate	,,	12,895
	(iii) Urea	,,	8,970
	(iv) Mixed fertilisers	,,	1,78,905
2.	*Manures :*		
	(i) Oil cake	Kg.	27,260
	(ii) Green manure	,,	86,142
	(iii) Farm yard manure	Tonnes	5,815.2
3.	*Pesticides* :		
	(i) BHC and DDT	Kg.	30,003.5
	(ii) Endrin/Folidol	Tins	945

Suggestions of cultivators for better propagation of improved practices.

TABLE No. 3

Suggestions regarding location of distributing centre

Sl. No.	Suggestions	Improved seed	Ammonium Sulphate	Super Phosphate	Oil-cake	Green manure	Chemical Pesticides
1	2	3	4	5	6	7	8
1.	Block Headquarters	27.67	25.34	22.00	18.67	19.34	25.34
2.	Gram Sevak's Headquarters	28.67	29.00	29.00	31.00	29.66	29.00
3.	Co-operative Society	43.00	44.33	48.00	45.00	47.33	44.00
4.	Others including private salesman etc.	0.66	1.33	1.00	5.33	3.67	1.66
	Total	100.00	100.00	100.00	100.00	100.00	1.00.00

(N. B.: Figures relate to percentage of cultivators giving particular suggestion to total number of cultivators.)

TABLE No. 4

Suggestions regarding agency of distribution

Sl. No.	Suggestions	Improved seed	Ammonium Sulphate	Super Phosphate	Oil-cake	Green manure	Chemical Pesticides
1	2	3	4	5	6	7	8
1.	Gram Sevaks	31.00	31.66	33.66	32.66	34.33	31.66
2.	Agriculture Department	11.00	11.34	9.34	8.34	10.00	10.67
3.	Co-operative Society	57.00	56.00	56.34	57.33	54.33	56.67
4.	Private Salesman	1.00	1.00	0.66	1.67	1.34	1.00
	Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE No. 5

Suggestions regarding mode of supply

Sl. No.	Suggestions	Improved seed	Ammonium Sulphate	Super Phosphate	Oil-cake	Green manure	Chemical Pesticides
1	2	3	4	5	6	7	8
1.	By credit	27.33	26.66	28.00	28.34	28.00	23.34
2.	By subsidy	56.00	55.00	51.00	49.33	50.67	59.33
3.	By credit and subsidy	16.67	16.67	16.67	16.67	16.67	16.67
4.	In exchange for produce	—	1.67	4.33	5.66	4.66	0.66
	Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE No. 6

Adequacy of inputs supplied

Sl. No.	Particulars	Improved seed	Ammonium Sulphate	Super Phosphate	Oil-cake	Green manure	Chemical Pesticides
1	2	3	4	5	6	7	8
1.	Adequate	67.66	70.33	70.33	69.67	72.00	66.67
2.	Additional quantity needed	27.67	25.67	24.00	23.00	24.00	32.66
3.	Substitute desired	4.67	4.00	5.67	7.33	4.00	0.67
	Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE No. 7

Suggestions regarding methods of advice by the Department.

Sl. No.	Suggestions	Improved seed	Ammonium Sulphate	Super Phosphate	Oil-cake	Green manure	Chemical Pesticides
1	2	3	4	5	6	7	8
1.	By propaganda	31.33	25.00	31.00	29.00	25.67	25.67
2.	By demonstration	28:66	28.66	25,66	26.66	28.33	29.66

1	2	3	4	5	6	7	8
3.	By training camp	7.00	12.67	10.66	12.00	13.66	11.66
4.	By audio-visual aids	1.00	1.66	0.67	0.33	0.33	1.00
5.	By propaganda and demonstration	31.67	31.67	31.67	31.67	31.67	31.67
6.	By demonstration and audiovisual aids	0.34	0.34	0.34	0.34	0.34	0.34
	Total	100.00	100.00	100.00	100.00	100.00	100.00

COMMENTS OF THE PROJECT EXECUTIVE OFFICER

1. Regarding improved seeds, in Pondicherry region, the local varieties have been replaced by improved varieties like CO—29, ADT—27, CO—25, BCP—1 and ASD—5. No ryot in this area is cultivating local varieties and all the cultivated areas are cropped with improved varieties only. The ryots who were inquired mean only the foundation seeds as improved seeds. The foundation seeds were produced in State Seeds Farms, only in limited quantity and they were supplied only to the selected ryots to facilitate the natural spread.

2. Pesticides are supplied only at 30% subsidy. There is a Government policy not to subsidise the seeds and fertilisers.

Fertilisers are distributed only through the village credit societies.

3. Demonstrations were conducted in 5 acres plot (pilot Demonstrations) and in 50 cent plots (composit demonstration) and trials are also conducted during the introduction of new varieties like Jaya and Padma. National Demonstration is also laid out in one acre plot.

4. Regarding the germination of seeds, the germination test is conducted both in State Seed Farm and in the Agricultural Department before distribution to the public. The seeds will be distributed only if the germination percentage is more than 90%. Therefore, there is no basis for the complaint.

5. *Periodicity of visit of Village Level Workers :* The Village Level Workers are the multipurpose workers of the Block. Besides the duties normally attached to their posts they are attending to the propagation work of other departments such as Information, Family Planning, Harijan Welfare. They are in charge of about ten villages belonging to their jurisdiction. Instruction will be given to all Village Level Workers to visit the villages at least once a week.

6. Regarding the distribution of loans to agriculturists, the verification work is done by the Revenue Department. They will be requested to reduce the time lag.

PROJECT EXECUTIVE OFFICER