GAL OYA FARMER ORGANIZATION PROGRAMME - PROGRESS AND PROSPECTS

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PROGRESS & PROSPECTS

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FOREWORD

Galoya Water Management Project, begun in late 1979, is a joint Government of Sri Lanka and United States Agency for International Development Project. The implementing agency is the Irrigation Department.

One of the main objectives of this project is the development and implementation of water management capabilities and programmes for the rehabilitated system through active farmer participation in system management. The recommendation of a 'model' for mobilising farmer participation in system management was entrusted to the Agrarian Research and Training Institute (ARTI). In order to fulfill this task the ARTI launched an action-research programme in the project area in 1980. Through this action-research programme we intended to come out, with designs for 'organisational structures' for irrigation management which include the designing of water users organisations, ways and means of farmer participation at various levels in the process of water management, methods of communication between the 'users' and 'controllers' of water etc.

The first batch of Institutional Organisers who were recruited as catalysts in the process of forming farmer organisations were fielded in April 1980. Since then several batches were recruited and sent to the field. This report presents the interim findings of the action research programme to secure farmer participation for water management, system design and operation and maintenance in the project area. Within the two and half years that this report covers over 200 farmer organisations were formed and farmer participation was successfully obtained not only for water management, system design, reconstruction and operation and maintenance but also for several other activities. The report describes the methodology adopted, the constraints of farmer organisations, performance of farmer organisations and the process involved in the formation of farmer organisations.

Mr. I. Ranasinghe Perera, Research and Training Officer of this Institute coordinated this study and he was also responsible for the writing of this report. I thank him for his effort. I hope this report will be useful to those who are endeavouring to seek farmer participation in water management.

T. B. Subasinghe
DIRECTOR

ACKNOWLEDGEMENT

This research report is the first ARTI report written on Gal Oya Farmer Organization Programme undertaken by the ARTI in support of the Gal Oya Water Management Project. The Farmer Organization Programme commenced in March 1981, with assistance from the MLLD ID, USAID, and the Cornell University.

The Author wishes to thank all the respondents including pioneer researchers of the Gal Oya Farmer Organization Programme Mr. C.M. Wi Wijayatatne and Mr. M.L. Wickramasinghe.

A special word of thanks to Mr. A.S. Widanapathirana (Research Officer, ARTI) for the ecnouragement given at all stages of this report.

I wish to thank Dr. Jayantha Perera (Deputy Director/Irrigation Water Management and Agrarian Relations Division), Professor Norman T. Uphoff, (Cornell Consultant), Dr. Jeffrey D. Brewer (Cornell Consultant) and Mr. Mahinda Silva for their invaluable comments and in editing this report for the final publication.

I also thank Mr. P. Ganewatte (Cornell Consultant) and Dr. C. Kariyawasam (Cornell Consultant) for giving me all posible assistance to conduct this study.

Finally I thank Miss. Lilanthi Felix who typed the draft report.

I.RANASINGHE PERERA
IAR DIVISION.

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GLOSSARY

CULTIVATION MEETING	:	Gathering of farmers and officials in a particular area prior to each cultivation season.
DRAINAGE AREA	:	The area without direct water supply. In the drainage area, farmers cultivate land using drained irrigation water, which comes through the other farmers paddy fields.
PROCESS DOCUMENTATION	:	Reports written by selected IOs on the process of farmer organizations.
YAYA PALAKA	:	An elected farm representative in the tract level under the Agrarian Services Act.

ABBREVIATIONS

A.D.	: Agriculture Department
A.R.T.I.	: Agraian Research and Training Institute
B.C.	: Branch Canal
D.A.C.	: Department of Agraian Services
D.C.	: Distributary Channel
F.C.	: Field Channel
F.O.	: Farmer Organization
F.R.	: Farmer Representative
G.	: Gonagolla
G.S.L.	: Government of Sri Lanka
I.D.	: Irrigation Department
I.O.	: Institutional Organizer
J.P.	: Jala Palaka (Irrigator)
K.E.S.	: Agriculture Extension Officer
L.B.	: Left Bank
M.	: Mandur
M.C.	: Main Canal
P.D.	: Process Documentator
P.M.B.	: Paddy Marketing Board
U.B.	: Uhana Branch
U.S.A.I.D.	: United States Agency for International Development
Y.P.	: Yaya Palaka

CHAPTER ONE

1. INTRODUCTION

Gal Oya Irrigation scheme is the largest single scheme in Sri Lanka, constructed by damming the "Gal Oya River", in the Moneragala district, The reservoir Senanayaka Samudra, was constructed in 1950s while the process of settlement continued through 1965. The Senanayaka Samudra has a storage capacity of 770,000 acre feet of water and a command area of 120,000 acres. The Left Bank (LB) command area is the largest, having about 62,000 acres. The channel system of LB comprises of about 32 miles of main channels, 50 miles of major distributary channels and about 600 miles of minor distributaries and field channels (Figure 1.1)

The scheme which is three decades old now has deteriorated badly due mainly to neglect of regular maintenance and repair work. As a result, water distribution within the scheme has been far from satisfactory. The head end of the scheme received adequate water for the cultivation of both Yala and Maha seasons... In the tail end area, however, the cultivation was done only during the Maha season with monsoonal rains. Because of this uneven pattern of water availability significant disparities in income levels have emerged between farmers in head end and tail end areas. This has also led to several social problems particularly in the tail end areas. Moreover, the institutional infrastructure and farmer participation in water management within the scheme were unsatisfactory. The relations between water users and officials were almost non-existent.

The above state of affairs continued through 1979 until the Government of Sri Lanka sought international assistance to improve the performance of the scheme. In response, the USAID in consultation with the Government of Sri Lanka prepared a plan to rehabilitate the Left Bank of the Gal Oya Scheme.

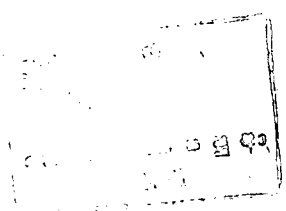
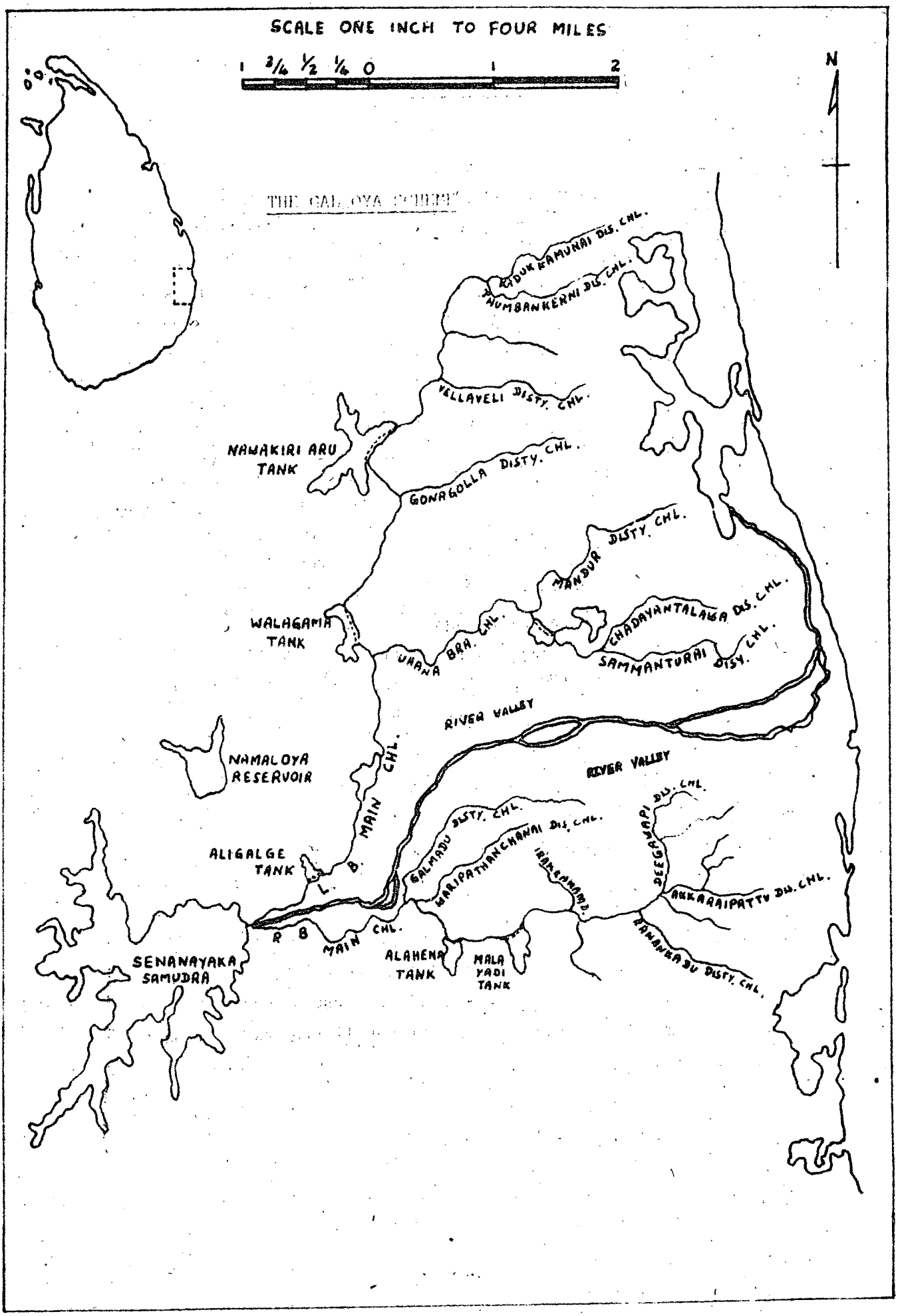


FIGURE 1.1


SCALE ONE INCH TO FOUR MILES
1 3/4 1/2 1/4 0 1 2
N
THE GALOYA SCHEME
KADUKAMUNAI DIS. CHL.
NUMBANKERNI DIS. CHL.
VELLAVELI DISTY. CHL.
NAWAKIRI ARU TANK
GONAGOLLA DISTY. CHL.
MANDUR DISTY. CHL.
WALAGAMA TANK
URANA BRA. CHL.
CHADAYANTALAWA DIS. CHL.
SAMMANTURAI DISY. CHL.
RIVER VALLEY
NAMALOYA RESERVOIR
MAIN CHL.
RIVER VALLEY
ALIGALGE TANK
L. B.
GALMADU DISTY. CHL.
MARIPATHANCHANAI DIS. CHL.
IRAKKAMAM.
DEGAWAPI DIS. CHL.
AKKARAIPATTU DIS. CHL.
R B MAIN CHL.
SENANAYAKA SAMUDRA
ALAHENA TANK
MALA YADI TANK
PANNAWA DU DISTY. CHL.

The programme of rehabilitation had the following three fold objectives.

(a) To improve the efficiency of water distribution within the scheme by renovating the conveyance system, and installing control structures etc.

(B) To obtain farmer participation for redesigning work and for subsequent operation and maintenance activities by the formation of farmer associations based on field channels.

(c) To effect institutional development by introducing training and extension activities.

The Agrarian Research and Training Institute (ARTI) was entrusted with the responsibility of developing suitable models of farmer participation and testing them in the field. The ultimate objective of the ARTI programme was to develop viable farmer organizations.

For this purpose, the services of Institutional Organizers (IOs) (change agents) have been obtained. They are of two types: (a) graduates recruited to organize farmers and (b) field officers of the Irrigation Departmnet. Both groups were trained by the ARTI for a period of 6 months and thereafter appointed to work in the Project area as change agents. (For details regarding training and fielding, see Chapter Two)

The change agents were expected to play several roles as outlined below:

(a) Role of a Catalyst

IOs are expected to bring about changes in farmers' environment. Hence they are expected live with farmers, understand them as rational and trustworthy people; help them to arrive at decisions but not to make decisions on behalf of the farmers who should be encouraged to develop self-reliance and deal with the problems they encounter.

In this process, an IO works avoiding political, caste or communal issues and harbouring no hostility towards others even if they do not agree with him.

(b) Role of a Facilitator

The IOs should seek to create an atmosphere suitable for initiating discussions among farmers themselves as well as between farmers and officials. With a view to improving the relationships of officials towards farmers they should facilitate communication among officials and the technicians as well as between the officials and the farmers. They also should facilitate solving problems by farmers, and developing a sense of unity and co-operation among them, to obtain necessary services and facilities and also to build up a farmer leadership. In the facilitating process the IOs do not make the farmers feel that they do not depend on IO's.

(c) Role of an Enabler

They should enable farmers to realize their own potentials, utilize the available resources and the organizational capacities. They also should enable farmers to understand their problems and work together in a spirit of harmony.

(d) Role of a Motiviator

They should encourage farmers to recognise their rights, including rights to common facilities and services, and generate confidence in co-operation, and co-ordination of farmers with a view to creating an understanding of farmers' obligations and responsibilities towards the farming community and also towards the Government.

(e) Role of an Educator

They should provide opportunities and guidance for farmers to be educated on irrigation, agriculture, credit, marketing, water management and farmer organization.

The IOs are also expected to assist farmers in building up co-operation among themselves and promoting interaction between officials and farmers through the above mentioned processes and activities. Subsequently, they are expected to form farmer organizations based on field channels to enable farmers to deal with the problems they encounter.

1.1 Phase of Experiment

The Gal Oya Farmer Organization Project was originally envisaged to be implemented in two phases as follows:

i) Providing Organizational inputs while effecting physical rehabilitation work such as design and construction activities.

ii) Providing Organizational inputs without effecting physical rehabilitation activities.

For these purposes initially two areas of the scheme, namely, Gonagolla and Uhana were identified as shown in the Figure 1.2. Both represent areas with good water availability but with some problems of water distribution. On the otherhand, the area closer to the reservoir and the tail end areas of the scheme were purposely left out as farmers would not be motivated for water management if there is too much of water or severe water shortage.

1.2 Objectives of the Report

This report presents the methodology adopted to organize farmers and the constraints faced by the farmer organizations (FO). The report describes the interim findings under the FO programme after three years of experimen-tation, since March 1981. More specifically, the objectives of the report are to:

a) present the strategy adopted to organize farmers adopting the catalyst's approach.

b) reveal the process involved in the formation of FOs;

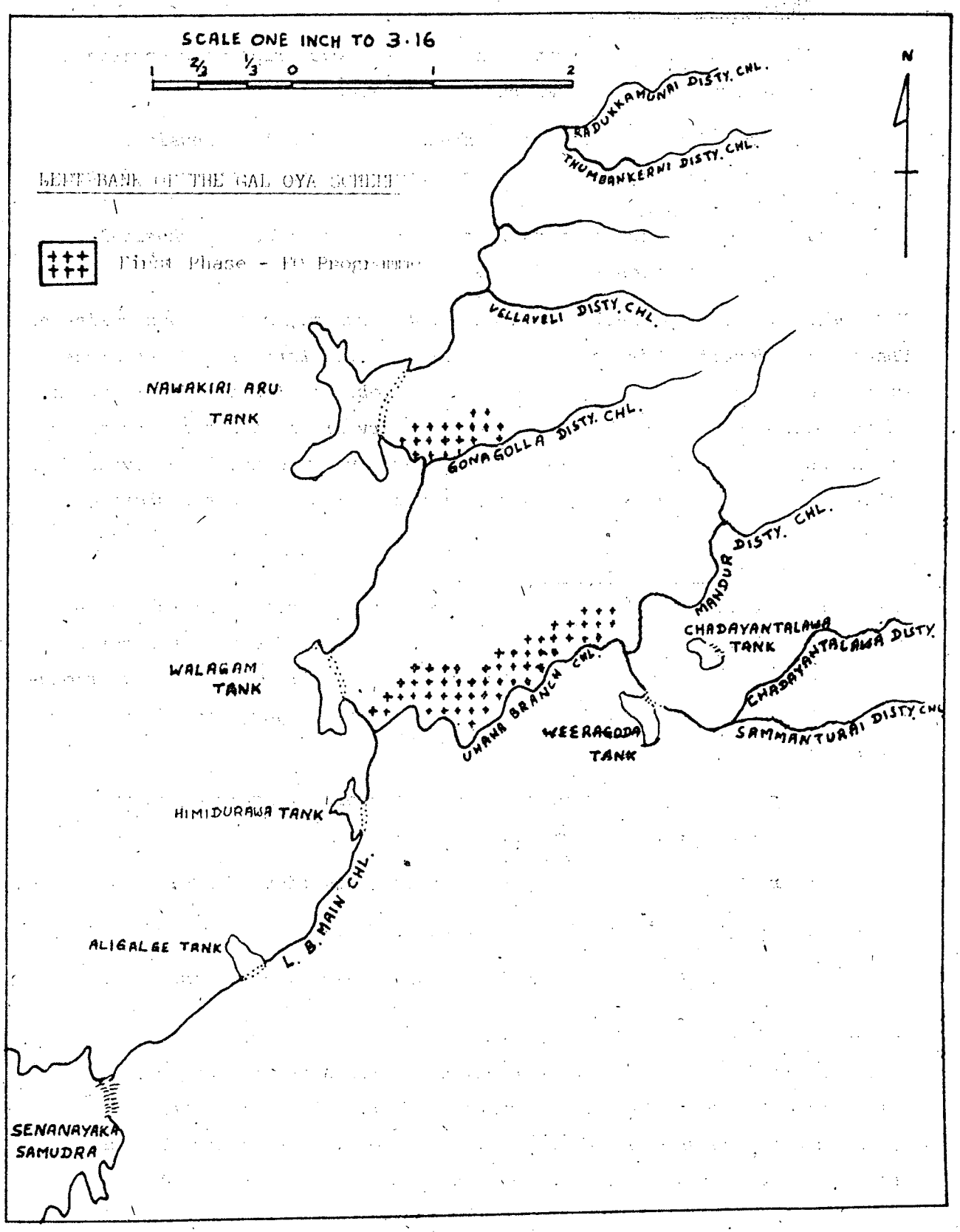
c) present the activities and the performance of FOs; and

d) examine the factors including constraints, affecting the FOs

1.3 Source of Data

This report is the first document which describes the process of organising FO from its very inception in 1981. There are both published and unpublished documents, papers etc., describing various aspects of the programme, which are incorporated in this report.

FIGURE 1.2


SCALE ONE INCH TO 3·16
1 2/3 1/3 0 1 2
N
LEFT BANK OF THE GAL OYA SCHEME
First Phase - Ex Programme
RADUKKAMUNAI DISTY. CHL.
THUMBANKERNI DISTY. CHL.
VELLAVELI DISTY. CHL.
NAWAKIRI ARU TANK
GONAGOLLA DISTY. CHL.
MANDUR DISTY. CHL.
CHADAYANTALAWA TANK
CHADAYANTALAWA DISTY.
WALAGAM TANK
UHANA BRANCH CHL.
WEERAGODA TANK
SAMMANTURAI DISTY. CHL
HIMIDURAWA TANK
L. B. MAIN CHL.
ALIGALGE TANK
SENANAYAKA SAMUDRA

The primary source of information however is the various reports prepared by the IOs since the commencement of the programme in March 1981. They consist of both weekly and monthly reports. Over 200 such reports have been analysed and utilized in the preparation of this study report. Moreover, the findings of other surveys have also been made use of.

The following are worth mentioning:

(i) Water Management and Paddy Production in the Dry Zone of Sri Lanka. Robert Chambers (1978)

(ii) The Institutional Framework of Irrigation and Cropping on Major Colonization Schemes. Lakshman Wickramasinghe, C.M. Wijayaratne, Sena Ganewatte (1982).

(iii) A case Study for "Learning Process" Applied to Farmer Organization and Participation in Water Management. The IO Programme in Gal Oya Prof. Norman Uphoff (1982).

(iv) 1982 Year Book for Sri Lanka Water Management Research. ARTI (1982).

(v) Mid-Term Impact Assesment. ARTI (1983)

CHAPTER TWO

2. BACKGROUND TO FARMER ORGANIZATIONS AND THE ORGANIZATIONAL STRATEGY

This chapter discusses the background to farmer organization in the Gal Oya Valley and the strategy adopted to get farmer participation in water management and some problems faced at the preliminary stages of organization.

The initial surveys conducted by the ARTI indicated several matters related to water management in the Gal Oya Valley. Firstly, water distribution within the scheme was far from satisfactory as farmers in the head end of the system obtained unrestricted supply of water while those at the tail end had no water for cultivation or even for domestic purposes. Because of this reason, productivity differences between head end and tail end areas began to surface. Secondly, there were many disputes related to water distribution among the settlers and the incddence of damaging the structures and tapping water illegally etc. were reported to be high. Thirdly the relation ships between the water users and the government officials were very poor; and farmers were desperate as solutions to their problems were not forthcoming.

Two major causes which led to the above state of affairs were the poor cooperation among farmers themselves and lack of co-opdination between farmers and officers with regard to water management. Success in the accomplishment of project objectives however depends mainly on the extent to which farmers organize themselves. Therefore, the initial step under the FO Programme was to organize farmers into groups with common interest, along principles of community organization, some of which are discussed later in this report.

According to the field study carried out in 1981 in the project area, it was found that there were several problems associated with community organization work in Gal Oya. Firstly the prospects for community organization work were very unsatisfactory; the only existing community organization was the Death Donation Sociey and other organizations had many problems at various stages of their formation. Most of the organizations died as soon as they were formed partly due to the deficiencies of the bureaucracy.

The Gal Oya community comprises of a heterogeneous population brought in from various parts of the island. Hence, there was very little interaction among them as the settlers had different customs, traditions etc. Each settler family was identified merely by a block number and had very poor personal relations with the neighbouring families, specially within a hydrological area. Because of this, the conditions conducive for the development of leadership characteristics of settlers, which are important for a programme of organizing farmers, did not exist. The second problem affecting community organization work was the difficulty in identifying good leaders. The leadership of the existing community organizations was either politically oriented or interested in personal monetary gains. Under these circumstances organizing farmers at Gal Oya appeared to be a challenging task.

After studying several approaches to community organization both in Gal Oya and elsewhere, it was considered desirable to adopt an approach somewhat similar to the community organizer (CO) programme in the Philippines for organizing farmers at Gal Oya. For the purpose a group of IOs was recruited. An IO selected by a research team of the ARTI was required to have a degree and a farming background with a special interest in working with farmers. Graduates were recruited because the change agent should be sufficiently educated to gain recognition among public officers. It was considered a matter of special importance that these graduates should be qualified in subjects related to the field of social sciences. The requirment of farming background was made compulsory as IOs should be able to understand the problems of farmers. Therefore, in selecting a change agent who could live among farmers, the research team believed that It would be more appropriate if a member of a farming family was selected. In addition to the above qualification graduates who have had experience in Dry Zone agriculture were encouraged to apply for the posts of IOs.

The ARTI selected 30 persons in January 1981, Soon after the selection, they were exposed to a period of 2 weeks training in Colombo and 4 weeks in Ampara. The first two weeks of the training programme concentrated on theoretical aspects of agriculture, irrigation, agrarian issues, community organizations, group dynamics and communication.

The latter phase of training at Ampara paid attention to practical aspects. This included discussions with farmers, officers etc. and getting acquainted with the farming environment in the area. While undergoing both the theoretical and practical training, each trainee was subjected to a continuous process of assessment on the basis of knowledge of subject matter, attitudes towards each other and general behaviour during the period of training. The objective of the assessment was to identify potential leadership qualities amongst the trainees. The two major leadership positions are 6 posts of Group Co-ordinators and 4 posts of Process Documentators (PD). Each co-ordinator IO is expected to lead a team of 3-8 IOs; while the responsibility of a PD is to document the farmer organization process.

In addition to the training of thirty IOs, another batch of 5 Irrigators and a Technical Assistant attached to the Irrigation Department and a officer working as the Assistant Land Commissioner were also exposed to the first training programme. Subsequently the latter officer was appointed as IO supervisor.

2.1 Fielding of IOs

The action oriented research programme was implemented in three separate areas. Area 1 comprised about 4000 acres from UB 1 to UB 10 and UB 15 to UB 16 along the Uhana branch channel. The second area covered an extent of 1000 acres in UB 11 to 14. Early rehabilitation was planned in these two areas. The third area represented an extent of 1000 acres in the Gonagolla area which would be rehabilitated later. Twenty four IOs and 6 IOs were fielded in Uhana (Area 1) and Gonagolla (Area 3) areas respectively on 15th March, 1981. The five irrigators were fielded in area 2 under the supervision of the TA around the same time. (The 5 irrigators and the Technical Assistant were later withdrawn as they failed to perform the IO role efficiently)

Subsequently another batch of 35 was recruited and trained by the ARTI in September 1982. Two more batches comprising of 22 and 35 were recruited and trained by the ARTI in March and September 1983 respectively in order to fill the vacant positions created by heavy drop out of ten IOs (Table 2.1)

The original area of 5000 acres covered by the IO programme was expanded to 17,370 acres with the fielding of subsequent batches of IOs (Table 2.2 and Figure 2.1)

Table 2.1 : Programme of Recruitment and the Distribution of IOs in the Project Area - 1981 through 1983

Time of Recruitment	No. Recruited	No. of Group Co-ordinators	No. of Process Documentators	Project Area
March 1981	30	06	04	Uhana Gonagolla
September 1982	35	09	09	Weeragoda Malwatta
March 1983 (replacement)	22	04	04	Vacated field- Nugelanda, Sillikkody, Vellaveli, Galapitagala
September 1983 (repleacement)	35	-	-	Vacated fields

2.2 The Strategy for Field Entry

The Institutional Organizers, soon after they were fielded did not suggest to farmers to organize themselves for purposes of distribution of water or for field channel cleaning activities. Instead they were planning to demonstrate to farmers the need and the benefits of getting organized into farmer groups. The IOs made use of some existing field problems as a prelude to organising work among farmers. The four main problem areas identified by IOs in this reagrd are described below:

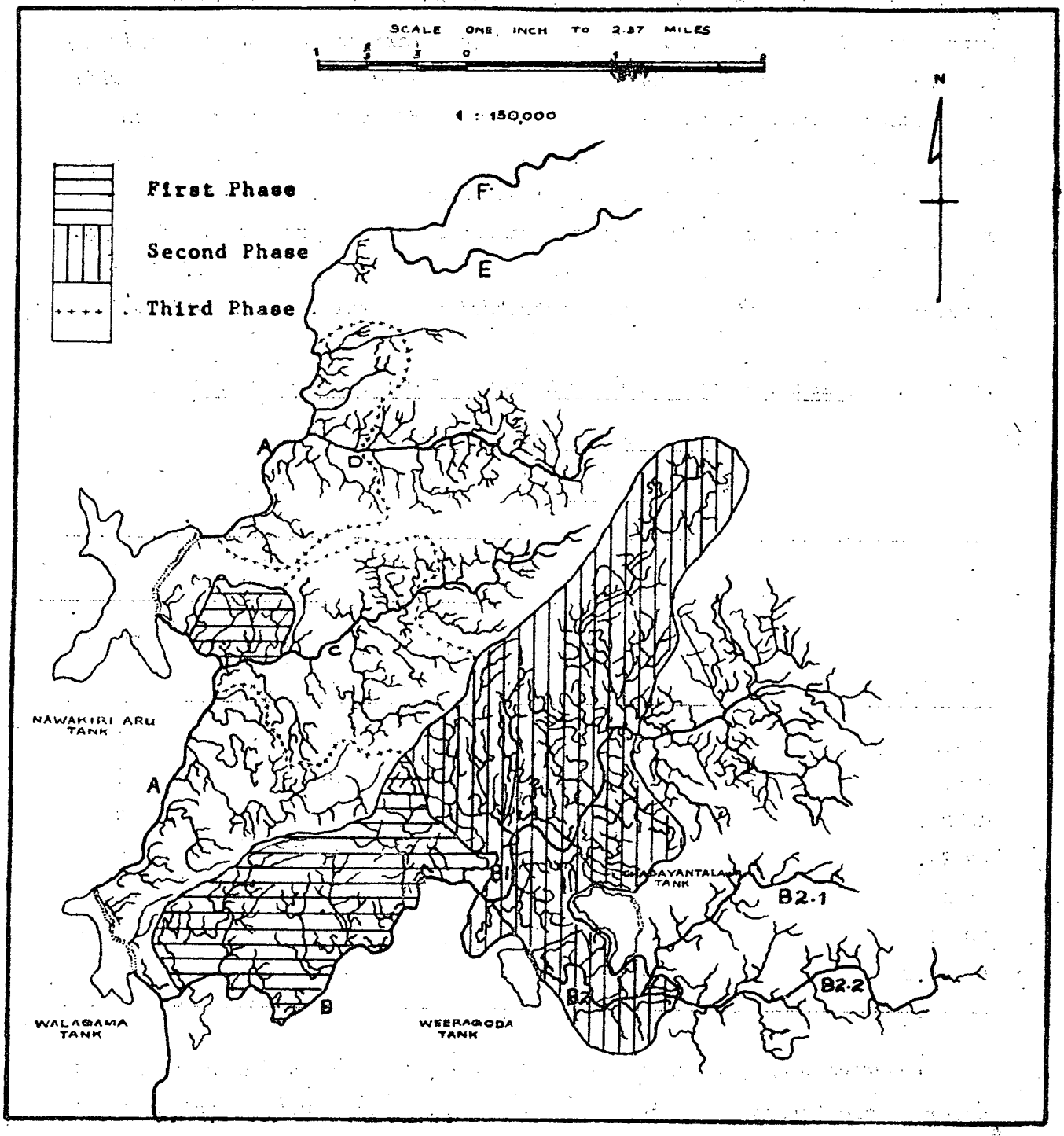
a) Water Disputes

As in other major schemes, the Irrigation Department is responsible for the distribution of water from the main reservoir, Senanayaka Samudraya to the field channels via the branch and

Table 2.2 : Distribution of Institutional Organizer by Phase of the Project - March 1981 through April 1983

Project Area	PHASE I			PHASE II			PHASE II		
	Channel Name	No. of IOs	Acreage Covered	Channel Name	No. of IOs	Acreage Covered	Channel Name	No. of IOs	Acreage Covered
Gonagolla	LB 29, LB 30, and G1, G3, G5.	06	1000				G2, G4, G6 to G 16	04	2414
Uhana	UB 1 to UB 16	24	5000						
Weeragoda, Mandur				M 1 to M 18	28	7417			
Malwatta				MS 1 to MS 8	04	1119			
Vellavely							LB 34 to LB 40 V1 to V5 S1 to S5	08	1808

Figure 2.1 : MAP OF THE PROJECT AREA



100 AREAS OF THE PROJECT

A. L.B MAIN CHANNEL
B. UHANA BRANCH CHANNEL
C. GONAGOLLA BRANCH CHANNEL
D. VELLAVELI BRANCH CHANNEL
E. THUMBANKENAI BRANCH CHANNEL
F. KADUKKAMUNN BRANCH CHANNEL

B1. MANDUR DIST.Y CHANNEL
B2. MALWATTA DIST.Y CHANNEL
B2.1. CHADAYANTALAWA DIST.Y CHANNEL
B2.2. SAMMANTURAI DIST.Y CHANNEL

distributary channels. Within the field channel, the distribution of water was nobody's responsibility. Hence the farmers obtained water in an unorganized manner; whereby those at the head end had enough water while those further down the channel were deprived of water. Because of the extravagant nature of water use by some of the head end farmers there were frequent quarels over water at the field channel level. At each water rotation, several quarrels and water disputes were reported among farmers. In order to obtain water some of them had to keep awake at night. Even homicides were reported in water distribution quarrels. (See Table 3.5)

Table 2.3 Distribution of Farmer Response Towards Field Canal Water Availability in 1980 Yala (%responses)

Channel Name	Farmer Response Category		
	Too much Water	Adequate Water	Inadequate Water
G 3.7	9%	54 %	36%
G 5.1	12%	80%	8%
LB 29.2	7%	85%	8%
LB 29.2	0%	20%	80%
UB 1	70%	10%	20%
UB 9.4	25%	60%	15%
UB 15.2	52%	16%	32%

The "powerful" and more influential farmers often had an access to water at the expense of less poweful farmers. Under such circumstances, IOs explained to farmers the need for an organization in order to overcome some of the water related problems faced by them.

b) Irrigation Rehabilitation

As the system itself was in a bad and dilapidated condition, water distribution across the scheme was far from satisfactory. In the meantime farmers wished to have a permanent solution to problems related to water management. IOs discussed the programme of rehabilitation with farmers and explained how the programme could best be used to solve their problems. Ios discussed with farmers the objectives of the rehabilitation, programme and demonstrated how they could cooperate and work with the irrigation officials for their own benefit. Ios also made it a point to explain to farmers that they will be consulted and their suggestions based on years of farming experience will be incorporated into the design plan.

C) Acute Water Problems in 1981 Yala Season

In 1981 Yala season there were acute water problems in the Ampara District. In the first quarter of 1981, farmers were informed that irrigation water would not be issued for Yala cultivation. Hence farmers were in a state of much dissatisfaction and uneasiness. In March 1981, the decision of the District Agricultural Committee was changed and it was decided to issue water for only 12,000 acres of the Left Bank. Subsequently, Yala cultivation meetings were held and farmers were advised to cultivate only one acre of paddy in each allotment. The rest of the area of the allotment was expected to be under subsidiary food crops. Farmers were informed at the Cultivation Meetings that if anyone wishes to cultivate more than one acre, he would do so at the risk of loosing the right over the land. Farmers agreed to the decision of the cultivation meetings and commenced cultivation accordingly.

Later it was revealed that every farmer had cultivated as much land as he could and all reservations, encroachments etc. were brought under cultivation. Only a few abided by the decision of the cultivation meetings. By the middle of the Yala season, the risk of crop failure because of insufficient water in the

tank was imminent as a result of excess acreage being brought under paddy cultivation. The farmers then discussed as to how to protect the growing Yala crop.

In order to minimize crop failrue, a crash programme of water management was urgently needed. At field channel level there was no proper mechanism through which water can be distributed among farmers. Therefore, water related disputes were reported. There was a larger number of water related complaints lodged by farmers at the irrigation offices than in preceding years. Farmers armed with clubs, weapons etc. were observed watching their pipe inlets in the stuggle to obtain water. A police patorl sefvice was in operation to protect structures and gates from being damaged by farmers along some of the branch channels of the Left Bank.

It was during this period that IOs entered the field. They explained to farmers how the risk of crop failure could be minimized by their organizing into groups. IOs motivated farmers to adopt methods of water rotation within their field channels. Such activities became a good basis for convincing farmers of the benefits of collective effort. The efforts weree encouraging and farmers accepted the IO as a motivator. Hence the IO was able to make a strong case for farmer organizations.

d) Weakness of Existing Leadership

The Yaya Palaka (YP) elected under the provision of the Agrarian Services Act. No. 58 of 1979 is one of the 'farmer leaders' based on the tract level. The responsibility of the YP in matters related to water management in the major irrigation schemes is (a) to assist farmers in the management of irrigation water (b) to resolve conflicts, (c) to prevent damages being caused to irrigation structures, and (d) to assist farmers in the distribution of water. However, they have not been able to solve water problems faced by farmers due to lack of farmer cooperation. It was observed that farmers were not satisfied with the activities of YPs. The payment due to

YPs based on acreage (alaries) was made only by a handful of farmers Each YP had farming work of his own which hampered the performance of his duty.

Farmer responses indicated some reasons which contributed to the poor work performance and unsatisfactory leadership of YPs. The reasons are summarized below:

(I) Each YP had to cover a large area of 300-500 acres of paddy and 100-125 colony farmers and a good number of other farmers as well. The YP found it difficult to discharge his duties efficienly over the large area assigned to him. Moreover, there is no mechanism for the YP to communicate with all the farmers in his area of authority.

(II) The YPs were appointed on a colony basis which has an administrative boundary. This is different from the hydrological boundaries served by an irrigation channel network. There are instances when an irrigation channel cuts across three administrative boundaries and had as many as three YPs for the particular channel. The fact that hydrological boundaries do not coincide with administrative boundaries affected the efficient discharge of duty of each YP

The main responsibility of the YP is to ensure the equitable distribution of water among farmers in his area of authority. In order to do so, it becomes necessary to organize water rotations. There are three steps involved in organizing a water rotation. Firstly he has to inform all the farmers in the channel about the rotation. Secondly, he has to pay a role in the actual implementation of the rotations and finally the YP has to see whether the rotation operates satisfactorily, taking remedial measures wherever necessary. Each of these reasons affect the satisfactory performance of water rotation which is the main role of a YP, with regard to water management.

(iii) The working relationship among YPs is very poor. There are no avenues for all of them to meet and discuss their water related problems. This too has adversely affected the functioning of the YP system.

(iv) The YP is generally associated with political patronage and because of this reason he has a group opposed to him. This too affected the performance of his work. Although the YPs are engaged in performing field level water management activities, they had varying degrees of success in their work. The IOs made use of the poor leadership role of the YPs to their own advantage to enter the community. The above climate in the pilot area favoured the initial work of IOs who were attempting to encourage the development of leadership among farmers, based on a common field channel and motivate them to form farmer organizations for purposes of water management. The farmers who had many water related problems accepted him. The fact that IOs were attempting to organize the farmers at a time when there was virtually no leadership for water management work favoured the activities of the IOs. The farmers accepted the IO and was prepared to listen and cooperate with him.

(e) Officer Relations

At the time IOs entered the field, it was noted that there was confusion in the activities of farmers vis-a-vis officials. The farmers complained of the negligence and unhelpful attitude of officers. On the other hand, the officers complained of farmers' lack of cooperation. However, it is reported that many farmers were not aware of the roles and functions of field level officers representing different departments. There were also instances where farmers in some areas of the scheme were not aware of even the Jala Palaka, the field level officer of the Irrigation Department. The IOs while recognising the existing poor farmer-officer relations, began to assist the farmers in improving this relationship.

2.3 Activities of the Institutional Organizers

Having entered the field, the first activity embarked upon by IOs was to identify the physical and socio-cultural characteristics of the Irrigation system and of the farmers. Each IO was required to prepare a map of his working area and an irrigation[2] profile and a community organization profile[3]. After the reconnaissance survey as indicated above, each IO visited all farmers personally; the original allottees, the highland cultivators, the lessees, the mortgagees, the tenants, the encroachers and those who cultivate on drainage areas within the hydrological area assigned to them. The contacts were originally made at each farmer's dwelling where the IO explained their mission while highlighting problems related to water management. It took about three months for each IO to complete the individual contacts. At the end of the period, each IO had met some farmers at least once and others on more than one occassion. Subsequently, more prominence was given to discussions on water management and other farming problems in general. The activity of the IO was to motivate groups of farmers along a particular field channel to organize informal discussions. In the initial phase, the IO himself acted as the convenor of the meeting. The agenda of the discussion was intended to stimulate farmers' own suggestions and activities in order to tackle the problems already identified. The need for getting themselves organized into farmer organizations was also stressed by the IO. Farmer responses to the activities promoted by IO varied within the community. The tail end farmers responded very favourably to IOs. They attended all

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2 The Irrigation profile is a description of the location of field channel network supported by a map, details of farmer behaviour relating to the nature and intensity of problems with regard to water management and farmer categories such as colonists, drainage farmers, lessees, encroachers etc.

3. Community organization profile is a description which includes the background of settlers, the type, nature and activities of community organization in the area and the leadership characteristics of the farmers.

field level meetings sponsored by the IO and participated actively in the meetings. The response of other categories of farmers such as those in head end areas of channels, encroachers, highland operators, drainage area cultivators etc. however was not good. Highland operators and encroachers usually obtain irrigation water by damming channels, cutting bunds, siphoning etc. Since the activities of farmer organizations could lead to a reduction in waste of water, it is likely that most of these categories of farmers expected difficulties for themselves. Hence, their support for the farmer organization programme was not satisfactory. On the other hand, the activities of farmer organizations would help water availability to the allotments in tail end areas. As such, cooperation of tail end farmers towards farmer organizations was better.

Although the farmer organization programme began at the same time in both Uhana and Gonagolla, there was a difference in the organizational effort between the two areas. Most of the farmers in Uhana area were aware of the forthcoming irrigation rehabilitation programme. They had earlier been made to understand by the IO that farmer organizations were a means of obtaining farmer participation for irrigation rehabilitation. Hence, the major activity of the farmer organization programme in Uhana areas was to organize farmers for design meetings, earthwork and for other matters[4] related to irrigation rehabilitation, which commenced in June 1981. Hence, some IOs could not meet all the farmers individually before they could meet as a group, as they were busy organizing farmers for rehabili-tation work.

The attendance at informal group discussionsin Uhana area was poor possibly because the IO had no time to meet each of the farmers individually and explain to them the need for forming an organization (Table 2.4)

See the discussion on design meetings, earth work, operation and maintenance work in Chapter Three.

Table 2.4 : Farmer Attendance for informal Discussions in Uhana Area During May 1981 through November 1981

Name of Channel	No. of Meetings Held	Expected Participation[a]	Actual Participation	% Participation
UB 1	6	168	86	51.19
UB 2	25	673	433	64.33
UB 3	1	37	13	35.13
UB 4	2	36	31	86.11
UB 9	10	443	177	39.95
UB 12	1	17	15	88.23
UB 15	2	62	41	66.12
UB 16	2	84	48	57.14
Total	49	1520	844	55.52

Source : IO Reports.

a. Based on the total number of farmers i.e., colonists, mortgagees, lessees, excluding drainage farmers and encroachers.

In Gonagolla area however, there was no such informal group discussions as in the Uhana area. The IOs had sufficient time to meet all the farmers individually before the commencement of physical rehabilitation work in Gonagolla. Moreover, in Uhana area the design meetings preceded the FO while in Gonagolla area they were organized after the formation of FO.

IOs met all the village level officers in the area and explained the objectives of the IOs activities.As was mentioned earlier officer-farmer relations were very poor. The IOs motivated farmers to invite village level officers to the farmer organization meetings in order to develop mutual interaction between farmers and officers. The IOs explained to the farmers, in the presence of officers, the mutual benefits and cooperation both parties can obtain as a result of regular contacts.

The activity pursued by IOs was to encourage formation of farmer groups along field channels. At initial farmer meetings guidance was usually provided by IOs who took much time in explaining to farmers the need for a leader for any group activity, roles and functions of leaders, leadership characteristics etc. Thereafter, IOs proceeded to organize group activities such as shramadana work, water rotations, channel repair work etc. This provided an opportunity for exposing and assessing the capabilities of the farmers. Such activities also helped to demonstrate to the farmers the benefits of working together.

Having being exposed to several group activities backed by continuous motivation of IOs, farmer groups selected one farmer as their spokesman or leader. The selection was done by consensus of all the members of a given hydrological area. No. of farmer group held an election to select a farmer leader. The farmer leader, more commonly known as Farmer Representative (FR) has to coordinate the group's activities, represent farmers' interests at discussions/ meetings and carry out other activities as decided by members of the organization. During the early stages of the formation of farmers' organizations, positionsof responsibility, such as those of chairman, secretary etc. did not exist. Each farmer took responsibility togehter with the FR to carry out group activities. Several organizations have subsequently appointed office bearers such as President, Secretary etc. Large farmer groups had the area of authority divided among smaller groups. In such cases 2-3 farmer representatives have been selected. In the division of the hydrological boundary, one sub-group was made responsible for head, another group for middle portion and so on. By this measure an attempt was made by farmers to preserve group cohesiveness.

Some farmer groups however were not able to select their representatives because too many members made the securing of a 'consensus' difficult. Some other groups had few members but lengthy channels made it difficult for them to clear and maintain regularly. Although they had selected representatives, the group activities were not satisfactory, since farmers found it difficult to cope with the heavy maintenance work load of

lengthy channels. Members of such organizations therefore had the impression that these representatives were not any different from the leadership of traditional village organizations, such as Death Donation Organizations etc. Such problems arose only in specific hydrologic areas. In such cases, IOs continue to motivate farmers to find their own solutions

The first farmer organization was formally established in May 1981, in the tail end of G. 5. Since then the number of farmer organizations have gradually increased and it reached the peak of 96 by November 1981. (Fig. 2.2). The lines AB and BC in the Figure denote the formation of farmer organizations in Uhana and Gonagolla areas. The line CD shows the pattern of formation of farmer organizations in Weeragoda area with the fielding of second batch of IOs in September 1982. Note that the points of curvature of lines AB, BC, CD and DE represent the time of fielding of IOs.

The first farmer organization meeting in each of the channels was organized by the IO as farmers had no prior experience in this regard. The responsibility was gradually transferred to the FR from the IO and the appointments of RRs were made after the formation of field channel organizations. The members met together depending on the intensity of field level irrigation, agricultural and agrarian problems. It should therefore be noted that some organizations had to meet regularly while others less frequently. Farmer attendance for regular meetings was very much better than in the case of previous informal meetings both in Gonagolla and Uhana areas. (Table 2.5 and 2.6). Attendance for meetings in Uhana area is 80% and 83% during 1981 and 1982 respectively. In the Gonagolla area, although the attendance was 87% in 1981, it went down to 67% in 1982. The reason for dwindled participation in Gonagolla area in 1982 is due to the declining farmer interest towards farmer organizations. According to the original schedule, the physical rehabilitation was expected to begin in 1982 in the Gonagolla area. The IOs explained to farmers the need to be organized before the commencement of the rehabilitation programme.

FIG. 2.2 : Progress of the formation of Farmer Organizations

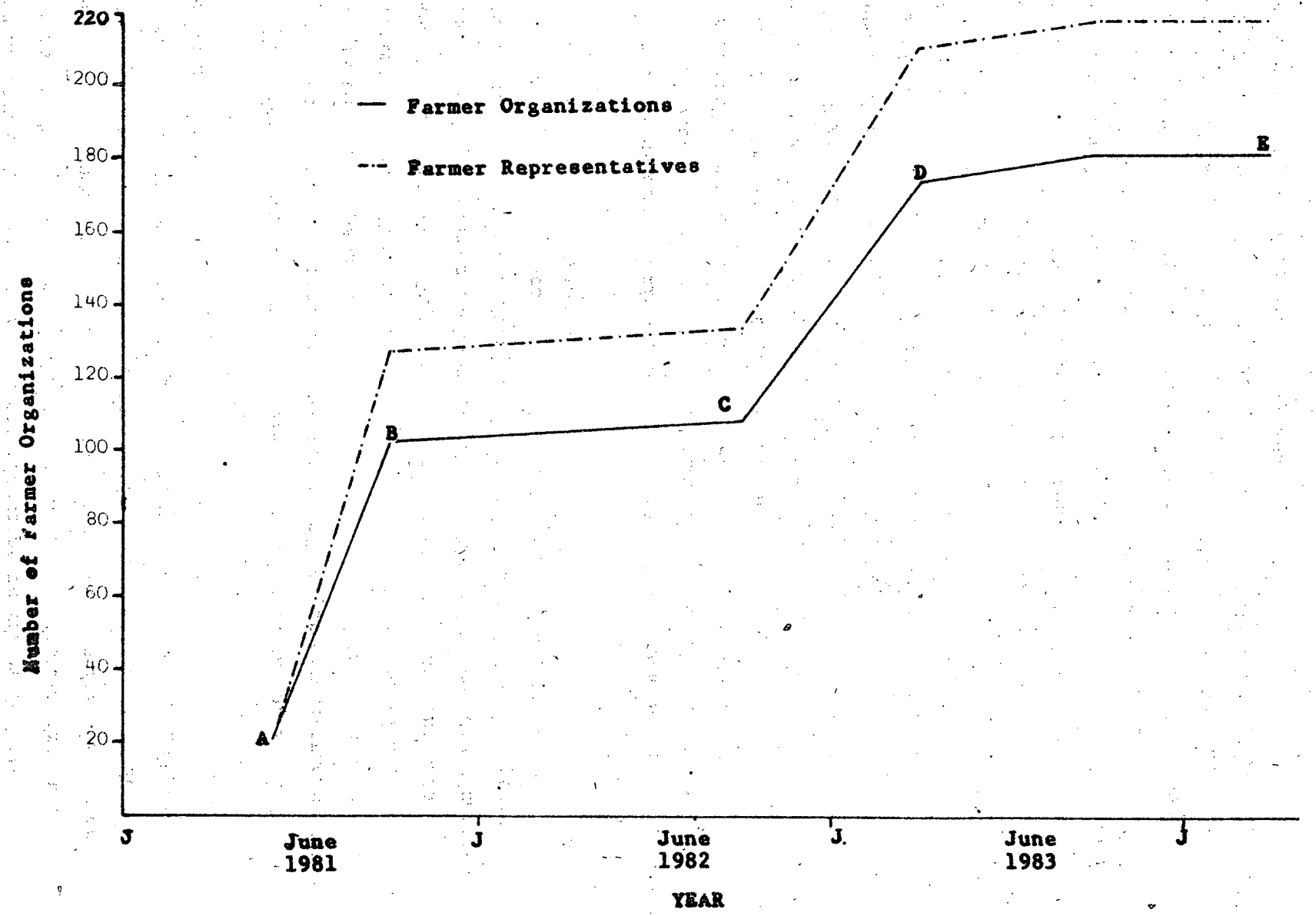


Table 2.5 : Farmer Attendence at Farmer Organization Meetings in Gonagolla Area During 1981 through 1982

Time Period	Channel Name	No. of Meetings Held	Expected Attendence	Actual Attendence	%
May 1981 to December 1981	G 1	4	85	70	82
	G 3	15	253	220	86
	G 5	3	64	55	85
	LB 29	7	102	94	92
	LB 30	1	15	15	100
TOTAL		30	519	454	87
January 1982 to October 1982	G 1	2	41	30	73
	G 3	7	130	103	79
	G 5	7	279	160	57
	LB 29	5	110	77	70
	LB 30	2	30	26	86
	LB 31	2	-	-	-
	G 9	1	-	-	-
TOTAL		26	590	396	67

Table 2.6 : Farmer Attendence at Farmer Organization Meetings in Uhana During 1981 - 1982

Time Period	Channel Name	No. of Meetings Held	Expected Attendence	Actual Attendence	%
May 1981 to December 1981	UB 2	30	519	401	77
	UB 7	4	53	49	92
	UB 9	13	233	174	74
	UB 11	1	-	-	-
	UB 12	9	95	93	97
	UB 14	1	15	15	100
TOTAL		61	953	768	80
January 1982 to October 1982	UB 1	1	40	18	45
	UB 2	50	723	623	86
	UB 7	1	11	10	90
	UB 9	5	96	72	75
TOTAL		57	870	723	83

However due to various reasons, the programme fell behind schedule and farmer interest in organizing themselves also began to erode. This is seen in the low levels of activity of the farmer organizations, declining attendance of members etc.

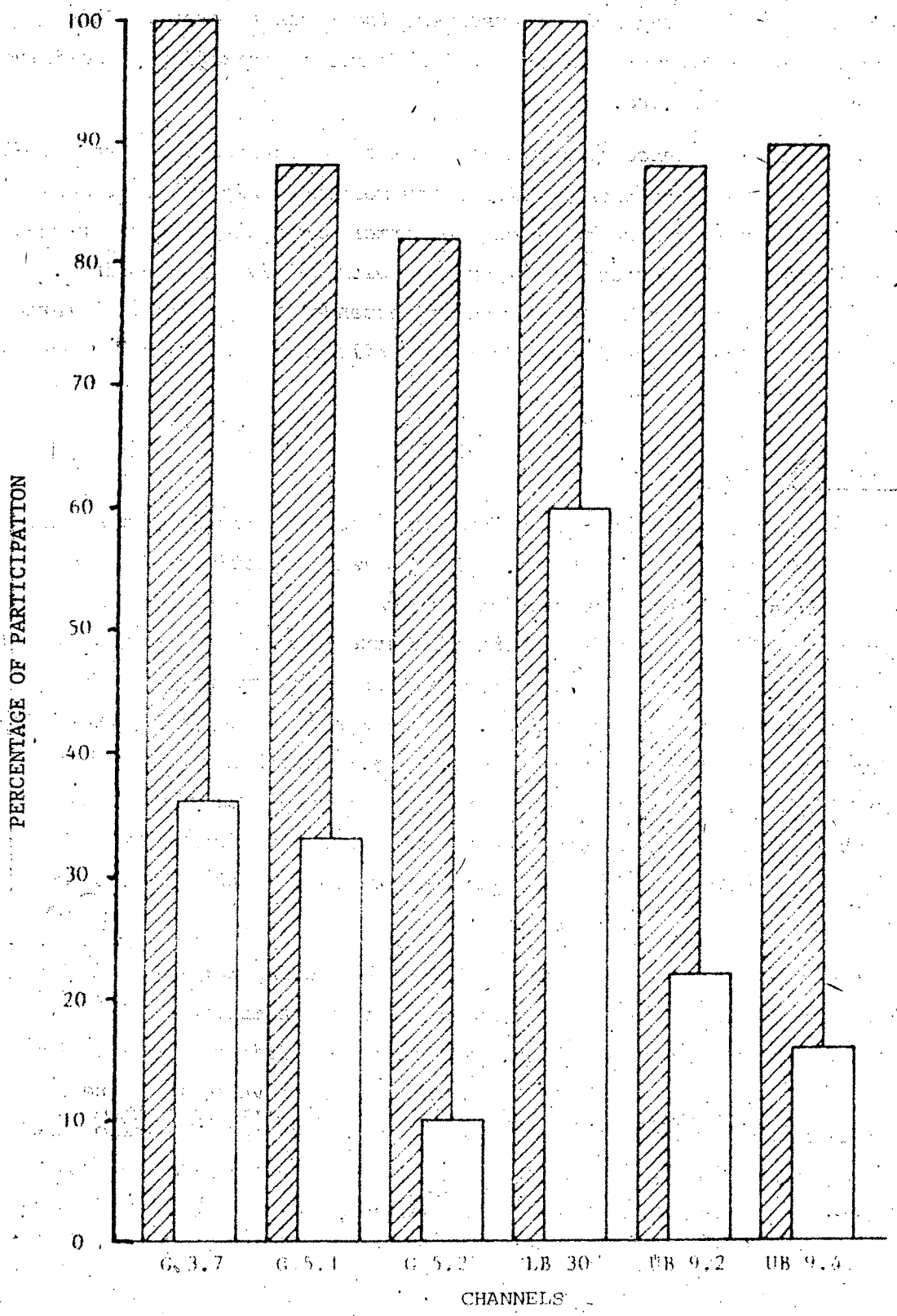
Overall farmer attendance at farmer organization meetings is substantially higher than at the traditional cultivation meetings (Figure 2.3). This difference is explained by the fact that farmer organizations have produced some benefits to the farmers when compared with cultivation meetings. It must be noted that the lowest level of attendance of farmers at farmer organization meetings was little over 80% while some organizations have shown 100% farmer participation.

2.4 Farmer-Officer Meetings

During 1981 a regular system of discussions was established between the FR and officers together with IOs. The two main objectives of these meetings were to promote interaction between the FR and the officer, and to discuss field level problems requiring attention. This system was not envisaged at the time the farmer organization programme was launched but evolved from the farmers themselves. The IO was involved in the organization of first farmer-officer meetings in his area. This later became the responsibility of the farmer representative. Monthly meetings were organized for each Technical Assistant's area which is usually 5000 acres. The meetings were usually held at a central place such as the TA's office and were attended by most of the FRs.

The category of officer to be invited for the meeting depended on the question at hand. It was decided by the farmers themselves depending on the problem requiring solution. Accordingly, officers of all relevant government departments such as ID, AD, DAS, CD, PMB have been invited on different occasions. The nature of these meetings was different in the Uhana and Gonagolla areas. At Uhana the pilot area was comparatively larger than Gonagolla and had 2 Agrarian Services Divisions, 2 Agricultural Extension Divisions, and 2 Irrigation

Figure 2.3



Distribution of Farmer Participation at Cultivation Meetings and at Farmer Organization Meetings by Channels in Yala 1981

Participation at Farmer Organization Meetings

Participation at Cultivation Meetings

Maintenance Divisions. As such officers in Uhana could not meet farmers as frequently as at Gonagolla which is a smaller area. Hence the system of meetings in Uhana area was based on distributary channels, where the meetings were attended by FR of the several distributaries.

The co-ordinating meetings were conducted in a very cordial mannerwhere both officers and FRs have benefited. Some officers who were blamed by the farmers prior to the introduction of the farmer organization programme, became friendly with them after the co-ordinating meetings. The attitude of the officers towards farmers also underwent a change as they began to understand that farmers are a rational and trustworthy group of people. Hence the monthly meetings became a forum for changing the attitudes of officers as well as of farmers.

The co-ordinating meetings between the FR and the officers have produced many benefits, some of which are discussed below:

(a) Repairs to Structures Along G 5 Distributary

Three structures along G 5 were damaged by farmers prior to the commencement of the FO programme. At one of the Co-ordinating meetings, the FRs drew the attention of the officers to the damaged structures and urged the ID to repair them. The ID officials (the Maintenance Overseer) and the Technical Assistant agreed to undertake the repair work. When asked as to why they did not attend to such matters for such a long time inspite of frequent appeals by farmers, the ID officials replied thus: "It was farmers who broke the structures and there will be no assurance that protection will be afforded to them even in the future when they are repaired by the ID. But now we (the ID) can assure that the structures are protected by the FO. Secondly there would also have been the possibility of allegations being made of improper use of funds had the ID repaired them. When FO agreed to repair them, there will be no room for such allegations" Subsequently, the repairs were effected.

The ID supplied the materials and did the technical supervision while the farmer organization provided free labour. This case reveals that the officers have changed their attitudes in favour of the FO.

(b) The LB 29 Case

The bund of LB 29 tail end was subject to flood damage in every Maha season. The Id had not been able to carry out repairs inspite of fequent complaints by farmers. This was discussed at one of the FR-Officer meetings and the ID agreed to construct a permanent structure resistant to flood damage. In this case also the ID provided materials and technical supervision while the FO supplied free labour.

In addition to the repair work mentioned above, the ID officials also agreed to keep the key of the distributary gate in G1 with the FO. In G 3.7, the FO erected a wooden gate at their own expense in order to facilitate water flow to the tail end of G 3 distributary.

(c) Extension Work

Consequent on a request made by FR, the Agricultural Department (AD) agreed to channel agricultural extension work through FO. The Agricultural Instructors (AI) of the AD approached the FO in G 3, G 5, UB 7, UB 2 etc. in order to carry out extension work. This facilitated not only the work of extension officers but also the dissemination of information in an effective manner.

(d) Agricultural Credit Scheme

Because of the better relations with officers some FOs in Gonagolla area negotiated a credit scheme with the Divisional Officer of the Agrarian Services Centre (ASC). The farmers were requested to deposit some cash and the ASC agreed to disburse twice the amount deposited as credit, within any season. A total of 150 farmers benefited from this scheme.

CHAPTER THREE

3. PERFORMANCE OF FARMER ORGANIZATIONS

As was explained earlier, the Farmer Organization (FO) Programme is one component of the rehabilitation of Gal Oya Scheme. By forming farmer organizations, it was intended to obtain farmer participation for (a) re-designing of the system, (b) system construction work, (c) operation work of the system, and (d) maintenance work of the system. This chapter discusses the performance of FOs with regard to each of the above activities.

3.1 Farmer Participation in System Design Work

Farmer participation in the design phase involves farmer consultation to secure their participation at the time of planning the irrigation system. By consulting the farmers it is expected to incorporate local hydrological knowledge of the farmers into the design plan so as to ensure the quality of designwork at field channel level This is a matter of high priority because the knowledge and experience of local hydrology available with the farmers can be harnessed for designs work. Farmer consultation is also necessary as they could provide useful insights into functioning of irrigation structures so that avoidable errors in designs work could be eliminated. Getting farmer participation in the design process also serves other useful purposes. Firstly, if farmers are associated at the stage of planning, they will get the feeling that the system belongs to them and they will be motivated to afford protection to the structures constructed. In Gal Oya it was found that most of the structures were damaged by farmers either due to their ignorance or due to deliberate attempts at obtaining more water.

Moreover, because of lack of awareness of functioning of structures, farmers had the impression that structures are erected to control but not to provide water. Thus they break structures. To cite an example of the severity of the problem, the reconnaissance survey carried out in the latter part of 1979 by the ARTI indicated

that in one branch channel, 25 out of the 27 gates installed had been purposely damaged or broken. Most of such willful damages can be prevented by educating farmers on the purpose and functioning of the structures.

Design Meetings: In order to get farmers involved in design work and incorporate their local hydrological knowledge into the design plan, design meetings were organized. A design Meeting is a discussion/consultation between irrigation engineer and farmers at field chanrel level. The IO facilitated design meetings through farmer organizations. In areas where farmer organizations have not been formed, the convening of design meeting was conveyed to all the farmers along the respective channels by the IOs.

The first approach to design meetings was to meet farmers with the Irrigation Engineer assisted by the Technical Assistant/s to discuss design requirments of a particular field channel. At these meetings, farmer representatives highlight the present status of the channel and its hydrological characteristics requiring attention. The design meetings were organized during the second half of 1981 and continued through the first half of 1982. In order to improve clarity of design suggestions made by the farmers, the ID suggested a change in the approach of the design meetings. The second approach outlined below commenced operating around April 1982.

Under this approach, the Irrigation Engineer walks along a field channel along with the farmer group, observing defects of the system at field channel level and discussing possible solutions. The farmers groups indicate specific local hydrological problems to the engineer who notes them for consideration. Farmers also suggest their requirments such as foot bridges, buffalo wallowing pits, bathing places, etc. for erection at appropriste places, in order to avoid possible future damage to the system. Some of the specific suggestions made by farmers deserve presentation. UB 8A, which is a new distributary channel, was constructe entirely on the farmers' suggestion.

The original design of turnout structure at UB 7.5 was changed by the engineers on farmers' suggestions. The new structure at M 5.2 was also reconstructed incorporating farmers' suggestions. For instance, farmers pointed out some practical problems with regard to the functioning of structures that were being constructed at M 5 and UB 16. However, irrigation engineers indicated that farmers' suggestions would be incorporated after testing the first water issue. Later, the engineers were convinced that the particular sturctures prevented the flow of water down the stream. The enginners re-constructed the structures incorporating farmers' suggestions. The structures gave no further trouble. Some of the structures and design plans were also changed according to the farmers' suggestions after they were completed. As examples, UB 4.1, UB 7.4, UB 6 tail, UB7.2, UB 7.3.1 could be cited.

Table 3.1 shows that farmer participation for design meetings in Uhana areas has been over 85%. For instance, 9 out of 11 design meetings held during the period April 1981 through June 1981 showed 100% farmer participation. It was also observed that some farmers outside a channel's command area also attended design meeting meetings through curiosity because such a dialogue between the farmers and the engineer had not taken place earlier at field channel level in Gal Oya. However, the percentage of attendance shown in the table covers only the farmers who were expected to attend the particular design meeting.

The high rate of farmer participation in design meetings can be attributed to three reasons. Firstly, in Gal Oya there had not been such dialogue at field level between the engineers and the farmers since the inception of the scheme. The new system of contact created interest among farmers who attended design meetings in order to observe the outcome.

Secondly, the programme of rehabilitation occurred at a time when farmers experienced many problems with regard to irrigation water. The message that the project expected to rehabilitate the scheme created great interest among farmers who participated in design meetings in order to make the rehabilitation programme a success.

Thirdly, the efforts made by the IOs to convince farmers of the importance of design-meetings also contributed to the high rate of farmer participation

Table 3.1 : Farmer Participation at Design Meetings by Time Period in Uhana Area 1981 April to March 1982

Time Period	No. of Meetings	Farmer Participation		
		Expected [a] participa -tion	Actual Participa -tion	Percentage
April 1981 to June 1981	11	333	327	98
July 1981 to September 1981	05	112	102	91
October 1981 to December 1981	-	-	-	-
January 1982 to March 1982	06	84	72	86

a. Expected participation is calculated on the basis of operators cultivating allotments and does not include highland cultivators, encroachers or drainage cultivators.

3.2 Construction Work

The farmer groups were expected to carry out construction work such as filling field channel bunds, doing earthwork for road bunds etc. While the ID undertook to install or re-construct irrigation structures at field channel level. The ID also under-took to provide technical advice on earthwork to farmer organizations. Where the construction work involved was heavy, the farmer organizations were provided with tractors by the ID for transport of earth. The farmer organizations provided free labour of their members not only for construction work with regard to field channels but also for some of the distributaries whenever the latter fell within the area of responsibility of farmer groups. Table 3.2 shows the amount of earth work done by farmers during 1981 through September 1983.

Table 3.2 : Rehabilitation Work

Period : 1981 - 1983 November
Area : Uhana

	Channel No.	Length of the Channels (Km)	Nature of Work	No. of Partici-pants	Man Hours	Gross Value (Rs.)	Percentage Completed	Remarks
1.	UB 1, 1.1.A, 1.1, 1.A	5.225	Earthwork/ Bund Filling	363	3733	18665	65	F/D Channel
2.	UB 2.1, 2.1.3, 2.3, 2.3.1, 2.3.2., 2.6	2.963	Earthwork	204	1041	5205	93	F/D Channel
3.	UB 3, 3.A	1.73	Desilting and Earthwork	102	584	2920	95	F/D Channel
4.	UB 4.1, 4	1.83	Earthwork	29	183	915	47	F/ Channel
5.	UB 5, 5.1	1.17	Earthwork	54	411	2055	95	F/ Channel
6.	UB 6	1.1	Earthwork	13	91	455	40	D/ Channel
7.	UB 7	3.396	Desilting/ Bund Filling	105	521	2605	75	D/ Channel
8.	UB 8.1	0.5	Earthwork	7	42	210	20	F/ Channel
9.	UB 9	7.595	Earthwork/ Bund Filling	119	852	4260	64	D/ Channel
10.	UB 10, 10.1	3	Desilting and Earthwork	47	342	1717	30	F/ Channel
11.	UB 12	7.985	Bund Filling/ Desilting	235	2228	11140	54	D/ Channel
12.	UB 14.1, 14.2, 14	1.223	Bund Filling/ Desilting	32	182	910	43	F/ Channel
13.	UB 15, 15.1	1.775	Earthwork	66	428	2140	45	F/ Channel
14.	UB 16, 16.1	1.6	Earthwork	210	1085	5425	65	F/ Channel
15.	Velikahagolla B	0.560	Earthwork	9	72	360	40	F/ Channel

Source : IO Reports.

Gross Value of Labour Rs. 59355/-.

Farmer participation for earthwork in some field channels, namely UB 1.1, I.1A, 2.2, 2.8, 2.11, 7.8, 8.1, 10.1, and 11 fell short of expectations, where 50% of the work remains to be done. Several reasons can be attributed for this delay. Firstly, some field channels had too much earthwork to be handled by farmer organizations with 2-4 members. Secondly, the membership of some organizations comprised largely of non-settlers such as lessees, mortgagees, etc. who were not willing to put much effort into the rehabilitation work. For instance, 75% of the original command area of the channel was cultivated by mortgagees who would not participate in rehabilitation work while the 25% of farmers who were members of the organization found it extremely difficult to accomplish the entire job. Thirdly the ID was not able to commence construction work as agreed upon. Hence, some farmer organizations gradually became indifferent and withdrew their support.

In addition to direct involvement with construction work at field channels, some farmer groups on their own initiative also undertook to supervise the quality of the work of contractors engaged by the ID.

3.3 Operation of the System

System operation refers to the preparation of a water distribution schedule setting out the dates, types, numbers and length of water issues, in respect of each sub-system and the implementation of this water distribution programme. The latter includes water distribution down to the field channel level which is the function of the water authority, namely the ID. Water distribution within the field channel is the responsibility of farmer organizations. For effective operation of the system it is necessary that farmers should be involved both in the preparation of the water calendar and the implementation of the water distribution programme within the field channels. This section describes the involvement of farmer organizations in field channel water distribution activities.

At its inception, the Gal Oya scheme had a continuous system of water issue where water was sent along branch, distributary and field channels simultaneously. The system was made rotational following severe water shortages after 1970. Rotational issues were expected to conserve as much water as possible. The rotational syste, however, posed many problems with regard to water distribution.

Firstly, the heavy discharge of water during a rotational issue frequently eroded the head end distributary bunds.

Secondly, the lack of control, structures and absence of gates made water control within a distibutary unmanageable. This resulted in most of the water entering head end allotments, leaving little or no water for tail enders during any particular water rotation. The difference in distribution of water was aggravated by lack of cooperation between head and tail enders, which invariably resulted in the farmer category receiving most of the water within a rotation. The head enders were not always free of water difficulties. Tail enders might manipulate the flow of water in the head area by channel crossing, cutting dams, closing pipe inlets of head enders etc. The difference in accessibility to water resulted in a growing social/economic disparity between the two categories of farmers[5].

Thirdly, the hydrologic complexities of some channels such as the presence of storage tanks within a distributary seriously affected the flow. In such distributaries water might be received at the tail end only on the last day of the main rotational issue. This created many problems for tail end farmers.

Fourthly, all farmers attempted to obtain water simultaneously during a particular water issue. This resulted in rigorous competition among farmers for water allocation and powerful farmers managed to get most of the water. Other farmers had to stay up at night in order to get water deliveries at night.

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5 Source : Process Documentation Reports

Fifthly, there was a growing intensity of water piracy such as illegal water diversion, water theft, damming the channel etc. manipulated by drainage farmers and encroachers particularly during the Yala season. The change over to the rotational issues aggrevated these problems and some of the regular allottees suffered heavily.

Becasuse of these problems it became necessary to adopt rotations within or among field channels during the main water rotations so as to increase equitable distribution of water.

Some farmers in the middle part of the scheme had adopted farmer water rotations on the field channel on their own even before the formation of farmer organizstions. However, there is no evidence that farmers in the head end and/or the tail end areas of the system had adopted water rotations before the introduction of the farmer organizations programme.

3.4 Types of Farmer Water Rotations

The farmer organizations have successfully implemented several types of water sub-rotations within the main rotational issue implemented by the ID. In each case the type of rotation was chosen and implemented entirely by farmers themselves while the IOs facilitated the process by conveying messages to the officials and to the farmers. From the ID's point of view, a good water rotation requires that tail enders should get water first to ensure that they get adequate water. However, the activities of farmer organizations show no single methodology through which water should be distributed among all farmers. The system of delivery is essentially a response to the characteristics of the channels, its location within a branch channel and other local hydrological factors. The objective of the water rotations adopted by farmer organizations was to facilitate equitable distribution of water among all allotments along a particular field channel. With this motive several types of water rotations have been implemented by farmer organizations as shown below.

Tail-first Rotation

Many farmer organizations carried out rotations where tail allotments were given water first. Subsequently, the head end farmers of the channel had their turn. This resulted in an assurance of water for the tail enders who subsequently did not interfere with water allocations in head end areas as was the case before the commencement of the farmer organization programme. Hence, head enders too were assured of water without trouble. Among the organizations which implemented 'tail-first' water rotations are FOs of LB 29 and G 3.

Head-first Rotation

According to this rotation, the head enders are allowed to obtain water first, followed by tail - enders. This was practised in channels such as UB 17 where structural complications exist. For instance, UB 17, and G 5 D-channels have a series of sub-tanks along their length and it takes 2-3 days for water to reach the tail-area after having filled the storage tanks upstream. Under such circumstances, if water was sent to the tail end first, it is likely that the tail end farmers would get satisfactory water within the main water rotation.

Distributary Channel Water Rotation

Some organizations did not practise any rotation based on the field channels; but they participated in water rotations based on the distributary channel. According to this system, each field channel along a particular distributary is given a specified time of about 2-3 days during which it should get water.

During the rest of the time, it will be kept closed while other channels will get water. The time of delivery for all the channels is caluclated in such a ways so as to accomodate them within the main water rotation of the ID. Examples where such water rotations have been adopted are UB 2, UB 7, G 1 and M 5.

Table 3.3 : Farmer Water Rotation by Channels

Time Period	Channel	No. of Organizations Adopting water Rotations	Participation
1982 Yala	Gonagolla Area		
	G 5	2	-
	LB 29	4	Over 75%
	Uhana Area		
	UB 2	5	Over 75%
	UB 5	1	Over 50%
	UB 6	2	-
	UB 7	1	-
	UB 8	2	Over 75%
	UB 9	3	Over 75%
	UB 10	2	Over 75%
	UB 15	3	Over 75%
	UB 16	1	Over 75%
		20	

Participation rate is defined as : $\frac{\text{No. Participated}}{\text{Total No. of Farmers}}$

Table 3.4 : Farmer Water Rotation by Channels

Time Period	Channel	No. of Organizations Adopting Water Rotations	Participation
1981 Yala	Gonagolla Area		
	G 1	2	Over 75%
	G 3	3	Over 75%
	G 5		
	LB 29	4	Over 50%
	LB 30	1	Over 75%
	Uhana Area		
	UB 1	4	Over 50%
	UB 2	17	Over 75%
	UB 3	1	Over 75%
	UB 4	4	Over 75%
	UB 5	1	Over 75%
	UB 7	4	Over 75%
	UB 8	2	Over 50%
	UB 9	9	Over 75%
	UB 10	2	Over 75%
	UB 15	3	Over 75%
	UB 16	2	Over 75%
		49	

3.5 Channel Closure for Saving Water

This involves the closure of the main gate of the distributary or field channel after receiving adequate water for the allotments within its command area. The objective of this system of distribution which can be implemented in a relatively short distributary of in the field channels, is mainly to save water rather than to rotate. For example, the G 1 farmer organization took only three days of water out of five day main rotation during 1981 and 1982. The channel was closed during the remaining two days of the main rotation, thus saving water to be used in the down stream area.

The short term benefits of water rotations effected by farmer organizations are most encouraging. Some tail end allotments along LB 29, G 5, M 5 and UB 9 which were not cultivated for 7-8 consecutive Yala seasons have been brought under cultivation subsequent to water savings effected in head end channels. Fig. 3.1 whows the distribution of the land brought under cultivation subsequent to the water rotation programme along M 5. It is estimated that the area cultivated along M 5 during Yala season is approximately 1001 acres.*

The other immediate benefit is the reduction in the illegal activities of farmers in water distribution. This includes illicit water diversions, bund breaking, water quarrels, complaints to government officials etc. Table 3.5 compares water related disputes prior to the formation of farmer organizations (1980 Yala) and after (1983 Yala) in respect of four distributaries. In UB 12, the number of disputes was only 6% in 1983 Yala compared to 1980 Yala. Similar trends appear in other channels as well. The disputes in G 16 where IOs were fielded during the latter part of 1983 should also be noted. Farmers were also able to save much or their crop during water shortages during the 1981 Yala season due mainly to water rotations and water management programmes. Because of these benefits the farmers themselves requested the officers at the 1982 Yala Kanna Meeting at Werandetagoda to bring the rest of the LB area under the farmer organization programme.

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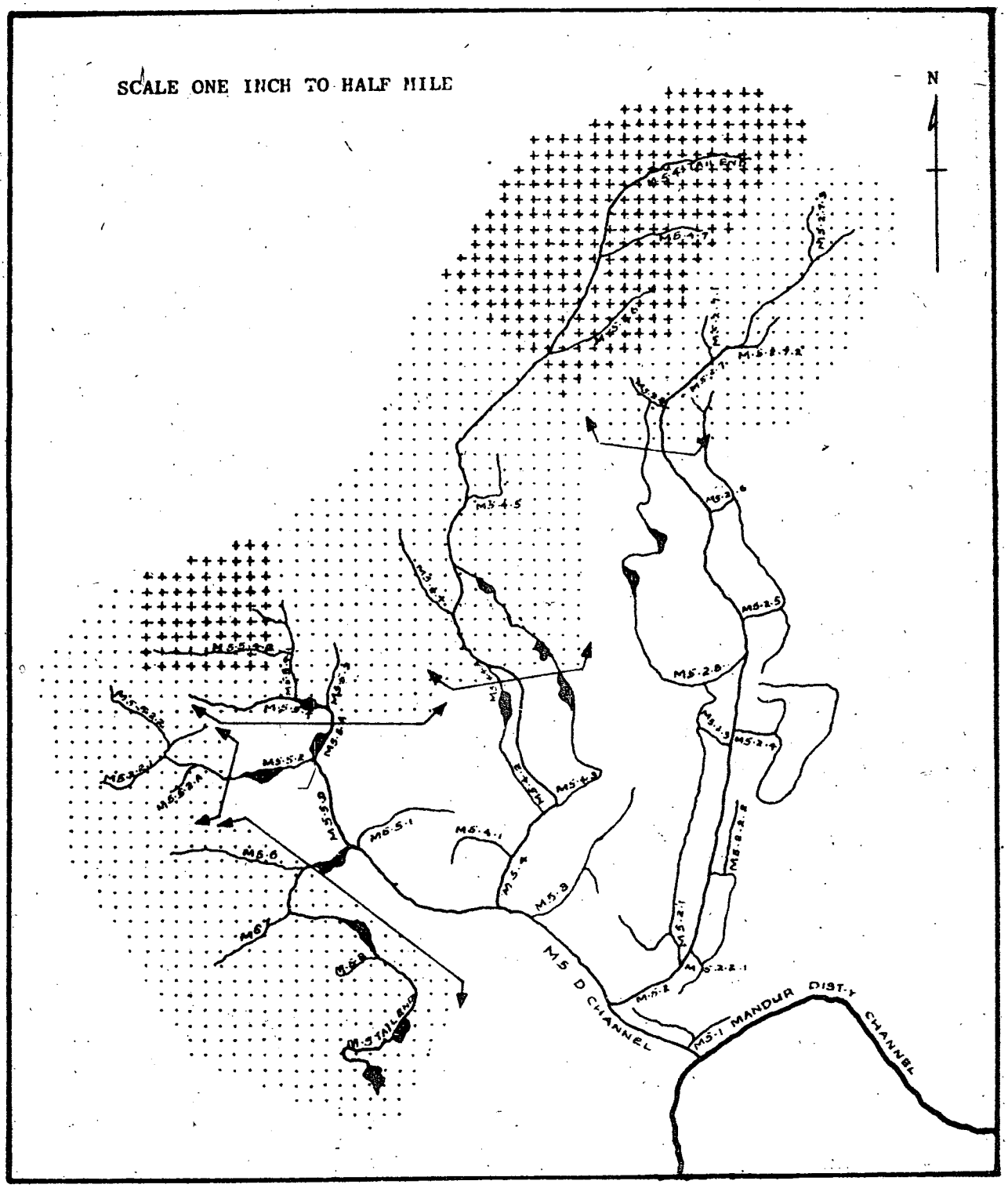
* See Annex 1.

Figure: 3.1



DISTRIBUTION OF UNCULTIVATED LAND DURING YALA SEASONS

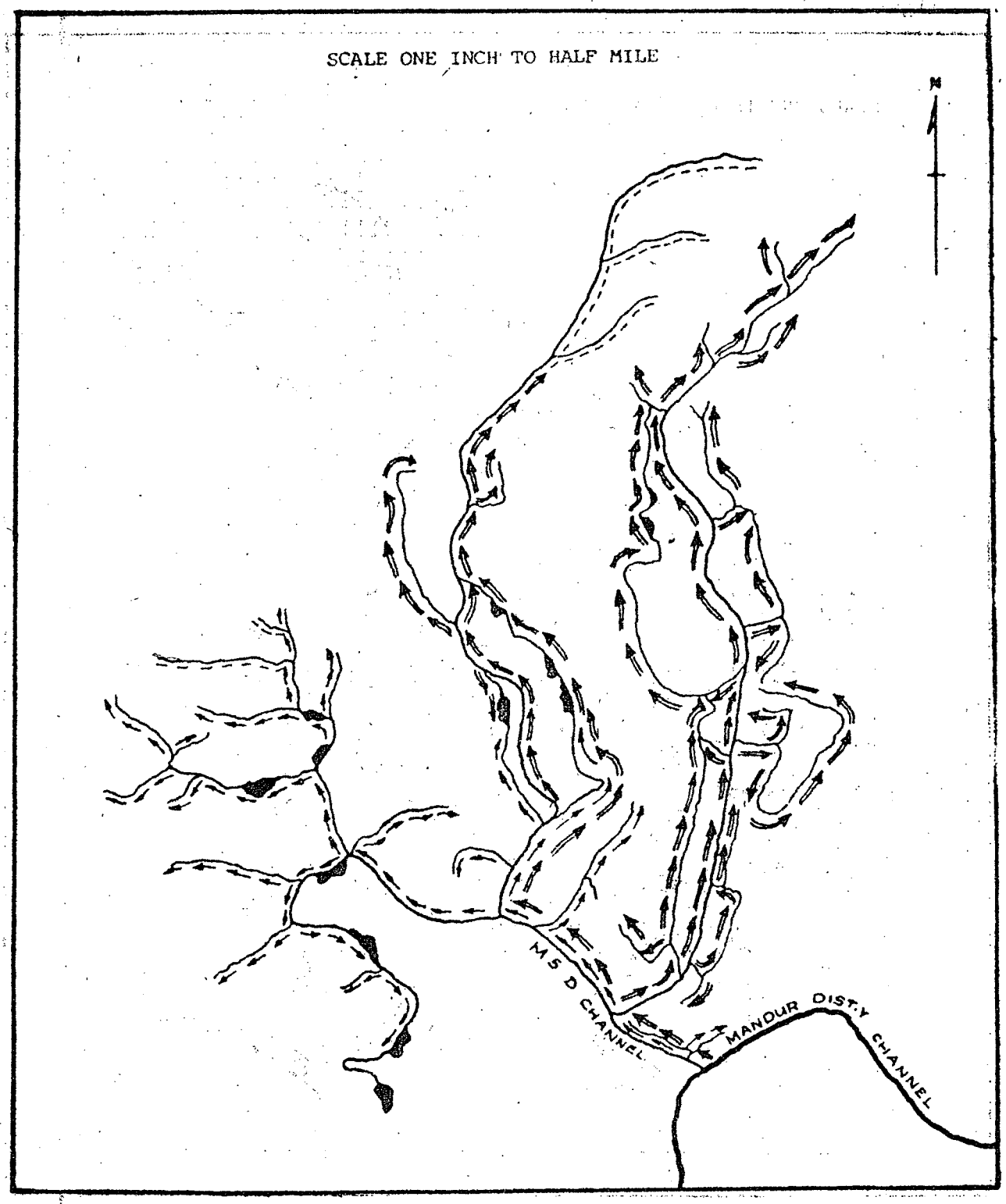
ALONG M-5 DISTRIBUTORY

Area uncultivated due to lack of irrigation water

Small storage tanks

Area uncultivated due to lack of irrigation water and proper maintenance.

Figure: 3.2



OPERATION OF FARMER WATER ROTATIONS ALONG M-5 DISTRIBUTORY CHANNEL (IN 5 DAY MAIN ROTATION)

- First two days water rotation
- Second three days water rotation
- Continuous flow
- Abandoned field channels/drainage area
- Small storage tanks.

Table 3.5 : Water Disputes by Districutary Channel (No. of Reported Incidents)

	Before Farmer Organization Programme Yala 1980 - Nature of Disputes				After Farmer Organization Programme Yala 1983 - Nature of Disputes			
	Illicit Water Diversion	Bund/Door Breaking or Channel Crossing	Quarrel Between Farmers	Complaints to Govt. Officers	Illicit Water Diversion	Bund/Door Breaking or Channel Crossing	Quarrel Between Farmers	Complaints to Govt. Officers
1. UB 12	20	7	4	0	2	0	0	0
2. LB 29	12	20	1	2	2	3	4	3
3. UB 2[a]	0	8	0	0	0	9	1	1
4. G 16[b]	*	*	*	*	18	25	5	14

[a] It should be noted that many of the FOs are not effective in this canal.

[b] Farmer Organization work commenced only at the second half of Yala 1983.

* Not available.

Source : IO Reports.

Some constraints affecting farmer water rotations should be mentioned here. The success of water rotations is dependent on the nature of the main water rotation adopted by the ID. During 1981 and 1982, the main problem which affected farmer water rotations was the farmer's uncertainity about when water would actually be delivered. Although farmer organizations have lodged several requests for definite information, it was not provided by the ID. Hence farmers planned water rotations based on secondary sources of information which created much confusion and dissatisfaction among farmers. In some cases, organizations were provided with the calendar prior to the implementation of water rotations. However, many changes have been made without advance notice causing much trouble to farmer organizations. In still other cases, the calendar has been sent but not received by organizations. Because of the communication gap between the ID and farmer organizations, some water issues arrived even in the night and farmers had much trouble in organizing successful water rotations. After developing "some personal contacts" between farmer organizations and selected officers, the communication gap was partly bridged. However, when the officers were transferred the system of communication was disrupted.

The second problem arose due to the activities of farmers operating relatively large holdings illegally, and due to highland cultivators and encroachers obtaining water without entitlement, thereby thwarting the effeort of water rotations adopted by farmer organizations. The illegal farmers were in trouble as water was allocated only for lowland allotments and drainage water was thus to be minimal. Therefore, the illegal farmers began to carry out subversive activities in order to disrupt the water rotation. In 1981 Yala season, drainage farmers reacted strongly against the activities of the farmer organization programme and damaged the bund of LB 29 distributary's tail end twice, during the night. However, this can not be eliminated unless a lasting solution is found for drainage/highland/encroachment farmers.

The third problem was brought about by Yaya Palakas of the Department of Agrarian Services. This problem arose not because of any shortcomings of the farmer organization programme but because of the conflict for leadership between Yaya Palaka and the farmer representatives. The new farmer representatives were able to solve some complicated problems relating to water distribution at the field channel level which the Yaya Palakas had unsuccessfully attempted to solve for a considerable period of time, Therefore, the farmer organizations (and also farmer representatives) were more popular among farmers and were assumed to be a potential threat to Yaya Palakas who continued to receive salaries without performing a useful job. In retailiation, some Yaya Palakas have attempted to confuse water rotations and in one instance, farmers caught one Yaya Palaka trying to open a pipe inlet at night which had to be closed. Such activities have thwarted the efforts of water rotations by farmers.

3.6 Systems Maintenance

Maintenance activities involve clearing of channels to effect better water flow and effecting repairs to irrigation structures, dams etc. and protection of the structures against damage. This section examines the participation of farmer organizations in maintenance activities..

Channel Clearing

In terms of the Irrigation Ordinance, the Irrigation Department is responsible for maintenance activities of branch, distributary and field channels up to a certain limit. Clearing of field channels becomes the exclusive responsibility of farmers. Field channel clearing has not been properly attended to by farmers as there was no effective mechanism to organize regular clearing. Some farmers would just clear the area adjoining his allotment. In other areas some Yaya Palakas dividded the channel among a few farmers and made them responsible for clearing work. However, Yaya Palaka were not in a position to get the channels in their area of authority cleared. At kanna meetings, decisions were

made to punish those who do not clear field channels. However, such decisions were hardly implemented. With the help of Institutional Organizers, farmer groups took up the clearing of field channels and in some cases even beyond therequired limits, with Shramadana (cooperative labour). Later farmer organizations accepted field channel clearing as a legitimate function of the group and carried out the work every season since March 1981. Farmer organizations have even continued to clean some of the distributary channels, which have not been cleared by the Irrigation Department due to financial limitations The Irrigation Department provided the technical guidance to farmer organizations in the clearing of distributary channels.

As shown in Table 3.6 and 3.7 an average of 56 shramadanas per year have been performed by farmer organization in the pilot area since 1981, Yala season. The total value of such activities amount to Rs. 96786.40

Field level officers such as Jala Palaka, KVS, and COO have also participated in shramadana work together with farmers. This had also encouraged better interaction between farmer organizations and officers. Much of the shramadana work was organized by farmer representatives themselves in 1982 following the reduction in the number of IOs.

Table 3.6 : Shramadana Activities in Gonagolla During 1981 through 1983

	Period	No. of Shramadana	Man Days	Value in Rupees*
1981	1st March 1981 to 31st May 1981	-	-	-
	1st June 1981 to 31st August 1981	12	209	8380.00
	1st September 1981 to 31st October 1981	18	344	13760.00
	TOTAL	30	553	22140.00
1982	1st January 1982 to 31st March 1982	8	257	10280.00
	1st April 1982 to 30th June 1982	1	16	640.00
	1st July 1982 to 30th September 1982	-	-	-
	1st October 1982 to 31st December 1982	15	166	6646.40
	TOTAL	24	439	17566.40
1983	1st January 1983 to 31st March 1983	-	-	-
	1st April 1983 to 30th June 1983	4	32	1285.00
	GRAND TOTAL	58	1024	40991.40

* Cost of male labour day was taken as Rs. 40/-.

Table 3.7 : Shramadana Activities in Uhana During 1981 through 1983

	Period	No. of Shramadana	Man Days	Value in Rupees*
1981	1st March 1981 to 31st May 1981	4	76	3040.00
	1st June 1981 to 31st August 1981	31	445	17820.00
	1st September 1981 to 30th November 1981	7	95	3820.00
	1st December 1981 to 31st December 1981	5	54	2190.00
	TOTAL	47	671	26870.00
1982	1st January 1982 to 31st March 1982	22	258	10320.00
	1st April 1982 to 30th June 1982	18	183	7320.00
	1st July 1982 to 20th September 1982	5	90	3600.00
	1st October 1982 to 31st December 1982	8	102	4080.00
	TOTAL	53	633	25320.00
1983	1st January 1983 to 31st March 1983	4	47	1880.00
	1st April 1983 to 30th June 1983	5	43	1725,00
	TOTAL	9	90	3605.00
	GRAND TOTAL	109	1394	55795.00

* Cost of male labour day was taken as Rs. 40/-.

CHAPTER FOUR

4 THE CONSTRAINTS TO FARMER ORGANIZATIONS

This chapter brings into focus some of the issues which appear to inhibit the formation and functioning of farmer organizations (FO) since 1981 March. The factors affecting the formation phase and the consolidation phase will not be considered separately as they appear to be interrelated, i.e. those factors that affect the formation will also affect the functioning of the organizations. The major constraints to FOO are:

(a) Activities of the drainage farmers, the encroachers and the highland cultivators;

(b) Conflicts with YPs;

(c) Land tenure patterns;

(d) Effects of water use patterns :

(e) Problems of the bureaucracy;

(f) Part-time farmers;

(g) Lack of legal recognition;

(h) Heterogeneity of settlers;

(i) The heavy turn-over of IOs

4.1 Activities of Drainage Farmers, Encroachers and Highland cultivation

The farmers cultivating on drainage areas, encroachments and highland areas have no direct access to channel water. They obtain water for cultivation by other means such as cutting dams, blocking channels, etc. Since water roatation, better channels maintenance etc. adopted by farmer organizations result in lesser volume of drainage water, the cultivation activities of drainage farmers are bound to be affected. The regualr channel cleaning and other maintenance activities adopted by the FO affect the high -land farmers and the encroachers. Moreover, because of the activities of the FOO the chances of the drainage operators resorting to illegal methods of obtaining water by crossing

channels, cutting bunds, siphoning etc. could be minimized. This can also be a threat to the non-allottees. The FO in G. 3.7 for instance repaired the channel gate in order to facilitate the flow along the tail end of the distributary. After the placement of the gate, however, the flow was reduced in one up-stream field channel where many drainage lands were located. The reduced flow affected the drainage operators, who manipulated to break and steal the channel gate fixed by the FO. This activity affected the colony farmers in tail end of the G 3 distributary and thwarted the efforts of the FO.

The same problem occurred in 1981 Yala at G 5 head end farmer organization. This FO repaired three irrigation structures along the G 5 distibutary in order to reduce the water wastage at the head end of the canal. In this effort the ID assisted the FO providing materials and technical supervision. However, two weeks later, out of the three structures two were again damaged. It was later found that the particular structures had been used by the drainage farmers to obtain irrigation water and that they had again damaged the structures.

Another istance is the activities of drainage farmers in LB 29 tail end. The FO here operated a highly successful water rotation programme in 1981 Yala, solving many of the water problems at the tail end of LB 29. Since the programme affected the drainage farmers they reacted by cutting the distributary canal bund twice during the rotation programme.

It is clear that the non-allottees react strongly against the activities of the FO particularly in relation to maintenance and operational activities. This problem however cannot be overcome until a permanent solution is found to the problems of non-allottees.

4.2 Conflicts with YPs

At the time IOs entered the field, the Yaya Palaka was the only leader based at the field level for matters related to irrigation. As indicated earlier, the activities of YPs were far from satis-factory due to several reasons (See Chapter 2, page 17). The

FOs on the otherhand have been able to solve many problems related to water management which YPs have not been able to solve for a considerable period of time. The new leadership, namely, the Farmer Representative (FR) became popular among the farmers and they appeared to be a potential threat to the YPs. The activities of the FR also affected the economic position of the YP who continued to receive contributions of paddy (salaries) from farmers without performing a useful role. Consequently, some YPs attempted to confuse water rotations and other maintenance activities pursued by FO in order to discourage farmer cooperation to the FO.

4.3 Land Tenure Pattern

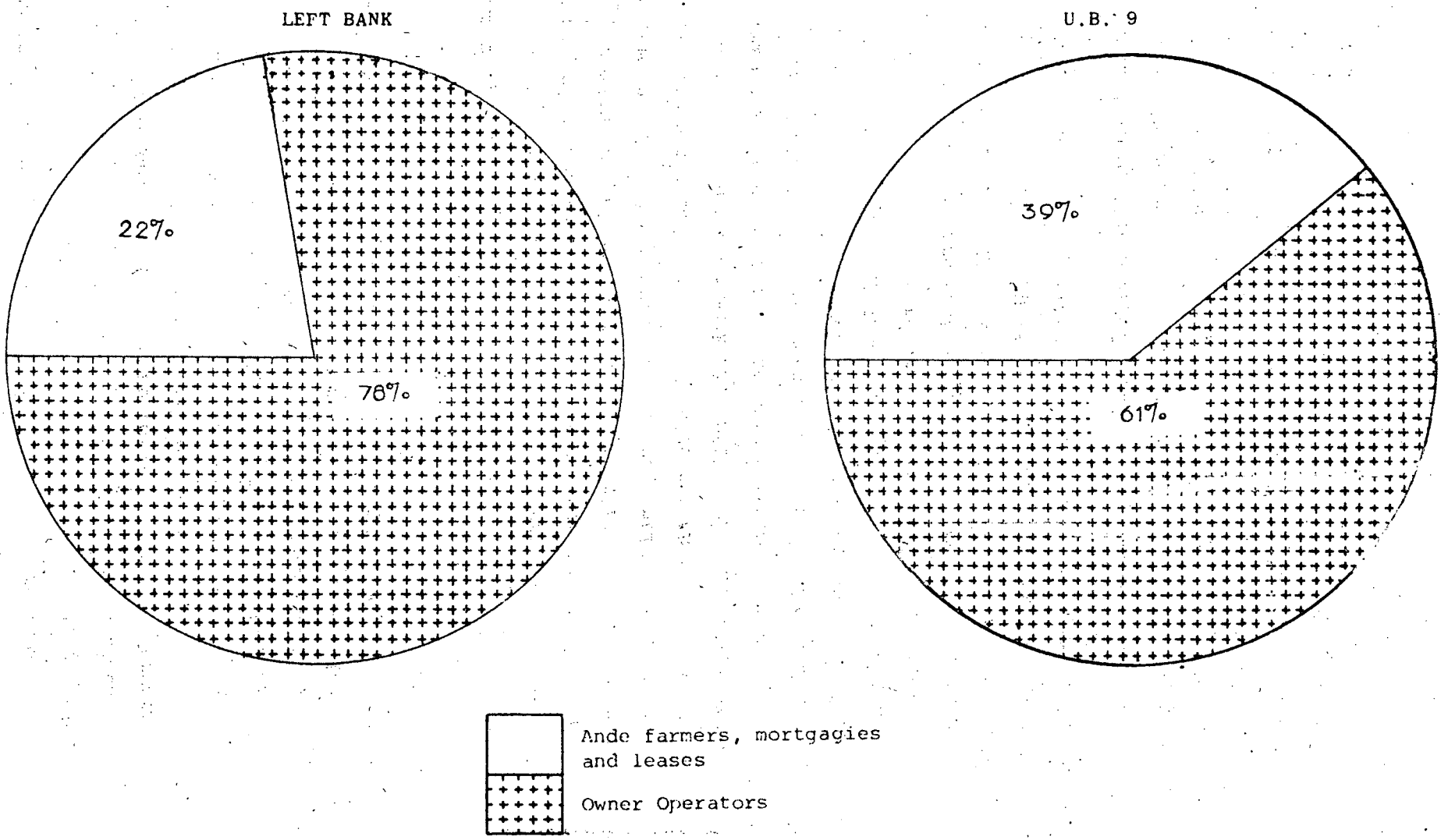
There had been three types of land allocation programmes in Gal-Oya scheme since 1952/53. Originally each settler was given four acres of lowland which was later reduced to three acres. The size of the lowland alloted per family was subsequently reduced to two acres. A survey carried out in 1980 indicated that patterns of land ownership had changed remarkably with both land accumulation and fragmentation taking place. The survey revealed that the average size of the lowland per settler was only 2 acres while the size range was between ½ acre to 50 acres per settler. This has arisen because of illegal land transactions of varying magnitues. Additionally, the land tenure had also changed from owner operator to other operators such as ande, mortgageee and lessees . The Fig. 4.1 indicates the distribution of land ownership in the LB area and in UB 9 distributary. Note that as much as 30% and 22% in the UB 9 and LB areas respectively are non-owner operators.

The experiment shows that getting non-allottees involved in farmer organizations is an extremely difficult task. One the one hand, the tenant and lessee farmers do not wish to join farmer organizations as it would expose their concealed and illegal land transactions. Tenant farmers have also no interest in seeking a lasting solution to water management problems since they operate the land only for a limited period of time, usually 2-3 seasons.

FIGURE 4.1

The Pattern of Land Tenure in U.B. 9 Distributory Channel and in the Left Bank

Area (in percentage)



4.4 Effects of Water Use Patterns

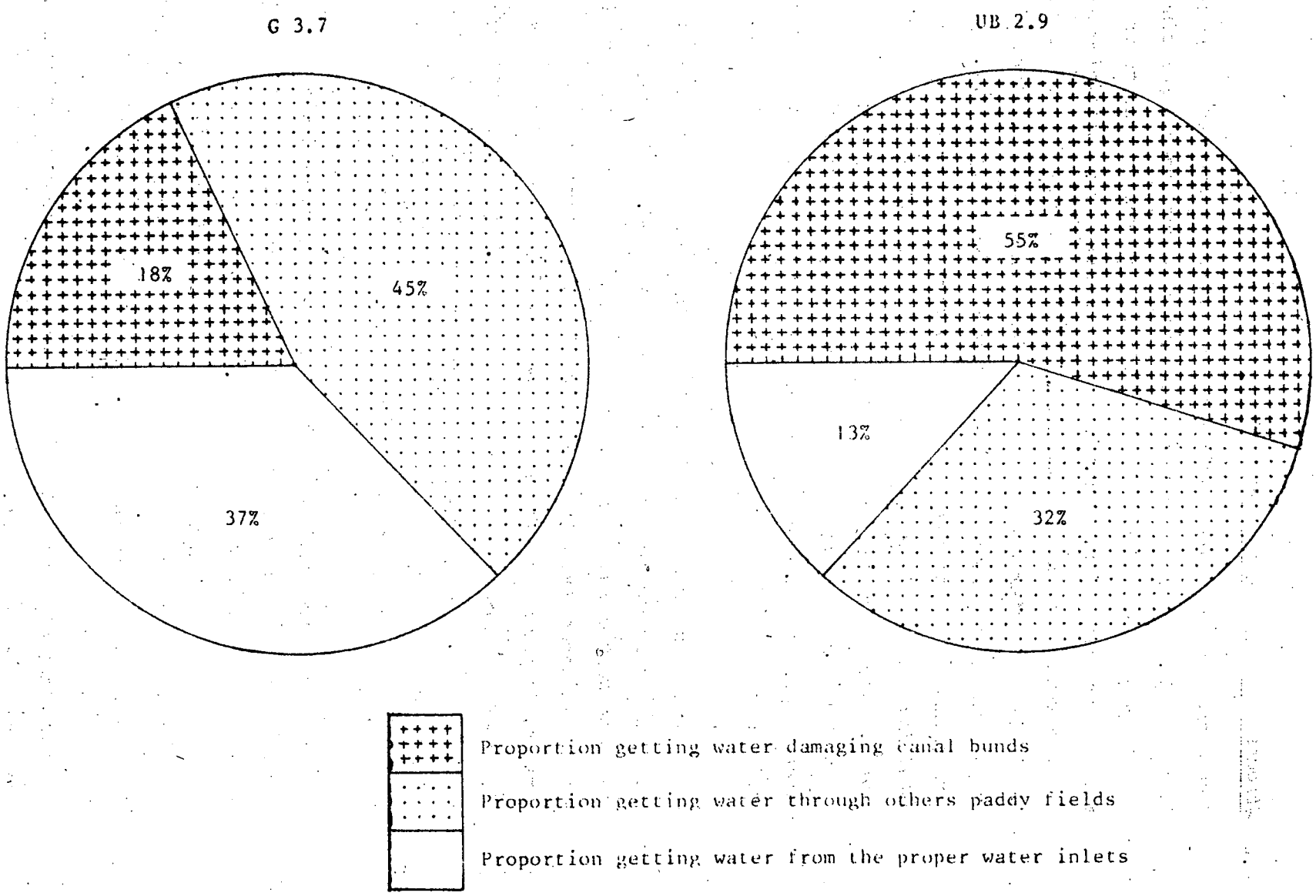
Many changes have occurred in the Gal Oya scheme since its inception in the 1950s. Some of the most important of these changes relating to water use are the increase in population, change in land tenure and land fragmentation. Fig. 4.2 shows the methods of obtaining water in two channels in the project area. In UB 2.9, only 13% of the farmers get irrigation water through the pipe inlet while in G 3.7, the proportion of farmers getting water through pipe inlet is 37%. In both channels, the majority of farmers resort to other methods of obtaining water such as by cutting dams and through other farmers' paddy fields. The dependent farmers usually get water through other farmers' paddy fields since each dependent farmer is not provided with a separate pipe inlet. These methods of access to water interfere with the activities of the FO, particularly in respect of water rotations.

For a successful water rotation, it is necessary that the pipe inlets are opened only during a specified period of time. At other times it has to be kept closed, particularly when down steam farmers obtain water. In cases where the same inlet is being shared by several farmers, it becomes difficult to adhere to this schedule since water use practices vary among farmers (see Table 3.3 and 3.4, participation is not 100%) . The farmers whose allotments are away from the common inlet usually attempt to keep the inlet open whenever there is water in the channel in order to get more of it.

The Process Documentation reports indicate that several water rotations adopted by FO have become unsuccessful because of the water use practices mentioned above. Although few dependent farmers together with the orginal allottee obtain water through the common pipe inlets, only the latter participates in FO activities. The dependents believe that the original allottee represents the interest of all those who cultivate the allotment. However, the participation of dependents in FO activities is also important since they are also water users.

FIGURE 4.2

Distribution of Methods followed by Farmers to get Irrigation Water by Selected Field Canals in 1982 Yala



The increase in population has brought many lands such as reservation, drainage area, etc under cultivation. The demand for water has also increased on account of an increase in the area cultivated. However, there has not been a proportionate increase in either the number of pipe inlets or the size of the inlet serving each allotment. This has led the farmers to resort to other methods of obtaining water, namely, cutting channel bunds, syphoning channel water etc. The conflicting interests between the FO and those users who adopt improper water use practices have unfavourable repurcussions on the FO Programme. On the one hand , such interests could reduce the number of farmers who join the FO. On the other hand, they may come into conflict with the activities of the FO.

4.5 Problems of the Bureaucracy

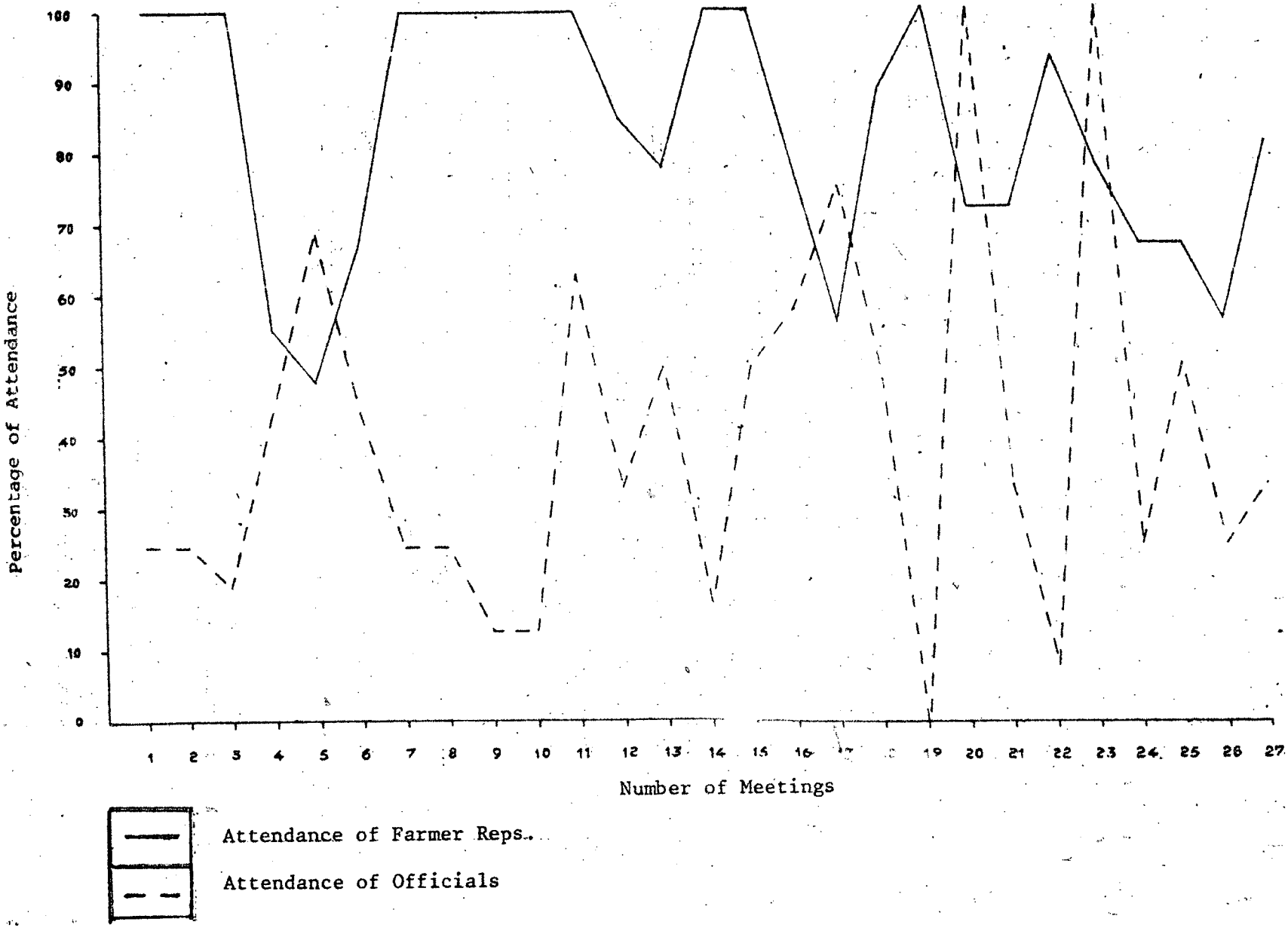
The co-operation of government officials is not readily available for farmer organizations except for isolated officials who come forward to help. The majority of officials have not attended meetings convened by farmers and requests for assistance by the FO have sometimes been turned down. The Fig. 4.3 shows the distribution of attendance of FRs and officals at monthly co-ordinating meetings in Uhana area. It also shows a clear relationship between the attendance of FRs and officials. The fluctations of attendance by FRs have corresponded directly to the attendance of officials. When asked as to why FRs responded to the attendance of officials, the FRs stated that there was no meaning in coordinating meetings if the officials do not attend. It should be noted that only 2 out of 27 meetings held recorded a 100% attendance of officials.

Farmers also indicated that officials do not plan properly to implement even the decisions taken at cultivation meetings. Often the decisions are delayed or advanced in implementation. For example, in March 1983, in the cultivation meeting of Gonagolla area, officials attempted to adhere to a schedule of activities despite the farmers' objection. The officials decided to issue water on 15th March, 1983. Although farmers wished to postpone the issue until the 20th March since the "Maha" crops was yet to be harvested. In actual implementation, however, the water issue began on 20th March.

FIGURE 4.3

UHANA AREA

Distribution of Attendance of Farmer Representatives and Officials
at Field Level Co-ordinating Meetings during 1981 through 1982 in Uhana Area



Since farmers were not made aware of the change in decision in advance, they had to undergo many difficulties. Every farmer had already harvested the immature paddy crop expecting water on the 15th as was decided at the cultivation meeting. Still others had made advance and pre-arranged payments for ploughing etc. by 15th March. This caused much difficulties to the farmers. The frequent changes in dicisions led to the dissatisfaction among farmers who therefore have no trust in the activities of the officials.

4.6 Part-Time Farmers

Part-time farmers are those who involve in an activity other than farming , such as carpentry, masonary, government and private sector employment, and non-agricultural labourers etc. They involve in farming work whenever they are free in their substantial vocations. The Fig. 4.4 indicates the composition of farmers in two colony units of the project area. It is seen that 46% of the 'farmers' in these units are part-time farmers while full-time farmers are only 54%. The participation of part-time farmers in the work of the FO such as water rotations, maintenance activitiese etc. is very poor since they are out of the farming community during most parts of the day. In addition, the part-time farmers also do not attend the FO meetings regularly. Hence the part-time farmers affect the performance of FO.

4.7 Lack of Legal Recognition

The Farmer Organization itself does not have any kind of legal recognition by the government which is required in carrying out its activities. For instance, the FO cannot collect acreage taxes due from farmers. It can neither punish those farmers who break and destroy the structures etc. No action can also be taken for cattle damage to irrigation structures.

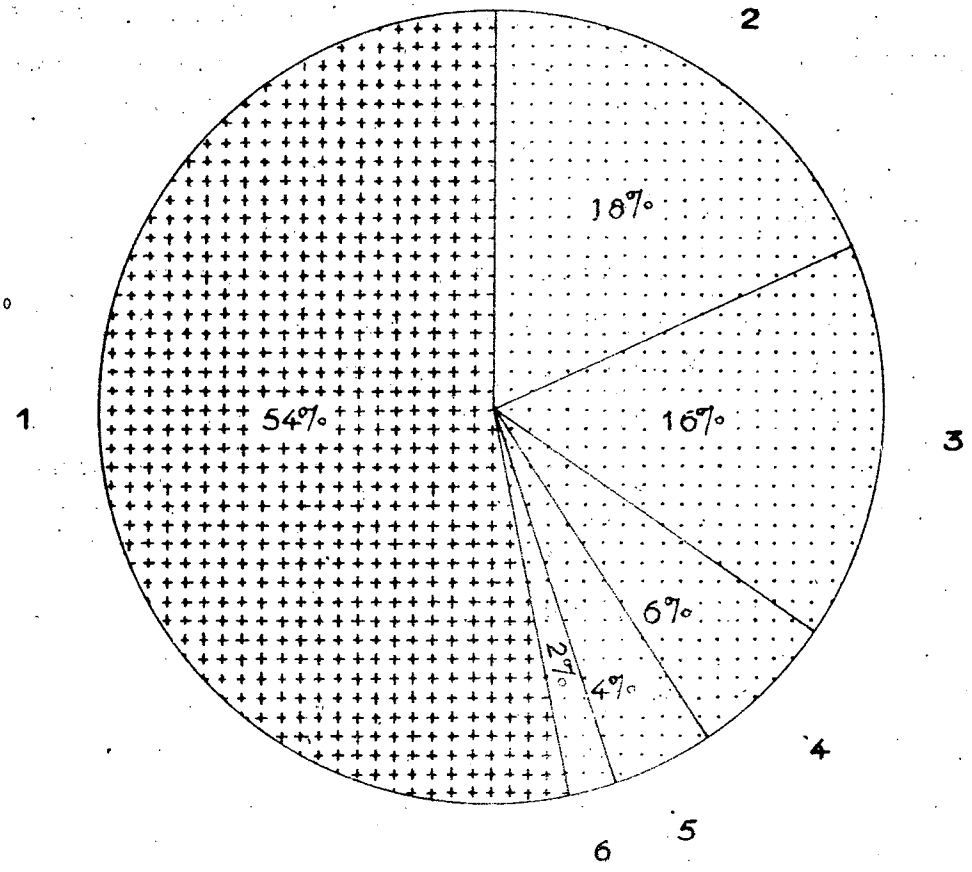
However, even some of the government officers do not recognize FOs as they have no legal status. It is observed that most of the FOs have failed to function effectively due to not having legal recognition.

FIGURE 4.4

DISTRIBUTION OF FARMERS BY ACTIVITIES

COLONY NO. 29 & 30

1980 YALA



Full-time farming

part-time farming

1. Full-time farming
2. Farming and carpentry or masonry
3. Farming and business
4. Farming and Govt. employment
5. Farming and casual labour
6. Farming and other employment .

SOURCE: 1980 sample survey.

4.8 Settler Heterogeneiety

Settlers in the Gal Oya scheme were drawn from different socio-cultural and agro-ecologic regions of Sri Lanka. The social aspirations economic background and farming experience among settlers were much different and varied. Those setterlers who came from the Wet Zone areas had a better general education than those came from the Uva province. Some of the settlers became paddy farmers only after arriving at Gal Oya. Because of the above differences, and particularly those due to education some farmers could grasp the organizational message conveyed by IOO quickly while others had to be 'motivated continuously' for a much longer period. Still some other farmers could not grasp the message at all having exposed to IOO on several occassions. A particular case in an area called 'Bibileyaya' of the pilot area should be mentioned. The farmers in this area were settled from the villages of Bibile area in the Uva province. They are not interested in paddy cultivation as such they either sold or leased out their allotments. For example, in 1982 Yala season, 65% of the colony alotments in Bibileyaya have been leased or mortgaged. The allottees worked on their won land as hired labourers.

According to the process documentation reports, most of them had no plan to educate even their children. In some instances, they have not cared to repair their cyclone affected colony houses, although compensation for house repair was disbursed by the government. Many farmers in Bibileyaya did not like to meet any officer who came even to help them. IOO had a very hard time in conveying to them the organization message. Some of the farmers left their houses when IOO visited them. As a result IOO have not met some of the farmers even at the end of few years of work in the area. This had inhibited the formation of farmer groups in the Bibilayaya area.

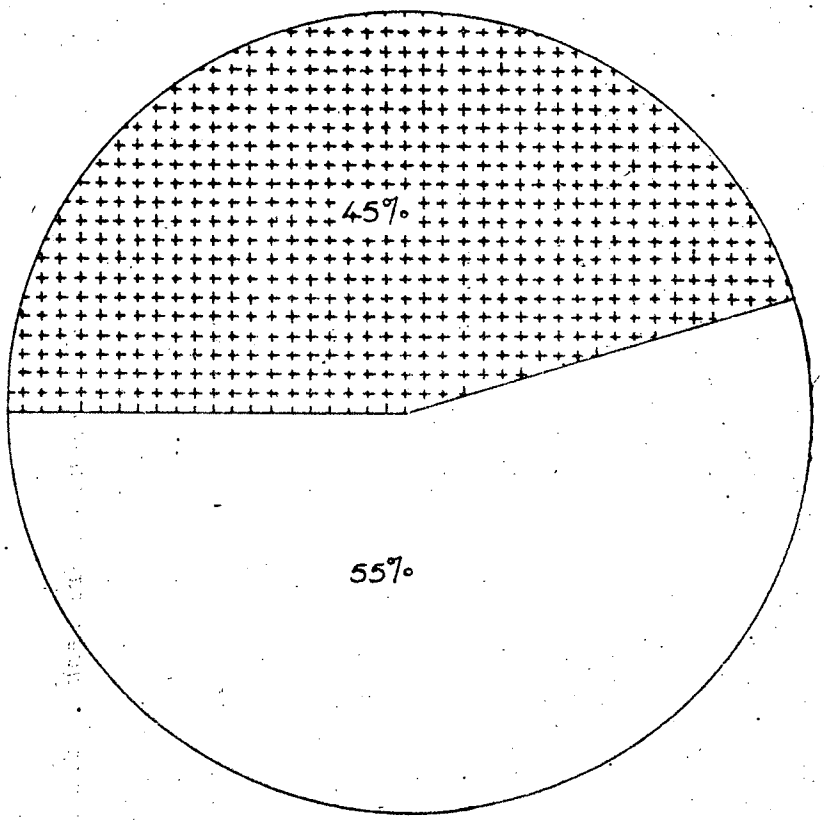
The formation and subsequent activities of the farmer organization became more complicated with increasing group heterogeneiety caused by settler characteristics. The Fig. 4.5 shows the composition of farmers by area of origin in two farmer organizations. The FO,

FIGURE 4.5

The Composition of Farmers by Area of Origin in Two Field Channel Organizations.

(IN PERCENTAGE)

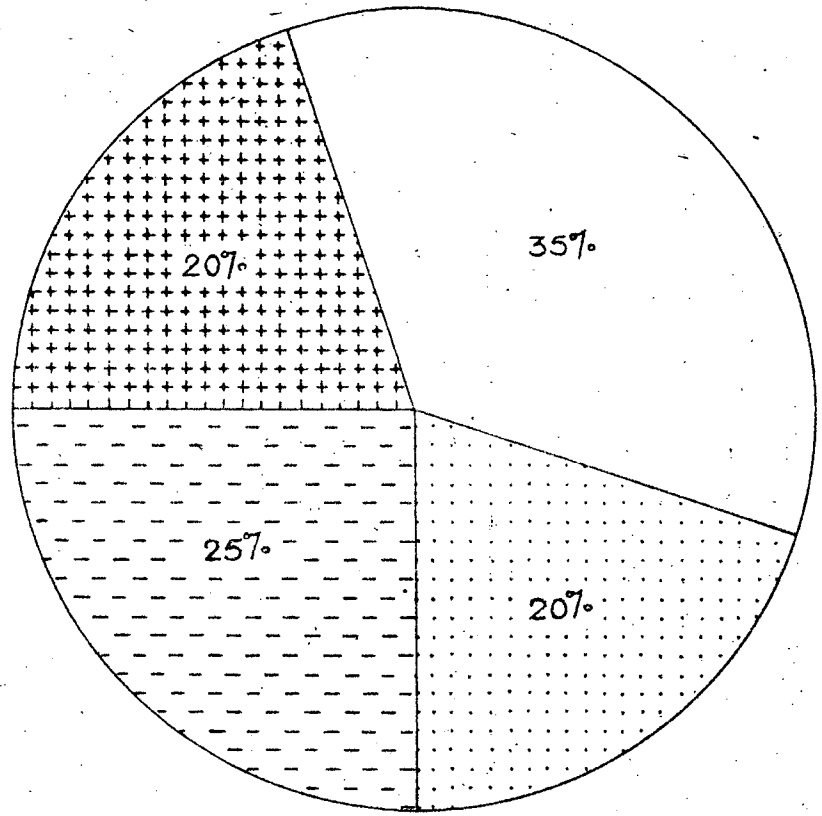
G 3.3



Kegalla

Bibile

UB 7.3.A & UB 7.3.A.1



Galle

Matara

Kandy

Purana Villages

UB 7.3.2/7.3.A.1 comprises of farmers drawn from four different areas, while the organization in G 3.3 has farmers from two areas.

4.9 Heavy Turn - Over of IOO

Since the IOs have been recruited on the contract basis, they constantly left the programme for permanent employment. This led to havey turn-over of IOs.

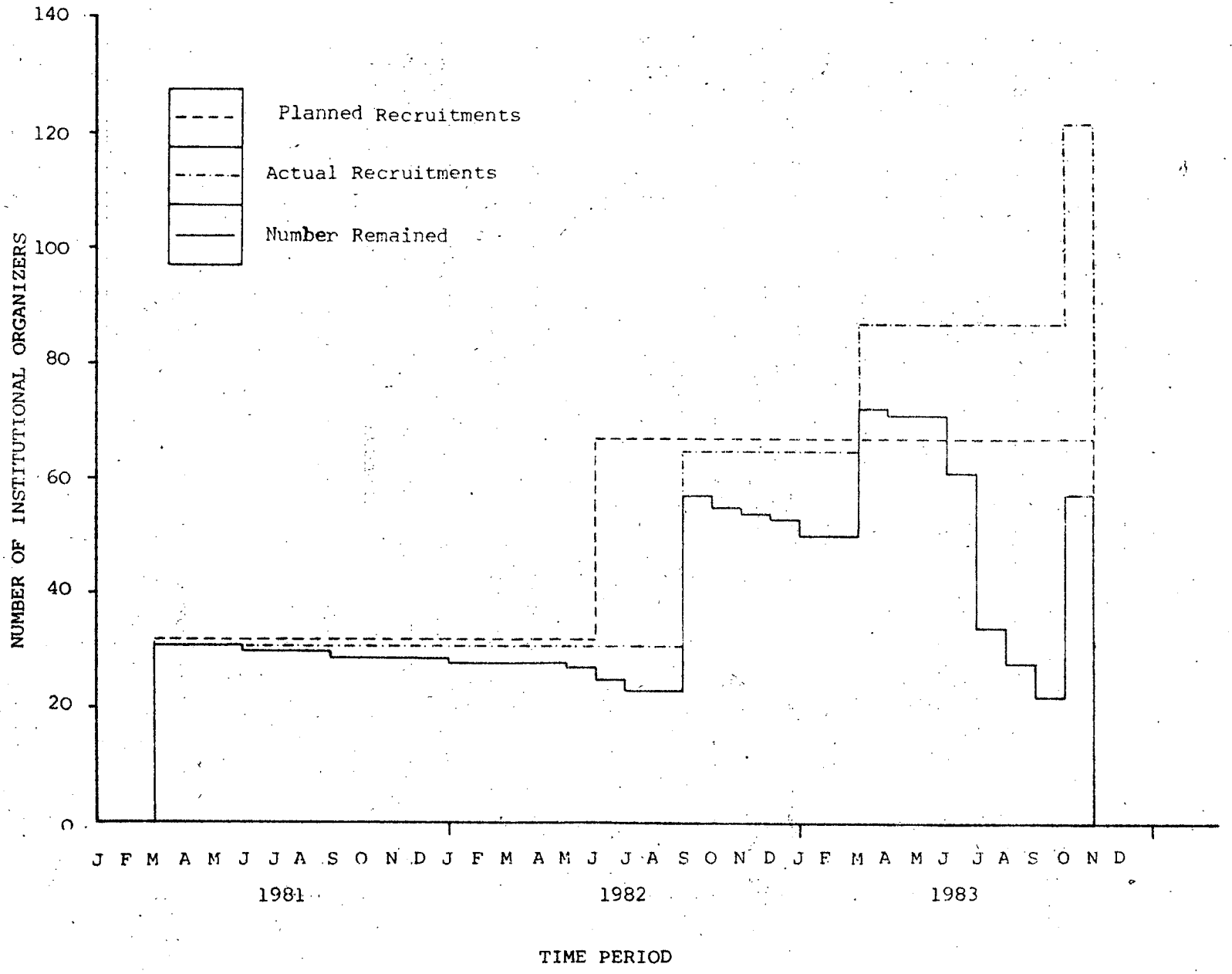
According to the original plan of the FO Programme, it was expected to field only two batches of IOs (65) for a coninuous period of two years; by doing so the ARTI thought that IO would be able to pursuade and convince the farmers towards the collective activities. However, those assumptions had to be changed because of high turn-over of IOO. Therefore, the ARTI had to recruit train and field two more batches comprising 57 IOs, in order to maintain the designed level.

Fig. 4.6 shows, the pattern of recruitment, turn-over, and the actual number of IOs remaining with the project during 1981 through 1983. For example, in 1983 September, the figures show that the planned number of IOO was only 65. Assuming heavy drop out the ARTI had recruited 85 IOs. However, the effort has been again diluted since a large number of IOs left for permanent employment; By September only 22 IOO remained with the project.

The heavy turn-over of IOs affected the farmer organization project in several ways. Firstly, the ARTI research plan was confused. As a result subsequent activities and the results changed accordingly . For instance in some fields, IOs had to be replaced seven times during the project period. This uncertainity affected the whole project not only in research planning and implementation but also in adminis-trative affairs of the ARTI.

Secondly, the confidence of farmers on IOs and the FO was weakended due to the constant leaving and fielding of IOs. In many istances, Ios left the field suddenly at the time FOs were about to be formed. Then the field was without an Io for some time until a new IO was appointed. According to the process documentation reports, this constant changes in the fielding of IOs strongly discouraged bohh farmers and the IOs themselves.

FIGURE 4.6 : **Pattern of Recruitments and Turnover of IOO**



CHAPTER FIVE

5. SUMMARY AND CONCOUSIONS

The objective of this report is to document the approach adopted to initiate farmer organizations in the Gal Oya Scheme. As stated in the report, the experiment commenced in 1981 and has now completed just three years, covering about 30% of the project area. Therefore, definit recommendations cannot be made at this stage of the project. Such policy recommendations can be made only when conclusions are drawn on the result of the experiment. This section therefore gives some preliminary conclusions which can be drawn from the results of the experiment during its first three years.

The approach adopted in organizing farmers in Gal Oya can be considered successful since over 200 FOs have already been formed. Chapters 2 and 3 show the success of FOs since they have already undertaken many activities, such as water rotation, water saving, conflict resolution, development of better farmer-officer relationsetc. However, the success of FOs is subject to the constraints discussed in Chapter 4.

(1) Gal Oya farmer organizations have proved the capabilities of farmers in the spheres of water management, conflict resolution and operation and maintenance work of the scheme. However, the time the FO Programme commenced in Gal Oya cannot be considered the most appropriate as many constraints have affected the implementation of the programme from its inception (See Chapter 4). These constraints could have been minimized if the farmer organizations were formed at the commencement of the human settlement in Gal Oya Therefore, it can be recommended, that farmer organizations can be developed successfully in new irrigation schemes together with the commencement of human settlements.

(2) Though the membership of farmer organizations is open to all water users along field channels, the encroachers, the drainage farmers and other categories of illegal water users do not participate in farmer organization activities because they are adversely affected when FOs function well. (See Chapter 3 and 4). Therefore, a farmer

organization programme cannot be strenthened until a permanent solution is found regarding illegal water users.

(3) The activities of FR of the new farmer organizations in Gal Oya appear to be a potential threat to the existing Yaya Palaka (YP) system. There has been much conflict between these two leadership positions.

As mentioned in Chapters 3 and 4, the new FR system became popular among farmers and consequently YPs attempted to disrupt farmer organi--ation activities. This conlict cannot be avoided until action is taken to clearly demarcate the roles and functions of YPs and FRS. As a possible solution, it can be recommended that the Yaya Palaka divisions be redemarcated to coincide with the new FR areas of the new organizations and farmer representatives be appointed as YPs.

(4) Though the FR and IOs have attempted to build co-ordinating links between FOs and Government officials, it has only been partially successful during the project period. However, for the smooth functioning of these organizations there should be a permanent link between officials and FOs. If the officials of relevant departments provided their input to farmers through the new field channel organizations this linkage could be strengthened in a short period of time.

/ap

ANNEX I

Distribution of Additional Land Brought Under Cultivation Along M 5 Distributory During 1983 Yala Season After Performance of Farmer Water Rotations

Channel No.	Acreage	No. of Farmers Benefited
M 5.2.3.A	108	24
M 5.2.4	70	18
M 5.2.5	19	04
M 5.2.6	53	13
M 5.2.7	66	20
M 5.2.8	37	8
SUB-TOTAL	353	87
M 5.4.D	34	15
M 5.4.3	107	35
M 5.4.4	59	35
M 5.4.4.A	20	09
M 5.4.5	34	10
M 5.4.6	59	26
SUB-TOTAL	313	130
M 5	35	12
M 5.5.1	28	08
M 5.5.2	170	40
M 5.5.4	34	13
M 5.6	68	19
SUB-TOTAL	335	92
GRAND TOTAL	1001	309