

**IDENTIFICATION OF SUCCESS  
CHARACTERISTICS OF  
FARMER ORGANISATIONS**

**Technical Report #2**

**March 1997**

**APAP III  
Research Report  
No. 1025**

**Prepared for**

**Agricultural Policy Analysis Project, Phase III, (APAP III)**

**USAID Contract No. LAG-4201-C-00-3052-00**

**Author:**

**TEAMS  
Consultants in Development  
(Technology, Engineering, Agriculture & Management Specialists)  
Colombo, Sri Lanka**

## CONTENTS

1.	INTRODUCTION	1
1.1	Introduction	1
1.2	Objective of the Study	1
1.3	Organisation of the Report	1
1.4	Limitations in Technical Report # 2	2
1.5	INMAS, MANIS and Mahaweli Programmes	2
1.5.1	The INMAS Programme	2
1.5.2	The MANIS Programme	3
1.5.3	Mahaweli Participatory Management Programme	3
2.	METHODOLOGY	7
2.1	General	7
2.3	Prioritising for Most Important Variables	7
2.4	Self Evaluation and Basic Information Sheet	7
2.5	Discussions with Line Agency Officials	7
2.6	Selection of FOs from the 3 systems	8
2.7	Weighting the 30 Verifiable Variables at the Open Forum	8
2.8	Weighting the 30 Variables at FO Level	8
2.9	Discussions with selected FO Office Bearers	8
2.10	Study on FO Meetings Reports and Financial Accounts	9
2.11	Informal Discussions with Members of the Study Working Group and Consultants	9
2.12	Tabulation of Data	9
3.	RESULTS	10
3.1	Preliminary Findings - Responses from Discussions with Individual Farmers and Farmer Representatives	10
3.2	Analysis of Responses to 30 Characteristics	16
3.2.1	Example	16
3.2.2	Responses from Farmer Organisations	19
3.2.3	Responses from the Line Agency Officials	20
3.2.4	General Analysis	20
3.2.5	Inter relationship between Farmer Organisations and Officers in Prioritising Success Characteristics of Farmer Organisations	20
3.2.6	Significant Issues	22
3.2.7	New Variables Identified	23

B

4.	Case Studies of Farmer Organisations . . . . .	24
4.1	Introduction . . . . .	24
4.2	Case Studies . . . . .	24
	4.2.1 Maha Siyambalagamuwa (Left Bank) FO . . . . .	24
	4.2.2 Maha Siyambalagamuwa (Right Bank) FO . . . . .	28
	4.2.3 Gemunu Farmer Organisation - Maha Galgamuwa . . . . .	30
	4.2.4 Chandrikawewa Project . . . . .	31
	4.2.5 Murawasihena Project . . . . .	34
	4.2.6 Kiriibbanwewa - Gemunu Farmer Organisation . . . . .	37
	4.2.7 Iginimitiya Project Right Bank- Pubudu FO . . . . .	39
	4.2.8 Iginimitiya Project - Mahauswewa FO . . . . .	41
	4.2.9 Iginimitiya Project - Ranketha FO . . . . .	42
5.	Conclusions . . . . .	45
5.1	Responses of Individual Farmers, FOs and Officers . . . . .	45
5.2	Characteristics Identified by Phase of Development and Category of Effect . . . . .	45
5.3	Summary of Conclusions . . . . .	46

### Annexes

Annex IA	The Variables Identified for Validation
Annex IB	Values Marked on 30 Variables by 19 Farmer Participants from 5 FOs, 17 Farmer Participants in 7 FOs and 21 Farmer Participants in 7 FOs.
Annex IC	Position of Variables Marked by the 5 FOs, 7 FOs and 7 FOs.
Annex II	Characteristics Considered as Most important by Individual Farmers in the 3 systems
Annex III	Characteristics Considered as Important by Farmers in the 3 Systems
Annex IV	Prioritisation of Characteristics by Farmer Organisations
Annex V	Prioritisation of Characteristics by Officers
Annex VI	Names of Farmer Participants with Position and Names of FOs in 3 Systems
Annex VII	Names of Officer Participants with Position
Annex VIII	Basic Details of the 5 FOs in Mahasiyambalangama and Mahagalgamuwa Walawe and Iginimitiya.



**Validation of Success Characteristics of  
Selected Farmer Organisations (Technical Report #2)**

**1. INTRODUCTION**

**1.1 Introduction**

The study on "Identification of successful characteristics of Farmer Organisations (FOs) in Irrigated Agriculture to Re-evaluate and Refine Irrigation Management Policy" has four working components. The four working components are translated to technical papers as the work component outputs. The first component of the study was to identify success characteristics of FOs through an indepth literature survey conducted over a period of three months. The output of the first component (Technical Report #1) identified 30 success characteristics of FOs from various experiments conducted by the Government, Non-government sectors and under special projects. Since identifying the 30 most important characteristics, the next task was to verify the finding of component one.

Verification of identified success characteristics was done through a series of field workshops with the participation of farmer representatives and line agency officials involved in irrigated agriculture under the three programmes of Integrated Management of Major Irrigation Schemes (INMAS) Management of Irrigation Schemes (MANIS) and Mahaweli Basin Development.

**1.2 Objective of the Study**

The main objective of Technical Report #2 is to test the validity of the 30 identified success characteristics of FOs. As the 30 characteristics identified in Technical Report # 1 were purely through a literature survey, Technical Report #2 attempts to field test these characteristics with farmers and officers in a field situation. Besides this main objective it was also the intention of the Report to identify any new characteristics that could be used to strengthen FOs.

**1.3 Organization of the Report**

This Report is structured according to the process that was followed in the field, with farmers, farmer organisations and line agency official responses. The information collected through these methods is analysed by the consultants considering inter relationships between FOs and officers in individual systems and interrelationships between different systems.

The Report is organized under five major sections. First Section introduces the report with reference to Technical Report #1 and mentions the limitations of the Technical Report #2. Section 2, deals in detail on the methodology followed in the collection of data to verify the 30 identified success characteristics. Section 3 discusses the results of the field workshop methodology adopted to verify the success characteristics. Section 4 presents the information collected by individual farmer organisations in a Case Study format. The final Section concludes the report with identifying and prioritising characteristics to strengthen existing farmer organisations.

#### **1.4 Limitations in Technical Report #2**

The principal limitation in Technical Report #2, was the small sample of FOs available to verify the 30 successful characteristics.

Due to limitation in funds and time, the consultants had to limit the verification process to only two schemes from MANIS, one scheme from INMAS and one scheme from Mahaweli. Hence, the findings of Technical Report #2 cannot be generalized to all FOs under Irrigated Agriculture nor can it be generalized to the schemes under the respective programmes. Two MANIS Schemes were selected, to strengthen the FO representation as one scheme had only two FOs.

Within the schemes too, the detailed verification process was limited only to three FOs from each scheme. This too restricted the information collection from a wider section of farmers.

#### **1.5 INMAS, MANIS and Mahaweli Programmes**

##### **1.5.1 The INMAS Programme**

The Integrated Management of Major Irrigation Schemes (INMAS) programme was begun in 1984. It was based on some earlier experiments in improving irrigation management (Gamaathige *et al.* 1995). At the same time, the Irrigation Management Division (IMD) was created to implement the INMAS programme.

As defined in the 1984 documents, the INMAS Programme has the following objectives:

In the short term:

- Increase agricultural production per unit of irrigation water,
- Increase agricultural production per unit of land,
- Distribute irrigation water to farmers adequately and equitably,
- Arrange for timely supply of agricultural inputs and sale of products,
- Organize and develop farmer organizations to facilitate farmer participation in management,
- Recover O&M costs from farmers in major irrigation schemes,
- Maintain irrigation systems at optimum level of performance,
- Identify major systems needing urgent rehabilitation

In the long term:

- Integrated development of the farms to commercial holdings,
- Crop diversification and rotation,
- Social and economic development of the farming community,
- Improved marketing of agricultural produce and by-products,
- Handing over to farmer organizations some management and operational functions of the systems.

Under INMAS, a Project Manager is stationed in each INMAS system. He is an employee of the IMD and is responsible for establishing and strengthening of farmers' organisations, for coordinating government agency efforts, and for chairing the Project Management Committee initially. The Project Manager, however, has no direct power over farmers or officers from other agencies; he must rely on persuasion to achieve INMAS goals.

The Project Manager is generally assisted by an Institutional Development Officer specifically charged with creating and strengthening the farmer organisations. In some INMAS systems, the IMD has appointed Institutional Organisers (IOs) to act as catalyst agents to create and strengthen farmer organisations. IOs have generally been provided only to schemes undergoing rehabilitation through a donor funded project. IMD expects that the IOs can be withdrawn once the farmer organisations develop.

At least two levels of hydrologically based farmer organisations exist in INMAS schemes: field channel groups and distributary channel organisations. Recently the INMAS programme has begun organizing system level farmer organisations in many of the INMAS schemes.

Since the adoption of the participatory management policy, formal turnover of the operation and maintenance of distributary channels to farmer organisations has been a goal of INMAS. Many farmer organisations have now formally taken responsibility for the distributary channel Operation and Maintenance (O&M). In most cases, the Irrigation Department is still providing funds and other assistance to the farmer organisations. However, in February 1992, under the Irrigation Systems Management Project (ISMP), 33 farmer organisations signed agreements with the government renouncing this assistance.

INMAS was implemented in 35 irrigation schemes, including most of those with command areas greater than 800 hectares.

### 1.5.2 The MANIS Programme

In 1986, the Irrigation Department created the Management of Irrigation Schemes (MANIS) Programme to bring the benefits of the INMAS approach to the schemes not falling under INMAS. The objectives of MANIS are identical with those of INMAS and the scheme level organization is similar. MANIS is managed directly by the Irrigation Department.

Each MANIS scheme has a (part time) Project Manager, generally the Technical Assistant assigned to the scheme by the Irrigation Department. The Project Manager is assisted by ID field-level staff including Work Supervisors and others. Special inputs have been few. The most important has been training given to the Project Managers. Until very recently, MANIS project Managers have not had specialized help such as Institutional Development Officers or Institutional Organizers.

Project Managers attend to their functions on a part time basis since that gave them time to perform their technical duties as well. Recently some MANIS schemes have been taken for rehabilitation under the World Bank funded National Irrigation Rehabilitation Project. Institutional Organizers like those used in some INMAS schemes are provided to these schemes.

Like INMAS, each MANIS scheme is supposed to have hydrologically based farmer organisations and the equivalent of a Project Management Committee. As in INMAS schemes, formal turnover of distributary channel management functions is a goal of MANIS. In addition, it has been recommended (IMPSA 1991) that all medium schemes with command areas of 400 hectares or less be turned over to farmer organisations.

Definition of schemes included within MANIS has been problematic. When the programme was created, the goal was to include all major schemes under ID control that were not part of INMAS. This would have been about 230 schemes. Because funding and facilities for training Project Managers were limited, initially only 120 Project Managers were named to take responsibility for some 170 schemes.

An amendment of the Constitution in 1988 created the Provincial Councils and specified that all irrigation schemes that were not interprovincial should come under the authority of the Provincial Councils. To simplify the definition, the Irrigation Department turned over to the Provincial Councils all schemes with command areas under 400 hectares. All larger schemes clearly were interprovincial, if only because their catchments lay in other provinces. Since then, many of these schemes have been returned to the Irrigation Department for technical or financial reasons. These transactions have confused the definition of which schemes fall within MANIS.

As a result of a request to the Irrigation Department from IIMI for an "official" list of MANIS schemes for this study, the ID has prepared a definitive list of 160 MANIS schemes. The schemes that remain with the Provincial Councils are not included nor are schemes that have never had any input at all. This is now being used as the basis for this Study.

### **1.5.3 Mahaweli Participatory Management Programmes**

Most of the Mahaweli schemes are new settlement schemes founded on irrigation systems that derive some or all their water from the Mahaweli River. The Mahaweli Economic Agency (MEA), a unit of the Mahaweli Authority of Sri Lanka (MASL), manages the Mahaweli schemes. The MEA attempts to provide fully integrated services to the settlers, including irrigation, agricultural, health and other services. In non-Mahaweli schemes, these services are provided by a variety of specialized agencies or by the private sector.

There are six hydrologically distinct Mahaweli irrigation schemes: System H, System C, System B, System L, Bakamuna, and Uda Walawe. Bakamuna was formerly called System G, it has recently been amalgamated administratively with System B.

System L is still under construction and is not further considered here. In effect then, there are four Mahaweli schemes discussed here: System H, System C, System B (including Bakamuna), and Uda Walawe.

A Resident Project Manager is in charge of each scheme. The Resident Project Manager is helped by deputies for agriculture, lands, irrigation, marketing, community development, and institutional development. Each Mahaweli scheme is divided into Blocks headed by Block Managers who are assisted by deputies for the five areas. Each Block is divided into Units headed by Unit Managers assisted by Technical Officers and Field Assistants in irrigation and agriculture respectively.

There have been several experiments in organising farmers for participatory management in different Mahaweli systems, including:

- \* System H Turnout Groups. The creation of "turnout groups" in Mahaweli System H in 1980 was the first experiment in organising farmers within the Mahaweli systems. Under this programme, a leader was selected for each "turnout" (equivalent to a field channel). Training was given to the leaders so that they could help with management of irrigation and other issues within the turnout area.
- \* Nation Builders' Association Effort. A non governmental organisation, the Nation Builders' Association, was invited to organise farmers, in System B in 1985 and in Uda Walawe a little later. In both places, the Nation Builders' Association fielded catalyst agents to organise farmers.
- \* MARD Farmer Organisations. The Mahaweli Agricultural and Rural Development (MARD) Project began work on organising farmers in System B in 1987. The MARD Project is using MEA field staff as catalysts to organize farmers for various activities, especially for input coordination and marketing.
- \* MEA-IIMI Effort. From 1991 to 1993, MEA and IIMI experimented in Uda Walawe with using catalyst agents in cooperation with MEA officers to create and strengthen farmer organisations.

MEA made formation of farmer organizations and turnover its official policy after announcement of the participatory management policy (Jayawardene 1990). As a result efforts were made to create farmer organisations throughout the Mahaweli schemes. In Systems B and C, following MARD examples, many of the organisations were based on Units rather than distributary channels; also these FOs focussed their efforts on agribusiness rather than on irrigation management. Also, although efforts were made to create farmer organisations, no effort was made to create joint management committees.

In October 1992, the new Managing Director of MEA initiated a programme to organise farmers for effective participation in system management throughout all the Mahaweli systems (MEA 1992). This programme adopted the INMAS model for participatory management, including distributary channel organisations and joint management committees.

An Institutional Development Officer has been appointed for each Block and is supervised by an Assistant Manager (Institutional Development) in each scheme. A central unit for Institutional development has been created for the MEA. Also, Institutional Organiser Volunteers (IOVs) were appointed for three of the four Mahaweli schemes. Appointments of IOVs were held up in System H for political reasons.

Since early 1993, FOs have been created or reorganised in the four Mahaweli schemes. Also, because of the large sizes of the schemes, four levels of Joint Management Committees (JMCs) have been created in each. The four levels are called Unit Coordinating Committees, Block Coordinating Committees, Subproject Coordinating Committees, and Project Coordinating Committees.

## 2. METHODOLOGY

### 2.1 General

Though there were limitations to the approach in collecting data, consultants followed a detailed methodology to capture maximum possible information within the limited available time.

### 2.2 Pilot Test

As the methodology is an innovative approach, consultants pre-tested the methodology in an independent scheme, Giritala Irrigation Scheme in Polonnaruwa. According to pilot test results, two modifications were made in implementing the actual methodology.

In the verification of 30 success characteristics, the consultants tested the farmer attitudes by exposing the scores given to verifiable variable number 16 to farmers. (According to the methodology individual scores given by farmers are not known to the farmer audience). Once the farmers knew the scores they have given to variable number 16, there was a marked shift in scoring from variable 17 onwards to indicate that the identified characteristics are strongly favoured by farmers. However, due to this sudden shift in farmer responses as a result of exposing their scores, in the subsequent test this procedure was not followed. Another change that followed the results of the pilot test was reducing the number of choices given to farmers to weight each verifiable variable. Initially there were four choices, (Very strong, strong, moderately strong and not strong) given to farmers to weight against each variable. Since the pilot test, this was reduced to three (very strong, strong and not strong) on the request of the respondents. Besides these changes, the planned methodology was accepted for implementation.

### 2.3 Prioritizing for Most Important Variables

Once the FOs have completed weighting the 30 variables, they were asked to prioritise the four most important variables for the success of FOs. These were prioritised from 1-4 in the ascending order. This indicated a collective understanding on prioritising the most important variables.

### 2.4 Self Evaluation and Basic Information Sheet

A small performer capturing basic information and self evaluation of the FO was sent to each FO prior to the field workshop. This performer was collected at the beginning of the workshop. The information given in the performer were used to select FOs for visits and detail discussions and the basic information was used to compile the FO profile.

## **2.5 Discussions with Line Agency Officials**

The second half of the first day of all workshops was used for a discussion with line agency officials and consultants. The discussion session was divided into two parts, one a general discussion on success characters by FOS and two, conducting the same exercise of weighting the 30 verifiable variables and prioritising upto 4, the most important variable for the success of FOs.

## **2.6 Selection of FOs from the 3 systems**

Selection of FOs for the detail study was done in two stages. Firstly, at least three representatives from each FO represented at the individual farmer participation in weighting the 30 verifiable variables. At the second stage, three FOs were selected from the total number of FOs participating at the individual discussions. The latter selection was done by the consultants on the day of the workshop based on the self evaluation questionnaire given by the FOs. Total number of FOs participated in the workshops were 5 FOs, from the two MANIS schemes, 7 FOS from the 7 blocks in Udawalawe special area and 7 FOs from Inginimitiya.

## **2.7 Weighting the 30 Verifiable Variables at the Open Forum**

An open forum discussion was used to verify the 30 variables identified to be tested. Farmers were asked to weight each variable on a sliding scale of 3 to 1 individually. Thus the responses at this stage of the methodology would indicate the understanding of individual farmer on each variable.

## **2.8 Weighting the 30 Variables at FO Level**

At this stage individual farmers were grouped into their respective farmer organisations and asked to weight the same 30 variables, but after discussing with fellow farmers from the organisation. Thus, the results here would indicate the collective understanding of FO members on the 30 variables.

## **2.9 Discussions with Selected FO Office Bearers**

First half of day two was used to visit the field and discuss with FO office bearers the important factors determining the success of FOs. These discussions usually took about two hours. Once the discussions with the FO office bearers were over, a general discussion was held with general farmers (non-office bearers) at a different place. The idea behind having the discussions in two separate places was to have a frank opinion of both FO office bearers and general farmers. This entire exercise was conducted with the 3 selected FOs in three half day sessions.

## **2.10 Study on FO Meetings Reports and Financial Accounts**

One of the important activities undertaken in this methodology is to record the important issues from regular FO meeting minutes and to understand the financial accounting system of FOs. This exercise was conducted with the FO treasurers and secretaries in all FOs undertaken for the detail study.

## **2.11 Informal Discussions with Members of the Working Group and Consultants**

Once all the information was collected through the participating methodology, the final session in the field was to discuss the findings of the field visits with project staff from Department of National Planning and Irrigation agency and individual project Management staff.

## **2.12 Tabulation of Data**

Information collected from field workshops and field visits were tabulated into three different sections. The individual farmer responses were tabulated for all 30 variables and given an aggregated score for each variable. FO responses were tabulated according to the prioritization given by each FO in the three systems. Line agency officer responses were also tabulated according to individual officer response from the three systems.

Individual farmer responses were analysed on three basic assumptions. Various response relationships between individual farmers and FOs, FOs and Officers, individual responses between systems and agency officer responses between systems were analysed using cross tabulation between the three categories. (individual farmers, FOs and line agency officers).

### 3. RESULTS

#### 3.1 Preliminary findings - Responses from discussions with individual farmer members and FRs

Following description presents a comparative farmer responses to the 30 identified characteristics, in the three systems.

#### Notes to Follow Description

Total no. farmers present at the Maha Siyabalagamuwa Mahalgamuwa workshop (MS/MG) 19  
 Total no. farmers present at the Walawe workshop 15-17  
 Total no. farmers present at the Iginimitiya workshop 20-21

#### Ratings

Most important = 3 points  
 Important = 2 points  
 Less important = 1 point

Aggregate points (AP) = 3x No. farmers responding + 2x No. farmers responding + 1 x No. of farmers responding

Percentage =  $\frac{\text{Total points obtained for a Characteristics}}{\text{Maximum possible points that can be obtained.}}$

Table 3.1: Existence of a federation is an indication of a strong FO. At the same time, a federation contributes to the strengthening of FO.

Characteristic 1	M.S M.G			AP	%	Walawe			AP	%	Iginimitiya			AP	%
	S	2	1			S	2	1			S	2	1		
Existence of a federation is an indication of a strong FO. At the same time, a federation contributes to the strengthening of FO.	15	4	-	53	93	15	-	-	45	38	14	6	1	53	84

Table 3.2: The number of requests presented to the PMCs and the number of requests implemented contributes to strengthening FOs.

Characteristic 2	M.S M.G			AP	%	Walawe			AP	%	Iginimitiya			AP	%
	S	2	1			S	2	1			S	2	1		
The number of requests presented to the PMCs and the number of requests implemented contributes to strengthening FOs.	5	8	5	36	63	9	6	-	39	76	15	5	1	56	88

Table 3.3: Successful FOs hold regular meetings and exhibit larger member participation in those meetings.

Characteristic 3	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
Successful FOs hold regular meetings and exhibit larger member participation in those meetings.	12	7	-	50	88	15	-	-	45	88	19	1	-	58	92

Table 3.4: A co-operative and the supportive attitude of the Agency representatives at the field level produces a successful/strong FO.

Characteristic 4	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
A co-operative and the supportive attitude of the Agency representatives at the field level produces a successful/strong FO.	16	2	1	53	93	14	1	-	44	86	16	4	-	56	88

Table 3.5: Training programmes directly focusing on participatory management helps to strengthen FO.

Characteristic 5	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
Training programmes directly focusing on participatory management helps to strengthen FO.	19	-	-	57	100	13	2	-	43	84	18	2	1	59	94

Table 3.6: Accessibility to the field level officers (all agencies, not only irrigation related officers) tends to produce a strong FO.

Characteristic 6	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
Accessibility to the field level officers (all agencies, not only irrigation related officers) tends to produce a strong FO.	18	-	1	55	96	15	-	-	45	88	20	-	1	61	97

Table 3.7: A committed leader with a style compatible with the group's needs is a prerequisite of a strong FO.

Characteristic 7	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
A committed leader with a style compatible with the group's needs is a prerequisite of a strong FO.	18	2	-	56	98	15	-	-	45	88	20	-	1	61	97

Table 3.8: Method and frequency of communication from office bearers to the general membership and vice versa is an indication of successful FO

Characteristic 8	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
Method and frequency of communication from office bearers to the general membership and vice versa is an indication of successful FO	17	2	-	55	96	15	-	-	45	100	18	2	-	58	97

Table 3.9: The density, intensity and duration of involvement of the organisers of the FOs determine its success.

Characteristic 9	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
	The density, intensity and duration of involvement of the organisers of the FOs determine its success.	15	4			-	53	93			14	1	-		

Table 3.10: The capacity of the leadership to mobilise the membership and resources of the FO for activities that benefit the organisation tends to make the FO strong.

Characteristic 10	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
	The capacity of the leadership to mobilise the membership and resources of the FO for activities that benefit the organisation tends to make the FO strong.	17	2			-	55	96			15	-	-		

Table 3.11: Strong FOs have the larger proportion of owner operators among its members.

Characteristic 11	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
	Strong FOs have the larger proportion of owner operators among its members.	1	8			10	29	51			5	6	4		

Table 3.12: The FOs where training has been more uniformly distributed among the general membership as opposed to concentrated training to office bearers tend to be successful.

Characteristic 12	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
	The FOs where training has been more uniformly distributed among the general membership as opposed to concentrated training to office bearers tend to be successful.	17	2			-	54	95			15	-	-		

Table 3.13: FOs for which the technical (agriculture) or organisational (Institutional) training is more balanced tend to be strong.

Characteristic 13	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
	FOs for which the technical (agriculture) or organisational (Institutional) training is more balanced tend to be strong.	16	3			-	54	94			14	1	-		

Table 3.14: The FO that have developed norms and regulations which are accepted by the members tend to be successful.

Characteristic 14	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
	The FO that have developed norms and regulations which are accepted by the members tend to be successful.	17	2			-	55	96			14	1	-		

Table 3.15: FOs that have the capacity to generate own funds tend to become more successful.

Characteristic 15	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs that have the capacity to generate own funds tend to become more successful.	19	-	-	57	100	12	2	1	41	80	20	1	-	61	97

Table 3.16: FOs which conduct their business and distribute benefits to its fairly and equally tend to be more successful.

Characteristic 16	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which conduct their business and distribute benefits to its fairly and equally tend to be more successful.	19	-	-	57	100	9	5	1	38	74	16	2	3	57	90

Table 3.17: FOs which have developed a mechanism to resolve conflicts (without outside mediation) fairly quickly tend to be successful.

Characteristic 17	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which have developed a mechanism to resolve conflicts (without outside mediation) fairly quickly tend to be successful.	15	4	-	53	93	15	2	-	49	96	19	1	1	60	98

Table 3.18: FOs which have no political interference and have the ability to keep politicians out of their organisational activities tend to be more successful.

Characteristic 18	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which have no political interference and have the ability to keep politicians out of their organisational activities tend to be more successful.	12	4	3	45	79	11	3	3	42	82	16	3	2	56	88

Table 3.19: FOs which have their members from a similar social background tend to be more successful.

Characteristic 19	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which have their members from a similar social background tend to be more successful.	9	10	-	47	82	10	3	4	40	78	12	5	4	50	79

Table 3.20: FOs which have required knowledge in the preparation of water distribution plans and have the capacity to implement the plan tend to be more successful.

Characteristic 20	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which have required knowledge in the preparation of water distribution plans and have the capacity to implement the plan tend to be more successful.	18	1	-	56	98	17	-	-	51	100	20	-	1	61	97

Table 3.21: Clearly defined hydrological boundaries are necessary for a strong FO in Irrigated Agriculture.

Characteristic 21	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
Clearly defined hydrological boundaries are necessary for a strong FO in Irrigated Agriculture.	15	4	-	53	93	17	-	-	51	100	19	2	-	61	96

Table 3.22: FOs which have the capacity to prepare and implement pre seasonal maintenance plans tend to be more successful.

Characteristic 22	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which have the capacity to prepare and implement pre seasonal maintenance plans tend to be more successful.	18	1	-	56	98	17	-	-	51	100	21	-	-	63	100

Table 3.23: FOs which have the capacity to monitor, evaluate and obtain feed back on O and M tends to be more successful.

Characteristic 23	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which have the capacity to monitor, evaluate and obtain feed back on O and M tends to be more successful.	9	10	-	47	82	17	-	-	51	100	19	2	-	61	97

Table 3.24: There is a minimum level of physical status in water delivery system above which the FO can be established and sustained.

Characteristic 24	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
There is a minimum level of physical status in water delivery system above which the FO can be established and sustained.	11	7	1	46	80	13	1	-	47	92	19	2	-	61	97

Table 3.25: FOs which keeps its financial records, specially in maintenance contracts, open to all its members tend to be strong.

Characteristic 25	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs which keeps its financial records, specially in maintenance contracts, open to all its members tend to be strong.	13	6	-	51	89	16	-	-	48	94	20	1	-	61	97

Table 3.26: A FO which has the capacity to impart the know how to its members for the increase of agricultural production per unit of water, to achieve a higher cropping intensity, to undertake crop diversification, encourages the use of high value crops and crop rotations tends to be Successful

Characteristic 26	M.S M.G			AP	%	Walawe			AP	%	Inginimitiya			AP	%
	3	2	1			3	2	1			3	2	1		
A FO which has the capacity to impart the know how to its members for the increase of agricultural production per unit of water, to achieve a higher cropping intensity, to undertake crop diversification, encourages the use of high value crops and crop rotations tends to be Successful	17	2	-	51	96	16	-	-	48	94	21	-	-	63	100

Table 3.27: FOs whose members produce high value crops, achieve high crop intensity and practice diversified agriculture are very strong.

Characteristic 27	M.S M.G			AP	%	Walawe			AP	%	Inginimutiya			AP	%
	3	2	1			3	2	1			3	2	1		
FOs whose members produce high value crops, achieve high crop intensity and practice diversified agriculture are very strong.	14	5	-	52	91	13	3	-	45	88	16	5	-	58	92

Table 3.28: A FO which helps its members to increase their area of production implement new income generating activities, and increase their income tends to be strong.

Characteristic 28	M.S M.G			AP	%	Walawe			AP	%	Inginimutiya			AP	%
	3	2	1			3	2	1			3	2	1		
A FO which helps its members to increase their area of production implement new income generating activities, and increase their income tends to be strong.	3	15	-	39	68	15	1	-	47	92	19	2	-	61	97

Table 3.29: A FO that supplies inputs such as fertiliser, agro-chemicals, seed paddy etc. on time, and at a comparatively lower cost to its members is considered a successful FO.

Characteristic 29	M.S M.G			AP	%	Walawe			AP	%	Inginimutiya			AP	%
	3	2	1			3	2	1			3	2	1		
A FO that supplies inputs such as fertiliser, agro-chemicals, seed paddy etc. on time, and at a comparatively lower cost to its members is considered a successful FO.	18	-	1	55	96	16	-	-	48	94	20	1	-	62	98

Table 3.30: A FO that help its members with soil management, water saving techniques and other resource conservation methods tend to be strong.

Characteristic 30	M.S M.G			AP	%	Walawe			AP	%	Inginimutiya			AP	%
	3	2	1			3	2	1			3	2	1		
A FO that help its members with soil management, water saving techniques and other resource conservation methods tend to be strong.	12	3	1	41	72	14	2	-	46	90	15	6	-	57	90

### 3.3 Analysis of Responses to 30 Characteristics

Three broad categories were used to analyse the responses given by farmers to the 30 characteristics. These categories are most important, important and less important. The categorisation is based on the assumption that most important characteristics would be allocated 20 percent important characteristics 50 percent and less important characteristics 30 percent for each of the three systems (INMAS, MANIS and Mahaweli). The range of characteristics in each category is decided by taking the difference between the highest and lowest aggregated totals for each system, multiplying the difference by 0.3, 0.5 and 0.2 for less important, important and most important categories respectively. The multiplied result is added to the lowest score in each of the categories.

#### 3.2.1 Example

In Inginitiya project the total aggregated score given by farmers (Annex 1.B pages 5-6 ) vary from 53-63. Hence the difference is 11 aggregate points (including first and last scored). As the less important category is assigned 30 percent, 11 points are multiplied by 0.3 and added to the least score in the aggregated point list (all additions always include both minimum and maximum scores). Hence  $11 \times 0.3 = 3 + 53 = 55$ . Therefore, the range of aggregated points for less important category is from 53 to 55. Similarly for important category it is  $11 \times 0.5 = 6 + 56 = 61$ . Therefore the range of aggregated points vary from 56-61. For most important category it is  $11 \times 0.2 = 2 + 62 = 63$ . Therefore the range is from 61 to 63.

According to this categorization the range of variables for the three categories in the three systems are as follows:

	<b>INMAS</b>	<b>MANIS</b>	<b>MAHAWELI</b>
Most important	62-63	52-57	48-57
Important	56 - 61	38-51	37-47
Less important	53-55	29-37	31-36

#### Farmers and FR Response Analysis

The following individual farmer representative response analysis is based on the above categorization.

Accordingly, there are only three characteristics (variables) 22, 26 and 29 which have been identified as most important by farmers in all three systems. These three characteristics are:

22 - Preparation and implementation of pre-seasonal maintenance plans.

Characteristic number 22 has been identified as strongly relevant by individual farmers and FOs in Iginimitiya. Two officers have also considered characteristic 22 as an important factor to successful FOs. Hence out of the six engineering characteristics, item 22 can be most important to Iginimitiya farmers and officers.

26 - Capacity to impart know-how to members for increasing production per unit of water, achieve higher cropping intensity and undertake crop diversification.

29 - Supplies Agricultural inputs on time and at a comparatively low cost to farmers.

These two characteristics have been rated high as an important by farmers and FOs in Mahasiyabalagamuwa and Walawe project areas. In both these areas characteristic number 26 and 29 have been ranked first and second by farmers and FOs. However, Line Agency Officers in Mahasiyabalagamuwa have not identified any productivity characteristics as an important factor. This does not mean that they discard productivity characteristics as of no importance but the institutional characteristics need high priority in the present situation than productivity characters. In Walawe Line Agency Officers (Technical Officer of the Mahaweli and Gramaniladari) have identified characteristic No.29 as an important factor, there by prioritizing at 2nd and 4th position in the order of ranking. In Iginimitiya, supplying agricultural input on time and at a comparatively low cost is considered as an important factor by the order of prioritisation, it has been placed at number four by both FOs and Officers. Individual farmers also have given a low priority to characteristic No:29 while recognising its importance.

While 26 and 29 are agricultural productivity characteristics, 22 is an engineering characteristic. When INMAS and MANIS systems are considered, only characteristics number 14 is rated as most important by farmers in these two systems. Characteristic number 14, which is an institutional factor emphasises the need to have developed norms and regulations for successful FOs.

It is interesting to note that, according to our categorisation only engineering and agricultural productivity characteristics are identified as most important for successful FOs by farmers in all three system. This indicates that in a horizontal system analysis common characters that need to be strengthened for successful FOs are productivity and engineering. However an individual system wise analysis (Annex II) indicate that Mahaweli and INMAS still emphasise on engineering and productivity characteristics (with the exception of variable 14 in INMAS) as most important. In MANIS, there are 20 characteristics identified as most important, of which 14 are institutional and social while 6 characteristics are engineering and agricultural productivity (E&P) while 5 out of the 6 E&P characters in MANIS are similar to those

in INMAS and Mahaweli; Variable no.27 - "FOs whose members produce high value crops, achieve high crop intensity and practice diversified agriculture are very strong" is considered important only in the MANIS system. This categorization by individual farmers could mean that in INMAS and Mahaweli, farmers are satisfied with the degree of institutional and social development while in MANIS this development is still not up to a satisfactory level. This could also be explained by the institutional and social resource inputs received by the former two systems as against the latter.

MANIS program which is still in the stage of institutional development needs special inputs to strengthen FOs to the level of INMAS and Mahaweli. However, MANIS farmers too recognize the importance of E&P characteristics to strengthen FOs to be successful sustainable units.

With respect to the broad categorisation adopted, characteristics 3, 24 and 28 are identified as important by farmers in all three systems (Annex III). Interestingly, at this level of categorisation farmers identify "holding regular FO meetings and larger member participation" and effectiveness of project Management Committees as characteristics of successful FOs. The other two variables 24 and 28 are E&P characteristics. In Walawe and Inginiitiya Officers and FOs have prioritised characteristic No.24 at 2nd position. However, their prioritisation has a significance with characteristic no:3, which is also given importance along with characteristic no.24. This could be explained, that when Irrigation infrastructures are not up to its minimum level farmers need to group themselves together more often to distribute the limited quantity of water delivered in a poor system. Hence, characteristic no:3 "Holding regular meetings and larger member participation" become very important. However, some FOs in Walawe where there is adequate water due to the physical location of the FOs, have also considered the status of the physical system important ostensibly realizing the importance of the physical system for good water delivery. However, for INMAS and Mahaweli systems there are 12 common variables which are considered as important by farmers in both systems (Annex II). For INMAS and MANIS systems, only variable 23 "FOs which have a capacity to monitor, evaluate and obtained back on O&M tends to be more successful" is identified as important.

Variable 11, "strong FOs have the larger proportion of owner operators among its membership", is one of the characteristics given less importance in developing successful FOs by farmers in all three systems. The general belief that larger the proportion of owner operators, stronger the FOs is not supported by most farmers in all three systems. However analyzing individual systems, the importance given to character No:11 by Mahaweli and MANIS farmers is the lowest in the aggregated points. This could be due to two reasons, one, leasing of land is not a common phenomenon in both these systems and two, all cultivators are given FO membership.

However, the situation is different in INMAS, where the farmers have given 54 points out of 63 to characteristic 11 (though it is considered a low score in a high scoring system). Analysis of individual farmer responses for variable 11 in INMAS, indicates that 15 out of 20 farmers rated it as a most important factor for strong FOs. Two farmers noted it as less important and three farmers as an important characteristics to successful FOs. This scenario in INMAS can probably be explained by the fact that percentage of land leasing among Inginiimitiya farmers are high.

### 3.2.2 Responses from Farmer Organisations

According to the priority rankings given by farmer organisations in the three systems, only characteristic No: 3 has been given first priority (Annex IV). This indicates that at group level farmers give high importance to having regular meetings and higher member participation as a characteristic for successful FOs. There are no characteristics common to all three systems in priority two to four. There are 9 variables (3,7,1,30, 8, 20, 25, 29, 18) which are being prioritized under priority 1 - 4. Of the 9 variables 4 variables are in E&P. These 4 characteristics are; i. characteristic 25 - FOs keep financial records specially in maintenance and possess Transparency to its membership, ii. characteristic 29. FOs that supply agriculture inputs to its members at concessional rates, iii.characteristic 20 -FOs that have required knowledge in preparation of water distribution plans and have the capacity to implement, and iv. Characteristics 30 - FOs that help its members with soil management, water saving techniques and other conservation method.

Analysing individual farmer responses and FO responses, it is clear that, characteristics No:22- capacity to plan and implement pre-seasonal maintenance plan, has received priority over characteristic No:20 -which deals with preparation and implementation of water distributing plans. This has been categorically stated by FOs in Inginiimitiya than in the other two systems.

Table 1 below indicates that responses from FOs also indicated the importance given to E&P characteristics, besides few common institutional characteristics which have been given importance by FOs.

**Table 3.31: Prioritization of Commonly Occurring Characteristics by Farmer Organisations**

System	Priority 1	Priority 2	Priority 3	Priority 4
All three systems	3	-	-	-
Mahaweli/INMAS	-	1,30	-	16
Mahaweli/MANIS	7	8	25,29	-
INMAS/MANIS	-	-	20	18,29

Source: Field workshop data

### 3.2.3 Responses from Line Agency Officers

Unlike, the assessment given by FOs on the selected 30 characteristics, the officer prioritization is more biased towards institutional and social characters. Of the 19 commonly occurring characters only 4 characters belong to E&P areas.

**Table 3.32: Prioritizing Commonly Occurring Characteristics by Line Agency Officers**

Systems	Priority 1	Priority 2	Priority 3	Priority 4
All three systems	3,7	4,7	10	-
Mahaweli/INMAS	18	-	15,26,7,25	29,30
Mahaweli/MANIS	-	8,10	12	16
INMAS/MANIS	8	3,18	1,14	-

Line agency officer assessment indicates that, E&P characters are given only 3rd and 4th priorities, while 1st and 2nd priorities are given to social and institutional characters. Among the institutional characters, leadership and holding regular meetings are given higher priority than others by officers in all three systems.

### 3.2.4 General Analysis

Analysing the responses given by individual farmers, FOs and line agency officers, it appears that farmers and FOs have given a high priority to E&P characters while agency officials prioritized social and institutional characters as more important for development of successful FOs.

### 3.2.5 Inter relationship between FOs and Officers in Prioritizing success Characteristics of FOs

Inter relationships between FO and officer responses are analysed for all systems, Mahaweli/ INMAS, Mahaweli/MANIS and INMAS/MANIS.

For all three systems, FOs have given priority number one to conducting regular FO meeting and exhibit larger member participation, in meetings (Characteristics 3). None of the other characteristics are commonly prioritised under priority 2 to 4 by FOs in all systems (Table 3). However officers have given first priority to 3rd and 7th characteristics with characteristics 4 & 7 are prioritized as number two, character 10 has been prioritised at number three. This indicates that variable 3, is commonly considered as an important characteristic by both FOs, and officers in all systems.

**Table 3.33: Common Responses given by FOs and Officers (All systems)**

	FOs	Officers
Priority 1	3	3, 7
Priority 2	-	4,7
Priority 3	-	10
Priority 4	-	-

Source: Field Workshop data

Table 3 also indicate that characteristic 7 (committed leadership) is identified as an important character by officials in all three systems.

In Mahaweli and INMAS systems variable number 30 is identified as an important characteristic by both FOs and officers. Most of the officers in this category have given importance to productivity characteristics than institutional social and engineering characteristics (table 4).

**Table 3.34: Priority Responses given by FOs and Officers in Mahaweli and INMAS Systems**

	FOs	Officers
Priority 1	-	18
Priority 2	1,30	-
Priority 3	-	15, 26, 7, 25
Priority 4	1,30	29, 30

Source: Field workshop data

Besides the productivity characteristics, the officers have also identified existence of a FO federation and FO leadership as an important characteristic to strengthen FOs. The reasons for prioritizing productivity characteristics over others can be explained by the fact that these systems (Mahaweli/INMAS) have received ample support to strengthen institutional, social and engineering activities through numerous donor funded projects. Though most donor funded projects also emphasized on agriculture development, it appears to be one of the areas lacking adequate attention. This would have possibly instigated both FOs and officers to identify productivity support as a vital area to strengthen FOs.

According to the responses given by Mahaweli and MANIS (Table 5) FOs and officers, Institutional characteristics have been identified as important over engineering and productivity characteristics. Among the FOs, variables 25 and 29 (productivity characters) have been given third priority.

This could be possibly explained by the inadequate agricultural support given to MANIS farmer organisations. Of the Institutional characteristics, Mahaweli and MANIS FOs and agency officials have identified, FO leadership and FO internal communication as important characteristics to strengthen farmer organisations.

**Table 3.35: Common Priority Responses given by FOs and Officers in Mahaweli and MANIS Systems.**

	FOs	Officers
Priority 1	7	-
Priority 2	8	8, 10
Priority 3	25, 29	12
Priority 4	16	-

Source: Field workshop data

When FO and officer responses of INMAS and MANIS (Table 6) are analyzed, variable number 29 (productivity characteristics) is prioritized at fourth place. All the other characteristics identified by FOs and officers are social and institutional. Here too, the officers have identified holding regular FO meeting as an important characteristic of successful farmer organisations.

**Table 3.36: Common Priority Responses given by FOs and Officers in INMAS and MANIS Systems**

	FO	Officers
Priority 1	-	8
Priority 2	-	3, 18
Priority 3	20	1, 14
Priority 4	18, 29	-

Source: Field Workshop data

### **3.2.6 Significant Issues**

In the individual farmer assessment, the most important commonly responded, characteristics are 22, 26 and 29 of which variable 22 is an engineering characteristic while 26 & 29 are productivity characteristics. When only the Mahaweli system is considered, the farmers have identified five engineering (20, 21, 22, 23, 25) and 2 productivity (26 & 29) characters as most important. INMAS farmers have identified one engineering (22) two productivity (26, 29) and one institutional (14) characteristic as important MANIS farmer have identified 20 most important characteristic of which only 6 are Engineering and productivity characteristics.

In the “less important” category, individual farmers in Mahaweli have identified only variable number 11. This is true to MANIS too where the farmers have identified variable 11 and 2 as less important characteristics. In INMAS farmers have identified 10 variables, including three new variable (1,2,4,11,12,18, 19, 32,33,34) categorized as less important. This too indicates that in INCAS more institutional inputs have made farmers to consider institutional inputs as less important to other characters in developing successful farmer organisations.

In the group assessments, neither FOs nor line agency officers have prioritized productivity or engineering as number one priority. Both groups have identified institutional characters 3 and 7 as priority one, for development of successful FOs.

This indicates that even farmers in groups consider institutional characteristics more important than other characteristics. However FOs have given due consideration to E&P characters from priority 2 to 4. In contrast line agency officials have identified only agricultural characteristics (no significance given to engineering characteristics) from priority 2 to 4. It is significant to note that even in the FO assessment only one engineering characteristic (20) has been identified at priority three (table 3)

This common response analysis indicates that among productivity and engineering characteristics, productivity characteristics have emerge more important than engineering characteristics. Institutional and social characteristics identified for strengthening FOs have been placed at third and fourth places.

### **3.2.7 New Variables identified**

There are four new variables, outside the 30 tested in the field workshops. these variables are presented below. However, these new variables should be further reviewed in the brainstorming sessions.

Variable 31

FOs which have legal authority to carry out decisions tend to be more strong.

Variable 32

FOs which have moderate number of farmers as membership (size of FO) tend to be more successful.

Variable 33

FOs which are located at tailend of the irrigation system tend to be more cooperative and strong.

Variable 34 FOs which undertake marketing of Agriculture produce tend to be more successful.

## 4. CASE STUDIES OF FARMER ORGANISATIONS

### 4.1 Introduction

This section aims to present an in-depth analysis of each FO studied. For the case studies the nine (9) FOs selected are under three programmes; namely Management of Irrigation Systems (MANIS), Mahawei Programme and Integrated Management of Major Irrigation Systems (INMAS). Analysis of each of the studied FOs is presented under four major headings. They are:

- i. General background,
- ii. Performance
- iii. Challenges and Constraints
- iv. Development Stage

See Table 4.1 for a Summary of the Basic Details of the nine FOs.

### 4.2 Maha Siyambalagamuwa Left Bank (LB) Farmer Organisation

#### i. General Background

Maha Siyambalagamuwa (LB) Farmer Organisation was formed in 1990 under the guidance of Irrigation Department. The area covered by the FO is 97.2 hectares and the total population in the command area is 922. Among them 128 farmers have obtained membership in the FO. Main activities of FO, other than water, include introduction of a savings system, undertaking rehabilitation contracts and sale of fertilizers to members. The FO consists by seven field canal groups.

#### ii. Performance

##### a. Institutional and Sociological

Farmers believe that training and awareness building are key factors for success of their FO. They have indicated that it is important to impart training more uniformly among general memberships and leaders of FO. Thus, they believe that if general farmers and office bearers are equipped with sufficient knowledge and skills such a FO tends to more successful.

Therefore, FO group members rank the characteristic no.12 as first in priority. In our field discussions, it was further revealed that members are satisfied with technical and institutional training provided by the agencies in developing their FO capacity.

Adoption of suitable communication methods and frequency of communications between FO office bearers and general membership is also a vital factor for success of FO. Maha Siyambalagamuwa (LB) FO representatives rated this characteristic as the second most important factor. Office bearers of this FO adopted several methods such as public notices and small informal group meetings to inform the members and get feedback from them. These methods, they believe, are effective ways of communications which make their FO strong.

Table 4.1: Basic Details of the Studied Farmer Organisations

Programme	Date of establishment	No. of members	Extent	Population	Key activities
1. Mahasiyambalagamuwa LB FO	19.8.1990	128	97.2 (ha)	922	Farmer savings, contracts, fertiliser sales, water distribution
2. Mahasiyambalagamuwa RB FO	19.8.1990	80	60.7 (ha)	686	Water distribution contracts
3. Mahagalgamuwa Gamunu FO	29.9.1990	34	46.5 (ha)	180	Water distribution, bank loans.
<b><u>Mahaweli Systems</u></b>					
4. MM8 FO, Chandrikawewa	August 1990	73	77 (ha)	525	Fertiliser supply, loans, water distribution, marketing
5. Murawasihena FO	June 1991	156	209 (ha)	350	Crop diversification, loans, water distribution
6. Gemunu FO Kiriibbanwewa	August 1991	37	120 (ha)	240	Loans, water distribution, educational programme, social events.
<b><u>INMAS System</u></b>					
7. Mahuswewa FO	27.10.1989	260	411 (ha)	5200	Contracts O&M water distribution Shramadana
8. Pubudu FO (RB)	1.6.1990	250	303 (ha)	1500	Shramadana, fertiliser sale, services, cultural events.
9. Ranketha FO (LB)	25.1.1985	141	910 (ha)	810	Rehabilitation, livestock, programmes, fertiliser sale, water distribution, training.

Source: Workshop data

Maha Siyambalagamuwa (LB) FO believed that keeping financial records open to all members as the third important factor for a success of FO. In our field observations it was revealed that this FO has a reasonable amount of money and they carry out number of business and market oriented activities to improve their financial capacities.

Farmer representatives pointed out that the ability to keep politics out of FO affairs is also a characteristic of a successful FO. They ranked this characteristic as fourth important characteristic in developing capabilities of FO. In the field discussions it was revealed that farmers of this FO has taken all possible efforts to keep political interest and politicians out of their organisational activities, especially in electing office bearers.

Leadership of this FO was rated as one of the salient characteristics. Majority of farmers believe that their office bearers are efficient and dynamic leaders. Majority of the Agency Officers are also of the same view and rated leaders' commitment and dedication as the priority number one and the pre-requisite for success of FO. especially, Agriculture Instructors Department of Agriculture (DOA) and Divisional Officer Department of Agrarian Services (DAS). Colonisation Officers Land Commissioner's Department (LCD) and the Project Manager (ID) believed that leadership with a style compatible with the group needs as the most vital factor. Agriculture Instructors and Colonisation Officers commented that young, dedicated and dynamic nature of leadership of Maha Siyambalagamuwa (LB) FO made them come within top ten of 82 FOs in the Grama Niladhari Division.

#### **B. Irrigation Engineering**

There are a few interesting development activities that had taken place in the organisation. They are:

1. Collection of service tax by FO and a payment made to office bearers approximately Rs. 2000/= per season.
2. Special tax imposed on reservation cultivators
3. Penalties on farmers who violate FO decisions

Further, they had considered the training provided to members of FO were the most important success characteristic. It may be possible for the FO to collect full cost of O&M from farmers in future if the service provided by the FO is increased and impact on recovery of full O&M cost is explained to all members. Moreover, as they are now collecting special tax for cultivation of reservations, it may also be possible to motivate them to impose a tax on water use beyond the cultivation seasons. With proper training and guidance, concepts on water marketing could be introduced to the FO as they are already exposed to collection of special taxes.

c. **Agricultural Productivity**

The Left Bank FO being financially sound is keen in business and marketing rather than welfare activities.

The FO has a tradition of successful crop diversification, during the Yala season when there was less water to be shared by the members. Two years ago big onion cultivation had brought large profits to nearly all farmers. When inquired why it was not repeated, the office bearers answered that members are prepared to cultivate paddy next Yala but they are planning to cultivate other field crops in the coming seasons.

But, when the FO were requested to rate the agricultural productivity, success characteristics it was found that none had been of much significance to them, although they are actively involved with the supply of inputs such as fertilizer and agro chemicals to its members (characteristic 29). The FO also helps its members to increase its area of production by cultivation even in the reservation and the FO levy a tax for this purpose (characteristic 28). The cultivation is being supervised by the FO. The 10 percent tax collected from such cultivation has strengthened the fund of the FO. In 1996 this collection has amounted to RS. 16,000/=.

d. **Secretarial and Financial**

The documents maintained by the secretary are:

1. Minutes of the general meetings, 2. Minutes of committee meetings, 3. Attendance register, 4. Membership list, 5. File of letters received, 6. File of copies of letters sent, 7. Assets register, 8. Register of membership applications, 9. Register of resignations from membership and 10. Register of notices. The activities of the FO are recorded accurately and documents are maintained well.

The treasurer maintains, 1. Cash book, 2. Ledger, 3. Payment vouchers, 4. Contract agreements, 5. Membership fees register and 6. Bank statements. The current account credit balance as at 16th November 1996 was Rs. 41,721.00. The accounting documents are not maintained accurately. Accounting practices of this FO need to be improved

iii. **Challenges and Constraints**

Despite the outstanding performance, FO faces several challenges and constraints. Chief among them are the difficulty to get young farmers involved in the FO activities poor services from Agriculture Instructors (AI), FOs inability to expand its activities into general problems such as infrastructure development and lack of legal authority to impose sanctions on defaulters.

iv. **Stage of Development**

Mahasiyambalagamuwa (LB) FO has gained considerable experience in facing challenges since its formation in 1990. According to field observations and group discussions with representatives of farmer groups, it is evident that this FO is in the consolidation stage. If necessary guidance and legal support is provided, this FO can be developed as a fully functional and an independent organisation.

3.2.2 **Maha Siyambalagamuwa (Right Bank) Farmer Organisation**

i. **General Background**

This FO is the smaller of the two FOs in Maha Siyabalagamuwa Scheme. Total membership is eighty (80). Total population in the FO area is 686 and covers approximately 60.8 ha of Land. Similar to the LB area this FO was also formed in 1990, but has less, experience in non water related activities. FO command area consists of 17 Field Canals.

ii. **Performance**

a. **Institutional and Sociological**

According to the group discussions, the most preferred success characteristic of the FO is its ability to have regular meetings and get majority of members participate in such meetings. Farmer Representatives (FRs) believe that dynamic FO needs to get together frequently and obtain majority's support for its activities.

Although this FO attempted to have regular meetings, it could not obtain majority participation at such meetings. Especially, the second generation farmer members are less interested in FO activities.

The second most important success characteristic of FO identified by FRs is its ability to generate own funds. FRs believe that a strong FO should have its own financial base to grow independently.

Success of FO also depends on the discipline and the common objectives. Therefore, to function as a strong organisation, farmers believe that it is necessary to develop norms and regulations by FO. Maha Siyambalagamuwa RB FRs rated this as their third most preferred success characteristic of FO. In reality, however, this FO faces challenges from different sections of the people in the area. Especially, there are serious challenges and threats from young and wealthy farmers to the FO activities.

The other most preferred success characteristics of FO identified by FRS is its ability to supply agricultural inputs and services on time and at relatively lower cost to its members. FRs who participated in group discussion believe that one of the prime objectives of a FO is to fulfil the basic agricultural requirements. If the FO is able to satisfy these felt needs of majority farmers, their participation in FO activities can be assured.

Among other characteristics, leadership of FO emerged as a vital factor for the success of a FO. It was observed that the major reason for selecting this FO as a strong organisation is its leadership. Since its inception (1990) the leadership positions have not changed. This is mainly because of the ability and style of present leadership is viewed by majority of farmers as contributing to the success of the FO. Farmers think that changing leadership means loss of valuable experience and knowledge that has been acquired by its key members over a period of time.

Agency officers are of the view that this FO is relatively better organised than others in the area. It is said that out of thirty (30) FOs in the Negampaha Divisional Secretariat area, this is rated as one of the best five organisations. But compared to LB, FO, this is graded as second.

**b. Irrigation Engineering**

FO had not selected any engineering characteristics as priority one. Their FO meetings had been scheduled once in every three months. Further, participation of farmers in FO meetings was also not satisfactory. Hence, they considered characteristic No 3. regular meetings as the most important characteristic. FO members had considered their FO as the best FO in Negampaha Divisional Secretariat area due to proper water distribution and active leadership. During the discussion, it had been revealed that there are disputes over water rights for a long period. Further, there are three tanks, in the same catchment area. This again points out that Mahasiyalagamuwa is a suitable place to study, the concepts of water-rights and present form of agreements and traditions practiced by farmers. As there were number of non land owner cultivators in the area and land had been allotted in 1995, transfer of land tenure rights to others and acceptance of rights by FO as well as by Government officers also can be studied.

**c. Agriculture Productivity**

This FO as a group has found characteristics No.29 (A FO that supplies inputs O&M) as important in strengthening the farmer organisation. In depth analysis shows that the FO although do not attract young farmers (farmers of the 2nd generation) has consolidated their organisation with a very strong leadership. The present leadership has been there since 1990 and many activities are being carried out which include the sale of agricultural inputs such as fertilizer, agro chemicals, seed paddy etc to the members. The price of such items are always less than in the open market.

**d. Secretarial and Financial**

The documents maintained by the secretary are: 1. Minutes of the general meetings, 2. Minutes of the committee meetings, 3. Register of members, 4. Assets register, 5. File of letters received and copies of letters sent out. The activities of the FO are recorded accurately and documents are maintained well.

The treasurer maintains, 1. Cash book, 2. Ledger, 3. Payment vouchers, 4. Membership fees register, and 5. Bank statements. The current account credit balance as at 16th November 1996 was Rs.20,000. The accounting documents are not maintained accurately. The treasurer has not received any training in accounts keeping.

iii. **Challenges and Constraints**

The major challenge to the FO is the non-cooperation of some farmers who are led by a few wealthy farmers. The present FO leadership is criticized by this group, but meantime they neither want to change the present leadership nor to cooperate with management. Political interference is also considered a constraint for selection of office bearers and decision making related to water distribution. The other issue which worries the membership is the lack of support and participation of youth (second generation) in farming. They (youth) think that this is an old profession which needs to depend on government officers and availability of water.

iv. **Stage of Development**

According to the ratings of Farmers and Officers, the RB Farmer Organisation can be grouped into the consolidation stage than formation stage. But there are number of aspects which need to be improved and developed in this FO for it to become a strong FO. Compared with LB Farmer Organisation, this can be rated as one which is in between the formation and consolidation stage.

4.2.3 **Maha Galgamuwa - Gemunu Farmer Organisation**

i. **General Background**

Gemunu FO has been established in 1990 with the assistance of ID officials. Although there are about 50 farmers under this FO area, only 34 have obtained membership. Population in the FO area is 180 and total command area is 46.5 hectares. Out of 19 anicuts 7 are in a deteriorated condition. Of the three FOs under Mahagalgamuwa, this FO is located at tailend of the main canal.

ii. **Performance**

a. **Institutional and Sociological Aspects**

Key members of the FO who participated in group discussions are of the opinion that a strong FO should be able to prepare a plan and distribute water equitably among its members. They rated this characteristic as the first preference in developing their FO. However, in reality, they face number of difficulties in preparing and implementing a water distribution plan by themselves. They think the poor physical system and non-cooperation of head end FOs make water distribution even more difficult.

The second success characteristic of the FO, according to their preference, is ability of a FO to supply agricultural inputs including fertilizer and provide them on time at a reasonable price to its members.

Farmers also think that it is important to have a system of farmer federation at higher level. Existence of a federation at Tank level or Project level is not only an indication of existence of strong FO, but also contributes to strengthen the FO. They rated this characteristic as the third most important in their order of prioritisation.

They also stated that the conduct of regular meetings and majority participation to those meetings is a success characteristic of the FO. In this aspect this FO is strong because most of its members participate in meetings and cooperate in group activities. This in particular is a strength of the FO and it has acquired this level of involvement of membership due mainly to challenges originating from the lack of opportunities other than farming.

The other salient characteristics of the FO includes the ability to carry out maintenance of canals by its members and the leaders ability to monitor and supervise water delivery to ensure an equitable and timely distribution to members.

b. **Irrigation and Engineering**

Gemunu FO selected characteristic No.20 as the most important. Hence, they considered equitable distribution of water as an indicator of a successful FO. It is necessary to note that there are 19 small anicuts in the command area. It is therefore very difficult to distribute water equitably with the irrigation system. Number of farmers in the FO is only 50, but they are not united. It appears that leadership is efficient. Tenant farmers are also considered as members by the FO. This FO also collects service charge for water distribution. However, it was pointed out that common decisions arrived at Kanna meetings were neglected by most head end farmers. In this situation, good irrigation system is necessary to strengthen the FO.

c. **Agriculture productivity**

Similar to the Right Bank FO, Gamunu FO too is involved in the trading of fertilizer, chemicals and the other necessary inputs for its members. They buy in bulk the inputs required for the members, store them and supply as and when required. This has helped them to consolidate their membership to a greater extent. The FO feels this characteristic as one in the order of priority.

e. **Secretarial and financial**

The documents maintained by the secretary are: 1. Minutes of the general meetings, 2. Minutes of the Committee meetings and, 3. Register of members. The records maintained are neither accurate no complete.

The documents maintained by the treasurer are: 1. Cash book, 2. Receipts book and 3. Membership fee register. The current account credit balance as at 17th November 1996 was Rs. 12,560.00. The treasurer has not received training on accounts keeping, hence financial records are not maintained properly.

iii. **Challenges and Constraints**

Challenges and constraints faced by this FO can be divided into four categories as follows:

- a) Young farmers are less enthusiastic in FO activities as they do not see prospects of income avenues through the involvement with the FO.
- b) lack of legal authority for FO make it powerless against illegal water tapping and difficult to impose sanctions against big land owners and tenants .
- c) political interference and biases in water distribution decisions ie. catholic farmers who are at head end area use political presure to change PMC decisions in their favour.
- d) poor marketing facilities for agriculture produce and exploitation by private traders.

iv. **Stage of development**

Although this FO is considered as the best out of three in the Mahagalgamuwa system. its performance shows only a marginal improvement in overall management of the system. Also, we believe that this is the weakest of the three FOs studied under MANIS programme. It can be rated as to be at the initial stage or formative stage of FO development.

**4.2.4 Chandrikawewa Project - MM8/Farmer Organisation**

i. **General Background**

MM8/FO located in the Chandrikawewa Blocks in Walawe Special Project has been formed in 1990. The FO command area is 77 hectares. Total membership in the FO is 73 and population in the area is approximately 525. FO has 7 FC groups and 14 members from the above FC groups form the executive committee of the FO. In addition to FC groups, a 7 member financial committee is also place for systematic management of financial matters.

ii. **Performance**

a. **Institutional and Sociological**

This FO identified that regular meetings with majority participation is an important characteristic of a strong and successful FO. The FRs who participated in the group sessions rated this as the second most important characteristic that makes an organisation strong. In our field interviews with FO leaders it was revealed that they conduct successful meetings at the beginning of each season where large number of members gathered to make decisions on seasonal matters.

This FO strongly believes that cooperative and supportive attitude of field level agency officers as a very important contributory factor for successful FOs. It is observed that leaders of this FO maintain close and cordial relationship with agency officers even at higher levels. A perusal of correspondence which this FO had with highest officers in the Mahaweli Authority, indicates their relationship, which not only strengthens the capacity of FO but also helps the process of empowerment of farmers.

Existence of a Federation of FOs at project level is considered as a basis for strong FOs at grassroots level. The FO believes that existence of project management committee of Walawe Project strengthens the capacity FO.

In addition to other social and institutional characteristics, strong and charismatic leadership, welfare oriented activities and business and enterprise development activities have made this organisation a strong FO in the area.

b. **Irrigation and Engineering**

MM8 FO has a very good irrigation infrastructure, better than any other FOs in the Block, as canals of the system have been recently rehabilitated and farmers have more water than their requirement due to return flows. Thus farmers believe that the prime reason for their success is the good physical status of the water delivery system. They are of the view that an organisation can only be established and sustained under an assured water through a good physical system. Even water rights or meaningful legal authority for FOs is only feasible under such situation.

c. **Agricultural Productivity**

The FO has undertaken the supply of inputs to all its members at a reduced price than prevailing in the open market. They also have established a retail shop of consumer items to service the membership.

Granting of cultivation loans by the FO to its members has found an important place in their activities. The members have leased out premises to store their input requirements such as fertiliser.

At the time of validation of the variables, the FO as a group rated characteristic No. 29 as one of the contributing factors to the strengthening of their organisation.

FO has established a Group Savings System with Bank of Ceylon and had also obtained a cultivation loan of Rs.140,000/- to provide credit to 17 farmers. Further development of the FO needs to be guided as they have a good foundation in respect of irrigation water and distribution system on agricultural production activities.

d. **Secretarial and Financial**

Documents maintained by the secretary are: 1. Minutes of general meetings, 2. Minutes of committee meetings 3. Equipment and material inventory, 4. Stationary register 5. Membership applications, 6. Membership register 7. Minutes of the unit coordination committee 8. Subject files (community development etc.) and 9. Visitors book. All activities of the FO are documented accurately.

Mahaweli Economic Agency has introduced 20 Accounting Documents (DCO 1- 20) to 169 societies in Walawe. The document use in this association are; DCO 1 - (Receipt for cash received), DCO2, (Receipt for cash sales), DCO 3 (Payments), DCO 4 (Cash book), DCO 5. (General ledger), DCO 6 (Journal) and DCO 7 (Receipts credit). In addition records: 1. Expenditure on Special Transport 2. Fertilizer inventory 3. Details of Contracts are maintained. As at 7th December 1996, the FO had a balance of Rs.42062.14 (deposits is 37,723.14 and Cash in hand 5,339.00). Financial records are maintained properly.

iii. **Challenges and Constraints**

The major challenges to the FO are from private traders and politicians. Since FO entered into sales activities of fertilizer and agro-chemicals and marketing, number of threats have been increased. Politics too seems to influence and interfere. As the FO is gaining local support it is sustaining a viable organisation in the area.

iv. **Stage of Development**

According to field observations and results of group discussions with FRs, MM8/FO has acquired most of the necessary skills and abilities to function as a viable local organisation. But agency officers who are working with this FO are of the opinion that it still required some guidance and support to be a fully functional independent FO. Therefore we may conclude that this FO is in the consolidation stage of the FO development process than in the fully functional stage.

**4.2.5 Murawasihena Project - Track 11/D4 Farmer Organisation**

i. **General Background**

This FO has been formed during 1991 by the Institutional Organizers of Mahaweli Authority. Total extent covered by the FO is 209 ha where nearly 200 farmers are engaged in farming. The present membership however is only 156. Population living in the FO command area is approximately 350. Under its commands the FO has 19 field channels and the length of D canal is about 4 1/2 miles. The farmers have settled in 1974 but since then most allottees have not cultivated properly due to water shortage.

ii. **Performance**

a. **Institutional and Sociological**

The performance of this FO suggests that a strong organisation may be able to survive even under a water short and physically weak system. This FO prioritised the following institutional and sociological characteristics.

FO should have regularly held meetings and it should be able to draw majority of members participation in these meetings. Farmer groups who participated in the workshop ranked this as the number one characteristic that makes a FO strong. In field discussions, it revealed that farmers are very cooperative and the FO is able to organise its members to clean the entire distributory canal within two hours.

Murawasihena farmers see the importance of having FO federation which strengthens their (FOs) capacity. It is unlikely that an individual FO can exchange resources and make fair decisions concerning FOs without a federation. Thus, they ranked this as the second most important success characteristic for a strong FO.

According to group discussions, leadership capacity of the FO to mobilise its members and resources towards the development of the organisation is also a success characteristic. It was observed in our field visits that this FO leadership is a dynamic and general members place a lot of confidence on their leadership. Leadership has the capacity not only to mobilise farmers, but also make strong disciplinary action against members who disobey the FO decisions.

The other success characteristic which this FO preferred as an important one is that organisations capacity to generate its own funds. Unless a FO develops a financial base of its own no activities can be implemented successfully. Therefore this FO engaged in number of fund raising activities such as maintenance contracts, rice processing and loan facilities to farmers. During the last season FO was able to get a loan of Rs.230,000/- from People's Bank. FO has launched number of community services such as arranging educational tours, constructing public toilets, cleaning of rural roads etc. utilising its own funds.

b. **Irrigation and Engineering**

Track 11/D4 FO spent more time in water distribution as they did not get an adequate supply during rotational water issues. But their irrigation system was in a good condition due to recent rehabilitation works. Thus, they did not select any engineering characteristics as an important item during the group session. This may lead to a conclusion that when there are no water shortages, organisational activities get priority over engineering activities.

c. **Agricultural Productivity**

The FO is well established with functions such as granting cultivation loans to its members. The organisation has a tradition of crop diversification during the Yala season when there is less water to be shared among the members.

Nevertheless, the FO as a group has not prioritised any of the agricultural productivity characteristics.

The FO has recorded very good yields of 90-95 bushels per ha. Further, nearly all members have a small banana cultivation. Hence, their average income could be high and probably they have good savings or access to credit to improve their production activities. It is possible to increase area under diversified crops as they have adequate water and access to credit facilities.

d. **Secretarial and Financial**

Documents maintained by secretary are: 1. Minutes of annual general meetings 2. Minutes of monthly meetings 3. Membership register, 4. Minutes of unit coordinating committee meeting 5. Membership application forms, 6. Cultivation loans register and 7. File of letters received and copies of letters sent. The FO records are kept accurately.

The treasurer maintains: 1. DCO 1, 2. DCO 2, 3. DCO 4, 4. DCO 5&7, 5. Vouchers register, 6. Loans ledger, 7. General ledger 8. Journal, 9. Membership fees register 10. Membership deposit register 11. Contract agreement register and 12. cultivation loans register. There is a savings deposit of Rs.123,000/- at Angunakilapelessa Peoples Bank as at 7th December 1996. FO maintains accounts records accurately.

iii. **Challenges and Constraints**

Although there are no significant challenges stated by farmers, this FO is heavily dependent on support and guidance of field officials institutional development officer and institutional organiser volunteers for its activities. On the other hand strict rules and regulations imposed by FO also have received some criticism. However on the overall the FO manages efficiently.

iv. **Stage of Development**

FO has gained financial and management abilities to overcome initial difficulties which most of the FOs faced during the formation stage. Therefore, this FO can be placed in the consolidation stage. But it needs intensive support to be in fully functional stage.

#### **4.2.6 Kiriibbanwewa - Gemunu Farmer Organisation**

##### **i. General Background**

Gemunu FO was formed in 1991. This is a relatively small FO which has only 37 farmer members. Total population under FO is 240 and extent covered is about 120 hectares. FO has five small groups. FO area receives water from an old tank called Urusitana Wewa through a nine km canal. FO is located at the tailend of the system. One of the salient features is that most of the FO members have similar social background thereby greater homogeneity and integration. Other than water delivery, FO undertakes social welfare and educational programs and contract activities.

##### **ii. Performance**

###### **a. Institutional and Sociological**

It was observed that the FO considers it is very important to meet regularly and get majority members participation in FO meetings. Farmers of this FO rated this characteristic, as the number one priority to make FOs successful. It was revealed that the FO have meetings on a monthly basis and most members do participate in these meetings even with short notice. One of the reasons for their success in conducting meetings and high farmer participation is the size of the FO. Since it has only 37 members, the leadership and members have a close togetherness making the conduct of the FO activities more effective.

This is the only FO which highly praised the work done by Institutional Organisers (IOs) in promoting FO. Thus the FO believes that the presence of an IO for a period of time to mobilize farmers toward group actions is an important contributory factor for the success of FO. FRs selected the above characteristic as the second most important one in their assessment.

The members of this FO believe that FO which conducts business and distribute benefits to its members fairly and equitably tends to be more successful. Although this FO spent more time on water related issues, a significant number of enterprises and social activities also have been carried out. For example obtaining of agricultural loans, saving system for woman and marketing arrangement for farmers agriculture produce. Such activities, farmers believe, promotes the FO as a social institution recognized by all. FRs also believe that FO need to continue to make arrangement to supply agriculture inputs at a lower price to its members. Farmer representatives who participated in group sessions ranked the above as important for the success of a FO.

b. **Irrigation and Engineering**

Gamunu FO of Kiribbanwewa Block has a lot of problems due to bad conditions of the irrigational canals. As a result, they struggle to distribute the available water among its members. They have been living with a bad irrigation system and water shortages. They have placed the characteristics No.24 at the fourth place in selecting the most strongly relevant characteristics. They identified characteristics No.03 as the most important one. When a FO spends a lot of their time and energy on maintenance works and distribution of water, they are actively engaged on engineering activities covered under items Nos.20 to 24. Hence, they did not consider it as a priority even though the FO cannot exist without involvement in operation and maintenance activities, particularly when irrigation water is not adequate and canals needs frequent maintenance.

c. **Agricultural Productivity**

The FO is involved in carrying out social activities for its members. The most important economic activity being the provision of cultivation loans to its members. This activity has helped the FO to establish well its organisation in the area during the past few years.

Apart from this, the FO is involved in the supply of inputs for its members very regularly. At the time of validation of the characteristics, the FO as a group has rated characteristic 29 as one of the important factors for the building up fo the organisation.

Major activities of the FO are mobilisation of savings to improve access to the credit facilities through banks. They have a compulsory saving system which was not observed in other FOs. FO as a borrower takes the responsibility to replay loans of the defaulters.

d. **Secretarial and Financial**

The documents maintained by the secretary are: 1. Minutes of General Meetings, 2. Minutes of monthly (field canal) meetings 3. Attendance register 4. Membership register 5. File of letters received 6. File of copies of letters sent. 7. Register of contract documents 8. Record of shramadana activities 9. Membership register and 10. Membership application register. The activities of the FO are recorded accurately.

The treasurer maintains: 1. Paying vouchers 2. Contract agreement register 3. The journal 4. Loans application register 5. Membership share register 6. Deposit register 7. Compulsory savings register 8. Loans ledger (DCO 10) 9. DCO 5 10 General ledger DCO 5, 10. Cash book Journal DCO6. Bank deposit as at 8.12.1996, was Rs. 63,200/= . The accounts records are maintained accurately.

iii. **Challenges and Constraints**

The major constraint for the FO is water shortage and poor conditions of irrigation canals. Weak physical infrastructures, they believe, discouraged farmers in involving in group activities. Political interference in FO activities and poor legal coverage to FO are two other challenges which the Gemunu FO believes as critical factors affecting success.

iv. **Stage of Development**

Despite the weaknesses of the physical system, this FO made good progress in organisational development. Dedicated leadership and multi functional nature of FO activities have gained recommendation and stability in the area. Although the FO still dependent on IOs for guidance on crucial matters, it has the ability to manage FO affairs. Therefore this FO can be placed at the middle level or consolidation stage of the FO development process.

**4.2.7 Iginimitiya Project Right Bank - 'Pubudu' Farmer Organisation**

i. **General background**

Pubudu Farmer Organisation has been established in 1990 with the assistance of Institutional Organisers of IMD. Current membership is 250 and total population in the FO area is approximately 1500. The extent covered by FO is about 303.7 hectares which include 20 field channels. This FO is rated as one of the best FOs in the project because it won the first place in the competition which was organized to celebrate the 10th anniversary of IMD.

ii. **Performance**

a. **Institutional and sociological aspects**

Pubudu FO believes that FOs should regularly hold meetings and have larger member participation to make them successful. Farmers have selected this characteristics as the most important in their selection of success characteristics. FO variables. From the field observations and discussions it was found that Pubudu FO held meeting monthly. Since farmers have encountered difficulties they are very keen to organise themselves and are responsive to group activities.

Farmers are also of the view that the success of a FO depend on its ability to generate own funds and develop a sound financial base. Officers, specially those promoting FOs(IO,IDO)also stated that FO most have the financial capacity to ensure individual benefits through collective actions. Therefore, FO has selected this as a success characteristic. It also has engaged in number of business activities such as undertaking of contracts, rental services of three wheel tractors etc. It was also revealed that the FO has a good financial management system.

Two other characteristics which both farmers and officers selected are non interference of politics in FO matters and dedicated leadership of FO. These two characteristics have strongly helped this FO to become one of the successful FOs in the area.

b. **Irrigation Engineering**

Farmers representatives stated that about 15 percent of their time was spent on irrigation related activities. They said that they cannot make a water distribution plan as the water supply is unreliable. The command area of Pubudu FO is situated at the tailend of the RB canal. Thus they believe there should be a minimum level of physical status in water delivery system above which the FO can be evolved and sustained. They preferred this as a important characteristic for success of FO and as the second most preferred characteristic.

c. **Agricultural Productivity**

Pubudu is one of the best organisations in the Ingimitiya project. It provides a large number of facilities to the members such as; supply of fertiliser at reduced prices, provides tractor service, etc.

Surprisingly the FO has not rated any of the agricultural productivity success characteristics as important to their organisation at the time of group validations.

d. **Secretarial and Financial**

Documents maintained by the secretary are: 1. Minutes of general meetings, 2. Minutes of committee meetings 3. Attendance register 4. Register of lands of FO. 5. Membership register, 6. Membership application form register, 7. File for letters received and 8. File of copies of letters sent. The activities of the FO are recorded accurately.

The documents maintained by the Treasurer are: 1. Cash book 2. Receipts book, 3 Ledger, 4. Membership fees register 5. Assets register, 6. Membership application forms and 7. Income and expenditure record of the tractor. Deposits as at 14.12.1996 was Rs. 23,162.30. The accounts are maintained satisfactorily.

iii. **Challenges and Constraints**

In general, there are many difficulties to remain in agriculture. Specially younger generation is leaving the area looking for better jobs elsewhere. Although FO is able to carry out activities that are beneficial for FO members, it is not in a position to expand alternative income avenues and carry out general development in the area. Therefore, farmers place little hope on FO to improve their living standards. On the other hand, despite the rehabilitation works, tertiary physical system (field channels) is not properly developed to ensure reliable water supply to the farmers. This has discouraged farmers to cooperate in FO activities.

iv. **Stage of development**

During past six years, 'Pubudu' FO has gained considerable experience to cope up with external and internal challenges. It is revealed that this FO has gained recognition as efficient both by farmers and agency officers and to placed in at an advantageous position among FOs. Thus we may conclude that this FO has consolidated its position and only required certain supportive actions to develop it to the fully functional stage an advantageous position among other FOs.

**4.2.8 Inginimitiya Project - Mahauswewa Farmer Organisation**

i. **General Background**

This FO has been formed in 1985. Although there are nearly 500 farmers in the area only 260 farmers are eligible for the membership. FO receives water from Uswewa tank which was constructed in 1887. The FO command area is about 411 hectares with an estimated population of around 5200.

ii. **Performance**

To become a strong FO it is necessary to have the support and encouragement from agency officials who are working at field level. This is the view of the Mahauswewa FO and they rated it as the most important characteristic in developing FOs. They also stated that their experience over the last five decades in which different types of FOs have established by the State. But most of the FOs failed due to lack of interest by the farmers and non-cooperation of agency officers towards FOs. However, during the last decade they have observed significant changes in the attitudes of officers. This positive and conducive environment has helped to improve their (FO) capacities.

In addition they also considered the accessibility to field officers by farmers tend to provide opportunities for FOs to grow strong. In group sessions farmers selected this characteristic as the second most important factor.

The Mahauswewa FO members prefer to have a committed leader. The present leadership has not changed or paved the way to young farmers acquire leadership skills. In our field visits we observed that low participation of members in FO meetings was partly due to this situation.

This FO also preferred to have improvements in farmer discipline as basis for a strong FO. They ranked the characteristic of FOs that have developed their own norms and regulations which are accepted by members as one of the four key characteristics which to make FO successful. However, in Mahauswewa FO only about 50 percent of the farmers are active in its activities.

b. **Irrigation Engineering**

Irrigation facilities and system of this FO is in a good condition. They had not selected any engineering characteristics as a priority variable.

c. **Agricultural Productivity**

Although the FO has been actively engaged in the social welfare and other economic activities for its members at the time of validation as a group it has not identified any of the agricultural productivity success characteristics as important to them.

d. **Secretarial and Financial**

Documents maintained by the secretary are: 1. Minutes of the General meetings 2. Minutes of committee meeting 3. Contract agreements register 4. File of letters received 5. File of copies of letters sent 6. Membership register and 7. Membership application forms. The activities of the FO are not accurately recorded.

The documents maintained by the treasurer are: 1. Cash book 2. Receipt book and 3. Membership fees register. Deposits as at 14.12.1996 was Rs.20,368.23. Accounts records are not maintained to the set standards.

iii. **Challenges and Constraints**

The complex land tenure pattern practiced in the area makes it difficult for farmer participation in FO activities. It was observed that nearly 50 percent of the farmers cultivating in the FO area are under different tenurial systems and also residing outside FO area. Youth interest in farming is also very low and many people preferred to get other jobs outside their villages. This social structural issues affect the progress FO in many ways.

iv. **Stage of Development**

Although the FO has a fairly well functioning irrigation system the social and institutional environment is not so conducive for this FO to become strong. Thus organisationally this FO is a weak one requiring reorganisation.

**4.2.9 Iginimitiya Project - Ranketha Farmer Organisation (D 2) of Left Bank**

i. **General background**

Ranketha FO, has been formed in 1985. Present membership of FO is 141. But still there are about 20 farmers who have not obtained membership. The area covered by FO is 910 ha and an estimated population of 810.

ii. **Performance**

a. **Institutional and Sociological**

It is interesting to note that this FO has not selected any of the sociological or institutional characteristics as most important items to improve the FO capacity. They believe that engineering and agricultural aspects of FOs are the key characteristics which determine success or failure of a FO.

In our field visits, we realised that farmers are very cooperative and always have higher level of participation in group and business activities such as contracts. They have done canal cleaning on group basis. In general farmers preferred two institutional factors as important to make FO strong. 1). Regularly held meetings and 2).generate income avenues and distribute benefits more equally to the membership. We observed that this FO has done fairly good number of agricultural programs and contracts.

b. **Irrigation Engineering**

Ranketha FO is located closer to the reservoir and can be considered as a FO with less irrigation problems. They have done number of rehabilitation contracts and the canal system is also in a good condition. FRs selected the characteristic of FO which able to prepare and implement seasonal maintenance of the most important and number one in the preference their priority list of items.

FO should have the capacity and knowledge to prepare and implement a water distribute plan. This they (FO) identified as the second most important characteristic to strengthen FOs.

c. **Agricultural Productivity**

Since this FO has rich experience in providing agricultural services to farmer they are able to develop a community base for existence. FRs who participated in the group sessions stated that FOs should be able to create new income projects through FO. Farmers rated this characteristic as the second preference in selecting top four characteristics of a strong FO. This FO has selected characteristic No.29 as the fourth important success characteristic of a strong FO.

It is a well establish FO in the Inginitiya scheme and has helped the members in many activities including the distribution of fertilizer, coconut seedlings for the home gardens and distribution of inputs such as seed paddy, fertilizer etc. The FO has organised a large number of training programmes for its members.

At the time of rating the characteristic pertaining to agricultural productivity, the FO as a group has identified characteristics 29 & 30 as factors important to them.

d. **Secretarial and Financial**

The documents maintained by the secretary are: 1. Minutes of the general meetings 2. Minutes of the committee meetings 3. Membership register 4. Register of paddy lands in the FO area, 5. Application forms for membership 6. Subject files for education, irrigation, homegardening rural development activities, etc. Activities of the FO are documented accurately.

The documents maintained by the treasurer are: 1. Cash book 2. Payment voucher file 3. Receipt book and assets register. The deposits in savings accounts as at 15th December 1996 was Rs. 16,484.00. Accounts records are not maintained properly.

iii. **Challenges and Constraints**

Disputes over unclear land boundaries among farmers hinder their social relationships. Hence, one pre-requisite to strengthen FO is to provide land titles and demarcation of lands. As the land of this FO area falls within two Divisional Secretariat areas the farmers are not able to make strong representation to line agencies.

iv. **Stage of Development**

This FO is more concerned on infrastructural (land and irrigation aspects) problems that damage the social organisation. Although the FO acquired certain level of organisational maturity it cannot be placed at consolidation stage.

## 5. CONCLUSIONS

### 5.1 Responses of Individual Farmers, FOs and Officers

Responses given by the three groups, individual farmers (FRs), FOs and Line Agency Officers vary in their perceptions (Tables 5.1) Individual responses indicate a significant importance given to Agricultural Productivity and Engineering characteristics while the FOs have prioritised in the order of Agricultural Productivity, Engineering and Institutional Characteristics. However, the officer responses tend to favour institutional development characteristics to Productivity and Engineering Characteristics.

The analysis also indicates that, responses given to characteristics clearly defer between systems. In Walawe and Ingimitiya, with high institutional inputs have considered Productivity and Engineering characteristics as more important than others.

Table 5.1: Responses given by Individual Farmers, Fos and Officers

Category	Individual Farmers and FRs	FOs Assessment	Officer Assessment
Productivity	28, 26, 29	29, 30	26, 29, 30
Engineering	22, 24	20, 25	25
Institutional	3,2	3, 7, 8,1	3, 4, 7,8,10,14 15,12,16
Social	None	18	18

### 5.2 Characteristics Identified by Phase of development and Category of Effect

The identified characteristics can be further categorised according to phase of Development of FO and category of effect and are given Below (Table 5.2)

Table 5.2 : Characteristics Identified by Phase of development and Category of Effect

Category of Effect	Phase of Development		
	Formation	Consolidation	Fully functional
Direct (Internal)		3,7*, 8*,10*, 14*, 15*, 16* 20*, 29*	7, 8, 14, 22, 25, 26, 28, 30
Contributory (External)	4*,12*,24*	1, 14*, 18* 2	

\* Present in more than one phase

According to the above categorisation, most identified characters belong to FO consolidation and fully functional stages. This indicates that few FOs at present require external inputs like, training, agency support and minimum level of irrigation infrastructure as contributory factors for successful FO formation. This analysis also indicates that most FOs can be included in the consolidation phase with few in the fully functional phase.

### 5.3 Summary of Conclusions

Two variables (Nos 11 and 21), "strong FOs have large proportions of owner operators among their membership" and "clearly defined hydrological boundaries are necessary for a strong FO in Irrigated Agriculture" are not given any importance as success characteristics either by the FOs or Officers.

A detail breakdown of the FO and Officer responses (Tables 5.3 and 5.4) indicates that FOs have prioritized holding regular meetings with larger participation and uniform training as most important characteristics. These characteristics have been prioritized, because the FOs believe that they are the important characteristics of a successful Farmer Organisation. Besides these two institutional characteristics, they (FO) have ranked as important variable Nos. 20 and 24 (Irrigation Engineering) and variable No. 29 (Agricultural productivity). Though not ranked in equal importance, leadership is also considered as an important characteristic of a successful Farmer Organisation.

The officer responses however, do not necessarily agree with the FO responses in its same order. Officers have ranked institutional characteristics as more important than Engineering and Agricultural Productivity characteristics. According to Table 5.2, the officers have prioritized leadership and holding regular meetings as most important characters while cooperative and supportive attitude of Officers at field level is placed third in the order of priority. Officers have considered only one productivity characteristic (Variable No.26) as important.

In the aggregate picture (Table 5.3) of FOs and Officer responses the order of prioritization is characteristics No. 3 (holding regular meetings), No.7 (leadership) and No.15 (capacity to generate own funds). While the first two characteristics have been prioritized both by FOs and Officers, characteristic No.15 (FOs that have the capacity to generate their own funds tend to become more successful) has been given preference by officers. Hence, in the aggregate picture it becomes important. In the composite responses of FOs and Officers, only three Engineering and Agricultural Productivity characteristics (Characteristics Nos.22,26 and 29) emerge as important. The emergence of institutional characteristics over Engineering and Agricultural Productivity in the composite analysis is due to the high weightage given to those same characteristics by Officers.

Table 5.3: Position of 30 Variables marked by Representatives of 19 Farmer Organisations

Variables	Manis (5. FOS) Positions				Mahaweli (7. FOS) Positions				Inmas (7.FOS) Positions				Total (19. FOS) Positions			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	-	-	1	-	-	1	-	1	-	1	-	-	-	2	1	1
2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
3	1	-	-	-	4	1	1	-	-	2	-	-	5	3	1	-
4	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
6	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-
7	1	-	-	-	1	-	-	-	-	-	2	-	2	-	2	-
8	-	1	-	-	-	1	-	-	1	-	-	-	1	2	-	-
9	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-
10	-	-	-	-	-	1	1	-	-	-	-	-	-	1	1	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	2	-	-	-	-	-	-	-	-	1	2	-	2	1	2	-
13	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
14	-	-	1	-	-	-	-	-	-	-	-	2	-	-	1	2
15	-	3	-	2	-	-	-	2	-	-	1	-	-	3	1	4
16	-	-	-	-	-	-	1	1	-	-	-	1	-	-	1	2
17	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-
18	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	2
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1	-	1	-	-	-	-	-	-	-	2	-	1	-	3	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	1	-	-	-	-	-	2	-	-	-	2	-	1
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	1	-	1	1	-	2	-	-	1	2	1	1
25	-	-	1	-	-	-	1	-	-	-	-	-	-	-	2	-
26	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	1	1	1	-	1	-	1	-	-	1	2	-	2	2
30	-	-	-	-	-	1	-	-	-	1	-	-	-	2	-	-

Source: Mahasiyambalagamuwa/Mahagalagamuwa (Manis), Walawe (Mahaweli) and Inginimitiya (Inmas) Systems workshop data

Table 5.4: Position of 30 Variables marked by 34 Officers Serving Famer Organisations

Variables	Manis (11 Officers) Positions				Mahaweli (12 Officers) Positions				Inmas (11 Officers) Positions				Total Positions			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	1	-	1	-	-	1	-	-	-	-	1	-	1	1	2	-
2	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-
3	2	1	-	-	3	-	1	1	3	2	-	-	8	3	1	1
4	-	2	-	-	-	2	-	-	-	2	-	2	-	6	-	2
5	1	-	3	-	1	-	-	-	-	-	-	-	2	-	3	-
6	1	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-
7	4	2	-	-	2	1	1	-	2	2	1	-	8	5	2	-
8	1	1	-	-	-	2	-	-	1	-	-	-	1	3	-	-
9	-	-	-	-	-	-	1	1	-	-	1	-	-	-	2	1
10	-	2	1	1	-	1	2	-	1	-	1	-	1	3	4	1
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	1	1	-	-	1	-	1	1	-	-	1	1	1	1
13	-	-	1	-	-	-	-	-	-	-	-	3	-	-	1	3
14	-	-	1	-	-	-	-	1	-	-	1	-	-	-	2	1
15	-	-	-	2	-	-	1	-	-	-	1	-	-	-	2	2
16	1	2	1	1	-	-	-	-	-	-	-	-	1	2	1	1
17	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-
18	-	1	-	3	1	-	-	-	1	1	-	-	1	2	-	3
19	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
20	-	-	-	-	1	-	-	-	1	-	-	-	2	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	2	-	1	1	-	-	1	1	2
23	-	-	1	1	-	-	-	-	-	1	-	-	-	1	1	1
24	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-
25	-	-	-	1	-	1	1	-	-	-	1	-	-	1	2	1
26	-	-	-	-	-	1	1	-	2	-	2	1	2	1	3	-
27	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	1	-	-	-	-	-	2	-	1	-	2
30	-	-	-	-	-	-	1	1	-	-	-	2	-	-	1	3

Table 5.5: Position of 30 Variables of marked by Representatives 19 Farmer Organisations and 34 Officers

Variables	Manis								Mahaweli								Inmas								Total Position			
	Position (5 FOS)				Position (11 Officers)				Position (7 FOS)				Position (12 Officers)				Position (7 FOS)				Position (11 Officers)				1	2	3	4
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	-	-	1	-	1	-	1	-	-	1	-	1	-	-	-	-	1	-	-	-	-	1	-	1	3	3	1	
2	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	2	
3	1	-	-	-	2	1	-	-	4	1	1	-	3	-	1	1	-	2	-	-	3	2	-	-	13	6	2	1
4	-	-	-	-	-	2	-	-	-	-	-	-	-	2	-	-	1	1	-	-	-	2	-	2	1	7	-	2
5	-	-	-	-	1	-	3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	-	4	-	
6	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	2	-	-
7	1	-	-	-	4	2	-	-	1	-	-	-	2	1	1	-	-	-	2	-	2	2	1	-	10	5	4	-
8	-	1	-	-	1	1	-	-	-	1	-	-	-	2	-	-	1	-	-	-	1	-	-	2	5	-	-	
9	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	-	-	-	-	-	1	-	1	-	2	1
10	-	-	-	-	-	2	1	1	-	1	1	-	-	1	2	-	-	-	-	-	1	-	1	-	1	4	5	1
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	2	-	-	-	-	-	1	1	-	-	-	-	-	-	1	-	-	1	2	-	1	1	-	-	3	2	3	1
13	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	4
14	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	1	-	-	-	3	3
15	-	3	-	2	-	-	-	2	-	-	-	2	-	-	1	-	-	-	1	-	-	1	-	-	3	3	6	
16	-	-	-	-	1	2	1	1	-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	1	2	2	3	
17	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-
18	-	-	-	-	-	1	-	3	-	-	-	1	1	-	-	-	-	-	1	1	1	-	-	1	2	-	5	
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	
20	1	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	1	-	-	3	-	3	-	
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	-	2	-	-	-	1	1	-	-	3	1	3
23	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	1	
24	-	-	-	-	-	-	-	-	1	-	1	1	-	-	-	-	-	2	-	-	-	1	-	-	1	3	1	1
25	-	-	1	-	-	-	-	1	-	-	1	-	-	1	1	-	-	-	-	-	-	1	-	-	1	4	1	
26	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	2	-	2	1	2	1	3	1	
27	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	1	1	-	-	-	-	1	-	1	-	-	1	-	-	1	-	-	1	-	-	2	2	1	2	4	
30	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	1	-	-	-	-	2	-	2	1	3	

Source: Mahasiyambalagamuwa/Mahagalagamuwa (Main projects), Walawe (Mahaweli) and Inginimitiya (Inmas) Systems workshop data

The emerging important characteristics are given below.

- (3) Successful FOs hold regular meetings and exhibit larger member participation in those meetings.
- (7) A committed leader with a style compatible with the group's needs is a prerequisite of a strong FO.
- (15) FOs that have the capacity to generate own funds tend to become more successful.
- (22) FOs which have the capacity to prepare and implement pre seasonal maintenance plans tend to be more successful.
- (26) A FO which has the capacity to impart the know how to its members for the increase of agricultural production per unit of water, to achieve a higher cropping intensity, to undertake crop diversification, encourages the use high value crops and crop rotation stands as a strong FO.
- (29) A FO that supplies inputs such as fertilizer, agro-chemicals, seed paddy etc. on time, and comparatively lower cost to its members is considered a successful FO.

ANNEXES

**The Variables Identified for Validation**

- (1) Existence of a federation is an indication of a strong FO. At the same time, a federation contributes to the strengthening of FO.
- (2) The number of requests presented to the PMCs and the number of requests implemented contributes to strengthening FOs.
- (3) Successful FOs hold regular meetings and exhibit larger member participation in those meetings.
- (4) A co-operative and the supportive attitude of the Agency representatives at the field level produces a successful/strong FO.
- (5) Training programmes directly focusing on participatory management helps to strengthen FO.
- (6) Accessibility to the field level officers (all agencies, not only irrigation related officers) tends to produce a strong FO.
- (7) A committed leader with a style compatible with the group's needs is a prerequisite of a strong FO.
- (8) Method and frequency of communication from office bearers to the general membership and vice versa is an indication of successful FO
- (9) The density, the intensity and duration of involvement of the organisers of the FOs determine its success.
- (10) The capacity of the leadership to mobilise the membership and resources of the FO for activities that benefit the organisation tends to make the FO strong.
- (11) Strong FOs have the larger proportion of owner operators among its members.
- (12) The FOs where training has been more uniformly distributed among the general membership as opposed to concentrated to office bearers tend to be successful.
- (13) FOs for which the technical (agriculture) or organisational (administration) training is more balanced tend to be strong.
- (14) The FO that have developed norms and regulations which are accepted by the members tend to be successful.
- (15) FOs that have the capacity to generate own funds tend to become more successful.

- (16) FOs which conduct their business and distribute benefits to its s fairly and equally tend to be more successful.
- (17) FOs which have developed a mechanism to resolve conflicts (without outside mediation) fairly and quickly tend to be successful.
- (18) FOs which have no political interference and have the ability to keep politicians out of their organisational activities tend be more successful.
- (19) FOs which have their members from a similar social background tend to be more successful.
- (20) FOs which have required knowledge in the preparation of water distribution plans and have the capacity to implement the plan tend to be more successful.
- (21) Clearly defined hydrological boundaries are necessary for a strong FO in Irrigated Agriculture.
- (22) FOs which have the capacity to prepare and implement pre seasonal maintenance plans tend to be more successful.
- (23) FOs which have the capacity to monitor, evaluate and obtain feed back on the O and M tends to be more successful.
- (24) There is a minimum level of physical status in water delivery system above which the FO can be established and sustained.
- (25) FOs which keeps its financial records, specially in maintenance contracts, open to all its members tend be strong.
- (26) A FO which has the capacity to impart the know how to its members for the increase of agricultural production per unit of water, to achieve a higher cropping intensity, to undertake crop diversification, encourages the use high value crops and crop rotation stands as a strong FO.
- (27) FOs whose members produce high value crops, achieve high crop intensity and practice diversified agriculture are very strong.
- (28) A FO which helps its members to increase their area of production implement new income generating activities, and increase their income tends to be strong.
- (29) A FO that supplies inputs such as fertiliser, agro-chemicals, seed paddy etc. on time, and comparatively lower cost to its members is considered a successful FO.
- (30) A FO that help its members with soil management, water saving techniques and other resource conservation methods tend to be strong.

Values Marked on 30 Variables by 19 Farmer Participants from 5 FOs

Variable No.	Participant Responses																			Distribution			Aggregate Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	3	2	1	Total
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	15	4	-	53
2 (1)	3	3	3	3	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	5	8	5	36
2 (2)	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	1	1	1	10	4	5	43
3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	12	7	-	50
4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	16	2	1	53
5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	19	-	-	57
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	18	-	1	55
7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	18	2	-	56
8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	17	2	-	55
9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	15	4	-	53
10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	17	2	-	55
11	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	8	10	29
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	17	2	-	55
13	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	16	3	-	54
14	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	17	2	-	55
15	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	19	-	-	57

Source: Workshop on Testing Variables of Success Characteristics of FOs held at Galgamuwa Irrigation Engineer's Office on 15.11.1996

Values Marked on 30 Variables by 19 Farmer Participants from 5 FOs

Variable No.	Participant Responses																			Distribution			Aggregate Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	3	2	1	Total
16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	19	-	-	57
17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	15	4	-	53
18	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	1	12	4	3	45	
19	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	9	10	-	47	
20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	18	1	-	56	
21	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	15	4	-	53	
22	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	18	2	-	56	
23	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	9	10	-	47	
24	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	11	7	1	46	
25	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	13	6	-	51	
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	17	2	-	55	
27	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	14	5	-	52	
28	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	3	15	-	39	
29	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	18	-	1	55	
30	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	12	5	1	41	

Source: Workshop on Testing Variables of Success Characteristics of FOs held at Galgamuwa Irrigation Engineer's Office on 15.11.1996.

Values Marked on 30 Variables by 17 Farmer Participants from 7 FOs

Variable No.	Participant Responses																			Distribution			Aggregate Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	3	2	1	Total
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
2	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2					9	6	-	39
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
4	3	3	3	3	3	3	3	3	3	3	3	3	3	2						14	1	-	44
5	3	3	3	3	3	3	3	3	3	3	3	3	2	2						13	2	-	43
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
7	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
8	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
9	3	3	3	3	3	3	3	3	3	3	3	3	3	2						14	1	-	44
10	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
11	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1					5	6	4	31
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3						15	-	-	45
13	3	3	3	3	3	3	3	3	3	3	3	3	3	2						14	1	-	44
14	3	3	3	3	3	3	3	3	3	3	3	3	3	2						14	1	-	44
15	3	3	3	3	3	3	3	3	3	3	3	2	2	1						12	2	1	41

Source : Workshop on Testing Variables of Success Characteristics of FOs held at Walawe Auditorium Embilipitiya 06.12.1996.

Values Marked on 30 Variables by 17 Farmer Participants from 7 FOs

Variable No.	Participant Responses																			Distribution			Aggregate Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	3	2	1	Total
16	3	3	3	3	3	3	3	3	3	2	2	2	2	2	1					9	5	1	38
17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2			15	2	-	49
18	3	3	3	3	3	3	3	3	3	3	2	2	2	1	1	1				11	3	3	42
19	3	3	3	3	3	3	3	3	3	3	2	2	2	1	1	1	1			10	3	4	40
20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			17	-	-	51
21	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			17	-	-	51
22	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			17	-	-	51
23	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			17	-	-	51
24	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2				15	1	-	47
25	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				16	-	-	48
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				16	-	-	48
27	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2				13	3	-	45
28	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2				15	1	-	47
29	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				16	-	-	48
30	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2				14	2	-	46
31	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2				13	3	-	45

Source: Workshop on Testing Variables of Success Characteristics of FOs held at Walawe Auditorium embilipitiya 06.12.1996

Values Marked on 30Variables by 21 Farmer Participants from 7 FOs

Variable No.	Participant Responses																					Distribution			Aggregate Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	3	2	1	Total
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	14	6	1	53
2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	-	15	5	1	56
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	-	19	-	1	58
4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	-	16	4	-	56
5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	18	2	1	59
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	20	-	1	61
7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	20	-	1	61
8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	-	18	2	-	58
9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	-	19	-	1	58
10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	19	2	-	61
11	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1	1	1	15	3	2	54
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	16	2	2	56
13	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	19	1	1	60
14	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	21	-	-	63
15																						20	-	1	61

Source : Workshop on Testing Variables of Success Characteristics held at Inginitiya Project Manager's Office on 13.12.1996.

Values Marked on 30 Variables by 17 Farmer Participants from 7 FOs

Variable No.	Participant Responses																					Distribution			Aggregate Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	3	2	1	Total
16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	1	1	16	2	3	57
17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	19	1	1	60
18	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1	1	16	3	2	56
19	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	1	14	4	3	53
20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	20	-	1	61
21	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	19	2	-	61
22	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	21	-	-	63
23	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	19	2	-	61
24	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	19	2	-	61
25	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	20	1	-	61
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	21	-	-	63
27	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	16	5	-	58
28	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	19	2	-	61
29	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	20	1	-	62
30	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	15	6	-	57
31	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	18	3	-	60
32	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	1	15	5	1	56
33	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	14	6	1	55
34	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1	17	3	1	58

Position of Variables Marked by the 5 FOs

Position	Mahagalgamuwa St. Anthony's FO	Mahagalgamuwa Parakum FO	Mahagalgamuwa Gemunu FO	Mahasiyambalangamuwa Right Bank FO	Mahasiyambalangamuwa Left Bank
1	7	12	20	3	12
2	15	15	29	15	8
3	29	20	1	14	25
4	22	3	3	29	18

Analysis

Variable No.	Position			
	1	2	3	4
1	-	-	1	-
2	-	-	-	2
3	1	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	1	-	-	-
8	-	1	-	-
9	-	-	-	-
10	-	-	-	-
11	-	-	-	-
12	2	-	-	-
13	-	-	-	-
14	-	-	1	-
15	-	3	-	2

Variable No.	Position			
	1	2	3	4
16	-	-	-	-
17	-	-	-	-
18	-	-	-	1
19	-	-	-	-
20	1	-	1	-
21	-	-	-	-
22	-	-	-	1
23	-	-	-	-
24	-	-	-	-
25	-	-	1	-
26	-	-	-	-
27	-	-	-	-
28	-	-	-	-
29	-	-	1	1
30	-	-	-	-

Source: Workshop on Testing Variables on Success Characteristics of FOs held at Galgamuwa Irrigation Engineer's Office at 1000 on 15.11.96

**Position of Variables Marked by the 17 participants of 7 FOs**

	Kuttam wewa	Chandeika wewa	Benkame	Suriya wewa	Angunakola	Embilipitiya	Murawasihena Block
Position	D 65 Gemunu FO	nm/8 D2	D3/D5	D/01	D/3	D/7	D/4
1	3	24	3	3	29	7	3
2	9	3	17	10	30	8	1
3	29	4	25	16	24	3	10
4	16	1	13	24	18	15	15

Analysis

Variable No.	Position			
	1	2	3	4
1	-	1	-	1
2	-	-	-	-
3	4	1	1	-
4	-	-	1	-
5	-	-	-	-
6	-	-	-	-
7	1	-	-	-
8	-	1	-	-
9	-	1	-	-
10	-	1	1	-
11	-	-	-	-
12	-	-	-	-
13	-	-	-	1
14	-	-	-	-
15	-	-	-	2

Variable No.	Position			
	1	2	3	4
16	-	-	1	1
17	-	1	-	-
18	-	-	-	1
19	-	-	-	-
20	-	-	-	-
21	-	-	-	-
22	-	-	-	-
23	-	-	-	-
24	1	-	1	1
25	-	-	1	-
26	-	-	-	-
27	-	-	-	-
28	-	-	-	-
29	1	-	1	-
30	-	1	-	-

Source: Workshop on Testing Variables on Success Characteristics of FOs held at Walawe auditorium at 9.30 am on 6.12.96

Position of Variables Marked by the FRs of 7 FOs

	Mahauswewa	Ranketha	Arunalu	Pubudu	Ekamuthu	Gemunu	Dimuthu
Position							
1	4	22	31	3	22	8	3
2	6	30	1	24	24	12	4
3	7	20	12	15	12	20	7
4	14	29	14	18	26	22	16

Analysis

Variable No.	Position			
	1	2	3	4
1	-	1	-	-
2	-	-	-	-
3	-	2	-	-
4	1	1	-	-
5	-	-	-	-
6	-	1	-	-
7	-	-	2	-
8	1	-	-	-
9	-	-	-	-
10	-	-	-	-
11	-	-	-	-
12	-	1	2	-
13	-	-	-	-
14	-	-	-	2
15	-	-	1	-

Variable No	Position			
	1	2	3	4
16	-	-	-	1
17	-	-	-	-
18	-	-	-	1
19	-	-	-	-
20	-	-	2	-
21	-	-	-	-
22	-	2	-	-
23	-	-	-	-
24	-	2	-	-
25	-	-	-	-
26	-	-	-	1
27	-	-	-	-
28	-	-	-	-
29	1	-	-	1
30	-	1	-	-
31	1	-	-	-

Source: Workshop on Testing Variables on Success Characteristics of FOs held at Inginimitiya Project Manager's Office on 13.12.1996

Position of variables Marked by 11 Officers

Position of variables marked by 3 Agricultural Instructors, 1 Assistant Director Agriculture, 2 Divisional Officers (Agrarian Services) 1. Colonisation officer, 1 Grama Seva Niladhari, 2 Project Managers and 1 Bank Officer.

Position	Agricultural Instructors			Assistant Director Agriculture	Divisional Officers Agrarian Services		Colonisation Officer	Project Managers		Grama Seva Niladhari	Bank Officer
	1	2	3		4	5		6	7		
1	6	8	7	1	7	3	7	7	16	1	5
2	4	10	3	18	16	7	10	16	8	4	7
3	1	12	10	16	17	14	23	5	5	5	13
4	10	18	12	23	18	16	-	25	15	18	15

Analysis

Variable No.	Positions			
	1	2	3	4
1	1	-	1	-
2	-	-	-	-
3	2	1	-	-
4	-	2	-	-
5	1	-	3	-
6	1	-	-	-
7	4	2	-	-
8	1	1	-	-
9	-	-	-	-
10	-	2	1	1
11	-	-	-	-
12	-	-	1	1
13	-	-	1	-
14	-	-	1	-
15	-	-	-	2

Variable No.	Positions			
	1	2	3	4
16	1	2	1	1
17	-	-	1	-
18	-	1	-	3
19	-	-	-	-
20	-	-	-	-
21	-	-	-	-
22	-	-	-	-
23	-	-	1	1
24	-	-	-	-
25	-	-	-	1
26	-	-	-	-
27	-	-	-	-
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-

Source: Workshop on Testing Variables of Success Characteristics of FOs held at Polpithigama Divisional Secretariat and Galgamuwa Divisional Secretariat on 6.12.96

**Position of variables Marked by 11 Officers**

1. Block Manager, Assistant Manager I.D.U, 1 Agriculture Officer, 3 Unit Managers, 8 Institutional Development Officers, 3 unit Managers, 1 Grama Niladhari, 3 Field Assistants, 2 Institutional organise Volenties, 1 Technical Officer, 1 Chairperson Womens FO, 1 Bank Officer

Position	Block Manager	Assistant Manager I.D.U	Agriculture Officer	Unit Manager	Inst. Development Officers	Grama Niladari	Field Assistant	Institutional Organisers Volunties	Technical Officers	Chairperson Women's FO	Bank Officer
	(1)	(1)	(1)	(3)	(8)	(1)	(3)	(2)	(1)	(1)	(1)
1	2	5	18	3	3	7	20	3	27	7	15
2	8	7	25	4	10	8	26	4	29	1	26
3	9	15	26	7	25	3	10	12	30	10	10
4	14	3	-	22	9	29	30	22	28	16	8

Analysis

Variable No.	Positions				Variable No.	Positions			
	1	2	3	4		1	2	3	4
1	-	1	-	-	16	-	-	-	1
2	1	-	-	-	17	-	-	-	-
3	3	-	1	1	18	1	-	-	-
4	-	2	-	-	19	-	-	-	-
5	1	-	-	-	20	1	-	-	-
6	-	-	-	-	21	-	-	-	-
7	2	1	1	-	22	-	-	-	2
8	-	2	-	-	23	-	-	-	-
9	-	-	1	1	24	-	-	-	-
10	-	1	2	-	25	-	1	1	-
11	-	-	-	-	26	-	1	1	-
12	-	-	1	-	27	1	-	-	-
13	-	-	-	-	28	-	-	-	1
14	-	-	-	1	29	-	1	-	1
15	-	-	1	-	30	-	-	1	1

Source : Workshop on Testing, Variables on success characteristics of FO held at Walawe Auditorium Embilipitiya at 1430 hrs on 6.12.1996.

Position of Variables marked by 12 Officers

1 Technical Assistant (ID), 1 Coconut Development Officer 1 Grama Sevaka, 2 Colonyalier officers, 1 project Manager, 1 Institutional Development Officer, 1 Institutional Organiser, 1 Graduate Trainee Development Assistant, and 1 Bank Officer

Position	Agricultural Instructors		Technical Assistant ID	Assistant Director Agriculture Coconut Development Officer	Grama Sevaka	Colonisation Officers		Project Managers	IDO	Institutional Organiser	Graduate Trainee	Bank Officer
	1	2	3			4	5					
1	26	3	10	7		26	12	3	8	3	7	18
2	3	22	6	18		3	4	4	12	7	24	7
3	22	26	1	15		17	26	7	25	9	14	10
4	30	29	13	29		4	30	19	13	13	-	4

Analysis

Variable No.	Positions			
	1	2	3	4
1	-	-	1	-
2	-	-	-	-
3	3	2	-	-
4	-	2	-	2
5	-	-	-	-
6	-	1	-	-
7	2	2	1	-
8	1	-	-	-
9	-	-	1	-
10	1	-	1	-
11	-	-	-	-
12	1	1	-	-
13	-	-	-	3
14	-	-	1	-
15	-	-	1	-

Variable No.	Positions			
	1	2	3	4
16	-	-	-	-
17	-	-	1	-
18	1	1	-	-
19	-	-	-	1
20	1	-	-	-
21	-	-	-	-
22	-	1	1	-
23	-	-	-	-
24	-	1	-	-
25	-	-	1	-
26	2	-	2	-
27	-	-	-	-
28	-	-	-	-
29	-	-	-	2
30	-	-	-	2

Source: Workshop on Testing of Variables on Success characteristics of FO held at Ingimitiya Project Manager's Office on 13.12.1996

Annex II

**Characteristics considered as Most Important by Individual Farmers in the 3 Systems**

<u>Walawe(Mahaweli)</u>	<u>Inginimitiya (INMAS)</u>	<u>Mahasiyabalagamuwa(MANIS)</u>		
20	22	1	12	22
21	26	4	13	26
22	29	5	14	27
23	14	6	15	29
25		7	16	
26		8	17	
29		9	20	
		10	21	

Source: Field Workshop Data

Annex III

**Characteristics Considered as Important by Individual Farmers in the 3 Systems.**

<u>Walawe (Mahaweli)</u>			<u>Inginimitiya(INMAS)</u>			<u>Mahasiyabalagamuwa(MANIS)</u>		
1	12	28	2	13	27	2	16	28
2	13	30	3	15	28	3	17	31
3	14	31	4	16	31	6	20	
4	15		5	17		7	21	
5	16		6	18		8	23	
6	17		7	20		9	24	
7	18		8	21		10	25	
8	19		9	23		13	27	
9	24		10	24		15		
10	27		12	25				

Source : Field Workshop Data

**Prioritization of Characters by FOs Farmer Organization**

<u>Prioritization</u>	<u>Farmer Organizations</u>							<u>System</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	
1	3	24	3	3	29	7	3	Walawe
	7	12	20	3	12			Mahasiyabalagamuwa
	4	22	31	3	22	8	3	Inginimitiya
2	9	3	17	10	30	8	1	Walawe
	15	15	29	15	8			Mahasiyabalagamuwa
	6	30	1	24	24	12	4	Inginimitiya
3	29	4	25	16	24	3	10	Walawe
	29	20	1	14	25			Mahasiyabalagamuwa
	7	20	12	15	12	20	7	Inginimitiya
4	16	1	13	24	18	15	15	Walawe
	22	3	3	29	18			Mahasiyabalagamuwa
	14	29	14	18	26	22	16	Inginimitiya

Source : Field Workshop Data

Prioritization of Characteristics by Officers

Priority	<u>Number Of Officers</u>											<u>System</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	
1	2	5	18	3	3	7	20	3	27	7	15	Walawe
	6	8	7	1	7	3	7	7	16	1	5	Mahasiyabalagamuw
	26	3	10	7	26	12	3	8	3	7	18	Inginimitiya
2	8	7	25	4	10	8	26	4	29	1	26	Walawe
	4	10	3	18	16	7	10	16	8	4	7	Mahasiyabalagamuw
	3	22	6	18	3	4	4	12	7	24	7	Inginimitiya
3	9	15	26	7	25	3	10	12	30	10	10	Walawe
	1	12	10	16	17	14	23	5	5	5	13	Mahasiyabalagamuw
	22	26	1	15	17	26	7	25	9	14	10	Inginimitiya
4	14	3	22	9	20	30	22	28	16	8		Walawe
	10	18	12	23	18	16	25	15	18	15		Mahasiyabalagamuw
	30	29	13	29	4	30	19	13	13	4		Inginimitiya

Source : Field Workshop Data

**NAMES OF FARMER PARTICIPANTS WITH POSITION AND  
NAMES OF FOS IN 3 SYSTEMS**

**1. The Participants at the workshop held at 10.00 am on 15.11.96 at Galgamuwa  
Irrigation Engineer's Office**

- 1 Mr. R.W.P Nicholus Chairman St. Anthony's FO - Mahagalgamuwa
- 2 Mr. R.M Muthukuda - Secretary, St. Anthony's FO - Mahagalgamuwa
- 3 Mr. R.W.P Pilasius - Treasurer, St. Anthony's FO - Mahagalgamuwa
- 4 Mr. R.W.B.G Nivison - Member, St. Anthony's FO - Mahagalgamuwa
- 5 Mr. H.A.M Joseph Perera - Chairman, Gemunu FO - Mahagalgamuwa
- 6 Mr. H.M Nandasiri Herath - Secretary, Gemunu FO - Mahagalgamuwa
- 7 Mr. A. Karunaratne - Gemunu FO - Mahagalgamuwa - Mahagalgamuwa
- 8 Mr. H.M Dissanayake - Member, Gemunu FO - Mahagalgamuwa
- 9 Mr. W.P Fernando - Chairman, Perakum FO - Mahagalgamuwa
- 10 Mr. H.M Piyadasa - Asst. Secretary, Perakum FO - Mahagalgamuwa
- 11 Mr. W.M Sunil Wasala - Member, Perakum FO - Mahagalgamuwa
- 12 Mr. R.M Rambanda - Chairman, Left Bank FO - Mahasiyambalangamuwa
- 13 Mr. W. M Danapala - Treasurer , Left Bank FO - Mahasiyambalangamuwa
- 14 Mr. M.A Heenbanda - Member, Left Bank FO - Mahasiyambalangamuwa
- 15 Mr. R.M Muthubanda - Member, Left Bank FO - Mahasiyambalangamuwa
- 16 Mr. E.M Ekanayaka - Chairman, Right Bank FO - Mahasiyambalangamuwa
- 17 Mr. D.M.M Kapurubanda - Secretary, Right Bank FO - Mahasiyambalangamuwa
- 18 Mr. Wimala Ranaweera - Member, Right Bank FO - Mahasiyambalangamuwa
- 19 Mr. D.M Nihal Senaratne - Member, Right Bank FO - Mahasiyambalangamuwa

**Participants at the Discussion held at Mahasiyambangamuwa Project Management Committee Office at 0930 am on 16.11.1996.**

1. R.M Ranbanda - Chairman, Left Bank FO
2. E.M Ekanayake - Secretary, Left Bank FO
3. W.M Danapal - Treasurer, Left Bank FO
4. N.I.A Heenbanda - Vice Chairman, Left Bank FO
5. R.M Muthubanda - Assistant Secretary, Left Bank FO
6. R.M Ranbanda - Committee Member, Left Bank FO
7. R.M Tennakoon - Committee Member, Left Bank FO

**Participants at the discussion held with Left Bank FO ordinary members at the Left Bank FO Community Centre at 11.30 on 16.11.96**

1. R.M Dayananda - Member
2. R.M Herath Banda - Member
3. L.V Sittimda - Member
4. R.M Wijeratne - Member
5. W.G Tilakaratne - Member
6. A.M Kularatne - Member
7. P. Siridara - Member
8. H.M Dumbanda - Member
9. R.M Kulubanda - Membre
10. Heembanda - Member
11. B.M Muthubanda - Member
12. P. Lapada
13. T.S.J Jemis
14. R.M Muthubanda
15. P. Pancha
16. R.M Rambanda
17. R.M Punchibanda
18. Dissanayake

**Participants at the Discussion held with office bearers of Gemunu FO of Mahagalgamuwa Scheme at 9.30 on 17.11.1996 at the residence of FO Treasurer**

1. H.A M George Perera - Chairman
2. M.M Nandasiri Herath - Secretary
3. M.M Tikiribanda - Treasurer
4. U.M Jayasinghe - Co. Member
5. K.P.U Premadasa - Co. Member
6. M.M Tilakaratne - Co. Member
7. A Karunaratne - Co. Member

**Participants at the discussion held with ordinary members of Gemunu FO of Mahagalgamuwa Scheme at 11.00 am on 13/11/96 at the Residence of FO Treasurer**

1. M.M.Karunaratne - Member
2. T.B. Aushadahami - Member
3. A.M. Wimalasena - Member
4. Mrs.S.M.Kiribanda Ethana - Member
5. R. Mudiyanse - Member
6. B.D. A Albert Jayasuriya
7. M.M.A. Kiribanda -Member
8. J.A. Podiappuhamy - Member
9. K.P. Mudiyanse - Member
10. D.P.Kalubanda- Member
11. A.M.Aushadahami - Member

**Participants at the Workshop at Walawe Auditorium on 6, December 1996.**

1. W.M Amaratilake - D/65 Gemunu FO, Chairman, Kiribbanwewa Block
2. R.M Wijeratne - D/65 Gemunu FO, Secretary, Kiribbanwewa Block
3. K. Piyatilake - D/65 Gemunu FO, Treasurer, Kiribbanwewa Block
4. T.G Piyasena - mm8/D2 DCO, Chairman, Chandrikawewa Block
5. V.K.D Charles - mm8/D2 DCO, Secretary, Chandrikawewa
6. A.K.A.D Carolis - mm8/D2 DCO, Vice Chairman, Chandrikawewa Block
7. A.J Perera - D3/D5, DCO Secretary, Binkama Block
8. R.W Arnolis - D3/D5 DCO, Vice Chairman, Binkama Block
9. Mrs. j. Gajadeera - D3/D5 DCO, Member, Binkama Block
10. R.G Sirisena - D1/02 FO, Chairman, Siriyawewa Block
11. N.K Kusumananda - D1/02 FO, Secretary, Siriyawewa Block
12. W.A.P Linton - D03 FO, Chairman, Angunakolapelessa Block
13. M.K Piyadasa - DO3 FO, Secretary, Angunakolapelessa Block
14. Ariyasena Liyanarachchi - D/4 FO, Secretary, Muravasehena Block
15. S.W Perera - D/4 FO, Secretary, Muravasehena Block
16. D.M Ratnasiri - D7 DOC FO, Chairman, Embilipitiya Block
17. Mrs. M Premawathie - D7 DCO FO, Secretary, Embilipitiya Block

**Chandrikawewa Block MM8/D2 DCO FO**

**Participants - Officers at chairman Office**

- 1 J.G. Piyasena - Chairman
2. V.K.P. Charles -Secretary
3. Allanayake Gunasena - Treasurer
- 4 A.K.A.D. Carolis - Vice Chairman
5. H.R.M. Jayaratne - CommitteeMember

**MURAVASIHENA bBlock, Deniya Unit, Track 11 D/4 D.C.O**

a) Participants Officers at the community centre of the D.C.O

1. Ariyasena Liyanarachchi - Chairman
2. H.N Nimal Prasantha - Secretary
3. M.G Dharmadasa - Treasurer
4. A.P Premadasa - Committee Member
5. S.H Peter - Committee Member
6. B.V Nandasena - Committee Member
7. L.P.G Premasiri - Committee Member

b) Participants - ordinary members - 76 ordinary members

**Kiriibbanwewa Block, Hathporuwa, D/65 Gemunu FO, at Chairman's House**

a) Participants (Officers)

1. W.R Amaratilake - Chairman
2. R.D Sunil Jayaratne - Secretary
3. K. Piyatileke - Treasurer
4. K. Wijeratne Banda - Assistant Land Secretary
5. E R Piyatilake - Committee Member
6. R.A Podiappuhami - Committee Member
7. K.m Piyadasa - Committee Member
8. K. David - Committee Member

b) Participants - Ordinary Members at the DCO Committee Centre 1100hrs 8.12.96

1. Mrs. A..P Rosalin
2. Mrs. L.T.G Hemalatha
3. A.P Kalubanda
4. B.A Dayaratne
5. S.A Jayalissa
6. B.M Wijeratne
7. S.A Dharmadasa
8. M. Sirisena
9. P.A.P Ranjith
10. T.P Gunaratne
11. P. Indrasiri Mendis
12. W.A.K Podimahatmaya
13. Mrs. Rohani Kulatunga
14. Mrs. P.A Leelawathi - Organising Secretary S.A.P
15. N. Mendis - World Union
16. Mrs. D.M Lokumenike

**Farmer representatives present at Inginiitiya Project Managers Office  
on 13th December 1996.**

1. N.G. Gunadasa - Gemunu FO, Secretary
2. N.P.A. Appuhamy - Gemunu FO, Chairman
3. R.H.M. Herath Banda - Gemunu FO, Member
4. M.P. Simon - Arunalu FO, Secretary
5. K.P. Leelasekara - Arunalu FO, Member
6. A.M.D. Appuhamy - Ekamuthu FO, Treasure
7. J.M. Ariyadasa - Ekamuthu FO, Treasure
8. T.M. Dissanayake - Ekamuthu FO, Secretary
9. R.M.H. Somarathna - Dimuthu FO, Chairman
10. H.P. Premarathna - Dimuthu FO, Secretary
11. M.U. Piyadasa - Dimuthu FO, Treasure
12. S.M. Heenbanda - D/2 Ranketha FO, Secretary
13. D.M. Cyril Piyarathna - D/2 Ranketha FO, Treasure
14. K.A. Chandrasekara - D/2 Ranketha FO, Member
15. R.M. Rambanda - Right Bank / Track 3/D1 FO, Chairman
16. R.H.M. Muthubanda - Right Bank / Track 3/D1 FO, Treasure
17. K.M.M. Kalubanda - Mahausawewa FO, Secretary
18. R.M. Ranbanda - Mahausawewa FO, Secretary
19. J.A. Ranjith Ramyasiri - Mahausawewa FO, Treasure
20. A.W. Ukkubanda - Mahausawewa FO, Assistant Secretary
21. A.H.M. Gunawathuhamy, Track 6 FO, Chairman

**Pubudu FO at the FO Committee on 14.12.1996**

**(a) Participant Interviews Office bearers**

1. R.M. Ranbanda - Chairman
2. R.H.N. Nandatilake - Secretary
3. R.H.M. Muthubanda - Treasurer

**(b) Members**

1. R.M. Kapurubanda
2. R.M. Kirimudiyanse
3. R.M. Dharmarathna
4. R.M. Ratnayake
5. S.N. Wijesiriwardana
6. B.M.M. Jayasundara
7. H.M. Tikiribanda
8. R.M.R. Dissanayake
9. A.H. Premadasa
10. A.M.M. Sirisena

**Mahauswewa at Treasurers Residence on 14.12.1996**

**(a). Participants - Office Bearers**

1. K.H.M. Kalubanda - Chairman
2. A.M. Ranbanda - Secretary
3. J.A. Ranjith Ramyasiri - Treasurer
4. H.M. Gunawardana - Committee Member
5. J.M. Abeysoma - Committee Member

**(b). Participants. Members**

1. A.N.M. Ukkubanda
2. A.H.M. Dissanayake
3. W.P. Wimalasiri
4. J.H.M. Dingiri Banda
5. Lalith Fernando

**Ranketha FO Et (at Treasurers Residence) on 15.12.1996**

**(a). Participants Officers**

1. D.M. Gunasena - Chairman
2. S.M. Heenbanda - Secretary
3. D.M. Cyril Jayaratna - Treasurer
4. W.M. Ukkubanda - Committee Member
5. W.M.A. Ariyawansa - Committee Member
6. W.M.A. Nanda Bisomanike - Committee Member

**(b). Members**

1. K.A. Chandrasekara
2. W.M.P. Kiribanda
3. K.M. Piyadasa
4. R.M. Jayarathna
5. W.M. T. Gunarathna
6. D.M. Bandara
7. W.M. Dingiribanda
8. W.M.P. Sirisena
9. R.S.M. Tikiribanda
10. K.M. Somarathna
11. H.M.P. Ranhamy

### Names of Officer Participants with position

#### The Officers Participants at the workshop held on 15.11.96 at Galgamuwa

1. Agriculture Instructor Galgamuwa
2. Agriculture Instructor Galgamuwa
3. Miss R.H. Lankaratne. Agriculture Instructor, Moragollagama
4. R.M Piyadasa, Assistant Director Agriculture, Polpithigama Divisional Secretariat Office
5. Divisional Officer. Agrarian Services, Galgamuwa
6. S.M.G.S Jayasekera, Divisional Officer, Agriculture Services, Moragollagama 'Govijana Kendraya'
7. R.M J Bandara, Colonization Officer, Polpithigama
8. S.A.D.N Samarasinghe, Project Manager, Mahasiyambalangamuwa scheme
9. M. U. de Silva, kalanchiya Project Manager, Mahagalgamuwa Scheme
10. H.M Karunaratne, Grama Seva Niladhari
11. B.S Kahadawa, Bank of Ceylon, Galgamuwa

#### Participants at the workshop held at Walawe Auditorium on 6th December 1996

1. W. Ranasinghe - Divisional Manager I.D.U project office MEA. Embilipitiya
2. A.K.D Premaratne - Block Manager - Kiriibbanwewa
3. D. Kuruwita - Agriculture officer - Kiriibbanwewa
4. IOS (8)
  - a. K.M.K Muhandiram
  - b. S Abesiriwardhane
  - c. P.D Jayawardhana
  - d. P. Siriwardhane
  - e. M.A Sumanasen
  - f. Wilson Alwishewa
  - g. S.M.A Piyadasa - Muravasihena
  - h. K.J.N Jayaneththi
- \* (responses indicated as group)
5. Unit Managers
  - a. H.B Liyanage
  - b. W.K Bandularatne
  - c. Athula S. Karunasena
6. Field Assistants
  - a. H. Somapala
  - b. L.D Wijetunga
  - c. P.A Chandradasa
7. Technical assistant - Amarasinghe Kiriibbanwewa Block
8. Institutional Organisers Volentier - Miss. E.A Susia Surangani  
Miss. A.J Chandra Kumara
9. Grama Seva Niladhari Liyanarachchi Dayaratne
10. Charperson Viharamahadevi Woman's FO Embilipitiya - Chandra Kodikara

**Officers present at Inginimitiya Project Managers Office on 13th December 1996**

1. Mrs. A.M.R.S.S. Abeyratne - Agriculture zInstructor - Agricultural Department
2. M.M. Kapurubanda - Agriculture Instructor - Agriculture Department
3. B.A.M. Chandrarathna - TechnicalAssistant - Irrigation Department, Inginimitiya
4. H. Chitrasena Coconut Development Officer - Coconut Development Board
6. E.M. Dingiribanda -Colonization Officer - Land Commissioner's Department
7. M.Maitripala Colonization Officer - Land Commissioner's department
8. W.L.M. Premarathna - Programme manager - Inginimitiya Project Office
9. M.A.B. Senarath bandara - Intitutional Department Officer - Inginimitiya Project Office
- 10.M.M. Ranbanda - Institutional Organizer - Inginimitiya Project Office
11. W.M.J. Kumara - Graduate Trainee - Inginimitiya Project Office
12. Kapila Munasingha - Second Officer Bank of Ceylon - Anamaduwa

**Basic Details of the 5 FOs in Mahasiyambalangama and Mahagalgamuwa**

Name of FO	Date of establishment	No. of members	Extent (ha)	Population	Activities undertaken other than water delay	Special activities delivery	Assessment * Average * Good * Excellent
Left Bank Mahasiyambalangamuwa	19-8-1990	128	97.2	922	-	1.Savings 2.Rehabilitation 3.Sale of fertilizer	Good
Right Bank Mahasiyambalangamuwa	19-8-1990	80	60.7	686	-	-	Good
Perakum Mahagalgamuwa	30-7-1991	34	36.4	150	-	1.Supply of seed 2.Supply of fertilizer	Good
St. Anthony's Mahasiyambalangamuwa	3-10-1993	81	81.8	650	1.Providing instructions farmers 2.Input Supply	-	Good
Gemunu Mahasiyambalangamuwa	29-9-1990	34	46.5	180	-	-	Good

**BASIC DETAILS OF THE 7 FOS IN WALAWE SPECIAL PROJECT**

Name of FO	Date of Establishment	No. of Members	Extent ( ha)	Population	Activities Undertaken other than water delay	Special Activities delivery	Assessment * Average * Good * Excellent
1. D/4 Deniya unit F.O Murawashena Block	June 1991	156	209	350	Cultivate Loan Crop divesitification	Cultivation Loans	Very Good
2. MM8/D2 F.O Chandrika Wewa Block	6 Aug. 1990	73	77	525	Fertilize Supply Cultivation Loans	Supply of needs and fertilizer Cultivation Loans	Excellent
3. D/02 F.O Suriya Wewa Block	7 Aug. 1990	50	102	600	Awarence programme		Very Good
4. D3/D5 FO Binkama Block	6 June 1991	115	152	930	Social Work House for poor Cu'tivation Loans	Cultivation Loans	Very Good
5. D65 Gamunu FO Kiriibbanwewa Block	20 July 1991	37	120	240	Supply of Dranaging Work Social Activity Educational Programmes	Cultivation Loans	Good
6. Track 16 FO Angunukola Palassa	25 June 1991	87	-	435	Fertilizes Supply Rehabilitation of Canals	Environment of Women's	Very Good
7. D7. DCO Embilipitiya Block	Jan 1991	89	89	400	Awareness Programme Involvement of Women	Involvement of Women	Very Good

Basic Details of the 7 FOs in Inqinimitiya Project - (IMD)

Name of FO	Date of establishment	No. of members	Extent (ha)	Population	Activities undertaken other than delivery	Special activities	Assessment *Average * Good *Excellent	Reasons for the assessment
1. Left Bank Track 3 EKAMUTHU	10 Oct 1985	166	492 1/2	900	1. Rehabilitation work 2. Cultivation of OFCs 3. Regular committee meetings 4. Training programmes	1. Maintenance of FOs 2. Training of Farmers	Very good	1. Farmer participation in Sramadana 2. Participation of members at meetings
2. Right Bank Track 2 D7, DIMUTHU	23 July 1989	88	310	600	1. Sramadana 2. Supply of seeds 3. Farmer Participation in social activities	1. Agricultural Training to Farmers 2. Promoting sports activities 3. Organising religion and social activities	Good	
3. Left Bank Track 3 D1, RANKETHA	25 Jan 1985	141	910	810	1. Rehabilitation of canals by sramadana 2. Cultivation of OFCs 3. Promoting religions social activities 4. Livestock training 5. Preparation of seeds measures	1. Fund raising activities 2. Sale of fertilizer & insecticides 3. Farmer training 4. Distribution of Coconut seedlings	Very good	1. Regular meeting 2. Social religions and cultural activities

Basic Details of the 7 FOs in Inginimitiya Project - (IMD)

4. Right Bank, Track 3 D1, PUBUDU	1 June 1990	250	750	1500	1. Sramadana activities 2. Sale of fertilizer 4. Provide tractor service	Organising cultural Religion and sports activities	Good	1. Winning the 1st place in the 10th anniversary competition 2. Regular meetings 3. Provide Tractors service to farmers
5. Left Bank MAHAUSWEWA	27 Dec 1985	260	1061	5200	1. Cultivation under "bethma" system 2. Sramadana activities 3. Regular meetings 4. Assisting farmer training	1. Rehabilitation through contracts 2. Undertake emergency repair to canals	Very good	1. Regular meetings 2. High participation at meeting 3. Conducting training programmes
6. Left Bank Track 5 ARUNALU	20 Dec 1985	145	372	3300	1. Agriculture livestock training programme 2. Forestry culture 3. Home garden 4. Training farmers for self employment	1. Forestry cultivation 2. Promoting cattle rearing 3. Contract work	Good	1. Additional income generation activities 2. Promoting environment protection
7. Right Bank Track 2 D1 GEMUNU	January 1985	102	215 ha	1200	1. Sramadana 2. Awareness training programme	Assisting Trainee programmes	Good	1. Cultivation according to agreed schedule 2. Training in water use