

**A STUDY ON THE
IMPACT OF SFDA ON THE DIFFUSION
AND ADOPTION OF INNOVATIONS IN FARMING**

**A THESIS SUBMITTED TO
THE ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
IN PARTIAL FULFILMENT OF THE REQUIREMENTS
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OF
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BY

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**DEPARTMENT OF EXTENSION EDUCATION
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BHUBANESWAR**

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Dedicated to my Grand Father

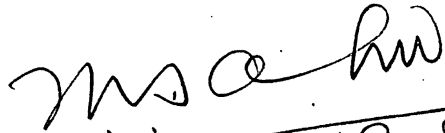
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AND ADOPTION OF INNOVATIONS IN FARMING**

CERTIFICATE

I certify that the thesis entitled " A study on the Impact of SFDA on the diffusion and adoption of innovations in farming", submitted by Sri Surjyanarayan Barik in partial fulfilment of the requirements for the degree of Master of Science (Agriculture) majoring in Agricultural Extension of the Orissa University of Agriculture and Technology, Bhubaneswar, is a faithful record of bonafide research work carried out under my direct supervision. It is further testified that all the data presented in this thesis are based on his own observations and no portion thereof has been used in any other thesis for a diploma or degree. These data have not appeared in any article or publication of the author. The help received during the course of investigation and writing up of thesis has duly been acknowledged by him.

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The 19th August, 1974.



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August 19th, 1974.

Surjyanarayan Barik
(Surjyanarayan Barik)

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CHAPTER I

Introduction

INTRODUCTION

The present problem of shortage of food has been, to a large extent, solved by the green revolution. The pattern of agriculture has also taken a different turn-especially in Punjab and Hariyana-because of green revolution. So also, the economy of the farmer of those States. There has been, no doubt, an increase in the agricultural production. At the same time green revolution has been severely criticized since it enhanced the economic disparity between the big and small farmers. The new agricultural technology, some how, could reach the upper crust of the farming population who could be able to use the technical know-how that paid higher dividends. Contrary to this, the weaker section of the farming population could not compete with their big brothers and as such, were at the disadvantage of utilizing the new knowledge.

Land distribution and its utilization and the tenure system are probably the major weaknesses in the agricultural pattern of our country. Production inputs cannot be efficiently utilized due to uneven and scattered distribution of land. This is particularly true in case of small and marginal farmers of our country. This economically under-privileged class constitute greater portion of the farming population. Apart from others, economic backwardness is rather the major and all important weakness in their farm operation.

Pandey (1972) has rightly pointed out that, the new agricultural technology is labour intensive and, therefore, favourable to the small farmers. It affords greater opportunities to gainfully employ his family's surplus labour in farm production and, thereby, provides an avenue to convert his idle labour into increased earnings. Ramasamy (1972) and many others have pointed out that, the modern technology has not touched this section of farming population who have been exploited by the merchants and money lenders. This situation necessitated the establishment of a special agency that could take care of the small and marginal farmer. On the basis of observation and studies made by scientists and expert committees and their subsequent recommendations, the Government of India established two important agencies— The Small Farmers Development Agency (SFDA) and the Marginal Farmers and Agricultural Labour Development Agency (MFALDA) in selected areas throughout the country. The projects have been operating since 1970. quite often weaknesses in the organizational structure and function are found in case of new schemes and projects. At the present moment these projects are badly necessary and need to be continued in an effective manner. If, due to some weakness the project is discredited and subsequently dis-continued, there could not be any hope of strengthening the hands of the small and marginal farmers.

It was therefore, thought of investigating and evaluating the working of SFDA and to find out the extent of benefit, present weaknesses and suggestions to overcome the bottlenecks if any, etc.

The National Commission on Agriculture (1973) in their interim report have recommended that the maximum limit of holding of small farmers should not be above two hectares. They observed that a farmer with two hectares of holding even in a dry area can attain income level above the minimum considered desirable. In the present study, accordingly the land size the only qualifying criterion of the small farmer has been taken between 1 to 2 hectares (2.5 to 5 acms).

Reports are coming out that there has been some improvement made by SFDA where-ever it has functioned. The extent of improvement is not yet evaluated, although several reports in favour of the scheme are coming out. In order to study the impact of SFDA and the diffusion and innovations in farming the present study has been planned.

The specific objectives of the study are :

- (1) To study the socio-economic characteristics of small farmers in SFDA.
- (2) To assess the knowledge of farmers about objectives and working of SFDA.
- (3) To study the extent of participation of the farmers in SFDA activities.
- (4) To assess the relative importance of different programmes of SFDA as perceived by the

participating farmers.

- (5) To assess the extent of benefit accrued to the farmers eg. changes in level of, (a) knowledge, (b) skill and (c) attitude.**
- (6) Weakness in the programme implementation, (a) Organizational structure, (b) working methods.**
- (7) Suggestions for improvement.**

CHAPTER II

Review of Literature

REVIEW OF LITERATURE :

Small Farmers Development Agency is a special Project of recent origin. The Project has been functioning only since 1970 in the entire country. As such, there has not been much research work done in this field. A few research and evaluation reports that are available have been reviewed. The evaluation reports are either progress reports or statements made on the basis of casual observations. However, an attempt has been made here to review whatever materials are available on the topic.

REVIEW OF LITERATURE :

Silveira (1963) revealed that small farmers tend to receive proportionately larger loans in form of capital.

Quoting from the report of F.A.O. Agricultural studies, Mahta and Vaikuntha (1965) have stated that the development of agriculture in most of the countries has not yet reached the stage where the average small and medium size farmers make a proper use of the credit facilities extended to them. Little initiative has been shown from the side of agricultural credit institutions or by extension services to bring about the essential co-ordination between credit and extension education. The approach of most Central Banks to agricultural credit system were unsatisfactory.

Quoting from the farm management survey by the Ministry of Food and Agriculture, Subramanian (1966) stated to emphasize the need to lever up the farmers particularly

the small ones. Unlike the common belief, the surveys have shown that small farms are more productive of yield than larger ones. This means that upto a certain limit, added inputs must result in returns from them. Then he mentioned that, the small farmers should be organized for better participation in community activities. In a village, for instance, small farmers with progressive ideas on agriculture might be helped to form themselves into interest groups in order to ignite motivation through their dynamics.

Choudhury (1969) assumed that the larger the size of the family the wider the source of information and greater the degree of input. It was found that the respondents with families of more than six members registered greater impact than those with smaller families.

Sandhu (1971) has pointed out on social justice demands that the small land holdings be brought into agricultural modernization process. In other words, India's policy of concentrating its scarce input resources in areas of greater production potential and consequential limited attention to the requirements of small farmers.

Gopalan (1971) opined that the small farmers are prompt in repayment and willing to take up help from Nationalised Banks, SFDA, etc. Further he suggested to speed up the service system of such organisation.

Pandey (1972) reported the new technology is labour intensive and therefore, favourable to the small farmers, it affords greater opportunities to gainfully employ his family's surplus labour in farm production, and thereby, provides an avenue to convert his idle labour into increased earnings.

The National Commission on Agriculture (1973) (in their interim report on Re-orientation programme on small Farmers, marginal Farmers, and Agricultural labourers development agencies) reported that the demonstration may cover two crop seasons and be taken up one or two per panchayat or village in the areas with large concentration of small/marginal farmers. The selection of demonstration may be on $\frac{1}{2}$ acre of plot in the land from among the smallest land holding group of small farmers and selected marginal farmers.

In a study Bhattacharyya (1972) found that for success of high yielding varieties of paddy cultivation are required manures, insecticides, implements, etc. which the small farmers in most cases do not get through block offices.

Quoting from the central sector scheme of the union ministry of Agriculture, Prakash (1972) stated that the artisans trained may either join co-operatives or set up their own business. Where the artisans establish their own business loans upto Rs. 5000/- without security may be available

from the State Bank of India or other commercial Banks. The artisans can obtain credit facilities from the banks and institutions upto about 75 percent of their total financial requirements.

Sinha (1972) observed that the small farmers constitute about 52 percent of the rural house holds. Studies revealed that their productivity was not inferior to that of big farmers operating in similar conditions in the same area with the new technological development. Most of them can be come viable units provided credit and farm inputs are made available to them with this end in view. Small Farmers Development Agency programme was introduced in selected districts in the country, including PURNIA. And the functions of the agency were to locate the eligible farmers in the selected blocks of the district with the ~~assistance~~ of circle officers in charge of land records, investigate their problems and formulate a programme for investment and production activities to be under-taken by the supported farmers, prepare model schemes and pattern assistance to suit the needs of cultivators in different situations.

Pandey (1972) stated that the small farmer can take better and proper care of new crops, which are highly demanding in terms of personal care and management, as compared to a large farmer who is handicapped in a number of ways. It is again revealed from his study that, in the areas which are

at high stage of agricultural development, the small farmers can best be helped by giving adequate institutional support to enable them to make the necessary adjustment in the operation of their farm economy, by taking measures to forestall the ill-effects of the spread of mechanisation and by providing facilities to take up activities ancillary to agriculture, such as dairy farming.

Quoting from the study of the Central Sector Scheme of the Union Ministry of Agriculture Prakash (1972) described that, it has already been launched to assist the Small Farmers, and Marginal Farmers and Agricultural Labourers. Forty six projects have been initiated by the Small Farmer's Development Agency (SFDA). Small Artisans Schemes form a part and parcel of these projects where there is a sizeable number of rural artisans.

It is mentioned in the syndicate report of the 79th orientation course (1973) that the so called green revolution touched only the upper fringe of the country's farm structure. 70 percent of India's farmers whose holdings constitute the bulk of the country's cultivated area have been mere spectators of the latest development in Agricultural technology which has enormously increased the income of the thin upper crust of the big land holders.

Patil (1972) mentioned that a direct consequence of this basic phenomenon of higher population pressure on

small farms is that their farming is subsistence-oriented. They grow inferior cereals and pulses, mostly for self consumption and hardly for sale. Besides, on most of the small holdings, double cropping is conspicuous by its absence largely due to paucity of irrigation facilities and financial resources. This, in turn, adversely affects the adoption and use levels of productivity raising technological innovations. And the shortage of capital suffered by small farmers is further aggravated by their relatively low credit-worthiness. They are under-financed by all agencies including cooperatives not only in terms of security-oriented but also production-oriented credit.

As quoted by Quraishi (1972) from the report of All India Rural Review Committee the loan taken for agricultural purpose is otherwise utilised. Further, he suggested that with changed situation there is obvious need for a new type of village level worker of a much higher technical competence who can concentrate efforts on a much smaller area throughout the year so that more and more small farmers can be benefitted through his service to go on improving their lot.

Ramasamy (1972) mentioned that the modern technology has not touched this section (Small Farmers) of the farming population. Several adoption studies carried out in this sphere have concluded that the benefits of the package programme have not substantially reached the small farmers.

Besai (1972) stated that the primary aim of the Small Farmers Development Agency is to extend a helping hand to the small farmer, so that he can stand on his own legs and obtain maximum production on his land through improved farming practices, irrigation and adequate doses of inputs and pesticides.

De (1973) observed that, irrigation acts as a catalytic agent for the introduction of new technology. It is one of the crucial factors in the adoption of package of practices. Development of minor irrigation facilities, therefore, the major part of the project schemes.

Ram Chandra (1973) analysed the farm credit requirement, its availability and the utilization patterns by the small farmers of district Fatehpur. The study showed that maximum number of small farmers (49 percent) obtained credit from cooperative societies, whereas the money lenders and cooperative Banks had advanced credit to 30 & 40 percent respectively. Commercial Banks that have emerged recently as one of the main agencies to advance credit, have been able to provide loans to only 5 percent of the small farmers.

It is published by the planning commission (1974) on the Draft Fifth Five Year Plan that the Small Farmers' Development Agency (SFDA) has under taken a scheme for the development of the small artisans by supplying them improved tools and equipments. It is estimated that on an average a kit

of these modern tools will cost Rs.500 and a sum of Rs.19 lakhs is required if all the artisans are to be covered under it. Under the rural industries project programme, it is proposed to upgrade the skills of those traditional artisans by organising various training programmes and subsidising the cost of improved tools and equipments.

In the study of SFDA and MFALDA in Nalgoda, Rao (1974) stated that the agency is subsidising 50 per cent of the loan sanctioned for lift irrigation to the small farmers, marginal farmers and agricultural labourers by the three lift irrigation cooperative societies. The beneficiaries are mostly from the weaker section such as harijans, Lambardars, carpenters, washerman, etc.

Sandhu (1971) mentioned that the small farmers are not able to follow the package of practices recommended for the cultivation of high yielding varieties. Amongst other factors, the lack of resources is the most important limiting factor. One of the solutions lies in adopting intermediate technology.

The study of Tewari (1971) revealed that the crux of the problems of a small farmer is the imbalance in the factors of production. Imbalance in factor combination takes two forms. Firstly, it does not provide full employment to all working members of the family. Secondly, it does not provide even the minimum or requirement of housing facility to the

farmer. And the Government role need not be confined to concessional loans and subsidy. They can organise cooperative associations and provide administrative and technical guidance. They will have to set up extension service for small farmers.

As quoted by Quraishi (1972) the All India Rural Credit Review Committee recommended for the establishment of autonomous agencies at the district level known as "Small Farmers Development Agencies". The main function of this agency would be to identify the small farmer, his problems, requirements of inputs including credit and making necessary arrangements in this connection. Further, he mentioned that the flow of credit is the most important ingredient for the programmes of development of the small farmers. The agency, as already stated will not be giving any credit directly but will function as a catalyst and stimulate the flow of credit from various institutional agencies.

The same author (1972) stated that the small farmers and landless agricultural labourers constitute roughly 52 percent and 24 percent of the normal house holds. About 62 percent of the holdings are less than two hectares and account for about 19 percent of the cultivated area. Surveys have identified the main problems of the small farmers as (1) fragmentation of holdings, (2) insecurity of tenure, (3) inadequate and untimely supply of inputs including water,

(4) lack of credit facilities and (5) unsatisfactory arrangements for storage and marketing.

Ramasamy (1972) described the question of generating farm surpluses that some small farmers have, could not be disposed off at economic prices. The money lenders cum merchants exploit the small farmers' helplessness.

Doharey (1972) reported in the National Symposium of transfer technology that the deficient resources, lack of irrigation facilities, credit requirements and indebtedness are the main problems of small farmers. It is therefore requested that SFDA programmes should be extended to the widest area and help be provided to make them viable and efficient.

Dutta (1973) has pointed out that the Agency should keep close contact with the farmers and take steps in the timely supply of seeds and fertilizers. The amount of cash loans granted to them should be sufficient to cover the entire expenses, at least, one development programme in agriculture, say to buy a pair of bullocks.

It was revealed from the socio-economic survey conducted in Nowgong District of Assam that, loans in both cash and kind are given to the farmers under the scheme.

Srivaraman (1973) stated that the small and marginal farmer will not be willing to absorb the credit unless he is assured that he will be in a position to repay

the debt. Contrary to the general impression, the farmer does not like to stay in debt. The small and marginal farmers are always at disadvantage under the field conditions in getting a fair return for investment.

It is indicated in the Syndicate Report of the 79th Orientation Course (1973) that the SFDA has neither been transferred completely to the local self governing bodies, nor does it have a separate field organization of its own. Coordination has been left to a cumbersome committee wherein members meet infrequently.

The National Commission on Agriculture (1973) in emphasizing the credit flow by the co-operatives in SFDA programme indicated that, it may be seen except in the Ganjam Project Agency, the credit flow is not very encouraging. The co-operatives, it appears have shared major portion of the finance in comparison to the commercial Banks.

On the Bench Mark Survey Report (1973) it is stated that the small and medium farmers, by and large, remained neglected partners in the prosperity that the agriculture in the state has witnessed in recent years.

Rao (1974) in his study about SFDA, MFALDA in Nalgoda, Hyderabad pointed out that the agency programme has received a set back due to adverse seasonal conditions and underground water. A number of restrictions imposed by the ground water Department have resulted in delay in sanction

of loans by the financial agencies. Further, he stated that the agency requires wide publicity to make people know its activities and come forward to receive the assistance offered by it.

Rama Rao (1974) mentioned that these schemes have brought about a silent economic revolution, a revolution that has made the poorer and weaker sections more prosperous. And the small farmer, aware of his economic viability, what is perhaps more important is an awareness of the credit institutions that are financing a small farmer is not brought with high degree of risk that was traditionally associated with it.

Quraishi (1972) has suggested a guide line about the functions of SFDA. viz(a) identify eligible small farmers and ~~agricultural labourers~~, (b) investigate their problems, (c) formulate economic programmes for providing gainful employment to the participants, (d) provide rural industries, (e) evolve adequate institutional financial, and administrative arrangement for implementing various programmes, (f) provide adequate risk fund to the cooperative lending institutions at primary, district, and state level for short-term, medium-term and long-term loan, (g) promote creation of common facilities for production, processing, storage and marketing of products, (h) provide adequate subsidy for custom service by Agro-industries corporation, increasing infra-structure like marketing facilities,

storages and irrigation sources, etc. besides giving marginal subsidy for some extra staff and (1) evaluate the programme from time to time.

The National Commission on Agriculture (1973) suggested that the extension machinery in the District should be strengthened and organised to pay particular attention to the problems of small and marginal farmers. It is not desirable that the programme should receive a set back because of lack of attention by the extension staff at all levels.

CHAPTER III

Research Methodology

RESEARCH METHODOLOGY :

The Small Farmers Development Agency is now functioning in three districts of Orissa State, viz. Ganjam, Dhenkanal and Keonjhar. The projects are financed by the Central Government as is the case in other parts of the country. In each district there is one administrative officer who acts as the Project Director and is supported by three technical Assistant Project Directors drawn from the Agriculture, Animal Husbandry and Co-operative Departments. The field programmes are executed by the existing block staff under the guidance and supervision of the officers at the district Headquarters. At the State level all the special projects (SFDA, MFALDA, & TDA etc.) have been functioning under the control of one Agricultural Production Commissioner.

SELECTION OF AREA AND RESPONDENTS :

The present study was undertaken in the Ganjam district of the State during 1974. The district was selected purposively, since it was learnt that, there has been considerable progress made in that district compared to the other two. Again, there are 29 C.D.Blocks in the district. Out of which 4 are covered by TDA Project. It has been planned to cover the rest 25 blocks in phases under SFDA Programme. As such all the blocks have not been covered so far. Two C.D. Blocks viz. Chhatrapur and Ganjam in which the project has been operating from the beginning were selected purposively.

The main reasons are :

(i) the two blocks are included in the beginning of the project work.

(ii) the two blocks are well communicated.

(iii) both the blocks are nearest to the district Headquarter.

(iv) there is potentiality for agricultural development in both the blocks.

Apart from the above the limitations of the investigator were also taken into account. The study has to be completed within the academic time limits. Transport and financial implications which are the bottle necks were also given due considerations.

The list of Gram Panchayats from both the blocks were collected. Two gram panchayats from each block were selected at random. These are Podapadar and Chikalhandi in Chhatrapur block and Karapada and Kainchapur in Ganjam block. Twentyfive (25) farmers from each gram panchayat were interviewed at random. Thus, a total of 100 respondents small farmers were included in the study. The respondents were, infact, interviewed on their availability and co-operation. Interview in a Gram Panchayat was closed when 25 respondents were completed. Although the exact number of small farmers in the localities where interviewing was made is not known it is ascertained that the total number of small farm families is about 360. As such the proportion of respondent farmers comes to about 28 %.

RESEARCH DESIGN :

The Small Farmers Development Agency (SFDA) has been working in the State since 1970-71. Several programmes have been executed under the programme. The present study is rather an evaluative type of work and survey research method has been employed for the purpose. The data were collected from the respondent farmers with the help of an interview schedule and further processed. Statistical analyses were employed wherever possible.

DEVELOPING AND PRE-TESTING INTERVIEW SCHEDULE :

The investigator moved to the district headquarter for an initial study and observation of the SFDA Project. The project officials were contacted and an initial discussion was made with them. It was thus easy to get a correct and factual understanding of the organizational structure and function of the project. This initial study greatly helped in subsequent development of an interview schedule.

A provisional schedule was prepared keeping in view the objectives of the study stated earlier. The schedule was conveniently divided into six parts for easy collection of data. The provisional schedule thus prepared was employed for pre-testing in an area under Chhatrapur Block of the district. On the basis of pre-testing informations received from 10 respondent farmers the schedule was revised and modified.

Another small questionnaire was also prepared to interview the officials working in the project. This questionnaire was, however, not pretested but was only adjusted in relation

to the main schedule.

Both the schedules were then ready to be utilised for the collection of data.

COLLECTION OF DATA :

The interviewer moved to the district and established his temporary headquarters at Chhatrapur. The block officials were contacted and were explained about the objectives of the project. They were requested to provide necessary cooperation and assistance to which they readily agreed. The V.L.Ws. of both the blocks were instructed by their respective block officers to render necessary assistance. They were also asked to respond to the second part of the questionnaire meant for the officials.

While moving in the villages accompanied by the local V.L.W. or any other extension worker, the members of the Gram Panchayats and/or co-operative societies and other local leaders were contacted first. They were explained about the objectives of the project and their co-operation was sought. A few days in the beginning were spent in contacting small farmers and fixing timing for the interview. Contacting small farmers and their further listing continued side by side.

It was thus easy to establish rapport with the respondent farmer who was given full understanding about the study before the interviewing actually held.

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It was thus easy to establish rapport with the respondent farmer who was given full understanding about the study before the interviewing actually held.

The active head of the family of each respondent small

farmer was interviewed . The principles of interviewing was judiciously followed. The interview was held either in the house of the respondent farmer or in the common place of the village or even at odd places but convenient to him. Care was taken to avoid misinterpretation and misconceptions. Indirect and cross questions were asked in order to get the correct information. The responses were recorded in the presence of the respondent farmer. Thankfulness was expressed at the end.

Since the Project Director had recently joined in place of the previous one, he declined to respond to the schedule. So also the three Assistant Project Directors and the two Block Development Officers. declined to respond to the schedule. Therefore the second schedule meant for the officials was employed with the A.E.Os., C.E.Os. and the V.L.Ws. of both the blocks all the 22 of them responded to the schedule and the data were tabulated and processed.

PROCESSING AND ANALYSIS OF DATA :

The interview schedules were serialised from 1 to 100 for the purpose of tabulation. Big tabulation sheets were used for individual respondents on individual items. From the tabulation sheets simple and cross tables were easily prepared. Score points as obtained by the different individuals were first computed on the interviewing schedule and then transferred to tabulation sheet.

Scales and scale statements were separately tabulated for the convenience of further processing. The mean scores were found out and accordingly rank order made. Cross tables were prepared and it was thought to employ χ^2 test. Nearly all the tables were found not competent for such analysis. As such χ^2 and co-rrelation analyses could not be done.

CHAPTER IV

Research Findings

RESEARCH FINDINGS :

The research project entitled, "Impact of SFDA. on the diffusion and adoption of innovations in farming" was undertaken in the Ganjam District of Orissa State in the year 1974. Basic data were collected through personal interview and with the help of a pretested questionnaire. The findings of the data collected were processed and analysed and are described below.

SOCIO-ECONOMIC CHARACTERISTICS OF THE SMALL FARMERS :

(a) Age :

The respondent farmers were grouped under three categories of age. The distribution is presented in the Table-4.1.

Table-4.1

Distribution of small farmers according to age.

Age group		f
a) Upto 30 years	...	18
b) 31 to 50 years	...	54
c) 51 and above	...	28
Total	...	100

The data above indicate that middle aged farmers constitute more than half while the older farmers are more than one-fourth. Comparatively, younger farmers are less in proportion and constitute about one-fifth of the total.

(b) Education :

The respondent farmers were grouped under three categories according to their level of literacy and education as can be seen in the following table.

Table-4.2

Distribution of small farmers according to Education.

Educational level	No.
a) Illiterate	55
b) Upto primary (Class-V)	38
c) Secondary (Class-VI to Class-XI)...	7
Total	100

It is seen from the data in the above table that illiteracy is more prevalent among the small farmers since 55% of them do not know how to read and write. 38% are read upto primary level and only 7% are found to have some secondary school education. It may be mentioned here that none of them has passed the High School Examination or gone beyond that.

(c) Caste :

Brahmin respondents are only 6 in number while the non-Brahmins are 94. There was no respondent in the sample from Schedule Caste/Schedule Tribe and Non-Hindu Communities.

(d) Sources of Income :

Data on the sources of income are presented in the following table.

Table-4.3

Sources of income of small farmers.

Sources of income		Sources f		Major sources f
a) Farming	..	100	..	98
b) Business	..	61	..	--
c) Employment	..	21	..	2
d) Prestige occupation	..	16	..	--
e) Wage earning	..	34	..	--

It is seen that farming is not only the source of income but also the major source. The size of the farm being small does not provide engagement and employment throughout the year. That is why majority of the small farmers have one or more side business of some form or other. Quite a large number of them get into small business within the community. About one-third of the small farmers also work as wage earners.

(e) Total annual family income :

The respondents were grouped under three categories of total family income which can be seen from the data below :

Table-4.4

Total annual family income of small farmers.

Income class (annual)		f
a) Upto Rs.2000/-	...	10
b) Rs.2001/- to Rs.3000/-	...	49
c) Rs.3001/- and above	...	41
Total	...	100

The data in Table-4.4 indicate that about half of the small farmers are in the middle income group. Computed in terms of average annual per capita income, it is noticed that 38 respondents are in the low range of upto Rs.400/-. An average annual per capita income of Rs.401/- and more is noticed in case of 62% small farmers.

(f) Material possession :

All the small farmers depend on bullock power and as such maintain bullocks. Although not all, most of them (83%) possess bullock cart. Bi-cycles are found in every fifth home. In other words 20% of them possess it. Radio is found in 6 of the 100 families interviewed.

(g) Type and size of family :

Data on type and size of family are presented in Table-4.5.

Table-4.5

Type and size of family of small farmers.

Type of family		f
a) Joint	...	74
b) Nucleus	...	26
Total	...	100
<u>Size of family :</u>		
a) Upto 5	...	26
b) 6 and above	...	74
Total	...	100

Joint families are still found to be dominant and more in number as indicated in the data above. Nucleus families constitute about one-fourth of the total. Similarly, the size of family upto 5 members is only one-fourth while that of 6 and above is three-fourth.

(h) Type of residence :

Data on type of residence can be seen from the following Table.

Table-4.6
Type of residence of small farmers

Type of residence	f
a) Kutcha	60
b) Semi-pucca	35
c) Pucca	5
Total	100

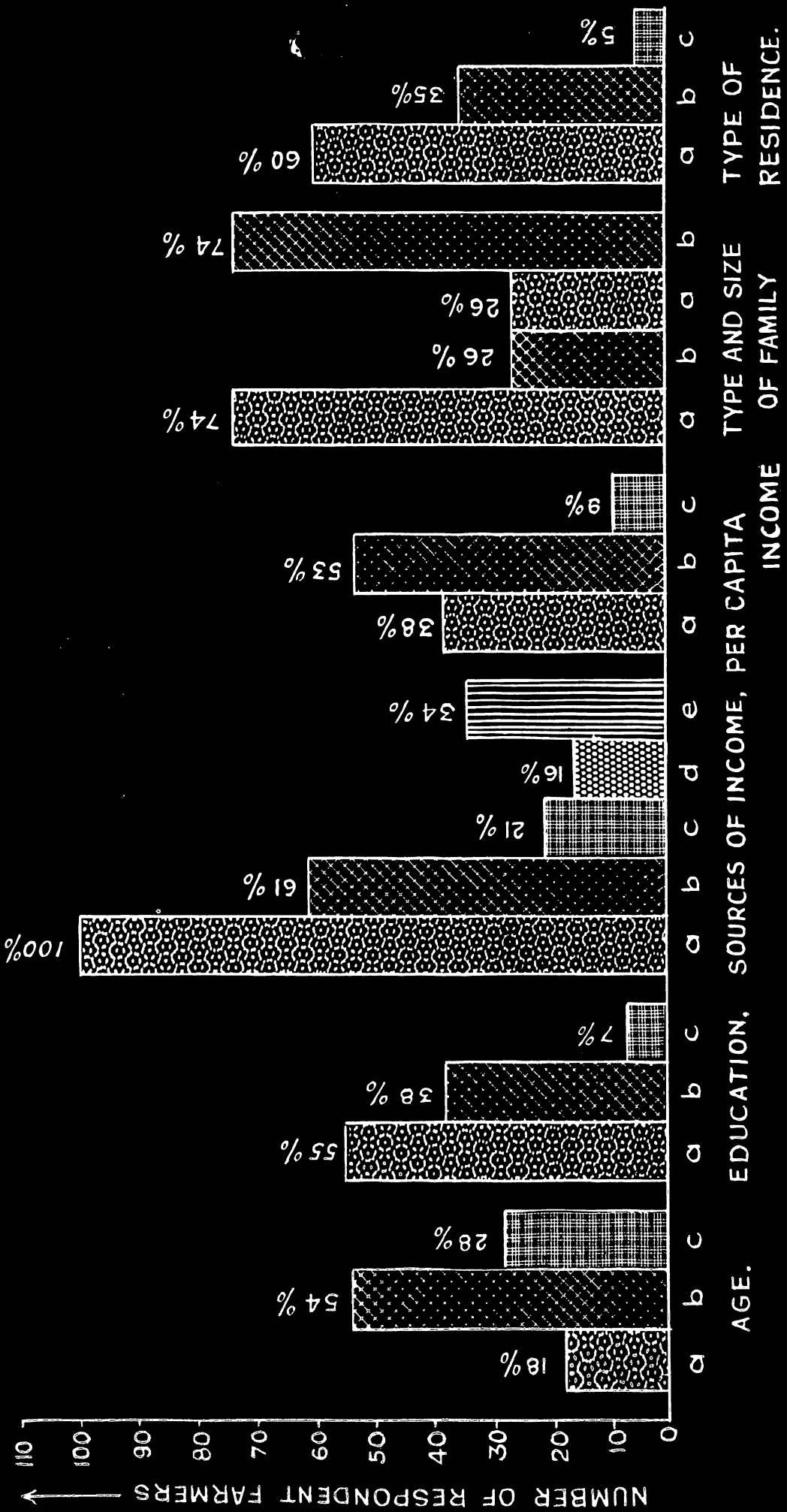
Majority of the small farmers live in kutcha houses while only a few (5%) possess pucca houses. About one-third of them live in semi-pucca type of residence.

The findings on socio-economic characteristics of the small farmers as described above have been diagrammatically presented in figure-I.

INTER RELATIONSHIPS OF SOME
SOCIO-ECONOMIC CHARACTERISTICS :

The data were processed to find out if there is any relationship that exists between some of the socio-economic characteristics of the small farmers. The findings are described below.

Fig. I. SOCIO-ECONOMIC CHARACTERISTICS OF THE SMALL FARMERS.



(a) Age and Education :

The data on the above two variables are presented in the table below.

Table-4.7
Relation between age and education

Age	Education			Total
	Illiterate	Upto primary	Secondary	
a) Upto 30 years	7 (38.89)	8 (44.44)	3 (16.68)	18
b) 31 to 50 years	29 (53.61)	23 (42.69)	2 (3.70)	54
c) 51 and above	19 (67.85)	7 (25.00)	2 (7.15)	28
Total	55	38	7	100

Figures within () give the % of the horizontal total.

The data in the above table indicate that a little above one-third of young farmers, a little above half of the middle aged farmers, and two third of the old farmers are found to be illiterate. The percentage of farmers both under primary and secondary education columns gradually goes down with advance in age. In other words there is a trend of negative relationship between age and educational level of small farmers.

(b) Age and Percapita Income :

A two-way table was prepared to find out the relationship between the two variables and is presented below.

Table-4.8

Inter-relationship of age and percapita income.

Age	Per capita income		Total
	Upto Rs.400/-	Bs.401/- and above	
a) Upto 30 years	2 (11.11)	16 (88.89)	18
b) 31 to 50 years	26 (48.14)	28 (51.86)	54
c) 51 and above	10 (35.73)	18 (64.27)	28
Total	38	62	100

Figures within () give the % of the horizontal total.

It is noticed from the above table that more of older farmers are found to be under low income group compared to younger farmers. That means the data indicate a trend of negative relationship between the two variables.

(c) Education and Percapita Income :

The data of the above two variables are presented in Table-4.9.

Table-4.9

Inter-relationship of Education and percapita income.

Education	Per capita income		Total
	Upto Rs.400/-	Bs.401/- and above	
a) Illiterate	25 (45.46)	30 (54.54)	55
b) Upto primary	13 (34.21)	25 (65.79)	38
c) Secondary and above	- (0.00)	7 (100)	7
Total	38	62	100

Figures within () give the % of the horizontal total.

It is evident from the data above that the percentage of farmers with high income gradually increases with increase in their level of, education and vice-versa. None of the farmers having secondary education come under low income group. Stated otherwise, average per capita income is positively related with the level of education of the small farmers.

KNOWLEDGE OF FARMERS ABOUT OBJECTIVES AND WORKING OF SFDA. :

The respondent farmers were asked to express their knowledge on the objectives and working of SFDA in a 3 point scale. There were ten statements in all and the data has been presented in the table-4.10.

Table-4.10
Knowledge of farmers about objectives and working of SFDA.

S1 No	Items	Know well	Know some	Don't know	Mean score	Rank
1.	Meaning of SFDA.	13	67	20	1.93	3
2.	Date of initiation of programme.	6	50	44	1.62	7
3.	Objectives	-	-	100	1.00	9
4.	Location of local SFDA Headquarter.	35	41	24	2.11	2
5.	Local SFDA agent.	49	29	22	2.27	1
6.	Different programme of SFDA.	3	76	21	1.82	4
7.	Expected role of small farmers in SFDA programme.	5	51	44	1.61	8
8.	Relation between programme and objectives of SFDA.	-	-	100	1.00	9
9.	Usefulness of Executed SFDA programme.	10	55	35	1.75	5
10.	Helpfulness of programme in improving present conditions of the small Farmers.	13	43	44	1.69	6

The data in the above table reveal that, maximum number of farmers know the local SFDA agent and the official headquarters. Although they have understood to some extent the meaning and the execution of different SFDA programmes, the actual usefulness or helpfulness of such programmes are not actually realised. Quite a good number of them do not know the date of initiation of programme in their locality nor the role they have to play in such a programme. All the farmers, however, are found to be ignorant about the objectives of SFDA and its relationship with the programmes. The rank order as per the mean score has been given in the table where, the above findings are quite evident and well marked.

AWARENESS AND EXTENT OF PARTICIPATION OF FARMERS IN SFDA ACTIVITIES :

Block staff closely followed by the local leaders (including G.P. members) have been found to be the sources of information for the farmers to know about SFDA activities. Friends and relatives occupy the next position. Thus localite personal sources are found to play a significant role in this regard as can be seen below.

Sources of information about SFDA activities.	First information	Additional information
a) Block staff.	78	75
b) Local leaders (including G.P. members)	77	73
c) Friends and relatives.	26	16
d) Radio, News-paper, Neighbour etc.	-	-
e) Any other, specify	-	-

The farmers gave their opinion on the usefulness and the extent of their participation in SFDA programmes. The data are presented below :

	Fully	Partly	Not at all	Total
1. Did you consider in the beginning the scheme to be helpful :				
a) to you	13	31	56	100
b) to the small farmers of the village.	13	49	38	100
2. What is your opinion now ?				
a) to you.	7	38	55	100
b) to the small farmers of the village.	-	76	24	100
3. Do you take part in SFDA programme ?	12	42	46	100
4. Do the small farmers of your village participate ?	-	79	21	100
5. Do the small farmers of your village properly understand the functioning of SFDA.	1	73	26	100

It is seen above that more than half of the farmers either at the beginning of the programme or even at present do not consider the scheme to be helpful to them. Only a few of them agree that the scheme is fully helpful to the small farmers. Surprisingly, the number of those who agreed to this in the beginning (13) has gone down (to 7). However, a good number of them consider that the scheme is partly helpful to the small farmers of the village.

Although, 54% of the respondents either fully or partly take part in SFDA programmes, 46% do not do so; They, however, state that the small farmers of the village partially participated to the extent of 79% . It is further seen that 26% of the small farmers have not properly understood the functioning of SFDA.

REASONS FOR PARTICIPATION IN SFDA ACTIVITIES :

The respondent farmers were asked the reasons for their participation on SFDA activities. There were nine statements arranged in a three point scale, as can be seen from the table below.

Table-4.11

Reasons for participation in SFDA activities.

	Fully	Partly	Not at all.	Total score	Mean score	Rank
1. The small Farmers participate in the programme because of :						
a) Economic benefit.	41	21	38	203	2.03	3
b) Social development.	-	-	100	100	1.00	8
c) Higher production.	53	18	29	224	2.24	2
d) to get subsidy.	1	2	97	104	1.04	6
e) to get free input materials.	30	32	38	192	1.92	4
f) to get the services of the specialists.	4	10	86	118	1.18	5
g) to enhance social status.	-	1	99	101	1.01	7
h) to get loans.	75	4	21	254	2.54	1
i) to come into close contact of the officers.	-	4	96	104	1.04	6
j) any other.	-	-	-	-	-	-

The mean score for all the nine reasons stated above has been calculated. It is noticed that, getting loan from and/or

through SFDA organization is the first and foremost criterion for the farmers to participate in the organization's activities. The next reasons in order are, higher production and economic benefit. Quite a good number of farmers, how-ever, participate to get some free-input materials. Enhancing social-status or social development have been found to be the least encouraging reasons for such participation.

PROGRAMME ACTIVITIES AND THEIR RELATIVE IMPORTANCE :

The respondents indentified all the eight important programme activities of SFDA. Every one of them, however, do not know about all the activities. The relative importance of the activities has also been assessed and is presented in the table-4.12 below :

Table-4.12

Relative importance of SFDA Programmes

Programme activities.	Number of farmers identified.	Relative importance	
		Mean score.	Rank
a) Loan to dig well for irrigation.	79	1.99	1
b) Loan to buy in puts	64	1.45	2
c) Supply of in puts	3	0.01	5
d) Loan to open dairying	1	0.00	6
e) Loan to open poultry	4	0.00	6
f) Loan to open fishery	14	0.03	4
g) Loan to open cottage industry.	1	0.01	5
h) Loan for Land Development.	52	0.71	3

Loan to dig well for irrigation or to buy inputs or for land development have been identified by 79,64 and 52 farmers

respectively. These three programme items also rank in the same order in terms of the relative importance as perceived by them. Other programme items are not found to be of much significance.

On asking about the extent of help the farmers receive from the organisation 11 of them have stated that they get full help as per their need, while 43 have got partly such help. Thus, 54 % of the farmers have received either fully or partly help from SFDA and 46 % did not get any.

There are twenty two (22) and twenty one (21) responses received in favour of loan to dig well and to buy inputs respectively as programme items with comparatively greater significance to the small farmers. This they feel to be so because of their bearing on economic achievement, (64 responses), solving immediate problems (55 responses) and bearing on future problems (30 responses).

The adverse comments received on different programme items have been tabulated and given in Table- 4-13.

Data in table-4.13 reveal that maximum number of adverse comments received against loan to buy inputs loan to dig well for irrigation and loan for land development in order.

INFORMATION SEEKING HABIT OF THE SMALL FARMERS :

The farmers were asked about the sources of their getting farm information. The sources of farm information and their credibility have been presented in Table : 4-14.

Adverse comments on different programme items.

Variables	Loan to dig well for irrigation	Loan to buy inputs	Loan to supply of inputs	Loan to open dairying	Loan to open poultry	Loan to open fishery	Loan to open cottage industry	Loan for land development
i) Not significant	11	8	4	1	4	7	1	24
ii) Not related to the problems	8	3	-	1	1	3	-	12
iii) Not related to majority of the people.	35	88	-	-	1	6	-	14
iv) Beneficial or related to a selected group of individuals.	36	35	-	-	-	-	-	2
v) Detrimental to the community.	-	-	-	-	-	-	-	-

Total Responses	90	134	4	2	6	16	1	52

Table - 4.14

Sources of farm information and their credibility.

Variables	f	Credibility	
		Mean score	Rank
a) Friends and relatives	15	0.12	5
b) Neighbour farmers	2	0.01	6
c) Leading farmers	16	0.17	4
d) G.P.members and local leaders	52	0.63	3
e) Block staff(SFDA staff).	74	1.57	1
f) Commercial Agent	0	0.00	7
g) Other agency sources. (Agril. deptt.)	65	1.49	2
h) Radio	0	0.00	7
i) Newspaper	0	0.00	7

The figures in the table above indicate that the small farmers usually seek and/or get informations on improved farming from local personal sources. They are found not to have any contact with cosmopolite or impersonal sources. The mean score for credibility of different sources has also been calculated. It is noticed that, the staff of the local C.D. Block and the Agriculture Department have scored highest mean score and as such have highest credibility. Commercial Agents and mass-media are neither named as a source nor possess any credibility. G.P.members and leading farmers, however, possess intermediate position as credible sources.

**BEHAVIOURAL CHANGE OF
SMALL FARMERS BY SFDA :**

All extension programmes are educational in nature. SFDA being a special extension programme is supposed to be also educational although, more of supply and service are linked with it. Since education brings about change in human behaviour, SFDA is thought to have produced such changes among the small farmers. An attempt has been made to ascertain the extent of improvement brought about by SFDA in terms of improved knowledge, skill and attitude on improved farm practices and their subsequent adoption. Of course it is difficult to isolate the effects of SFDA in this regard since, the same V.L.W. works both for SFDA and Block Programmes. As far as possible the responses related to only SFDA and obtained through cross-questioning have been recorded.

(a) Knowledge :

In the general area of gain in knowledge six specific areas were put in a point scale and the data presented in table- 4.15.

It is evident from the data in Table-4.15 that, majority of the farmers are ignorant about improved farm practices. About one-third of the farmers have gained knowledge on the use of improved seeds, improved cropping pattern and improved farming practices. And these three specific areas rank high in order followed by knowledge on use of manures

Table- 4.15

Change in knowledge on improved farm practices.

Sl. No.	Programme Items	Know well	Know some	Donot know	Mean score	Rank
a.	Do you know about some improved cropping patterns suitable to your holding.	10	24	66	1.44	2
b.	Do you know that improved seeds only can improve your production as well as income.	18	16	66	1.52	1
c.	Do you know that recommended dose of manures and fertilizers can improve your production and income.	2	20	78	1.22	4
d.	Do you know that recommended plant protection measures improve your production and income.	3	16	81	1.19	5
e.	Do you know that improved agricultural implements can help you better in your farm operation than the indigenous ones.	2	2	98	1.02	6
f)	Do you know improved methods and practices of farming that can improve your present level of production.	7	25	68	1.39	3

and fertilizers. Knowledge gained on the use of improved agricultural implements is found to be the lowest.

(b) Understanding and skill :

The extent of change in the skill on improved farm practices has also been assessed under six specific areas and is presented below.

Table- 4,16
Change in skill on Farm practices.

Sl. No.	Programme items	Good skilled	Some-what skilled	Not-at-all skilled	Mean score	Rank
a.	Are you skilled in alternate cropping patterns for your farm.	7	24	69	1.39	1
b.	Are you skilled in selecting better variety of seeds for your farm.	4	28	68	1.36	3
c.	Are you skilled in using manure is and fertilizers with regard to dose, time and methods of application.	-	8	92	1.08	4
d.	Are you skilled in use of plant protection chemicals with regard to dose, time and methods of application.	-	6	94	1.06	5
e.	Are you skilled in selecting and handling improved agricultural implements.	-	-	100	1.00	6
f.	Are you skilled in scientific methods and practices of farming.	5	27	68	1.37	2

The extent of change in skill is found to be less than that of change in knowledge. As stated under the change in knowledge, the first three areas of use of improved seeds, improved cropping pattern and improved farm practices

rank high, although, the sequence is different. The relative ranking of last three areas remains unchanged and is the same as found under the change in knowledge.

(c) Attitude :

In this general area seven statements-four positive and three negative-were arranged in a three point scale as can be seen from table 4.17.

Table- 4.17

Attitude towards SFDA.

Sl. No.	Programme items	Agree	Undecided	Do not agree	Mean score	Rank
a.	SFDA can help solve the many fold problems of the small farmers.	42	9	49	1.93	4
b.	SFDA workers are not taking care of the small farmers.	12	2	86	2.74	1
c.	SFDA programme are not necessarily to deal with the current problems and felt needs of the small farmers.	35	4	61	2.26	2
d.	Big farmers and non-farmers are getting benefit of SFDA programme at the cost of the small farmers.	64	3	33	1.69	5
e.	More and more farmers are gradually attracted and involved in SFDA programme	35	11	54	1.81	6
f.	The usefulness of SFDA programme are being realised by more and more small farmers gradually.	19	12	69	1.50	7
g.	Involvement of small farmers in SFDA programme can improve their living conditions.	56	7	37	1.19	3

It is noticed that 43 small farmers have changed and developed a favourable attitude towards agency.

practices while 57 have not. The negative statements under (b), and (c) in the table above rank high in order. That means the present SFDA programmes are not conducive in changing the attitude of the small farmers. It seems that the number of farmers to realise the usefulness of the programme do not increase and as such they are not attracted to be involved in it. Therefore these two items have ranked last in the list. It is, however, a good number of farmers feel that SFDA can improve their living conditions and can help solve their many-fold problems.

ADOPTION OF IMPROVED FARM PRACTICES :

Adoption of improved farm practices is the ultimate aim in any extension programme. In this study the respondents were asked about the new practices they have learnt, adopted and discontinued, etc. It has been found out that 54 farmers have partly or fully adopted some practice or other, while 46 have not adopted any.

Table : 4.18
Adoption and discontinuance of improved farm practices.

Practices [*]	Number of Small Farmers		
	Learnt	Adopted	Discontinued or Reversion
a. Digging well for irrigation	47	31	15
b. Use of improved inputs	35	19	14
c. Poultry farming	1	-	-
d. Fisheries	1	-	-
e. Land development for higher production	13	4	4

* The practices are learnt to be used on getting loan from and/ or through SFDA.

The data reveal that, two programme items - loan to dig well and to buy inputs - are conspicuous since comparatively more number of farmers are involved in those. It seems much efforts have not been made in other activities as indicated by the figures. The table needs no further explanation.

The reasons for non-adoption and/or reversion are given below.

Reasons	f.
a) After completion of well it is dis-continued.	15
b) Loan is not available in/time, not adequate and complex procedure to pay-back.	21
c) Farmers could not repay the amount.	2
d) No help and guidance from the SFDA staff.	8
e) Do not know the benefits.	8
f) Not at all interested to take part in SFDA programmes.	46

It is seen above that 46 farmers are not at all interested to participate in SFDA programmes and as such have not cared to adopt any practice. Quite a good number of farmers have stated that the loan amount is either not adequate or not available in time. And also the complex procedure of getting and paying back the loan have stood on the way of their adoption. Other reasons are self-explanatory and needs no elaboration.

The data on the extent of change in knowledge, skill, attitude and adoption are diagrammatically in Fig.- II.

INTER RELATION-SHIP OF SOCIO-ECONOMIC CHARACTERISTICS AND CHANGE IN BEHAVIOUR :

The data were further processed to find out if behavioural change is influenced by any socio-economic characteristics. Only three such characteristics—age, education and per-capita income—have been studied with regard to their influence on the behavioural change.

(a) Age and Behavioural change :

Data on the above are presented in table 4.19. It is quite evident from the data that behavioural change has negative trend of relationship with age. In other words as age advances the extent of change in knowledge, skill, and attitude gradually decreases and vice-versa. The data are diagrammatically represented in Fig.-III.

(b) Education and Behavioural change :

Influence of level of education on improvement in knowledge, skill, attitude and adoption are presented in table 4.20. The data indicate that, there is a positive relationship between level of education, and behavioural change of the small farmers. (See Fig.-IV).

(c) Income and Behavioural change :

Influence of income on changes in knowledge, skill, attitude and adoption are presented in Table-4.21. Although there is slight variation and also statistically not significant there seems to be a trend of positive relationship. That means an increase in the level of income increases the extent of change in knowledge, skill, attitude and adoption. Diagrammatic representation of the data is given in Fig.-V.

Table 4.19

Age of farmers and Behavioural change.

Age	Knowledge			Understanding and skill			Attitude			Adoption			df. x ²	Total
	K.W.	K.S.	D.K.	G.S.	S.S.	N.S.	F.A.	S.Fa.	N.Fa.	Ad.	Nad.			
a. Upto 30 years	4 (29.00)	6 (30.00)	10 (50.00)	1 (5.00)	9 (45.00)	10 (50.00)	9 (5.00)	1 (5.00)	10 (50.00)	14 (70.00)	6 (30.00)	2	4.543	20
b. 31 to 50 years	6 (11.53)	11 (21.16)	35 (67.31)	2 (3.84)	14 (26.93)	36 (69.23)	18 (34.62)	5 (9.62)	29 (5.76)	24 (46.16)	28 (53.84)	2	N.S.	52
c. 51 and above	1 (3.57)	6 (21.43)	21 (75.00)	- (0.00)	6 (21.43)	22 (78.57)	8 (28.57)	2 (7.14)	18 (64.29)	16 (57.15)	12 (42.85)			28
Total	11	23	66	3	29	68	35	8	57	54	46			100

Figures with in () give the % of the horizontal total.

K.W.= know well
K.S.= know some
D.K.= Do not know

G.S.= Good skilled
S.S.= Some what skilled
N.S.= Not-at-all skilled

F.A.=Favourable attitude
S.Fa=Some what favourable attitude.
N.Fa= No favourable attitude

Ad = Adopted
N.ad=Not adopted.

Table-4.20

Education of farmers and behavioural change.

Education	Knowledge			Understanding skill			Attitude			Adoption		df.	X ²
	K.W.	K.S.	D.K.	G.S.	S.S.	N.S.	F.a.	S.Fa.	N.Fa.	Ad.	N.Ad.		
a. Illiterate	-	14	41	-	12	43	12	5	38	24	31	5.281 N.S.	55
	(0.00)	(25.45)	(74.55)	(0.00)	(21.82)	(78.18)	(21.82)	(9.09)	(69.09)	(43.64)	(56.36)		
b. Up to Primary (Class-V)	9	6	23	2	13	23	8	3	17	24	14		
	(23.68)	(15.78)	(60.54)	(5.26)	(34.21)	(60.53)	(47.87)	(7.89)	(44.74)	(63.16)	(36.84)		
c. Secondary (Class-V to Class-XI)	2	3	2	1	4	2	5	-	2	6	1		7
	(28.57)	(42.85)	(28.58)	(14.28)	(57.15)	(28.57)	(71.43)	(0.00)	(28.57)	(85.72)	(14.28)		
Total	11	23	66	3	29	68	35	8	57	54	46		100

Figures with in () give the % of the horizontal total.

K.W.-Know well

K.S.-Know some

D.K.-Do not know

G.S.- Good skilled

S.S.- Some what skilled

N.S.-Not-at-all skilled

F.a.-Favourable attitude

S.Fa.-Some what favourable attitude

N.Fa.-No favourable attitude.

Ad- Adopted

N.Ad-Not adopted.

Table-4.21

Income of farmers and behavioural change.

Income	Knowledge			df.	χ^2	Understanding & skills			Attitude			df.	χ^2	Adoption		df.	χ^2	Total
	K.K.	K.S.	D.K.			G.S.	S.S.	N.S.	Fa.	S.Fa.	N.Fa.			Ad.	N.Ad.			
a. Upto Rs.400/-	1 (2.64)	12 (31.58)	25 (65.78)	1	0.001 N.S.	-	11 (28.94)	27 (71.06)	7 (18.42)	5 (13.16)	26 (68.42)	3	0.633 N.S.	17 (44.74)	21 (55.26)	1	3.320 N.S.	38
b. Rs.401/- and above	10 (16.12)	11 (17.74)	41 (66.14)			3	18 (29.04)	41 (66.12)	28 (45.16)	3 (4.84)	31 (59.00)			37 (59.67)	25 (40.33)			62
Total	11	23	66			3	29	68	35	8	57		54	46			100	

Figures with in () give the % of the horizontal Total.

K.K. = Know well
K.S. = Know some
D.K. = Do not know

G.S. = Good skilled
S.S. = Some what skilled
N.S. = Not-at-all skilled

Fa. = Favourable attitude
S.Fa. = Some what favourable attitude
N.Fa. = No favourable attitude

Ad. = Adopted
N.Ad. = Not adopted

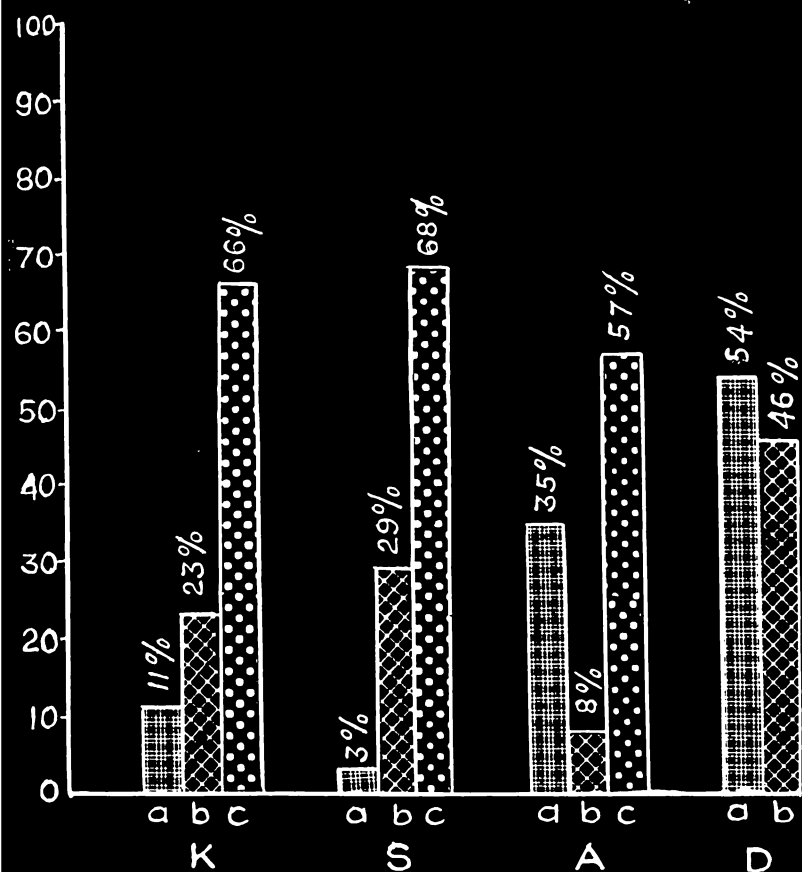


Fig. II. BEHAVIOURAL CHANGE

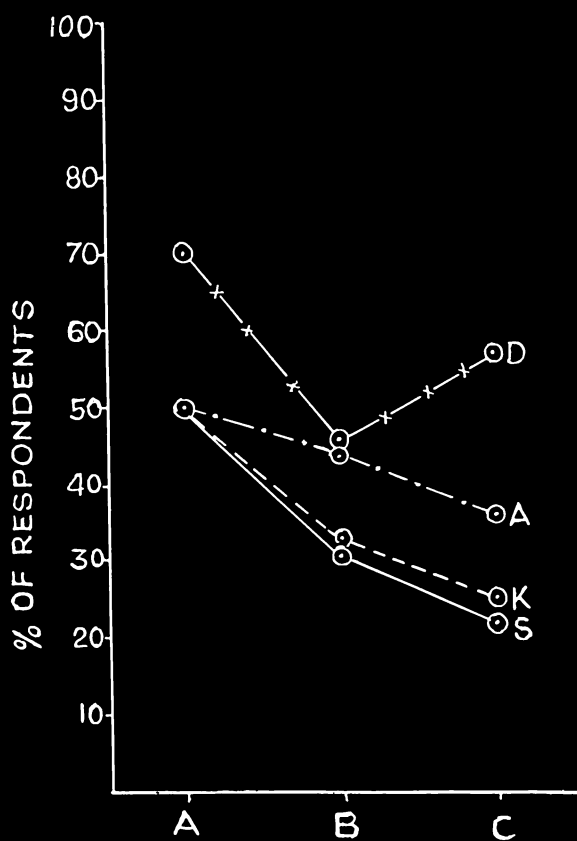


Fig. III. AGE AND CHANGE

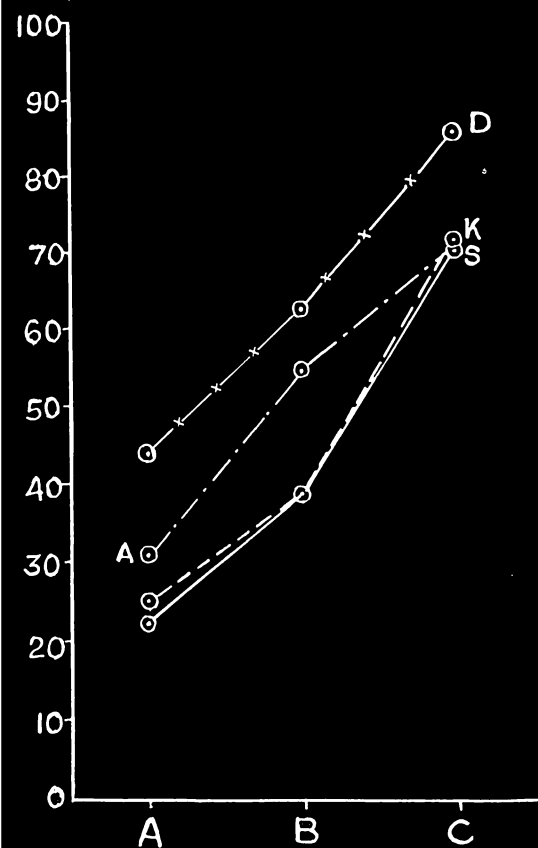


Fig. IV. EDUCATION AND CHANGE

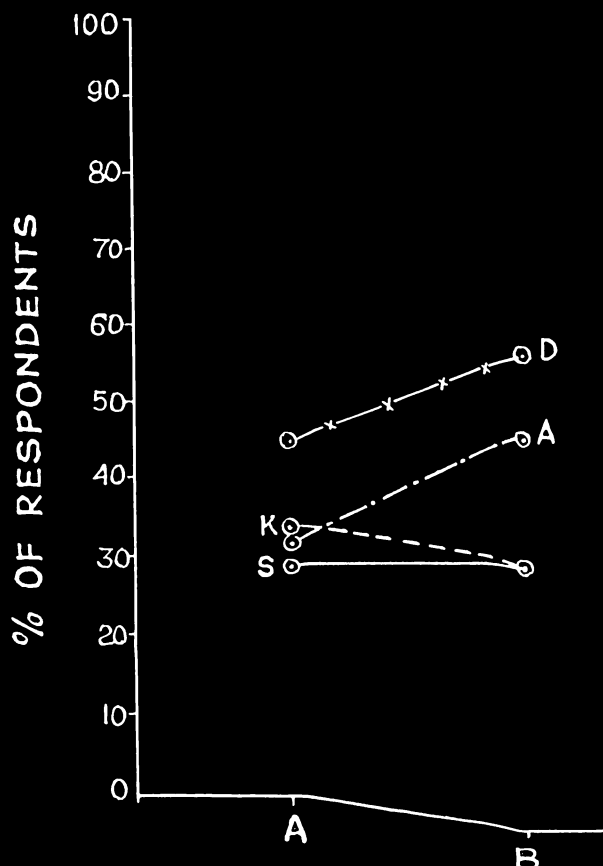


Fig. V. INCOME AND CHANGE

WEAKNESSES IN SFDA :

The farmers were asked to give their opinion on different items of SFDA programme implementation. The statements alongwith the responses received on a dichotomy are presented below.

Table-4.22
Opinion of farmers of SFDA programme implementation.

Sl.	Statements.	Yes.	No.
1.	SFDA is primarily engaged with the small farmers of the area.	67	33
2.	SFDA programmes are related to the problems and needs of the small farmers of the area.	65	35
3.	SFDA programmes are planned in consultation with the small farmers and/or their representatives.	-	100
4.	SFDA has helped the small farmers to develop an urge to improve their condition.	47	53
5.	SFDA has sought the co-operation of small farmers for the execution of its programmes.	59	41
6.	SFDA has taken care to publicize widely about its functioning in the area.	-	100
7.	SFDA has taken care to publicize its objectives among the small farmers.	-	100
8.	SFDA programmes are realistic and has a bearing on the present situation.	49	51
9.	The working methods appropriate and liked by the small farmers.	20	80
10.	SFDA Officers and workers take keen interest in the development of the small farmers.	3	97
11.	SFDA has separate field worker in your village/area.-	-	100
12.	SFDA has provision of specialised service to cater the needs of the small farmers.	-	100
13.	SFDA is eager to help any small farmer.	3	97
14.	There is ready response from the agency either by post or person at the time of need.	-	100
15.	The small farmers can be organised and made to work in scientific lines if technical help and guidance comes from SFDA.	54	46

It is evident from the opinion of the farmer as seen on the table-4.22 that, there are serious weaknesses with regard to the structure and function of SFDA. It seems the organisational structure has serious weaknesses as felt by the farmers. The functional aspect is also not very encouraging since, many farmers do not know about the objectives and programmes of SFDA. Technical guidance available to the farmers is not adequate. Planning and execution of the programmes are mostly not related to the needs and interests of the farmers. The farmers for whom the agency is established do not know much about it. They are also not consulted in any aspect. Such drawbacks in the scheme may lead to its closure after a certain period since it would not yield desired results. The defect, as is evident, does not lie with the project but with its structure and function.

The respondents specifically mentioned some of the weaknesses of the present SFDA programmes. They also proposed some suggestions to overcome the weaknesses. These are listed below.

<u>Weakness in SFDA.</u>	<u>Suggestion of Small Farmers.</u>	<u>Earlier supporting reports.</u>
1. The farmers are not well aware of the objectives and programmes of SFDA.	1. Wide publicity through different media be made to make the farmers aware of those.	Rao (1974)
2. Staff:- (a) The field staff do not visit the farmers regularly.	2. Staff:- (a) Separate field staff be appointed at block level, and be instructed to visit the farmers regularly.	Syndicate report 79th Orientation Course (1973) Towari (1971) Quraishi (1972) National Commission on Agriculture (1973)

<u>Weakness in SFDA</u>	<u>Suggestion of small farmers</u>	<u>Earlier supporting reports</u>
(b) They fail to provide necessary guidance.	(b) & (c) specially trained and technically competent staff be appointed in SFDA.	Ramasamy (1972)
(c) May be the field staff are incompetent and inadequately trained.		
(d) Lack of supervision by superior and expert staff.	(d) The supervisory staff should not only supervise but also visit the small farmers.	
3. <u>Loan:</u> (a) The process of getting loan is cumbersome and time taking.	3. <u>Loan:</u> (a) The process be simplified.	Sandhu (1971) Doharey (1972) Sinha (1972) Patil (1972) National Commission on Agriculture (1973) Dutta (1973).
(b) Amount of loan is neither adequate nor available in time.	(b) Adequate loan to complete the project for which it is advanced be provided in time.	
(c) All the farmers are not equally treated in order to get loan.	(c) Impartiality be maintained.	Quraishi (1972) Tewari (1971)
4. Lack of interest of the small farmers to be involved in SFDA programmes.	4. Steps be taken to formulate programmes around the interest and need of small farmers.	Subramanian (1966) Sinha (1972) Quraishi (1972)

VIEWS OF THE SFDA OFFICIALS ON STRUCTURE AND RELATED FUNCTION :

Twenty two members of staff of SFDA working in the two Blocks were interviewed as has been stated earlier. These respondents are from the rank of V.L.As. and Block Extension Officers. The officers in the rank of B.D. O

and above, however, declined to respond and as such their views could not be obtained.

All the official workers felt that establishment of SFDA is timely and rightly conceived of and would help improve agricultural production. Their opinion on the organizational structure, functions and present weaknesses with suggestions to overcome these are described below.

(a) Organizational structure :

In this general area five statements were put in a three point scale and the data are presented in Table-4.23.

Table- 4.23

Short comings in present SFDA structure.

Statements	Agree	Undecided	Do not agree	Mean score	Rank
1. The organizational structure of SFDA needs change and modification, since :					
(a) Separate staff is not employed to carryout it's programmes.	19	-	3	2.73	2
(b) Adequate staff are not employed at village and panchayat levels as field workers and supervisors.	19	1	2	2.77	1
(c) supervision and execution does not rest with technical staff.	18	1	3	2.68	3
(d) The field workers are not given proper pre-service & induction (orientation)training.	13	-	9	2.18	5
(e) Well spelled out duties and responsibilities are not allocated to different positions in the organization,	17	2	3	2.63	4

The mean score of all the five statements indicate the seriousness of weakness of present structure. The little

difference seen in the mean scores indicate that all are some what equally important. Any way, the training aspect of the field workers that takes the last position seems to be tolerable.

(b) SFDA functions :

In this general area eight statements were not in a three point scale as can be seen from Table-4.24.

Table-4.24
short comings in programme implementation.

Statements	Agree	Unde- cided	Do not agree	Mean score	Rank
a. SFDA programmes are realistic and takes into consideration the current problems and felt needs of the small farmers of the area.	17	3	2	2.68	4
b. The programmes are planned in consultation with the cliniale and/or their representatives.	11	2	9	2.09	6
c. The programmes are widely publicized prior to execution so as to attract and involve more small farmers.	11	4	7	2.18	5
d. Programmes are executed in time.	11	1	10	2.04	7
e. Programmes are planned/executed only for the development of the small farmers.	21	1	-	2.95	1
f. Education and training of small farmers are given priority over supply and service.	21	-	1	2.90	2
g. Supply and service approach, although a must at present, is regarded supplementary to educational approach.	17	3	2	2.70	3
h. SFDA programmes are not isolated since these have been integrated into the over-all block programme.	18	1	3	2.68	4

The present programme implementation suffers most in all the aspects seen in the table, since the mean score

values are very high. What is more dis-couraging is the process of programme planning and its timely execution. These two items have secured the top most positions in the rank order column.

(c) SFDA programmes :

The actual programme action has also been studied. Five specific areas were put in this general area are described in Table-4.25.

Table-4.25
Short comings in SFDA programme action.

Statements	Agree	Unde- cided	Do not agree	Mean score	Rank
1. SFDA Programmes suffer most due to the lack of :					
(a) Adequate finance.	21	-	1	2.90	1
(b) Separate SFDA staff.	20	-	2	2.82	3
(c) Co-ordination of different Government and non-Government agencies.	20	1	1	2.89	2
(d) Participation and co-operation of the small farmers.	20	-	2	2.82	3
(e) Working conditions and facilities provided to the field workers.	21	-	1	2.90	1

The data above indicate that both inadequate finance and lack of facilities provided to the field workers are the serious bottlenecks closely followed by lack of co-ordination between Government and non-Government agencies. The high mean score value and the little difference between them for the five factors on the table show that each one of them is rather equally important and of serious nature.

(d) Weaknesses and suggestions :

The specific weaknesses of present SFDA and their proposed suggestions as stated by the officials are given below.

<u>Weaknesses</u>	<u>Suggestions</u>	<u>Earlier supporting reports</u>
1. <u>Staff:</u> (a) Inadequate and untrained field staff.	1. <u>Staff:</u> (a) More field staff specially trained for SFDA be appointed.	Pandey(1972) Ramasaamy(1972)
(b) More supervision than field work.	b) Number of supervisors be decreased.	
(c) Heavy work load on the present field staff.	(c) & (d) Separate field staff specially trained in Agriculture be appointed to take care of SFDA programmes.	Towari (1971) Quraishi(1972)
(d) Incompetance of present field staff to provide adequate technical guidance.		
2. Lack of co-ordination between and within official and non-official bodies.	2. Statutory provisions be made to maintain strong co-ordination between and within official and non-official bodies specially at Block level.	Syndicate Report 79th orientation course (1973).
3. The programmes are not sufficient to cover the problems of the small farmers under the present situation.	3. Programmes be planned in consultation and close contact with the small farmers and/or their representatives and would their need and interests.	Subramanion(1966) Quraishi(1972) Sinha (1972)
4. Lack of adequate finance for effective programme implementation.	4. Budgetary provision be increased to meet the total requirement.	Quraishi(1972)
5. Lack of publicity on objectives and functioning of SFDA.	5. Wide publicity be made through different media to make the farmers aware of objectives and programmes of SFDA.	National Commission on Agriculture (1973) Rao (1974)

The above weaknesses and their suggestions were collected through open-ended questions. The statements collected were grouped under the above categories and stated in summary form.

CHAPTER V

Discussion

DISCUSSION

SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS :

Middle aged respondent farmers are found to be more than either young or old farmers. In these days the older people are letting either middle-aged or young members of the family to shoulder the family responsibilities. Some educated young people have also taken up farming as business. As such, middle aged farmers are found more in number.

More than half of the small farmers are found to be illiterate. Because of their poor economic status they are not in a position to afford for the education of their children. Again the small farmers usually engage their family labour in day-to-day farm work or household chore in which the children render a helping hand. As such, the children are deprived of their schooling and remain illiterate. Higher education, which costs money, is obviously beyond the reach of the small farmers.

Because of caste restrictions Brahmins do not farm. The schedule caste and schedule tribe people are mostly landless. Since the investigation is on the small farmers, Brahmin respondents are found to be few.

Farming obviously is not only the source but also the major source of income for all farmers. The size of farm of a small farmer does not provide him full employment throughout the year. Nor does it provide sufficient income to maintain the minimum level of living. As such, every one of the small farmer is found to be engaged in a second profession to

supplement his income. Retailing and itinerary trading and wage earning are mostly chosen as the second business.

The average annual percapita income is bound to be low, because of the small size farm they operate. The extra income from other sources not also enough. Sophisticated agricultural technology has probably not touched this section of farming population for which income is found to be low. Except bullocks and bullock carts the small farmers do not possess any other materials, worth mentioning. Radio is possessed by every fifth or sixth farm family as reported by Sahoo and Sarkar (1971) and Sahoo and Behera (1973). But the small farmer with comparative low economic status is not in a position to have bi-cycle, radio, and the like.

Joint families are found to be more in number. Although, the present trend is in favour of nucleus families the small farmers prefer to remain in joint families, probably because of economic reasons. Naturally the size of the family is found to be bigger and correspond with the number of joint families.

Usually the small farmers live in Kutcha houses as they cannot afford to build pucca houses. Because of the cheap earthen tiles that are available locally some of them have converted their thatch to fire-proof rooves or changed the mud plastered floor and wall to cement plastered ones. As such, quite a good number of them are found to possess semi-pucca houses.

INTER RELATIONSHIP OF SOCIO-ECONOMIC CHARACTERISTICS :

Age is found to have negative relationship with literacy and education. Free primary education is locally available in recent years. As such more of young farmers are found to be either literate or educated. The middle-aged or the older people could not get this facility during their childhood days. Therefore such negative relationship exists between the two. Again, older people are usually conservative and not change-oriented. They possess comparatively less risk bearing capacity. Because of this they cannot venture to improve farming for higher income nor they can risk for more gain in secondary profession. Therefore income of the older farmers is found to be lower than that of younger farmers. As stated above both education and income are negatively related to age. Naturally there exists a positive relationship between two variables. The better educated farmers are more judicious in budgeting and planning both their income and expenditure. Obviously their income remains higher than that of the illiterate farmers.

KNOWLEDGE OF FARMERS ON OBJECTIVES AND WORKING OF SFDA :

It seems that the project officials and workers have not taken enough care to publicize widely about the objectives and programmes of SFDA. Therefore majority of the farmers are not aware of it. They are also equally ignorant about the role they are expected to play. The local V.L.W. and

the Block office are known to the farmers for several years past. The same V.L.W. works as an SFDA worker and the Block Office is the local headquarter. This has made it easy for the farmers to identify both. The ranking of the items in Table-4,10, thus, seems to be justified.

PARTICIPATION OF FARMERS IN SFDA ACTIVITIES :

It seems that the farmers could get initial information on SFDA from the Block staff and G.P. members and local leaders. The small farmer is illiterate and a busyman in more than one profession. He has hardly time to get informations through mass-media and other sources but to depend on local personal sources. Again, publicity on SFDA through mass-media is very little. Therefore, such results are obtained. SFDA, probably, has not been able to provide the extent of help the farmers expected of it in the beginning. Therefore, the extent of favourable opinion has subsequently decreased. Accordingly participation of farmers in SFDA programmes is low. May be the poor contact of the agency established with the clientele, has resulted in poor participation of the farmers. A similar result reported in the farm management survey as has been quoted by Subramanian (1966).

Many past workers have reported that lack of resources-particularly lack of financial resources is the major short-coming of the small farmer. SFDA aims at re-vitalising the small farmer by providing the technical know how and credit both in cash and kind. The respondents are, probably, justified to rank "getting loan" as the first and foremost criterion for their participation. Such loan would

help them in increasing their production which would bring economic prosperity for them. The educational and social objectives of the programme- therefore rank last.

PROGRAMME ACTIVITIES AND THEIR
RELATIVE IMPORTANCE :

The agency, probably, has made intensive efforts in providing loan to the farmers to improve their farming and/or subsidiary occupation. Lack of irrigation as a barrier to higher farm production has been reported by Patil (1972), Desai (1972), Rao (1974), and many others. The farmers equally, do feel its importance. Once they get assured irrigation they can get into multiple cropping or grow crops that can pay most. This would necessitate more funds to buy more and better inputs. Since farming is the major source of income and intensive farming can help provide engagement for most period of the year the farmers, therefore, have identified loan for different items of farming is more important than for non-farm subsidiary occupations. The significance of providing credit to the small farmers has also been reported by nearly all previous workers.

Quite a good number of farmers have not been benefited by SFDA and also do not probably expect to get any in near future. They are quite sceptic about the programmes of SFDA. Among the different programmes probably the three items- loan to dig well, loan to buy in puts, loan for land development are more widely known compared to the rest. Since only a few farmers have been either fully or partly benefited and a

quite large number ignored it is obvious that maximum number of adverse comments are received against the three.

INFORMATION SEEKING HABITS OF THE SMALL FARMERS :

As has already been stated the small farmer is a busy person through out the day. Majority of the small farmers are also illiterate and as such cannot utilise the printed materials as a source of getting information. It is probably difficult for them to interpret and understand messages from impersonal sources. As such they more depend on personal sources. Usually they are localites having comparatively less extra-community contact. They are bound to depend on local sources of information. The block and Agricultural Departmental staff of the locality maintain more regular contact than any other agency. Obviously, such agency sources are found to be more credible than any other. The G.P. members and local leaders who maintain a still closer contact not only with the Block staff but also with the district and other staff are more knowledgeable and better informed than any other farmer of the locality. Thus, they are found to be next credible source of information for the small farmers. Similar observations have been made by Lakshmana and Satyanarayan(1967), Sharma and Leagans(1969), Pachori and Qureshi (1973) and many others.

BEHAVIOURAL CHANGE :

Any extension effort, more or less, is educational

In nature and as such brings about change in behaviour. In the present SFDA programme probably the educational approach is not followed. Therefore only 11 farmers are found to know well and 23 are found to know some while 66 are found to know nothing on improved farm practices. Similar is the case with understanding and skill and attitude. Again due to somewhat low participation of farmers in SFDA programmes, behavioural change is bound to be low. It is noticed that change in attitude is more than change in knowledge which in turn is better than change in skill. A similar result on the impact of National Demonstration has been reported by Schoo and Behara (1973).

The farmers better know about improved seeds and are better skilled in cropping patterns. They also know and have acquired skill on improved methods of production, manures and fertilizers, plant protection chemicals and improved equipments and implements cost money which the small farmers do not have. It is probably the lack of financial ability that has dissuaded the small farmers to acquire new knowledge or skill in these areas, with regard to change in attitude towards SFDA that aims at improving their present farming. It is seen that the field workers have failed to take care of the small farmers and the present programmes do not take care of the current problems and needs of the small farmers. Since, the same staff work for SFDA as well as block programmes, they are

in a difficult position to pay sufficient attention particularly for the former. Lack of publicity has not allowed many farmers to know about or participate in SFDA activities. As such many of them have not been able to understand and realise the helpfulness of the programme. Obviously, such factors sufficiently influenced for low attitudinal change.

It seems that SFDA is primarily engaged at present to help provide credit to the small farmers. The agency is either supplying loan from its own funds or from other lending institutions like, Commercial Banks and Co-operatives. Such loans for farming is, probably, utilized primarily for digging well for irrigation, buying input materials and land development. The practices advocated by SFDA for adoption is, therefore, linked with advancing credit from institutional sources. Since credit is available to only a few, therefore, adoption of such practices is found to be low. The non-farm practices such as poultry, fishery and dairying, etc. involve much risk and complicated technical know-how. May be for this reason the small farmers do not care either to learn or to adopt these practices.

Inadequate and untimely supply of loan and the complex procedure associated with it is the major reason for non-adoption and/or reversion of the practices. Next is the lack of technical know-how or in other words the technical

support from the agency is not adequate. Sivaraman(1973) has rightly stated that the small farmer will not be willing to absorb credit unless he is assured that he will be in a position to repay the debt. As such, providing loan is only supplementary to providing technical know-how (Mehta and Vaikuntha(1965). The inadequacy of credit as found in this study is supported by the earlier findings and reports of Patil (1972), Quraishi (1972), Dutta(1973) and National Commission on Agriculture(1973).

**SOCIO ECONOMIC CHARACTERISTICS
AND BEHAVIOURAL CHANGE :**

The findings of the present study reveal that age is negatively related with behavioural change. Such finding is in conformity with the findings of several researchers who have worked on behavioural change and adoption Wilson and Gallup (1955), Sahoo (1958).

The very definition of education is that which bring about change in human behaviour as such education and behavioural change move together. Similar observations have been made by Wilson & Gallup (1955), Sahoo (1958).

Education and income are positively related. That means those having higher income are better educated. Accordingly those having better income will have a better behavioural change. Again the farmers having higher income do have better access to different sources of information compared to those having less income. Since they are better informed and have better risk

bearing capacity, their rate of adoption is found to be higher than their counterpart with lower level of income. Similar results have been reported by several workers in the past.

SHORT-COMING OF SFDA :

The short-comings in the proper functioning of SFDA lie more in the organisation itself than what is noticed with the farmers. Probably, the present block staff who are entrusted with SFDA programmes find it difficult to spare adequate time and energy in their day-to-day works. They feel over burdened with this extra load which they fail to discharge. Since they are maintained by the block for all farmers they probably cannot devote extra time specifically for small and marginal farmers. Whether big or small all farmers are equally treated by the block staff. The situation, thus, remains unchanged even after three to four years after the initiation of this special project. The Weaknesses stated explicitly by the farmers and the corresponding suggestion have been recognised and supported by several workers as mentioned in the last column. These are self explanatory and they are actually existing in the present situation.

VIEWS OF THE OFFICIALS :

The officials working for SFDA at the block level have rightly identified that inadequacy of field staff is the first and foremost weakness in the structure of the SFDA organisation. This has been discussed earlier and needs no repetition. Other structural defects are of equal seriousness in nature.

In the area of functional defects planning and execution of the programmes are found to be the major weaknesses. It is a fact that the people or their representatives are not consulted either at planning or at execution time. There is no machinery assigned with publicity work. Therefore the small farmers are left to their own fate as usual without knowing what is happening around them. Some how or other they are aware that some thing is being done for the development of the small farmers. This is largely due to the present organisational structure in which separate staff are not appointed.

The agency is not provided with adequate finance that would help in effective programme implementation. There is also no coordination between different Government organisations between Government and the people. These are actually experienced by the field workers and needs no elaboration. The short-comings in respect of structure and function of the organisation with corresponding suggestions as stated by the officials mostly tally with those stated by the farmers. The V.L.W.'s who form the major part of the official respondents express that the work load is heavy on them and they are not competent to handle these special programmes. In fact, the administrators of the organisation should take action in appointing specially trained staff if possible Graduates in Agriculture--to efficiently handle the special problems of the small farmers. Small farmers may be organised or their existing organisation strengthened

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(Subramanian, 1966) so that, these special programmes can be effectively implemented. The present budgetary allocation needs to be enhanced.

The above problems and suggestions are quite commonly observed. It is necessary to eliminate or avoid these so as to enable the agency achieve its objectives.

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CHAPTER VI

Summary and Conclusion

SUMMARY AND CONCLUSION

An investigation entitled, "A study on the Impact of SFDA on the diffusion and adoption of innovations in farming" was carried out in Ganjam district of Orissa State during 1974. Basic data were collected with the help of a structured schedule from hundred small farmers and twentytwo officials working in SFDA. The data were processed and statistically analysed. The salient findings of the investigation as indicated by the processed data are summarised below :

1. The composition of the small farmers in the district in respect of some of their socio-economic characteristics are--

(a) Majority of the farmers (more than half) are middle aged.

(b) More than half are illiterate while a little over one-third are read upto primary education. Only a few have some secondary education and none has gone beyond that.

(c) The small farmers are mostly non-Brahmins.

(d) Farming is the major source of income of nearly all the small farmers. Each small farmer is engaged in a secondary occupation of some form of other.

(e) The average per-capita income of about two-fifth of the farmers is low and that of the rest is medium.

- (f) Except bullocks and bullock-carts the small farmer does not possess anything worth mentioning.
 - (g) Majority of the small farmer (about three-fourth) live in joint families and possess big size family of six and more members to the same extent.
 - (h) More than half of them (60 %) live in kutcha houses and the rest in semi-pucca houses. Possession of pucca houses has been found only to the extent of 5 %.
 - (i) Age is found to have a trend of negative relationship with the level of education and income of small farmers.
 - (j) Education and per-capita income of the small farmers maintained a trend of positive relationship.
2. The small farmers are found totally ignorant about the objectives and its relationship with the programmes of SFDA. Majority of the small farmers are found to be not well aware about the different aspects of SFDA programmes and their implementations.
 3. Only about half of the small farmers participate in SFDA programmes while the other half do not.
 4. Getting loan for higher production that will lead to economic well-fare are the major criteria for their participation in SFDA programmes.

5. Loan for farm business^{viz.} to dig well for irrigation, to buy inputs, and for land development^{are} in order of preference. Loan for farm business is highly considered as important activity of SFDA by the small farmers. Loan for non-farm or secondary occupation is of very little significance to them.
6. The small farmers get information on improved farm practices mostly from local-personal sources. The agency sources viz. staff of C.D. Block and Department of Agriculture and informal sources viz. G.P. members and local leaders are found to be credible sources for them.
7. Change in behaviour of small farmers as influenced by SFDA is found to be low and dis-couraging (only to the extent of about one-third). Change in attitude is more than change in knowledge which, in turn, is better than change in skill.
8. The small farmers are found to be some what better knowledgeable and skilled in respect of improved seeds, cropping patterns and improved methods of farming than in the use of fertilizers, plant-protection measures and improved agricultural implements.
9. The small farmers are inhibited to develop a favourable attitude towards SFDA since the field workers do not take care of them or the programmes do not take into account their current problems and needs.

10. Adoption of practices advocated by SFDA are linked with availability of loan.
11. Inadequate and untimely supply of loan and the complex procedure associated with it are the major reasons for non-adoption and/or reversion. Lack of technical guidance from SFDA staff is also next important reason for non-adoption.
12. Age has^{been} found to have a trend of negative relationship while, education and per capita income tend to maintain a positive relationship with change in knowledge, skill, attitude and adoption of practices of the small farmers.
13. Lack of publicity through different media is a major short-coming and stand as a barrier for the small farmers^{to become} aware of it.
14. The speciality of SFDA has not been felt^{by} any small farmer since the agency does not maintain separate field functionary. The agency also has no special method of work to cater the needs and interests of the small farmers.
15. The weaknesses^{and} short-comings of SFDA as felt by the farmers as well as the officers are :
 - (a) Lack of publicity to make the farmers aware of the objectives and programmes of SFDA.
 - (b) In-adequate and incompetent present field staff who are over loaded with work.

- (c) Lack of supervision and absence of specialised service.
 - (d) Lack of adequate finance.
 - (e) Lack of co-ordination between and within Government and non-Government agencies.
 - (f) Complicated procedure of getting loan which is neither adequate nor available in time. Partiality in sanctioning and/or recommending for loan is also noticed.
 - (g) Lack of participation and involvement of small farmers.
16. The specific suggestions as proposed by the farmers and the officials to overcome the present defects of SFDA are :
- (a) wide publicity be made through different media on objectives and programmes of SFDA.
 - (b) Separate staff specially trained and preferably Graduates in Agriculture be appointed as field workers in SFDA.
 - (c) Present budgetary provision be increased for effective implementation of SFDA programmes.
 - (d) statutory provisions be made to strengthen co-ordination between and within Government and non-Government agencies.
 - (e) The process of getting loan be simplified. Loan amount should be adequate to complete

the project for which it is advanced and be provided in time. Impartiality be maintained in sanctioning and/or recommending loan.

- (f) Programmes be planned and executed around the interest and needs of the small farmers and in consultation with them and/or their representatives.

CONCLUSION AND RECOMMENDATIONS :

SFDA as a special programme to uplift and develop millions of small farmers has been rightly conceived of. The new project has been in operation for last 3-4 years in selected parts of the country. Although, the aims and objectives of the project are tuned to the need of the time yet it has suffered due to lack of an effective organisational structure and corresponding function as evidenced from this study. It may not be possible to achieve the objectives if the present state of affairs is allowed to continue. It is necessary to evaluate and investigate the functioning of the project from time to time and to take proper action so as to eliminate or avoid the short-comings found therein. Then only the project can yield desired results.

A modest attempt in the above direction has been made in the present study which has been able to bring to the notice of the administrators and planners some of the bottlenecks found in the programme implementation. It is rather time to give a thought to these and take immediate action. This would

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definitely help, it is presumed, to enable the project run in the right manner and yield results expected of it.

These results based on a smaller sample may not be conclusive. It needs repetition of such investigation for conformation of these results.

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Appendix

APPENDIX - I

"Interview schedule for respondent farmers to assess the impact of SFDA on the diffusion and adoption of innovations in farming."

Name of the interviewer :
Sri S.N.Barik,
College of Agriculture,
Bhubaneswar,
Respondent No.....

Name of the Respondent.....

Block.....Panchayat.....Village.....

Date of the interview.....

PART - I

SOCIO-ECONOMIC CHARACTERISTICS OF SMALL FARMERS

1. Age
 - a) Upto 30 years.....
 - b) 31 to 50 years.....
 - c) 51 and above.....
2. Education:
 - a) Illiterate.....
 - b) Upto Class-V.....
 - c) VI to VIII.....
 - d) IX to XI.....
 - e) H.S.C. and above...
3. Caste :
 - a) Brahmin.....
 - b) Non-Brahmin.....
 - c) Schedule caste/
Schedule tribes.....
 - d) Non-Hindu.....
 - e) Any other (Specify)....
4. a. Average land for farming.....
b. Average annual income from farming.....
5. Sources of Income :
 - a) Farming.....
 - b) Business.....
 - c) Employment.....
 - d) Prestige occupation....
 - e) Wage earning.....
 - f) Any other (specify)....
 - g) Major source.....

6. Average annual family income : (mention exact number)

- a) Upto Rs.2000/-.....
- b) Rs.2001/- to Rs.3000/-.....
- c) Rs.3001/- and above.....

Average per capital income.....

7. Material possession :

- a) No. of bullocks.....
- b) Bullock cart.....
- c) Bicycle.....
- d) Radio.....
- e) Improved agricultural implements (Sprayer/MS plough)...
- f) Automobile.....
- g) Tractor/power tiller...
- h) Water pump.....
- i) Any other

8. Type and size of family:

- a) System: (i) Joint.....
(ii) Nucleus....
- b) size: (i) Upto 5.....
(ii) 6 and above...
(mention number)

9. House:

- a) Kutchha.....
- b) Semi-pucca.....
- c) Pucca.....

PART - II

Sl. No.	Items	Know well	Know some	Do not know
1.	Meaning of SFDA.	3	2	1
2.	Date of initiation of programme.			
3.	Objectives.			
4.	Location of local SFDA Headquarter			
5.	Local SFDA agent.			
6.	Different programmes of SFDA.			
7.	Expected role of small farmers in SFDA programme.			

Sl. No.	Items	Know well 3	Know some 2	Do not know 1
8.	Relation between programme and objectives of SFDA.			
9.	Usefulness of Executed SFDA programmes.			
10.	Helpfulness of programmes in improving present conditions of the small Farmers.			

PART - III

1. How did you come to know for the first time about SFDA ?
 - a) Block staff.....
 - b) Radio.....
 - c) Newspaper.....
 - d) Local leader.....
(including G.P.members)
 - e) Neighbour.....
 - f) Friends and Relatives....
 - g) Any other (specify).....
2. From where did you get further information about SFDA ?

Sl. No.	Statements	Fully 3	partly 2	Not at all 1
---------	------------	------------	-------------	-----------------

3. Did you consider than the scheme to be helpful :
 - (a) to you.....
 - (b) to the small farmers of the village.....
4. What is your opinion now ?
 - (a) to you.....
 - (b) to the small farmers of the village :
5. Do you take part in SFDA programme ?
6. Do the villagers participate ?
7. The small farmers in your village have properly understood the functioning of SFDA.

	Fully	Partly	Not at all
8. The small farmers participate in the programmes because of :	3	2	1
a) Economic benefit.....			
b) Social development....			
c) Higher production.....			
d) to get subsidy.....			
e) to get free input materials.....			
f) to get the services of the specialists.....			
g) to enhance social status.....			
h) to get loans.....			
i) to come in to close contact of the officers.....			
j) Any other.....			

PART - IV

1. State the items of programme, activities operating in your area ?
 - a) Loan to dig well for irrigation....
 - b) Loan to buy inputs.....
 - c) Supply of in puts.....
 - d) Loan to open dairying.....
 - e) Loan to open poultry.....
 - f) Loan to open fishery.....
 - g) Loan to open cottage industry.....
 - h) Loan for land development.....
 - i) Any other (Specify).....
2. Which one of the above do you feel to be most important to you (least three in order of preference).
 - a.....
 - b.....
 - c.....
3. Do you actually get such help as per you need ?
 - i) Fully.....
 - ii) Partly....
 - iii) Not at all.....
4. a) which one of the programme has comparatively greater significance ?

- : v : -

4. b) Because of :
- i) Immediate problem solving....
 - ii) Bearing on future problems....
 - iii) Social development.....
 - iv) Educational improvement.....
 - v) Economic achievement.....

5. Which one of the programmes you feel to be :
- i) Not significant.....
 - ii) Not related to the problems..
 - iii) Not related to majority of the people.....
 - iv) Beneficial or related to a selected group of individuals...
 - v) Detrimental to the community.....

PART - V

1. Do you seek advice or information on matters of farm problems ? Yes.....No...

If yes.....from whom :

- a) Friends and relatives...
- b) Neighbour farmers.....
- c) Leading farmers.....
- d) G.P. Members and local leaders.....
- e) Block staff(SFDA staff)..
- f) Commercial agent.....
- g) Other agency sources (Agril. Deptt).....
- h) Radio.....
- i) Newspaper.....
- j) Any other(specify).....

2. In which sources as listed above you have relatively greater confidence (in order to preference).....

3. Have you acquired new knowledge on better farming practices through SFDA. Yes.....No.....

If yes.....	know	Know	Do not
	<u>well</u>	<u>some</u>	<u>know</u>
	3	2	1

(a) Do you know about some improved cropping patterns suitable to your holding.

- | | <u>Know
well</u> | <u>Know
some</u> | <u>Do not
know</u> |
|--|----------------------|----------------------|------------------------|
| (b) Do you know that improved seeds only can improve your production as well as income. | 3 | 2 | 1 |
| (c) Do you know that recommended dose of manures and fertilizers can improve your production and income. | | | |
| (d) Do you know that recommended plant protection measures improve your production and income. | | | |
| (e) Do you know that improved agricultural implements can help you better in your farm operation than the indigenous ones. | | | |
| (f) Do you know improved methods and practices of farming that can improve your present level of production and income. | | | |
| (g) Please name any other aspect of better farming that you know of and that can help improve your production and income. | | | |

4. Has the SFDA helped you in proper understanding and acquiring necessary skill on better farming.

Yes.....No....

If yes.....state :

Good skilled	Somewhat skilled	Not-at- all skilled
<u>3</u>	<u>2</u>	<u>1</u>

- (a) Are you skilled in alternate cropping patterns for your farm.
- (b) Are you skilled in selecting better variety of seed for your farm.
- (c) Are you skilled in using manures and fertilizers with regard to dose, time and methods of application.
- (d) Are you skilled in use of plant protection chemicals with regard to dose, time and methods of application.

	<u>Good skilled</u>	<u>Somewhat skilled</u>	<u>Not-at- all skilled</u>
	3	2	1
e) Are you skilled in selecting and handling improved agricultural implements.			
f) Are you skilled in scientific methods and practices of farming.			
g) Any other item of scientific farming in which you have acquired skill.			

5. Do you feel that :	<u>Agree</u>	<u>Undecided</u>	<u>Do not Agree</u>
	3	2	1
a) SFDA can help solve the many fold problems of the small farmers.	3	2	1
b) SFDA workers are not taking care of the small farmers in your area.	1	2	3
c) SFDA programmes are not necessarily to deal with the current problems and felt needs of the small farmers.	1	2	3
d) Big farmers and non-farmers are getting benefit of SFDA programmes at the cost of the small farmers.	1	2	3
e) More and more farmers are gradually attracted and involved in SFDA programmes.	3	2	1
f) The usefulness of SFDA programmes are being realised by more and more small farmers gradually.	3	2	1
g) Involvement of small farmers in SFDA programmes can improve their living conditions.	3	2	1
6. List the new practices that you have been taught by the SFDA staff.....			
7. List the practices you have adopted.....			

8. Are you continuing the practices you have adopted ?
- i) Continuing.....
 - ii) Dis-continuing.....
 - iii) Not adopted.....
9. List the practices you have given up after adopting for some time.....
10. State the reasons of non adoption of reversion.....

PART - VI

Do you consider that :

- 1. SFDA is primarily engaged with the small farmers of the area. Yes.....No.....
- 2. SFDA programmes are related to the problems and needs of the small farmers. Yes.....No.....
- 3. SFDA programmes are planned in consultation with the small farmers and or their representatives. Yes.....No.....
- 4. SFDA has helped the small farmers to develop an urge to improve their condition. Yes.....No.....
- 5. SFDA has sought the co-operation of small farmers for the execution of its programmes Yes.....No.....
- 6. SFDA has taken care to publicize widely about its functioning in the area. YesNo.....
- 7. SFDA has taken care to publicize its objectives among the small farmers. YesNo.....
- 8. SFDA programmes are realistic and has a bearing on the present situation. YesNo.....
- 9. The working methods appropriate and liked by the small farmers. YesNo.....
- 10. SFDA officers and workers take keen interest in the development of small farmers. YesNo.....
- 11. SFDA has separate field worker in your village/area. Yes.....No.....

12. SFDA has provision of specialised service to cater the needs of the small farmers. Yes.....No.....

13. SFDA is eager to help any small farmers ? Yes.....No.....

14. There is ready response from the agency either by post or person at the time of need. Yes.....No.....

15. The small farmers can be organized and made to work in scientific lines if technical help and guidance comes from SFDA. Yes.....No.....

16. What in your opinion are the major problems (or weakness) in the present working of SFDA ?
.....
.....

17. What do you suggest or think appropriate to eliminate the weaknesses and to make the scheme more realistic and helpful to the small farmers of the area ?
.....
.....

APPENDIX - II

**Interview schedule for the SFDA
officials and workers.**

Name of the interviewer

Sri S.N.Barik,

**College of Agriculture,
Bhubaneswar**

Respondent No.....

1. Name of the Respondent.....

Name of the Block/Panchayat/any other.....

2. Status(Designation).....

**3. The establishment of SFDA is timely
and rightly conceived so as to
improve agricultural production.** **Yes/No.**

**4. The organisational structure of
SFDA needs change and modification
since.**

Agree	Undecided	Do not Agree
3	2	1

**a) Separate staff is not employed
to carryout its programmes.**

**b) Adequate staff are not employed
at village and panchayat levels
as field workers and supervisors.**

**c) Supervision and execution
does not rest with technical
staff.**

**d) The field workers are not
given proper pre-service and
induction (orientation)training.**

**e) Well spelled out duties and
responsibilities are not
allocated to different positions
in the organization.**

5. With regard to the function of SFDA.

**a) SFDA programmes are realistic and
takes into consideration the
current problems and felt needs
of the small farmers of the area.**

**b) The programmes are planned in
consultation with the clientele and/
or their representatives.**

**c) The programmes are widely publicized
prior to execution so as to
attract and involve more small
farmers.**

- | | Agree | Undecided | Do
not
Agree |
|---|-------|-----------|--------------------|
| | 3 | 2 | 1 |
| d) Programmes are executed in time. | 3 | 2 | 1 |
| e) Programmes are planned/executed only for the development of the small farmers. | | | |
| f) Education and training of small farmers are given priority over supply and service. | | | |
| g) Supply and service approach although a must at present, is regarded supplementary to educational approach. | | | |
| h) SFDA programmes are not isolated since these have been integrated into the over-all Block programmes. | | | |

- | | Agree | Undecided | Do not
agree |
|---|-------|-----------|-----------------|
| 6. SFDA programmes suffer most, due to : | | | |
| a) Adequate finance. | | | |
| b) Separate SFDA staff. | | | |
| c) Co-ordination of different Government and non-Government agencies. | | | |
| d) Working conditions and facilities provided to the field workers. | | | |
| e) Participation and co-operation of the small farmers. | | | |
| f) Any other (specify) | | | |

7. What in your opinion is major weakness in SFDA.
- a) Organisational structure.....
- b) Function.....

8. What is your suggestion to eliminate the above weaknesses and to make the scheme more realistic and helpful to the small farmers of the

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