

# FINAL REPORT

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Dr. J. J. J.

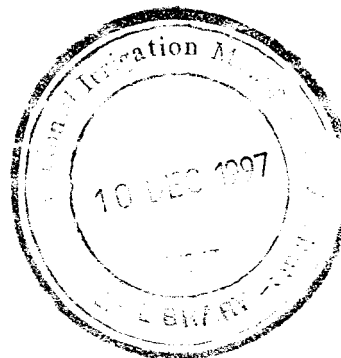
Dr. J. J. J.

Submitted

to

INTERNATIONAL IRRIGATION MANAGEMENT INSTITUTE

in connection with



## TURNOVER OF O&M OF DISTRIBUTARIES TO FARMERS' ORGANISATIONS POLONNARUWA DISTRICT

by



# 21656

Consultants in Technology, Management & Development Studies

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DS/11/90

12th March, 1992.

Dr. C.M. Wijeratne  
Sri Lanka Field Operations  
International Irrigation Management Institute  
107, Havelock Road  
Colombo.

Dear Dr. Wijeratne,

Turnover of Distributaries to Farmers' Organisation

Herewith we are submitting 2 copies of the **Final Report** of the above study which includes the changes requested by IIMI and IMD.

We take this opportunity to pay our gratitude to the members of: IMD, ID, ISMP USAID and IIMI Sri Lanka Operations including yourself for providing assistance and guidance to complete this study successfully.

Yours truly,

Wimal Gunawardena  
Project Principal

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## **1. INTRODUCTION TO THE STUDY AND WORK DONE**

### **1.1 BACKGROUND TO THE STUDY**

The study was concerned with the **Rapid Rural Appraisal** (RRA) sub-project of the Irrigation Systems Management Project (ISMP). The purpose of the study was to ensure that the program of **turning over** of management of Distributory Canals (DCs) to Farmers' Organisations (FOs) under the ISMP is a **learning process** for the project. The study was sponsored by the Research Advisory Committee (RAC) of the ISMP with the participation of the International Irrigation Management Institute (IIMI) as the coordinator. The study envisaged that the key lessons to be learnt are :

- i. how well are the DCs being operated and maintained,
- ii. how well are the state agencies and FOs cooperating,
- iii. how effective are the linkages with the Project Management Committee (PMC),
- iv. what is the impact of the turnover program on system performance and maintenance, and
- v. what are the factors that constrain or support successful farmer management of DCs and field canals (FCs).

As the Terms of Reference (TOR) given by IIMI indicate the specific study **objectives** are:

- i. to gather appropriate and insightful information on management activities and outcomes (performance) in sample locations, and
- ii. to convey this information to ISMP and Irrigation Department/Irrigation Management Division (ID/IMD) officials in a manner which is timely, easily absorbed and useful for improving the turnover program.

The duration of the study was **8 months** (February to September 1991) and the observations made during the overall period of study, conclusions derived from such observations and the recommendations are presented in this report.

## **1.2 Methodology of Work**

The methodology of work used for this study involved 8 **Tasks**. These Tasks are summarised below and an overview of the Methodology is presented in **diagram 1**.

**Task 1** : Study Preparation & Familiarization.

**Task 2** : Development of Research Procedures.

**Task 3** : Collection of First Round of Base-line Information.

**Task 4** : Sharing Information with Steering Committee Project Management Committee and Research Advisory Committee.

**Task 5** : Collection of Detailed Information.

**Task 6** : Preparation of Interim Report.

**Task 7** : Collection and Presentation of Further Information.

**Task 8** : Preparation of Draft Final Report and Final Report

For the purpose of gathering first hand real-world information 4 trained and experienced field investigators were stationed in the Project Area . They worked as two teams and each team covered two irrigation systems. They were provided with motor cycles to facilitate easy movement to and from nooks and corners of the irrigation systems.

The Team Leader based in Colombo guided and supervised the field investigators. Every fortnight the Team Leader visited the project area and on each visit three to four days were spent in the Schemes, meeting project and related agency officials, farmers, farmer groups and DCO officials. At these visits he also attended Project Management Committee meetings and Project Progress Review meetings. The overall work was supervised by the Project Principal and the work was closely and continuously monitored by the RAC of the ISMP.

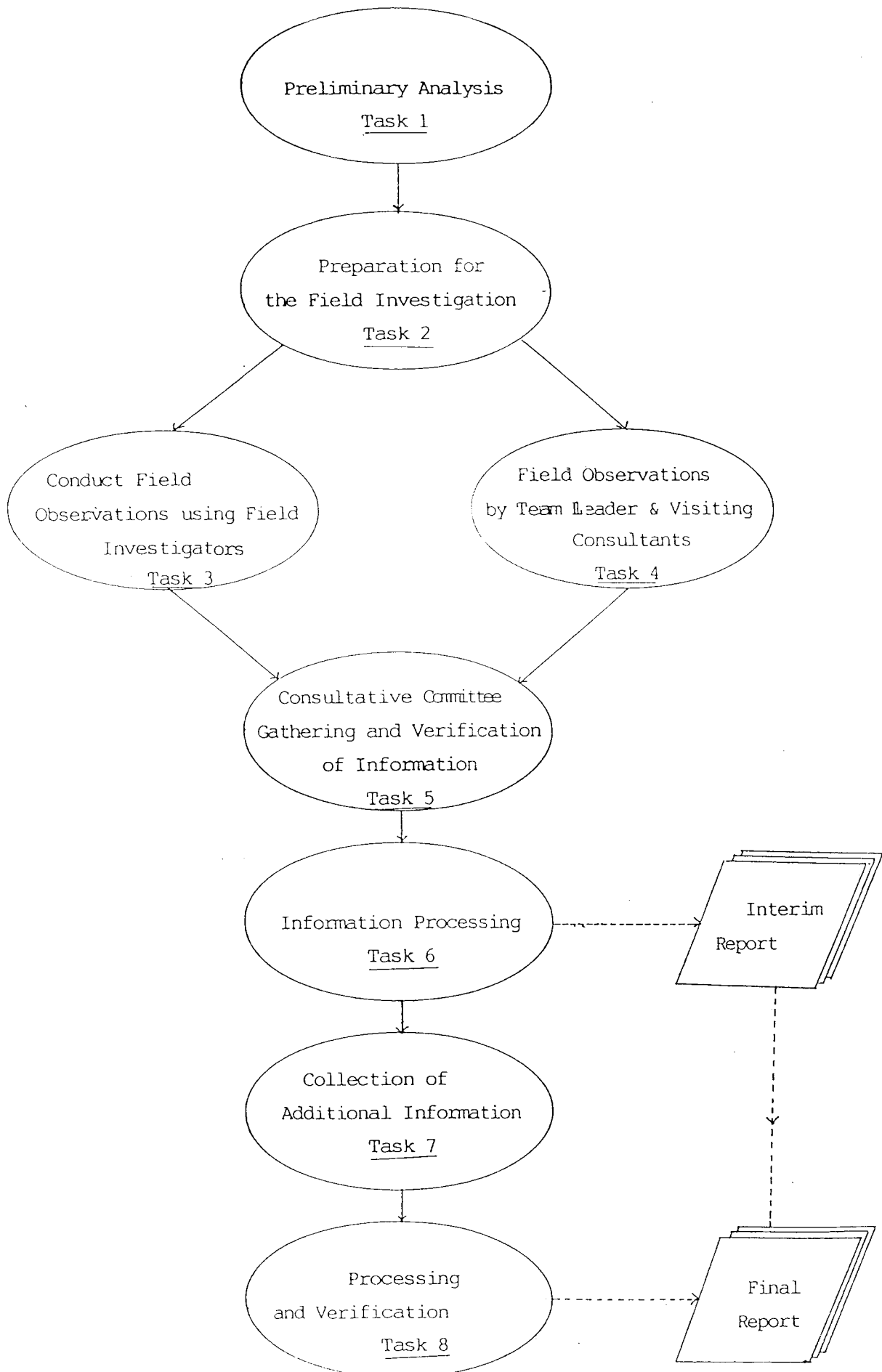


Diagram 1: Flow Chart of Work

The scope of work of the RRA sub-project states that for "balancing the need for adequate geographical coverage and limited resources, the RRA assessment will be conducted in **six representative subsystems** (Distributary Channel Organisations - DCOs) selected from Parakrama Samudra, Giritale, Minneriya and/or Kaudulla".

The six DCOs were selected in consultation with the Irrigation Systems Management Project (ISMP), IIMI and Irrigation Department (ID) officials. It had been the consensus to include good DCOs and not very good DCOs in the sample to minimise distortions in assessment, observations and recommendations of the researchers. The sample consisted of **Sevagama** and **Thalpotha** DCOs in Parakrama Samudra Scheme, **Ulpawewa** and **Sama** DCOs in Minneriya and Kaudulla respectively and Chandanapokuna and Kadawalawewa of Giritale Schemes (See Table 1). These locations are marked in the attached maps.

The field investigators while concentrating in an indepth study of the sample DCOs mentioned above, spent some of their time in studying the activities of other DCOs in these schemes.

For collection of information, the investigators met **farmers** individually and in groups, the **DCO officials** individually and in groups, attended Field Canal Group (FCG) meetings, DCO meetings, Sub-Project Committee Meetings, Project Management Committee meetings and met Project, ID, IMD and other related **agency officials**, perused minutes of meetings, material relating to training courses, maps and charts and books, registers and accounting records maintained by the DCOs .

Many observations were made by visiting IIMI officials, proceedings of Project Consultative Committee and the ISM Research Advisory Committee and various reports covering different aspects of the four irrigation systems under study and these observations become the foundation for the preparation of this report.

Table 1: Sample DCOs

Scheme	DCO	Extent	No. of Farmers	No. of FC Representatives
Minneriya	Ulpathwewa	1051	208	15
Kaudulla	Sama	485	246	16
PSS	Sevagama	1839	264	19
PSS	Thalpotha	600	322	10
Giritale	Kadalawewa	573	306	17
Giritale	Chandanapokuna	633	179	11

Source: TEAMS Field Investigators



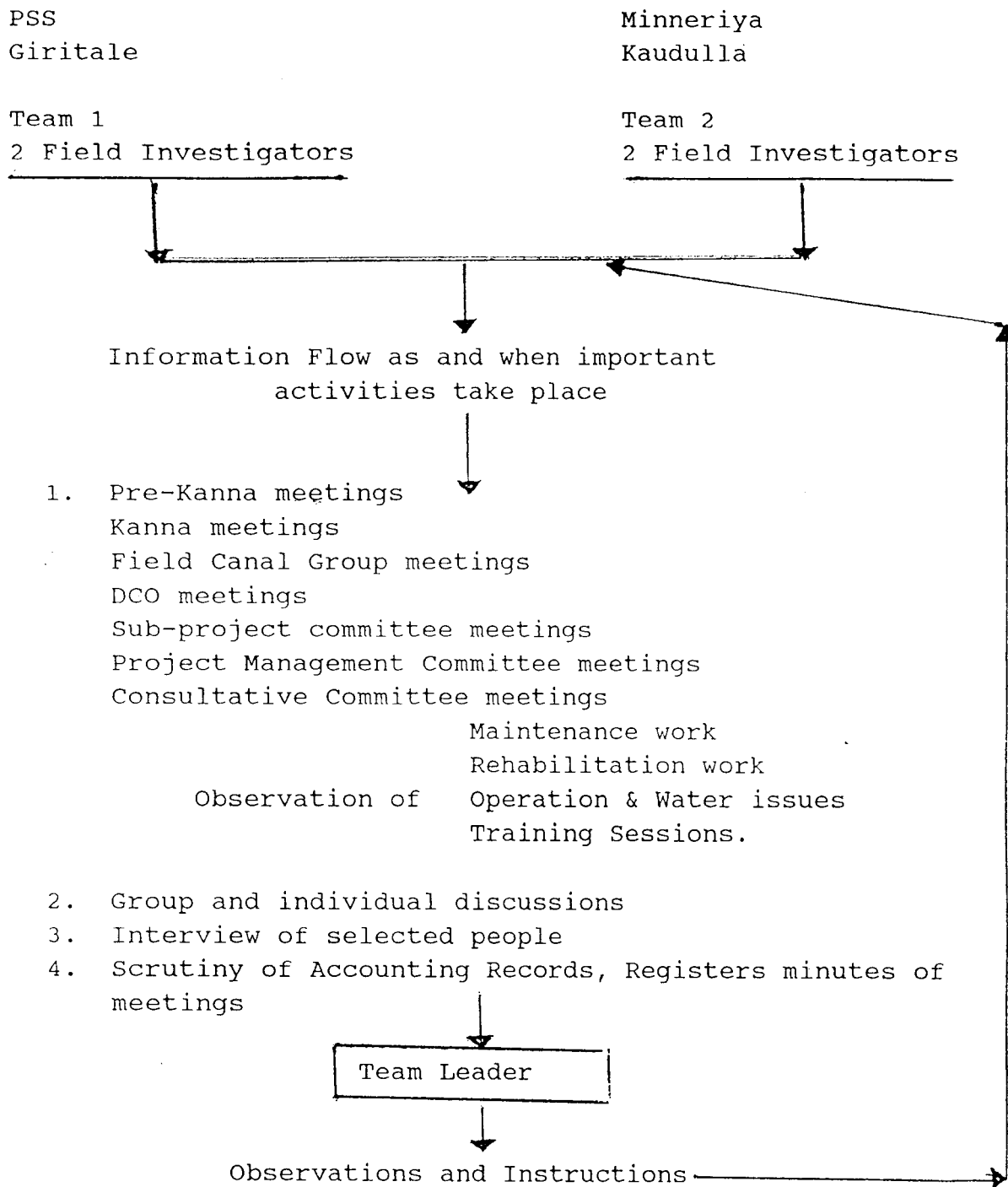


diagram 2 - Design of Information gathering Process.

### **1.3 Nature of Turnover Process**

As mentioned earlier, the Rapid Rural Appraisal (RRA) sub-project was set up to ensure that the programme of turning-over the management of Distributary Canals (DC) to Farmer Organisations (FOs) in PSS, Kaudulla, Minneriya and Giritale of the Polonnaruwa District is a learning process. Briefly recording the Turnover Process in the proper sequence prior to the discussions of the findings and the observations of the researchers is considered pertinent.

In 1984 under the Integrated Management of Agriculture Settlements (INMAS) Programme, project offices were established in Parakrama Samudra (PSS), Giritale, Minneriya and Kaudulla. Some of the objectives of the INMAS programme were:

- (a) **Formation** of Farmer Organisations to obtain farmer participation in the management of irrigation projects.
- (b) **Facilitation** of efficient operation and maintenance of the major irrigation projects to optimise the use of irrigation water.
- (c) **Improvement** of financial support for O&M costs by implementing a programme for the collection of contributions from farmers.
- (d) **Rehabilitation** of major irrigation systems where necessary.

The duties of Project Managers of INMAS projects are:

- (a) Act as prime mover in mobilising farmer participation related to O&M work while coordinating the efforts of the line agencies.
- (b) Promote contract work for O&M work by farmers.
- (c) Monitor the collection of O&M fees by the field level collectors and provide feed back to the Government Agents and IMD.

In 1989 the Government of Sri Lanka formally recognised via a Cabinet Paper the need for and the usefulness of joint management of irrigation systems with the active participation of the farmer's, mobilised by means of farmers organisations (FOs).

ISMP which was implemented with its innovative approach to rehabilitation emphasizing the usefulness of accompanying physical improvements via Essential Structural Improvements with institutional development through active farmer participation was a pioneer to make use of this new GOSL policy.

The INMAS Project offices and the Project Managers were found to be in ready-made institutional arrangement for the launching of the ISMP programme. Under the ISMP, the INMAS project offices were strengthened by recruiting the following personnel:-

- (a) Institutional Development Officers (IDO)
- (b) Monitory and Financial Assistant (MFA)
- (c) Institutional Organisers (IOs)

The functions of the IDO in brief are:

- (a) Organise training programmes and play an active role in their implementation.
- (b) Direct, guide and supervise IOs.
- (c) Assist Project Managers to achieve project objectives.

The responsibilities of the Monitoring & Financial Assistants are:

- (a) Motivate and guide the Farmer Organisations to build up funds.
- (b) Train representatives of farmer organisations in financial management and financial record keeping.
- (c) Systemize financial transactions of the DCOs with a view to prevent malpractices.

- (d) Report to authorities concerned data pertaining to financial dealings of the DCOs.
- (e) Motivate and assist farmers and farmer organisations to identify, set up and manage business enterprises.
- (f) Implement a Monitoring & Financial Management Programme.

The Institutional Organisers who work at the grass root level are young sons and daughters of the farmers of the area. They live with the farmers and speak the idiom of the farmer community. Their main role is to strengthen farmer organisations. They also function as a link between the DCOs and other related agencies. The IOs are organising farmer training and in most training programmes they also contribute as resource persons.

The Turn Over Process passes through four distinct stages namely:

- (a) Institutional strengthening phase.
- (b) Maintenance phase in which the DCOs assume responsibility of the maintenance of the irrigation system from the level of D canal and below.
- (c) The joint operations phase where the DCOs gain valuable hands-on experience by working side by side with ID officials in operating the system.
- (d) Total responsibility for O&M.

The DCOs which are going through the stages (b) & (c) are guided, assisted and supervised by the ID employees. The way in which the ID performs this task is discussed under the Section "Role of ID Employees".

While the DCOs are going through the above stages, the DCO officials and FCG representatives receive training in O&M, financial management etc. to enable them to gather knowledge and experience necessary for management of O&M by DCOs themselves.

#### **1.4 Government Policy and Turnover Concept**

The government of Sri Lanka is actively pursuing a policy of strengthening farmer organisations to active self management of small irrigation systems having less than 400 ha (1000 acres) command area and joint-management between the government and the farmers in all those schemes having more than 400 ha. Under self-management the farmer organisations will take responsibility for overall decision-making, implementation of O&M, rehabilitation, modernisation and mobilisation of financial and other resources needed for the management of the irrigation system. The irrigation agency will provide advice and guidance required by the FO to do so. Self-management in these terms does not imply government withdrawal leaving farmers to look after their affairs themselves. It means that the government will assist farmers to develop effective organisations and necessary technical capacities to be able to manage and to improve performance of their systems. Government would continue to provide assistance for major repairs beyond the capability of FOs on a cost sharing basis.

"Turnover is the process by which irrigation management agencies transfer some or all of the O&M policy making and implementation and resource mobilisation responsibilities to recognised FOs". The end result will be a self or jointly managed irrigation system.

Turnover programme is expected to be implemented in phases and not simultaneously in all systems. Thus this study on turnover of O&M to DCOs in four major irrigation systems in Polonnaruwa District is significant for the phased out implementation of the Turnover Programme on an islandwide basis.

## 2. Characteristics of the Sample DCOs

This chapter summarises the important characteristics of the 6 sample DCOs of the irrigation schemes under review.

### 2.1 Kadawalawewa DCO - Giritale Scheme

No. of cultivators	306
No. of irrigated acres	573
No. of FC representatives	17

Office bearers of the DCO:

President

Vice President

Secretary

Joint-Asst. Secretaries (2)

Treasurer

Water Manager

The duties and responsibilities of the office bearers will be discussed under the section "General observations on sample DCOs".

#### DCO Meetings

		average attendance
No. held in 1990	4	73%
No. held in 1991 (upto July 1991)	5	67%

#### Maintenance

From 1989/90 Maha this DCO was responsible for undertaking maintenance work.

The maintenance of Field Canals had been on 100% shramadana basis and the work had been assigned to cultivators on an individual basis. But these individual assignments are not paid for and should be treated as free labour. Most of the farmers have done their work and about 5% of the farmers have failed to do their assignments.

The maintenance work on DC canals was done on Shramadana basis and some jobs through wage labour. This work which includes weeding the canal bunds and desilting the canals had been done in accordance with the set norms by the ID in the last Maha season. In yala though there had been a slight delay, the work had been done satisfactorily. The DCO has received Rs.13,882/= for the work done from the Irrigation Department and the profits earned on these contracts have been credited to the DCO fund. The farmers in the DCO are of the view that the work done by the DCO is better than that of contractors, but the ID officials do not endorse this view. Almost all DCOs claim that quality of their work is superior to that of contractors. The inspections and the surveys carried out by the consultants do not support this claim.

#### Operation (Water distribution)

The DCO through its active involvement in water distribution work has solved most of the long standing water shortage problems of the tail enders in Yala 1991. According to Project Manager and DCO officials quite a number of tail enders in the past could not cultivate in yala seasons for want of water. For example, at the tail end of Kadawalawewa, (Bendiwewa) in Etumalpitiya area, about 80 irrigable acres which were abandoned in both maha and yala due to irrigation difficulties have been brought under the plough due to efficient water management by the DCO. In order to solve these problems, the DCO has intervened to reduce illicit tapping of water by persuading the farmers not to do so and by operating the canal system very effectively to prevent wastage of water. In this respect the farmers themselves have volunteered to close gates promptly when water is not required. The maintenance work done by the DCO as per norms set by the ID too contributed immensely to the above achievement. Though about 5% of the farmers did not do the assigned maintenance work in FCs, according to DCO officials the others have done their work properly.

This DCO is relatively new and was set up in March, 1990. Within a short period it has achieved quite a lot of the main aims of a DCO and this can be seen by taking into consideration the quality of O&M work done, action taken to supply inputs at fair prices, etc.

The activity which was undertaken by this DCO most successfully is the sale of agro-chemicals to the farmers at fair prices. Having started this activity with a capital of Rs.17,000/- in Maha 1989/90 by July 1991 it had a turnover in excess of Rs.100,000/-.

## 2.2 Chandanapokuna DCO - Giritale Scheme

No. of cultivators	179
No. of irrigated acres (cultivated)	633
No. of FC representatives	11

Office bearers of the DCO

President

Vice President

Secretary

Asst. Secretary

Treasurer

This DCO has taken over from February, 1990, both the maintenance and operation functions. However the keys of the (D22/23/24) distributory canals in the DCO area were in the custody of the Technical Assistant (TA) of the Irrigation Department. But the water manager appointed by the DCO did not have, according to him, any problems as he worked very closely with the TA.

### DCO Meetings

			Average <u>Attendance</u>
No held in	1990	3	85%
No held in	1991	4	75%



### Maintenance

The DCO had been resorting to two devices namely Shramadana and individual assignments to farmers for performing maintenance work.

It has been observed that a large number of farmers (about 40%) have not done their maintenance work on FCs prior to date of water issue. The farmers who have done their work have informed the DCO about the farmers who have not done their work, but the DCO had not been able to take any action against them. The DCO does not have legal power to compel them to do the work.

The profits earned from work done on shramadana basis were credited to the DCO fund.

This DCO for performance of some contracts has obtained the contracts in the name of the DCO and assigned them to some DCO members for execution. For example the rehabilitation contracts for D-23 and D-24 have been performed by 2 members one of whom is also the President of Gramodaya Mandala. The payments received were for D23 Rs.18,750/= and for D24 Rs.15,747/=. According to DCO President when contracts are given to DCO members the DCO can get them to do a better job. The DCO get 5% of value of contract and the other DCO members did not oppose this arrangement.

### Operation (Water Distribution)

This is one of the two DCOs in all four schemes under this study that has taken over both operation as well as maintenance functions.

The DCO has employed an ex-Vel Vidane as Water Manager. He was paid a monthly allowance by the Irrigation Department, but this payment will be stopped when O&M functions are turned over to DCO formally. Though an ex-Vel Vidane he has adapted himself quite well to perform his role as Water Manager of the DCO. His long experience in water distribution enables him to do his work efficiently, enabling all the farmers to obtain their water requirements.

According to the Water Manager there is a shortage of water in the DCO area and the distribution of water to each and every plot particularly to those at the tail end is difficult. He says that some farmers using the hubs of Kubota tractors open the gates to get water over and above their quota under the rotational system. This happens in the night and in the morning the gates remain closed. He says that the water shortage in yala seasons was due to less rainfall and syphoning of water from the D canals using hoses to irrigate high lands. Lot of farmers (about 5%) are guilty of this offence, but when they face water shortages they blame the system. However inspite of these problems the farmers are not deprived of their water in 1991 Yala. Co-operation extended by most of the farmers except a few and their effort to conserve water by prompt closure of outlets when water is not required has contributed to this situation.

Another special feature in this DCO is the requirement to register all leases, mortgages etc. with the DCO. The DCO president maintains a register where particulars pertaining to above transactions have to be entered. According to DCO President and Secretary, all above transactions are registered and when disputes arise between parties the DCO intervenes to settle them amicably.

This DCO has been very effective in resolving disputes among the farmers. Particulars of disputes resolved are also entered in a register kept by the DCO president. An example of a dispute resolved by the DCO is as follows. A person has attempted to cut a canal across plot no.1174 (paddy lot) to obtain water to a highland. The owner of the land objected. This dispute has been resolved by the DCO by persuading the farmer who owns the adjoining highland to permit the cutting of the canal across his land. (Though the dispute was settled whether it is the proper solution is a question). The farmers in this DCO do not take their disputes to Police Stations. Settlement of disputes is discussed in detail in a separate section in this report.

This DCO has run into some problems arising out of misappropriation of funds of a metal quarry. (a place where stones are broken into various sizes either manually or with machinery for the construction industry). The Treasurer of the DCO who misappropriated the money has resigned and the person elected to fill his vacancy also has resigned within a few days of his election. This DCO functioned without a Treasurer for a long period. As a result, no proper books of accounts were kept.

### 2.3 Sama DCO - Kaudulla Scheme

No. of Cultivators	246
No. of Irrigated acres (cultivated)	485
No. of FC representatives	16

Office bearers of the DCO:

President

Vice President

Secretary

Treasurer

Auditor

DCO meetings	average attendance
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1990	7	82%
1991		
March	3	82%

### Maintenance

Maintenance work (weeding and desilting) of D canals has been done under three ways namely (a) shramadama (b) individual assignments (c) paid labour.

The farmers on individual basis cleaned the FCs. It was noted that some farmers (about 10%) have not done the work assigned to them in any satisfactory form. The DCO has not been able to take any action against them.

This DCO also has helped its members to secure and perform large scale contracts on individual basis. The other members of the DCO generally like this arrangement as they prefer their colleagues to outsiders.

#### Operation (Water Distribution)

In the past, in yala seasons the farmers in this DCO area had inadequate water compelling some farmers to resort to "Bethme" cultivation. After the DCOs got involved jointly with ID officials in operation of the system it had been possible to provide water for everybody and eliminate bethme cultivation. Partly, the successful lobbying of farmer organisations to get more water has contributed to this situation. However the greater impact is due to proper planning of water issues, timely cultivation according to agreed upon time tables and conservation of water by prompt closure of outlets when water is not required. When the ID employees handled water management, according to about 20 farmers interviewed the above activities were not carried out very efficiently. The farmer organisations have motivated the farmers to be responsible, cooperative and contribute for better water management and water conservation. However a small percentage of about 5-10% do not comply with the requests of the DCO.

The DCO has decided to recover from each farmer Rs.50/- per season. This amount according to the DCO is equivalent to the contribution the farmers made (salaris) for the services of the Vel Vidane. In addition the DCO will recover Rs.12/- from each farmer as membership fees. Those who fail to pay the Rs.62/- according to the DCO will lose their membership in the DCO and the DCO will not intervene to solve any problems of such farmers including those relating to irrigation water. These decisions as observed by the Field Investigators are supported by all the farmers. They have not come across any farmers who did not approve them.

The DCO has collected already Rs.14,000/- which is in a fixed deposit. Still more than 50% of the farmers have to make their payments. The DCO officials anticipate all farmers to pay their dues towards the end of the year (1991).

This DCO has also successfully resolved many disputes. Many farmers had quite a lot of boundary disputes in FC 20 and FC 5 and they have been sorted out by the DCO. When complaints on boundary disputes are made at least two DCO officials visit the spot and investigate in the presence of the parties concerned. They measure the plots and restore the status-quo.

This DCO also has contributed (Rs.1000/=) towards the fund created by the system level farmer organisation to purchase and sell fertiliser to the farmers at reasonable prices. The farmers in the DCO got their fertiliser at reasonable prices under this arrangement.

#### 2.4 Ulpathwewa DCO - Minneriya Scheme

No. of Cultivators	208
No. of Irrigated acres (cultivated)	1051
No. of FC representatives	15

Office bearers of the DCO:

President

Vice president

Secretary

Asst. Secretary

Treasurer

Auditor

#### DCO Meetings

		Average Attendance
No. of meetings held in 1990	4	55%
No. of meetings held in 1991 (upto May 1991)	4	58%

### Maintenance work

This DCO had been performing maintenance as well as rehabilitation contracts. Like others this DCO also has performed maintenance contracts on (a) shramadana basis (b) individual assignment basis to farmers and (c) paid labour.

Maintenance of FC canals have been done on the basis of individual assignments of specified portions of work to the farmers in the FCs concerned.

Some large scale maintenance contracts (D15, D17, D18, D20) were done by the DCO itself. The DCO also has helped some members to get such contracts (RB1A, RB2, RB3, LB1, LB2) on individual basis. The farmers numbering about 30 interviewed in different locations held the view that the contracts done by the DCOs and the members of the DCO as individuals are slightly better in quality compared to those done by the outside private contractors.

In 1991 yala it was observed that about 25% farmers had not done their maintenance assignments in FC canals and their excuse had been giving priority for yala cultivation work.

This DCO has comparatively less irrigation problems. There are only a few areas affected by water shortages.

### Operation (Water Distribution)

This DCO is also in the joint operation phase. Its members work side by side with ID employees in planning water issues and operating the system. Non-availability of gates in quite a large number of outlets is an impediment to good water management in this DCO. Timely cultivation was observed. No serious difficulties by tail-enders to get adequate water were seen.

This DCO has taken the initiative to undertake many activities. It has started an enterprise to sell agro chemicals at fair prices to the members. This project after functioning for nearly six months has ceased to function due to misappropriation of funds.

The DCO is managing a Day Care Centre at a temple (Senanayakaramaya at Hingurakgoda). It has also made arrangements to provide meals to the children in the centre. The Day Care Centre attendant works on a voluntary basis and the parents were making arrangements to make a monthly contribution so that the attendant can be paid an allowance.

There is a women's organisation affiliated to the DCO which is conducting a sewing class for the young girls.

## 2.5 Sevagama DCO - Parakrama Samudra Scheme

No. of cultivators	197
No. of irrigated acres	829
No. of FC representatives	19
Office bearers of the DCO	
President	
Vice President	
Secretary	
Assistant Secretary	
Treasurer	
Patrons (2)	

### DCO Meetings

		Average <u>attendance</u>
No. of meetings held in 1990	4	48%
No. of meetings held in 1991 (upto July, 1991)	6	53%

### Maintenance

The Department of Irrigation (ID) has allocated in 1990 Rs.36,000/= for the two seasons for maintenance of the irrigation system. The DCO has failed to utilise this money and no maintenance work had been done. The DCO was so unorganised and unstable it could not secure and implement the maintenance contracts.

In 1991 Rs.14,328/- at the rate of Rs.7,164/- per season has been allocated for maintenance work. The President of the DCO at that time had no confidence to organise a shramadana and he has cleaned the D' canal with paid labour. When questioned as to why a shramadana was not organised, the reply was that people are not willing to participate in shramadana work. Though he expected the farmers to clean the field canals about 75% of the farmers have failed to do so. As the farmers could get their water they did not bother to clean the canals.

#### Operation (Water Distribution)

The DCO has not involved itself in water distribution. Two Vel Vidanes and an Irrigation Department employee were responsible for water issues and the farmers who were interviewed by the Consultants in different locations, numbering about 30, expressed their satisfaction on the water distribution.

The DCO in 1990 and until April 1991, was virtually non-functional and contributed nothing for the O&M of the DCO.

In April the DCO was reorganised and a new committee and office bearers were elected. A Vel Vidane was elected as a Patron of the DCO.

As the DCO was not organised the farmers did not participate in training classes.

The DCO was inactive due to a number of reasons. Some of them are:

- (a) The key office bearers of the DCO like the President and the Secretary were interested in activities not related to farming. They were attempting to use their positions to secure contracts for themselves. The farmers tolerated them, especially the president, as they feared to cross his path.
- (b) Most cultivators were mortgagors, lessors, and cultivators etc. They were not interested in farmer organisations.



- (c) Sevagama does not have irrigation problems. They had enough water. As water was flowing in the canals some farmers did not clean their FCs for long periods. Further the farmers did not have the need for any farmer organisation as they had enough irrigation water.
- (d) No efforts have been made to elect FC representatives in some FCS for about 3 years.
- (e) When the DCO President was asked to resolve farmer disputes he made decisions in favour of supporters of his political party. So the farmers lost confidence in him.

The key office bearers, particularly the Secretary, used the DCO to secure contracts for themselves.

The little funds the DCO had were misappropriated by the key officials of the DCO.

The settlement consists of ex-servicemen of the World War II. They are highly individualistic in their thinking and action.

The I.O. from the area could not be effective as he had been ignored and even ridiculed by some farmers. So, he followed the path of least resistance by ignoring the DCO.

The President of the new DCO seems to be a respected person who holds another important office as Chairman of the Conciliation Board (a committee appointed by the government to settle disputes among villagers). The other office bearers are also respected men in the area and the new DCO has the potential to develop itself to handle O&M functions.

## **2.6 Thalpotha DCO - Parakkrama Samudra Scheme**

No. of cultivators	322
No. of irrigated acres cultivated	575
No. of FC representatives	10
Office bearers of the DCO:-	
President	
Secretary	
Treasurer	
Vice President	
Assistant Secretary	

### DCO meetings

		average <u>attendance</u>
No. held in 1990	4	70%
No. held in 1991	3	66%
(upto July, 1991)		

### Maintenance

The DCO has undertaken all the maintenance contracts. It also has done some rehabilitation jobs on contract basis. Most of the maintenance contracts have been performed on shramadana basis and the proceeds (Rs.3900/=) have been credited to the DCO fund. The FCs were maintained by the farmers on individual basis by dividing the work among themselves in an equitable manner. All the farmers have done the work assigned to them.

The maintenance work in Yala 1991 was done on paid labour.

Quality of maintenance work had been high and the work has been done on time.

### Operation

This DCO is also going through the joint operation phase. The DCO representatives work alongside ID employees in planning water issues and in operating the system. Non-availability of gates in most outlets causes difficulties for proper water management. When the gates are supplied, water management can be improved to conserve water. However the farmers have access to adequate supply of water.

It has been observed that the cultivation activities have been done on time.

The DCO has been functioning well. The key office bearers are young and educated. They had a proper perception of the role of the DCOs and were capable organisers of shramadana activities. There was, however a temporary set back as the President and the Secretary of this DCO contested the last Regional Council elections and during the election campaign the DCO activities were neglected as priority had always been given for election campaign work. Soon after the election the DCO became as active as it was, prior to election campaign.

The DCO has taken the initiative to promote cultivation of "Gotukola", a herb that fetches attractive prices in the market. Arrangements have been made by the DCO to provide planting material. About 10% of the farmers in the DCO cultivate 'Gotukola' in about 1/8 of their lands and the DCO has arranged the successful growers to provide planting material free of charge to others.

When passing through the area one may see patches of "gotukola" cultivations in most parts of the DCO area.

The DCO has planned a fund raising project to collect from each farmer Rs.50/- at the rate of Rs.10/- per acre per season. Even the receipts books have been printed for the purpose. Launching of this project had been postponed indefinitely as the key office bearers became more interested in the election campaign. However, after the elections the Consultants observed fresh initiatives to implement the scheme.

## **2.7 General Observations on Sample DCOs**

The DCOs are of varying sizes in relation to the area and the number of farmers, as they have been carved out on the basis of the physical situation, which seems to be the most appropriate and practicable basis.

Though the DCOs adopt the same constitution, differences were observed in the composition of office bearers. Some DCOs have Auditors, Water Managers, Assistant Secretaries and Patrons and some do not have them. Sevagama DCO has appointed a Vel Vidane as patron to enable the DCO to get the benefit of his long experience in water issues. Assistant Secretaries have been appointed to lighten the burden of the Secretaries by sharing the work-load. The Auditors are expected to be watchful of monetary transactions to prevent mal-practices. The water managers are for planning and implementation of water issues.

Duties and responsibilities of DCO office bearers according to information gathered at discussions with the officials of sample DCOs are:

President :- Chairs DCO meetings. Represents DCO in Project Management Committee. Liaison with outside agencies both Public and NGOs.

- Implementation of decisions relating to O&M.
- Organise Shramadana for maintenance work.
- Organise performance of contracts.
- Implement fund raising campaigns and manage ventures for sale of agro-chemicals etc.
- Represents DCO at systems level farmer organisations.
- Investigates settler complaints and settle disputes.
- Ensures equitable distribution of water.

Secretary :- Summons DCO meetings, keeps minutes of meetings and attends to all other secretarial functions.

- Assists the DCO President in discharging the duties and responsibilities of the DCO. Maintains membership registers and attends to correspondence.

Treasurer :- Organises collection of farmer contributions in accordance with the decisions made by the DCO.

- Organises fund raising campaigns.
- Keeps proper records of all financial transactions of the DCO.
- Operation of bank accounts.
- Preparation of financial statements inclusive of annual accounts.

Vice President: Assists the President in discharging his responsibilities.

- Represents President in meetings, discussions etc. in his absence.
- Presides DCO meetings in the absence of the President.

Assistant Secretaries :- Assist the Secretary in discharging his secretarial responsibilities.

Water Manager :- Prepares water issue schedules in consultation with ID officials.

- Assists the DCO in the preparation of maintenance programmes.
- Makes water issues, according to water issue schedules.
- Attends to complaints of farmers relating to water issues.

The distributory systems in all DCOs are in badly run down stages, the reason being that for a number of years, due to paucity of funds, maintenance work had been confined to most essential work. The current "Essential Structural Improvements" programme is also limited to meet only the most essential repairs of the physical system. The Irrigation Engineers, Technical Assistants and our Consulting Engineer have made this observation regarding the present status of the distributory systems. Under these circumstances the DCOs might be compelled to take over a part of an irrigation system that needs rehabilitation work involving heavy expenditure. Mobilising such vast resources in the short term may be beyond the capacity of most DCOs and the government needs to consider this situation seriously. Burdening the DCOs at the very outset with heavy responsibilities may result in the collapse of the DCOs.

The devices adopted by the DCOs to perform maintenance work had been similar. Shramadana, individual assignments to farmers and wage labour had been the strategies. The individual assignments also should be categorised as shramadana work as such work is not paid for. Hence the shramadana content of maintenance work is considerably more than what is shown in Table 3. Quantifying the work done on individual assignments is a difficult task.

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The consultants have not seen the DCOs doing any maintenance work over and above the jobs for which the ID has allocated funds. That is to say, they are undertaking the barest minimum. The DCOs are waiting till the current Essential Structural Improvement work is done to undertake any extra work. It was also found that some DCOs are unable to ascertain the quantum of work that will remain unattended at the time they will assume total responsibility for O&M.

Except for two DCOs (i.e. Chandanapokuna and Sevagama) all other DCOs are in the joint operation phase. Sevagama DCO which was in utter disarray until recently is now getting ready to do maintenance work. Chandanapokuna DCO has employed an experienced farmer (Vel Vidane) as its water manager and through efficient water management and with the cooperation of the farmers had been able to overcome the water shortage problems of the tail-enders quite successfully. His main concentration is on issuing water as per agreed upon schedules. By prompt closure of outlets when water is not required and preventing the top enders of FCs from taking more than their quota he had been able to ensure supply of water to the tail-enders.

Thalpotha, Kadawalawewa, Ulpathwewa and Sama DCOs in the sample participate in water management as described below.

The decisions on the cultivation programme such as the date of commencement of water issues, the duration of issues for land preparation, the date of starting rotational water issues and the last date of water issue for the season concerned are taken at the cultivation meetings. The ID officials and the DCO representatives including the two farmers in each DCO who are trained in water management (two farmer representatives from each DCO are trained in water management by the ID officials) sit together to prepare the water issue schedules for the DCOs. In the preparation of water issue schedules the DCO depends heavily on the technical expertise of the ID officials. The main task of the DCO is to persuade the farmers to stick to the agreed upon cultivation programme and to refrain from syphoning water to highlands. The DCO representatives divide between them responsibility of opening and closing outlets from the D canal in specified sections of the DCO. These representatives on a daily basis coordinate their work with the ID officials. They also move quickly and close the outlets when water is not required for instance on rainy days.

The Giritale DCO through its representation at Mahaweli Water Management Committee has obtained in Yala water for full cultivation of the irrigable area. Similarly Kaudulla farmers had been able to get the ID to fill the Kaudulla and Kantale tank simultaneously on a fifty fifty basis. In the past Kaudulla was filled after filling Kantale. These steps by the FOs to get an adequate supply of water, timely cultivation in accordance with the cultivation programmes approved at Kanna Meetings and prevention of wastage of water by prompt closure of outlets when water is not required and the reduction of illicit tapping for cultivation of highlands have enabled supply of adequate water to the tail-enders. Another factor is the prompt action taken by the DCO officials to investigate complaints pertaining to water issues and taking corrective action when necessary.

The above observations on maintenance and operation work are based on a relatively short period of time (one Maha and One Yala season). How things will fall into place in the long run are yet to be observed.

It is said that "necessity is the mother of invention": Some DCOs which do not face serious water problems e.g. Sevagama do not come forward willingly to organise themselves to install good maintenance and operation systems.

Lack of legal authority to enforce the decisions of the DCOs in relation to collection of annual fees etc may weaken the authority of the DCOs. It also may discourage DCO officials who enthusiastically work for the betterment of the conditions of their fellow farmers as their effectiveness may be limited.

The DCOs that have honest, energetic and knowledgeable leaders perform well and proper leadership is a key factor for the success of the DCOs. Some felt needs like high cost of fertilizer, and agro-chemicals and shortage of quality seeds had prompted the DCOs to set up enterprises to buy and sell agro-chemicals and fertilizer and to establish seed farms.

To ensure the viability and the sustainability of the enterprises the DCO officials who manage them should be trained in enterprise and financial management. The consultants have already witnessed the collapse of some enterprises e.g. metal quarry at Chandanapokuna and Ulpathwewa agro-chemical enterprise due to bad management.

Political activities of key officials of the DCOs have adversely affected the DCO activities. Some active DCOs have become inactive during the election Campaign e.g. Thalpotha.

At the initial stage the DCOs should hold their meetings at least once a month. It is mandatory to have a monthly meeting according to the DCO constitution. While the attendance at meetings was satisfactory the frequency of meetings needs considerable improvement. Political activities of key DCO officials had partly contributed for the non-holding of monthly meetings. Regular meetings are symptoms of active organisations. Further, the meetings were not being held not due to lack of business to transact but because the key officials were busy elsewhere.

The DCOs have done quite well in resolving disputes. People hardly take their land, water and crop damage disputes to the Police stations and law courts. The Police stations in the area also advise people to take disputes relating to above matters to the DCOs. This subject is discussed in greater detail under the section Resolution of Disputes.

In irrigation schemes in Sri Lanka, two common and virtually inherent problems are (a) shortage of water to tail-enders and (b) shortage of water to farm the total extent under command in Yala season, compelling some farmers to skip Yala cultivation or resort to Bethme. During the period of the present study in all 4 systems, the investigators have not come across any such serious problems. In fact, it was observed that some irrigable areas abandoned for a long time for want of water, coming under the plough e.g. 80 acres at the tail end of Kadawalawewa (Bendiwewa). It was apparent that this very satisfactory situation is an outcome of the lead taken by the DCOs:



- (a) to plan water issues more systematically together with ID officials,
- (b) timely performance of cultivation operations by most of the DCOs in accordance with pre-determined time tables,
- (c) prompt closure of gates by DCO representatives themselves when water is not required,
- (d) DCOs soliciting the co-operation of farmers to prevent illicit tapping (illicit tapping still remains a major problem),
- (e) partial success of the crop diversification effort and
- (f) successful lobbying of farmer organisations with the authorities concerned to increase the quota of water allocated e.g. Giritale farmers gaining representation at Mahaweli Water Management Committee and persuading same to increase the quota for Yala 91 from 75% to 100% and Kaudulla farmers convincing the authorities to fill both Kaudulla and Kantale tanks simultaneously. In the past, Kaudulla was filled after filling Kantale.

## 2.8 Composition of Field Canal Groups of the Sample

Field Canal Groups (FCG) are the foundation stone of the farmer organisational structure. The representatives elected by the FCGs form the DCOs and the representatives of DCOs form the Systems Level Farmer Organisations. In order to identify and elect good leaders for different levels of the farmer organisations FCGs though informal should be organised as cohesive groups. Further more FCG members are charged with the responsibility of maintaining the Field Canal (FC) and water distribution within the FC. The FCGs participate in Shramadana work to maintain the DCs. The FCG members have to pay membership fees for operation and maintenance of the irrigation system. Alert and cohesive FCGs are able through group pressure to prevent illicit tapping of water, encroachment of canal bunds and roads and damage to structures by cattle and tractors. Hence, cohesive FCGs are crucial to the success of FOs. However in a set up where the allotments are fragmented (Table 2) among the heirs of legal allottees and some allotments are

cultivated by lease holders, mortgagors and share croppers a question as to who should be the members of FCGs arise. Should it be the legal allottees or all cultivators or water users whatever their status? If the membership is confined to legal allottees only 30-40 of water users (Table 2) in the FCs will not be represented in the FCGs. The farmers whom the consultants have met in different locations at different times have expressed the need to organise all water users in FCs as FCG members. Such action according to them will enable collection of fees from all water users, and getting all cultivators to participate in Shramadana and other activities.

At present it is the legal allottees who are members of the FCGs though there is no legal barrier to enable all water users to become FCG members. The FCGs elect their representatives to the DCO. These representatives are elected by consensus.

The functions and the responsibilities of FCGs as stated by FCG representatives and DCO officials are:

1. Election of suitable representatives to represent the FCG at the DCO.
2. Clearing and repairing field canals, canal bunds and roads either through shramadana or individual allocation basis.
3. Water distribution for land preparation and subsequently rotational issues on an agreed upon equitable basis.

4. Resolution of conflicts among the farmers within the FC.
5. Arrange sharing of knowledge (debriefing) of the FC representatives who undergo training with the others in the group.
6. Ensure the dissemination of information relating to programmes approved, instructions issued etc. by the DCO to the members of the FCG through their representative in the DCO.
7. Take steps to prevent damage to the irrigation systems by cattle and tractors.
8. Take collective action at times of shortage of irrigation water for equitable distribution to everyone.
9. To decide on sanctions against those who do not observe group decisions.

The farmers whom the consultants have interviewed in different locations in the 4 systems numbering over 100 were aware of the above functions of the FCGs.

Table 2:

Number of Cultivators And Their Status In Some Selected Field Channels

Name of D.C.O	Field Canal	Total no of allotments	Owner Cultivators	Ande Cultivators	Mortgagors	Lessors	Total No of Cultivators
Ulpathwewa (Minneriya)	RB2	8	6	1	-	1	8
Sama (Kaudulla)	FC8	8	11	-	1	3	15
Kadawalawewa (Giritale)	FC2	4	3	1	-	1	5
Chandanapokuna (Giritale)	LB1/D22	17	11	8	-	2	21
Talpota (PSS)	FC4/LB.1	11	24	2	1	1	28
Sevagama (PSS)	FC14/LB.1	8	13	5	2	-	20
Total		56	68	17	4	8	97

Source : TEAMS Field Investigators

## 2.9 Composition of Distributary Canal Organizations (DCOs)

A Distributary Canal feeds several Field Canals (FC) with irrigation water. The farmers who share water issued to a field canal organise themselves into a group (FCG). Each FCG elects a representative to represent it at the 'D' Canal Organisation (DCO).

The DCOs by registration under the Agrarian Services (amendment) Act No.4 of 1991 can become "Body Corporates". They open and maintain their Bank Accounts. Enter into legally binding contracts with the ID and other organisations and individuals. The DCOs may set up and operate business enterprises and launch fund raising campaigns.

The DCOs have not yet become Body Corporates by registration under the Agrarian Services Act. Action to do so is being pursued. According to the arrangements made at Project Offices, registration formalities for all DCOs were to be completed by end of November 1991. The DCOs elect their office bearers like the President, Secretary and Treasurer. 90% of the office bearers are elected by consensus.

The DCOs are expected to hold monthly meetings where they discuss the work programmes, proposals for fund raising and business ventures, problems relating to O&M and rehabilitation work.

The range of items discussed at the DCO meetings are manifold and a cross section of them are stated below.

- (a) Approval to sponsor a film show (Sedasulang) for raising funds. Date fixed and organisers appointed.
- (b) A Coconut oil manufacturing project - decided on a suitable location to set up the venture.
- (c) Auditor's report for the period ending 31 December 1990. The failure of a FO representative to give the break up of a sum of Rs.140/- spent was queried.
- (d) Appeal for expediting rehabilitation work of FC 23.
- (e) Establishment of a paddy seed farm.
- (f) To call a meeting of the general membership to decide on quantum of membership fees to be collected.
- (g) Delay in payment for contracts completed.
- (h) Need for blasting material.
- (i) Maintenance work and Sharmadana.
- (j) Problems relating to water issues.
- (k) Shortage of quality seeds.
- (l) Lack of marketing facilities for paddy.

### 3. EFFORTS FOR THE PREPARATION OF DCOs FOR TURNOVER

Strengthening of the Farmers Organisations (FOs) and providing them with basic knowledge and skills are the main activities organised for the purpose of preparation of DCOs for turnover. This chapter deals with the activities related to these efforts.

#### 3.1 Training Activities

The principal strategy adopted for creating awareness of the turnover exercise and for imparting the required knowledge and skills to manage O&M after turnover is training.

Training programmes for farmers are conducted at three different levels, namely: (a) Grass root level for FC representatives and farmers (b) Middle level for DCO officials (c) Higher level programme for groups of DCO officials from number of schemes.

The types of training courses held are:

##### Grass Roots Level

Field Canal Group Training  
Farmer Representative Training  
Crop Diversification Training

##### Middle Level for DCO Officials

D' Canal Management  
Finanacial Management  
Systems Management Training

##### Higher Level Programmes for Group of DCO Officials

Farmer Education Tours  
Field Days - Field Demonstrations

The training is used as a catalytic process as everyone in the target groups cannot be trained. Those trained are expected to share their knowledge with their peers. An analysis revealed that the training courses have been designed on the basis of knowledge and skills required to manage O&M at D' canal level. Trainers are from ID, IMD and the Department of Agriculture.

The recorded attendance at Training Courses exceeded 90%. The trainers have been trained as Trainers. The trainees interviewed indicated that they could assimilate the subject matter taught.

The training courses have been designed to facilitate **"learning by doing"** approach and the programmes on O&M take the trainees to the field for practical work. The classes are held in schools, temples etc. to ensure easy access to the trainees.

The farmers in sample DCOs and in other DCOs who cultivated and are keen on cultivation of non-rice crops indicated their need for more training in cultivating other field crops. The IOs and the Project Managers have identified the disruption of agricultural extension services as an important cause for the poor response to crop diversification. Even at Project Management Committee meetings the need for more training in cultivation of OFCs was discussed. Hence there is a need for more training in crop diversification.

The consultants observed at least six training programmes and found that the trainers did not have the access to audio visual aids. The trainers as well as trainees in those programmes were of the view that audio visual aids could have enhanced the effectiveness of their training and learning efforts.

The IOs, the Project Managers and the DCO officials see a clear need for training of DCO officials in managing enterprises as the DCOs have taken the initiative to operate agro-chemical sales outlets. They also have many of proposals for purchasing paddy, rice milling, market stalls for farm produce etc.

There are no follow-up and retraining programmes, and no action has been taken to evaluate training programmes.

### 3.2 Contributions of the IOs

The Institutional Organiser (IO) plays a key role in the turnover process. Being the change agent operating at the grass roots level he is the most vital link between the farmer and the rest of the world.

At the very outset under the INMAS Programme graduates had been appointed as IOs . Later on the recruitment policy has been changed to engage young men and women with GCE (advanced level) from the farming community in the settlement schemes. The consultants are of the view that the decision to recruit educated sons and daughters of farmers as IOs was a step in the right direction. These IOs live with the farmers. They speak the idiom of the farmers. The IOs know their farmers by name. The farmers as observed by the consultants in many a location respected the IOs and sought their help and advice. As they are very close to their clientele (farmers) they did not encounter communication barriers and were able to function as effective change agents. The role of the IO is depicted in diagram 3.

The primary function of the IO is to create an awareness in the farming community about the turnover exercise and to strengthen the FOs to take over O&M. The IOs have done this work in several ways. They meet the farmers at organised meetings and small groups and explain the need for farmer organisations and the advantages of taking over O&M functions of the irrigation system.

For the turnover exercise to be a success strong farmer organisations are required. Though an informal group, the Field Canal Groups (FCGs) that elect representatives to the DCOs should be cohesive. In this direction too the IOs were very active. IOs in creating awareness among the farmers about the turnover process. In order to strengthen farmer organisations the IOs had met farmers in groups on several occasions and discussed with them the need to be united and organised, the qualities of leader and how leadership can be developed and the need to elect most suitable people to represent the FCGs at the DCO. They also impressed upon the



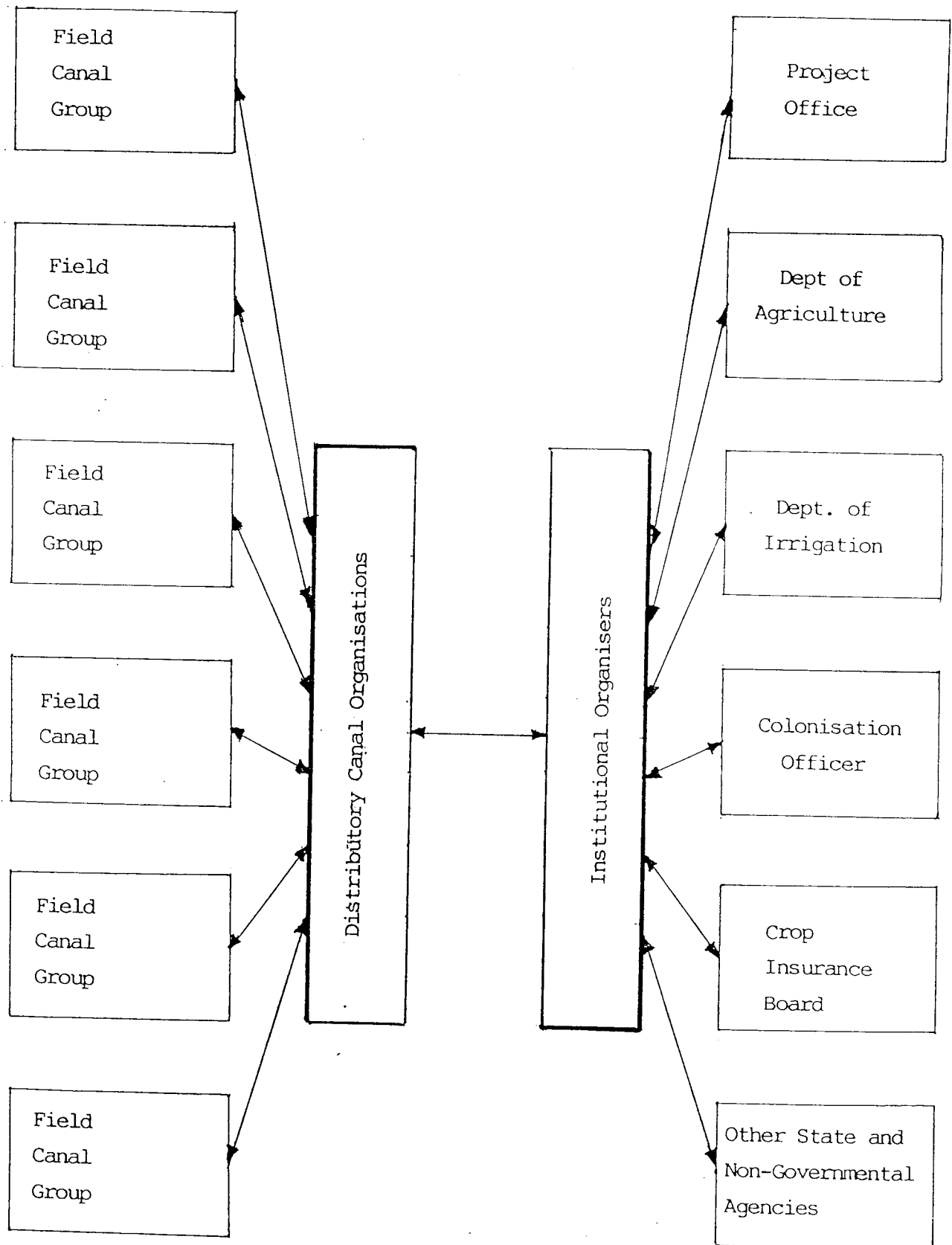


Diagram 3: Integral Role of the Institutional Organisers

farmers the importance of electing the most suitable people as office bearers of DCOs. This as observed has been an arduous task involving long hours of work and extensive travel. Meetings were to be held at times convenient to the farmers. Visits to farmers individually to motivate them to attend the meetings had been made. The IOs had spent lot of time in meeting the farmers individually and in groups.

Some farmers are very slow to respond to the requests of the IOs. Repeated visits had been made to persuade them. The consultants have seen the IOs identifying weak FCGS and holding special discussions to strengthen them.

The work schedules of IOs are generally heavy. They have to meet farmers in groups and individually; organise meetings; participate in DCO and Project Management Committee Meetings, organise training programmes, function as resource persons of training programmes, work as liaison officer on behalf of the farmers with government and non-government agencies as shown in the diagram.

The consultants have observed that the participation of IOs at DCO and Project Management Committee Meetings had been very satisfactory. On some occasions the IO had been the only public officer attending these meetings.

The selection of trainees to attend Training Programmes are done in consultation with the FCGs and DCOs and making the logistical arrangements are the responsibilities of IOs. The consultants have seen them in the role of the trainers too in most training programmes.

Another important function of the IOs was to act as the link between the farmer and the Project Office and other government and non-government organisations. In this role they have to facilitate two way communication in that taking the messages and problems of the farmers to the relevant organisations and transmitting the messages of different organisations to the farmers. Farmers see the IO as the person to whom they could refer their grievances and problems.

However the proper role of the IO should not be misunderstood with what he does. The IO is essentially a change agent who should create an atmosphere for the farmers to organise themselves into strong organisations and acquire skills and experience to self manage their officers, which include - O&M of irrigation system, preparation of seasonal cultivation programmes, mobilising of resources like seeds, fertilizer, chemicals, credit, know-how etc for implementing the programmes, settlement of disputes among farmers marketing of produce and all other requirements for optimum utilisation of the resources at the disposal of the farmers to enhance their living standards.

In playing his legitimate role the IO cannot ignore or turn a blind eye to the urgent needs of the farmers. In fulfilling such needs, for instance, locating a market for their produce, he is compelled to play a leadership role, in the short run that may create a situation where farmers are dependent on him. But he should as fast as possible empower the farmers with the capability to locate markets and move away from the leadership role leaving the farmers to manage their own affairs.

For discouraging the IO to emerge as a leader on whom the farmers are dependent, it is necessary to dispel the fears in his mind in regard to job security and to define and redefine his role clearly from time to time taking into consideration the different stages of the turnover process.

Being the officers who interact frequently with the farmers, on most matters, the advice and guidance of the IOs are sought by the farmers. On the other hand in order to ensure the success and the sustainability of projects like agro-chemical sales outlets, sewing classes, women's organisations etc. the IOs take the responsibility to provide whatever assistance necessary. The DCO officials, the farmers and the members of the womens' organisations with whom the consultants had discussions acknowledged with thanks the assistance extended to them by the IOs.

Consultants have observed that the IOs know the farmers in their location fairly well. This is an indication that they meet them frequently.

The IOs are very young and some elders in the community tend to ignore them. This, as observed was not a serious problem adversely affecting their effectiveness. But at Sevaagama DCO due to the uncooperative attitude of most farmers, the IO had not been able to do his work satisfactorily.

The IOs hold temporary appointments. So they are all concerned about their job security. Since of late the consultants have noticed a subtle strategy to demonstrate that the farmers will need their services even after complete turnover.

Rural communities are very susceptible to the so called dependancy syndrome. The ISMP may take notice of this possibility to map out a counter strategy if needed. It is important that the process should enable the farmers to become self-reliant. But experience in many communities has demonstrated that this is not a total reality. What is needed in this case is a system that would ensure the building of FOO by helping to help themselves. Self-reliance of farming communities should be treated as assisted self-reliance.

### 3.3 Role of the Project Management Committee (PMC)

The Project Management Committee chaired by the Project Manager and consisting of representatives of the DCOs and the relevant Government Agencies like the ID, Departments of Agriculture, Agrarian Services, etc. continues to be the main forum where all problems beyond the capacity of DCOs are discussed with a view to find solutions. In general these discussions relate to:

- (a) matters arising out of execution of contracts - delays in payment, difficulties in procuring some critical inputs like blasting material, metal etc
- (b) Encroachment of bund roads and reservations
- (c) Illicit tapping of water and
- (d) difficulties in acquisition of quality inputs like, seeds, marketing problems, inadequacy of extension services etc.

At these committee meetings, ID is always well represented, but it was observed that most other departments are gradually losing their interest. The effectiveness of the Project Management Committee, to some extent is affected by the capacity limitations and the lack of interest shown by some Government Departments in the project affairs. The Agriculture Department is a good example of capacity limitation as the shortage of trained man-power has compelled it to limit its services.

The consultants have observed that the Project Management Committee meetings have given the opportunity to the DCO representatives to discuss their problems pertaining to marketing, crop insurance, input supplies etc. directly with the representatives of the Paddy Marketing Board, the Cooperative Wholesale Establishment, the Agricultural Crop Insurance Board and the Department of Agriculture.

These interactions apart from solving the problems of farmers have been made use of by the agency officials to explain various schemes like the farmers pension scheme to the farmer representatives who carry these messages to their peers.

It was found that some problems brought to the Project Management Committee by the DCOs are beyond the capacity of the committee. The issues relating to encroachment of reservations and mass scale illicit tapping of water by powerful parties, remain unsolved inspite of several reminders.

The Project Management Committee given all above limitations performs its tasks successfully by tackling problems like delay in payment for contracts executed, essential repairs to canals and structures, shortage of seeds, inadequate marketing facilities, delays in settlement of crop insurance claims and shortage of materials like blasting materials to perform contracts. It is undoubtedly an essential milestone in the path to self management by the DCOs.

It is observed that the Project Management Committee at Kaudulla is now presided over by a farmer, elected as president. The farmers in Kaudulla also have setup a system level Farmer Organisation. This is a healthy development towards self management by the farmers themselves. The study revealed that system-level farmers' organisations of this nature are being organised in other Projects (PSS, Giritale and Minneriya) as well. At Kaudulla, sub-project management committees set up on territorial basis to solve problems within their areas of authority, can be considered as another innovation to find quick solutions to problems through a decentralised administration set up. It is learnt that the sub-project management committees were set up in 1982-83 in Galoya for the first time.

### **3.4 Contributions of the Department of Irrigation**

The functions and the responsibilities of the ID staff must change radically to facilitate the turnover process. From a position of maintaining and operating the irrigation system themselves the ID employees are called upon to perform manifold functions as trainers, guides, co-workers, inspectors, supervisors etc.; to prepare the farmers to assume responsibility for O&M of the entire irrigation system

at the level of the distributory canal and below. For the discharge of the new responsibilities these employees must change their attitudes, approaches and to acquire new skills like training skills. Some of them have done so with the knowledge of the possibilities of losing their jobs.

Some of the key functions of the ID employees in their new role as facilitator can be described as:

#### Co-workers

They work with the DCO representatives in identifying maintenance and rehabilitation work. Thereafter in accordance with the funds available and the needs of the farmers the work identified as necessary is arranged in order of priority. Estimation of the work is also done with the active participation of the farmers.

In operating the irrigation system the ID employees in the joint operation phase work along side farmers. Water issue schedules are prepared jointly. Decisions pertaining to closure and opening of outlets are taken jointly. Water distribution i.e. the physical operation of the system was done jointly with the farmers.

#### Guides

The DCOs due to lack of experience need lot of help for performing maintenance contracts. The ID employees guide them to mobilise the required human and material resources, plan and arrange work flow and to match the work done to the established norms. Similar guidance has been given for operating the irrigation system.

#### Inspectors and Supervisors

In these roles the ID employees were achieving two objectives. As employees yet responsible for the O&M of the system, they have to be satisfied, that all activities undertaken by the farmer organisations are done satisfactorily according to the established standards. This is an essential requirement for sanctioning payments. On the other hand through careful inspection and close supervision they guide and assist the farmers to do the work undertaken systematically and properly.

### Trainers

The most important contribution of ID employees for the turnover effort is made as trainers. For performance of this duty they had to acquire new skills. Training courses on technical subjects related to O&M like identification of maintenance and rehabilitation work, setting priorities, estimation, preparation of bills of quantities, assessing water requirements of given units of land for different crops, preparation of water distribution schedules, functions of different structures, capacities of canals, reading gauges and metres etc. are delivered by the ID employees-Works Supervisors and Technical Assistants. This work take them to class rooms as teachers and to the field as demonstrators. The consultants have observed them doing this work quite skillfully.

The change of attitudes of ID employees and the adaptation to perform new functions will not take place overnight. It takes sometime for them to adjust themselves mentally and physically into the new role. This period of adjustment had been critical and during this period conflicting situations between the ID employees and farmers did occur leaving room for the farmers to suspect their bona fides. It does not take much time to inflict a wound but it takes a long-time to heal it. The consultants observed that the ugly experiences of the critical adjustment period haunting in the minds of farmers manifesting in the form of criticism of ID employees. Most of such criticism like ID employees were anti-farmer organisations and they deliberately underestimated jobs contracted out to farmer organisations according to inquiries made are no longer true. Fortunately these suspicious feelings are fading away and the consultants have observed particularly from about March, 1991 a cordial relationship between the farmers and ID employees. A continuous effort in future to prepare ID employees in advance for their new roles to minimise conflicting situations a vital requirement.



### 3.5 The Role of Other Agencies

The collective effort of almost all agencies operating at grass roots level is crucial to the successful turnover of O&M to the DCOs. The roles played by some of the most important agencies are:

#### Department of Agriculture

Provides agricultural extension, conducts training in agriculture (rice cultivation, crop diversification), organises field days, assist in setting up demonstration farms, provides seeds and help establishment of seed farms. Trains agriculture volunteers.

#### Department of Agrarian Services

The FOs are to be registered with the Department of Agrarian Services and the Department advises the Project Management and the DCOs in regard to registration requirements and procedures. Assist DCOs in settlement of disputes relating to cattle damage etc. A major function it performed was the supply of agricultural inputs, but the DCOs now organise input supplies with the assistance of the Project Management.

#### Agricultural Crop Insurance Board

Crop insurance coverage is essential for securing agricultural credit and the Agricultural Crop Insurance Board provides that service. The Board officials also have to assess crop damage and settle claims for crop damage. Another important service, the Board provides is the implementation of the farmers pension scheme.

#### Paddy Marketing Board

Their main contribution is the purchase of paddy under the guaranteed price scheme. The PMB sets up purchasing centres for the purpose.

### Cooperative Whole Sale Establishment (CWE)

The CWE buys farmer produce like chillies, onions, greengrams etc. It operates purchasing centres.

### Cooperative Societies

The service of the cooperative societies is two-fold. They buy farmer produce and sell agricultural inputs like fertilizer and chemicals.

### Banks

The Bank of Ceylon and Peoples Bank provide agricultural credit to the farmers. These banks also provide DCO with credit for various enterprises.

## **3.6 Contributions of Farmer Representatives**

The duties and the responsibilities of farmer representatives in relation with the turnover process are manifold. They have to lead their Field Canal Groups and represent the interests of the FCGs at the DCOs.

### As Leader of FCG

- (a) Organise the group to maintain the FC-weeding and repair where necessary.
- (b) Solicit cooperation of all farmers to prevent damage to canals and structures by cattle and tractors.
- (c) Organise equitable distribution of water among all the farmers and prevent wastage of water.
- (d) Settle disputes among members of the group.
- (e) Convene and preside over FCG meetings.

### As FCG representative

- (a) Represent FCG at DCO - bring problems of the group to the notice of the DCO and find solutions for same through the DCO.
- (b) When called upon hold office in the DCO and system level farmer organisation.
- (c) Share with his peers the information gathered at DCO meetings and knowledge gained at training programmes.
- (d) Discuss with his group decisions of the DCO affecting the farmers calls for shramadana, collection of fees, compliance with cultivation calendar etc and solicit cooperation of the FCG to implement them.

#### 4. MANAGEMENT CAPACITY AND PERFORMANCE OF SAMPLE DCOs

##### 4.1 Different Perceptions of Different Actors

Since the present study aims at making objective observations on the turnover of management of distributaries to the FOs, the important perceptions of different actors of the real-world situation is useful. This section deals with perceptions of this nature.

###### (i) Perceptions of a Project Manager :

According to one Project Manager the objectives of the Turnover programme are :

- a. To organise and develop farmer organisations for self management.
- b. To coordinate activities of all relevant government agencies.
- c. To promote socio-economic and cultural activities.

The Project Manager pointed out that the Members of all DCOs in his project were given management training. The role of the Irrigation Department in this Project was recognised as follows:

Technical Advice  
Task estimation  
Supervision, inspection  
Approval of payment for work done

The Project Manager highlighted that there is a shortage of water, but due to efficient water management by the DCOs and strict adherence to the pre-determined cultivation calender the full extent is under crop.

According to his view this is an outcome of proper training. All farmers have been given awareness training. DCO members are trained in relevant disciplines. Furthermore, all officers attached to the project have been trained. The training manuals were designed by an expert. When turning over, all farmers are summoned and a document exchanged.

(ii) Perceptions of another Project Manager

The Project Management Committee in this project is chaired by a farmer. The System Level Farmer Organisation set up already and chaired by a farmer will manage all functions embracing the totality of the scheme after turnover.

There are Sub-Project Committees set up for a group of DCOs. They have been created for speedy discharge of business. Further the Sub-project Committee Officials get exposed to a managerial environment. They also improve their leadership skills.

As the cost of fertiliser was very high the System Level Farmer Organisation raised a fund of Rs.100,000/- by collecting Rs.1,000/- from each DCO. Some DCOs contributed more according to their capacity and with this fund a pioneering effort was made to buy and sell fertilizer at reasonable prices. This venture had a good impact in bringing down the selling prices of fertiliser in the area.

The DCOs in the system in consultation with the farmers, requisition the quantities and varieties of fertilizer required. The system level farmer organisation buy them from the Fertilizer Corporation and delivers to the farmers. The farmers pay for fertilizer received. The pricing is on the basis of cost plus transport plus a profit margin of about 5%. As a result, the price has come down from Rs.540/= to Rs.490/= per Cwt.

(iii) Perceptions of another Project Manager

There are 20 DCOs functioning in this system successfully. Maintenance has been turned over to all DCOs except in the case of one DCO.

All DCOs are ready to take over the operation. Elections are held every two years to elect office bearers to DCOs. At the last election about 12 presidents were not re-elected. They lost as they pursued their personal interests. Members can change the office bearers at any time. Here too, as in other cases, social status motivates farmers to hold office in DCOs. Four DCO officials contested in the last elections and won seats and there are no conflicts due to politics among members.

Maintenance work is mostly done on shramadana basis. Very little is spent for shramadana (for tea) and the rest is credited to the DCO fund.

(iv) Perceptions of an IDO (Institutional Development Officer)

IOs have met all the farmers and explained the duties and functions of the FOs and what is meant by leadership. FCGs have been given awareness training and they are capable of electing the most suitable farmers to represent them at DCOs.

According to the IDO, the traditional leadership has changed and Vēl Vidanes have been got rid of. There are 9 IOs and 12 DCOs. The DCOs should meet monthly to discuss programmes, problems, work-in-progress and take appropriate decisions. However, there is a poor participation of representatives of relevant government agencies at DCO meetings particularly after the suspension of the incentive payment.

The DCO programme has resulted in many benefits to the farmers. Some of them are: timely cultivation, well maintained canals and structures. The organised farmers are beginning to realise their strength as pressure groups. On their insistence, the tank was filled this time (1991 Yala) before water issues which is a great achievement.

The generous commissions given to Agrarian Services Department and Co-operatives for fertiliser and agro-chemicals are not passed down to farmers even partially. Farmers through their organisations have bought agro-chemicals and sold them at reasonable rates to the farmers. The Department of Agrarian Services do not like this as their vested interests are threatened.

The DCOs have decided to collect Rs.100/- per 2 acre holding, but collecting this is difficult. DCO officials devote their time and spend their own money to perform their duties but they will not be able to do it on this voluntary basis for long. They continue doing voluntary work as there are some invincible gains like social status, easy access to public offices, etc. There is no yard-stick to evaluate the success of the programme as financial values cannot be assigned to most benefits which include less water disputes, land disputes, and petitions.

(v) Perceptions of the President of a Sample DCO

The particular Chairman has been holding this position from 1984. The DCO has taken over both Operation and Maintenance. An ex-vel-vidane is employed as water manager who is paid an allowance. The general meetings are held every 6 months. Maintenance work is done on shramadana basis. The money earned for maintenance jobs is deposited in a fund. Farmers on an individual basis are assigned portions of the D'Canal for clearing. Some farmers do not do their work.

Persuasion is the only device, as they have no power to deal with non-cooperating members. TAS and WSS of ID do not fully cooperate. Generally, payments for contracts are delayed. Furthermore, there is poor participation of Agrarian Services and Agriculture Department officials. For problems like land disputes, subletting and "Andagoviya" (share croppers), crop damages by cattle the farmers do not go to the police or even to the Project Office. The problems are settled at DCO level.

(vi) Perceptions of the President of another Sample DCO

He has held the post of President for 6-7 years. He spends his own money - around Rs.50/- per day for DCO matters. The ID is helpful and water problems are satisfactorily resolved. 90% of the farmers are to be prosecuted for non-payment of bank loans. The accumulated interest is high. They have appealed for waiver of accumulated interest without any success. Sometimes the FOS cannot influence national policies. Most farmers are reluctant to be the President or the Secretary of the DCO.

(vii) Perceptions of the President of another Sample DCO

He has been elected as president from 20-4-91. Payment for maintenance work done on shramadana basis has not been made as the work was not done properly. Poor participation for Shramadana work is due to most legal owners renting out their plots and the renters not having any permanent interest in the land. The renters do not take part in Shramadana work.

The farmers have a clear perception of the role of FOS, as awareness programmes have been held. The two Vel Vidanes are still active. They are popular with the farmers. They still are in possession of the gate keys. They do not receive any remuneration for their services.

He is also president of the conciliation board (a committee appointed by the government to investigate and settle disputes among the people). Most disputes are settled at DCO level. Even Police officers in the area advise people to take their complaints relating to land, crop damage etc. to the DCO.

As a result, there are less disputes. Even problems of illicit tapping of water can be solved. The operation of the system has been improved e.g. tail-enders of B 11 of D4 did not get water and on investigation the DCO found that 2 gates were not opened for 10 months. With the opening of these 2 gates the water started flowing to the tail end.

Although Farmers wished to cultivate chillies, they were not able to get seed in time. There is a lack of Agricultural Extension Officers and KVSS. The GSS are yet to fill the vacuum created by the KVSS. The Department of Agriculture is unable to extend their services to the farmers as it is under-staffed. Volunteers are being trained to overcome these problems.

The DCOs have decided to collect Rs.100/- per (kanna) season from each field.

(viii) Perceptions of a President of a Sample DCO

A Sub-Project Committee of the system consists of all FOs in the area of authority, the TA, Cultivation Officer, Gramasevaka and any other officials as required. The sub-project committees were created at the request of farmers.

Issues beyond the DCO are referred to the Sub Project Committee. All matters that cannot be solved at sub project committee level are referred to the Project Management Committee. The sub-project committee is an innovation for speedy disposal of business. It also gives an opportunity to farmer leaders to improve their leadership skills and to train in management.



Types of business transacted at sub-project committee.

- a. Issues arising out of rehabilitation
- b. Land disputes
- c. Decisions on water issues ie. date of closure of water etc.

(ix) Perceptions of a Secretary of a DCO

He has functioned for two years as secretary of DCO. In this system 100% of maintenance work has been done on shramadana basis. Payments for Shramadana are deposited in the bank. The Committee Meetings are held once a month and general meetings once in three months.

There is an improvement of quality of work after taking over of maintenance by DCO. For example, structures are protected and there is better water distribution. There are less disputes and the disputes are resolved by the DCO. It could be confidently mentioned that the DCOs will successfully manage O&M, if officers of agencies like ID, Department of Agriculture give their cooperation.

Some of the problems which exist are for example seed supply is not properly organised. Fertiliser and agro-chemicals are available but at high prices. It is also difficult to sell paddy at reasonable prices. Hence, farmers cultivate chillies, B'onions and Gotukola in Yala.

In this scheme too, the secretary of the DCO dedicates his own time and money to carry out these duties. He functions as secretary to many other societies in the community.

(x) Perceptions of the President of the Project-level Farmer Organisation in Kaudulla

In Kaudulla a new development has taken place with the emergence of the Project level Farmer Organisation. This system-level farmer organisation consists of all farmers who are members of farmer organisations in the scheme. The Committee is made up of Presidents of DCOs. Office bearers are elected by the committee. All Department Heads are patrons. This committee has taken the initiative to:

- i. Buy and sell fertiliser and agro-chemicals to farmers at reasonable prices.
- ii. Through the Presidential Secretariat at Anuradhapura, they were able to get a large allocation of money to the Cooperatives in the area to purchase paddy.
- iii. Negotiate contracts with the related institutions.
- iv. Supply seed paddy and organise seed farms.

According to the President of this organisation they are ready to take over the total management of the distributory system which includes O&M. Supply of inputs, agriculture extension and marketing arrangements will also be handled by them. Due to the existence of FOS there has not been any "bethma cultivation" for the last 4 seasons. The total irrigable area is cultivated which is a major achievement.

After the complete take over of O&M, professionals will be hired and the project will be managed as a business enterprise. This organisation believes that the Irrigation Department has high overheads and the output of the ID is not commensurate with the money spent.

xi. Perceptions of an Irrigation Engineer

The turnover process has increased our work load. Without a corresponding increase of staff. In addition to the work we have been doing we have to devote lot of time attending meetings in connection with turnover exercise, extend our services as resource persons for imparting skills to the DCO members to attend to O&M work themselves after complete turnover.

Most DCOs lack knowledgeable people and financial resources to execute maintenance and other contracts. So we need to help them a lot.

It is a sensible approach to turnover in stages allowing adequate time and creating an environment in which the DCO officials can acquire knowledge and skills to perform the work they have to do on assuming total responsibility for O&M.

Some farmers and even some DCO officials do not know the nature of duties and functions that will be transferred to them on turnover. More training and some awareness programmes targeted at the total farming community seem necessary.

It is regretted to note that the DCOs have not done maintenance work other than those covered under contracts. A huge effort will be necessary to involve all cultivators to participate in O&M work.

Turnover programme will compel the farmers to organise themselves. The farmers will not be able to solve their irrigation, cultivation and marketing problems without forming themselves into strong organisations. When the farmers themselves become responsible for O&M they will take extra care to look after the irrigation system.

xii. Perceptions of a Technical Assistant

At the very beginning of the turnover process there was a confusion as to what was happening, as the concerned parties have not been told clearly the aims and objectives, the process of turnover and the roles they were expected to play.

It is not easy to import theoretical knowledge and practical skills in O&M to people with different educational backgrounds to attend to O&M of irrigation systems. Due to difficulties in reading and understanding estimates and contractual documents we were sometimes accused of sabotaging the turnover process by underestimating contracts awarded to DCOs, which is not true.

ID staff will have to extend their support over a long period for turnover to become successful.

For turnover to become a success almost all farmers need to extend their cooperation. Even though we have more work now on turnover our work load will be considerably reduced as we will have to deal with only the DCOs. People also will take more interest to conserve water and to maintain the system.

xiii. Perceptions of a Work Supervisor

We are now training the farmers in water management and maintenance work.

As supervisors we have to devote more time now in guiding and helping the farmers to do O&M of the irrigation system.

We find that most of the farmer representatives who attend training classes are very keen to learn. Their attendance is also very good.

The farmer leaders should try hard to get all the farmers to join in shramadana work.

Though we have more work now on turnover we will have less work, as, we will be dealing only with the DCOs. We however feel that the turnover should be a gradual process.

#### **4.2 Operation Capacity and Performance in Sample DCOs**

Under the chapter on "Characteristics of the sample DCOs" the involvement of the sample DCOs in operation of the irrigation system has been discussed in detail. Four DCOs namely Kadawalawewa, Sama, Ulpathwewa and Thalpotha are operating the irrigation system jointly with the ID. Chandanapokuna DCO has taken over O&M from February, 1990. However, the TA of ID kept the keys of the D' canals. Though the water manager of the DCO according to him had ready access to the keys whenever required the consultants could not find a valid reason for doing so.

The Sevagama DCO has been just reorganised and it will have to prove its capacity and readiness to take over O&M.

The DCOs have trained farmers (2 in each DCO) for water issues and they are participating in water issues with ID officials.

All DCOs have indicated their willingness to take over operational functions and as joint operators they have gained experience in water issues. They have the capacity to perform. However about 25% of the farmer representatives in sample DCOs have expressed the need to take over O&M completely after the completion of the on-going Essential Structural Improvements Programme.

#### **4.3 Maintenance Capacity and Performance of Sample DCOs**

According to Table 3 the value of maintenance work done by the sample DCOs on shramadana are.

Chandanapokuna	14,540
Sevagama	7,164
Thalpotha	13,190
Kadawalawewa	16,262
Ulpathwewa	17,100
Sama	7,313

The participation in Shramadana Campaigns has been not satisfactory. Only Thalpotha has registered over 50% attendance.

Weeding and desilting the canals were the maintenance work done by the DCOs. On complete turnover the DCOs will have to maintain the roads, canal bunds, canal and road reservations, effect repairs to damaged structures and canals etc. very much more work than what they are doing at present. Sheladia Associates are in the process of preparation of maintenance plans for Giritale Scheme. According to the Plans prepared for Puranagama DCO the annual maintenance cost per acre per year is approximately Rs.173/=-, of which the cash component for material, equipment and transport per acre is Rs.37/=-. The major maintenance cost is labour.

Though the DCO representatives have been trained in identification and estimating maintenance work and have gained some practical experience by joining the ID officials in the preparation of maintenance plans, they have not yet prepared maintenance plan by themselves.

The Quarterly Progress Report No.17 for the period July to September, 1991 of the Irrigation Systems Management Project compiled by Sheladia Associates indicates that under Minneriya scheme 5 shramadana campaigns and under Kaudulla scheme 1 shramadana campaign have been held for road construction. This indicates that the DCOs are now extending their shramadana activities to areas other than irrigation canal maintenance. According to Table III-1 of this same report the membership fees collected by the 4 irrigation schemes in Polonnaruwa are:

Scheme	Total membership of the DCOs	Members paid membership fees	Amount collected as membership fees	Amount in Development fund
PSS	6500	3800	8350	286300
Giritale	2327	2105	13995	327000
Minneriya	4780	2806	17735	314167
Kaudulla	4637	2817	28197	278865

During the 3rd quarter ending September 1991 more than 50% of the members have paid their fees raising the percentage of members who have paid their fees to 55%. These developments are indicators of DCOs mobilising resources required to manage O&M.

Table 3:

Maintenance Contracts Performed On Shramadana Basis Six (06) Sample D C O S

Name of D.C.O	Number of Farmers	Season	No of Shramadana Held	Purpose	No of Farmers Participated	Percentage of participation	Value of Contract Rs	Payments Received Rs
Chandana_ Pokuna (Giritale)	179	1990 Yala	-	Not available D23 and D24 Cleaning bunds and desilting beds	Not available	Not available	5100	5100
Do	179	1990/91 Maha	2	Do	62	35%	5100	5100
Do	216	1991 Yala	5	Do	115	53%	4340	4340
Sub total			7		177	44.0%	14,540	14,540
Sevagama (PSS)	264	1990 Yala	No Shramadana	Cleaning and desilting "D" Canals	Allocation of Rupees 18,000 not utilised. Part of work done on paid labour and received Rs 3377 out of Rs 18,000			
Do	264	1990/91 Maha	DO	DO				
Do	264	1991 Yala	1	Do	51	20%	7164	Not paid yet
Sub Total			1		51	20%	7164	-
Talpota (PSS)	98	1990 Ya	1	Cleaning and desilting	52	53%	6595	6595
DO	98	1990/91 Maha	1	Do	60	61%	6595	6595
DO	98	1991 Yala		No shramadana. Work done by Hired Lobour			7660	Not Paid Yet
Sub Total			2		112	57%	20,850	13,190

Name of D.C.O	Number of Farmers	Season	No of Shramadana Held	Purpose	No of Farmers Participated	Percentage of participation	Value of Contract Rs	Payments Received Rs
Kadawalawewa (Giritale)	261	1990 Yala		not Available			6,541.00	6,541.00
DO	261	1990/91 Maha	Do			Not Available	6,541.00	6,541.00
Do	261	1991 Yala	1	Do	80	30.6%	3,180.50	Not paid Yet
Sub Total			1		80	30.6%	16,262.00	13,082.00
Ulpathwewa (Minneriya)	208	1990 Yala		Not Available			5,900.00	5,010.00
Do	208	1990/91 Maha	07	Cleaning and desilting	98	47.1%	5,900.00	N.A
DO	208	1991 Yala	05	Do	93	44.7%	5,900.00	Not Paid Yet
Sub Total			12		191	45.9%	17,100.00	
Sama (Kaudulla)	246	1990 Yala		Not available			2,063.00	2,063.00
Do	246	1990/91 Maha	2	Cleaning bunds &	88	35.7%	2,063.00	2,063.00
Do	246	1991 Yala	1	Desilting beds	45	18.2%	2,630.00	Not Paid Yet
Sub Total			3		133	26.9%	7,313.00	4,126.00

For operation of canals per month 1991

Ulpathwewa - Rs.2,344.00

Kadawalawewa Rs.1,131.00

Source: TEAMS Field Investigators



The DCOs have not yet spent their funds for O&M. Investments have been made in ventures to operate sales outlets for chemicals and fertilizer. Arrangements are being made to invest in purchasing centres, paddy milling etc. According to about 50% of the office bearers of the sample DCO they expect ID to do all necessary repairs to the irrigation system. Thereafter the DCOs will spend their money and effort for O&M.

With some technical inputs from the ID to prepare maintenance plans the sample DCOs except Sevagama have the capacity to manage O&M on their own.

#### **4.4 Resolution of Disputes**

Most DCOs have made giant strides in resolution of minor disputes. Though minor, most of these disputes if not for the intervention of the DCOs, would have ended up at Police Stations and Law Courts, causing the litigants wastage of their productive time and hard-earned money.

The disputes are related to boundary conflicts, illicit tapping of water, conflicts between lessor and lessee, mortgagor and mortgagee and crop damage by cattle. The DCOs have books for recording the disputes and the solutions found. The parties to the disputes are requested to place their signatures in the complaint book in acknowledgement of the prescribed solutions.

Some examples of disputes settled by the DCOs are:

- (i) In the Thalpotha DCO the boundary ridge of a plot in FC10 was encroached by the farmer of the adjoining plot to widen his field. The DCO checked the dimensions of the two plots and restored the boundary ridge to original form.
- (ii) In Thalpotha DCO a farmer's cattle damaged the paddy nursery of another farmer. The DCO got him to issue a quantity of paddy plants equivalent to the quantity damaged by cattle to the victim from his nursery.

- (iii) A farmer in DC16 of Ulpathwewa had planted a long aged paddy variety in Yala '90 . At the time the crop was maturing water issues ceased. The DCO intervened and got water issue in that canal for an extra few days and saved the crop.
- (iv) The paddy field of a farmer in Ulpathwewa was inundated with water escaping from an anicut. The DCO officials repaired the anicut and restored the field to a cultivable stage.

The number of disputes (land, water, crop damage) reaching Police stations according to discussions held with Police officers were almost nil. The Police Stations in the area advise the people to take their complaints to the DCOs.

#### **4.5 Financial Capacity & Performance**

Table 4 is an attempt to compute balance sheets as at 31.07.91 of the 6 DCOs in the sample, from the incomplete accounting records in their books. Among other things, the table reveals (a) sources of income (b) the financial and other material resources at the disposal of the DCOs (c) to what extent the DCOs have been able to collect annual membership fees from the farmers, (d) efforts to explore non-traditional sources of income and (e) the need to improve book-keeping standards.

The main sources of income are:

- (a) Membership fees
- (b) Profits from maintenance and rehabilitation contracts.
- (c) Profit from the sale of agro-chemicals and fertilizer.
- (d) Funds raised in the form of share capital for commercial undertakings like agro-chemical sales outlets.
- (e) Special fund raising campaigns such as film shows.

The amounts collected as membership fees are comparatively small and a large number of farmers have not paid their membership fees. According to Quarterly Progress Report no.17 for July-September, 1991 for Irrigation Systems Management Project there had been a considerable improvement of collection of membership fees in the 3rd quarter of 1991. These figures are quoted under section 4.3 of this report.

**Table 2** indicates up to what extent the land is fragmented. 56 plots are cultivated by 97 cultivators of different status such as ande-cultivators, mortgagors and lessors. Quite a large number under owner cultivator category, constitute brothers and sisters and sons and daughters, cultivating the fragmented portions of the plots. For successful collection of annual fees based on the extent cultivated; bringing all the cultivators irrespective of their status to the membership register seems a necessity. This is also the view of the farmer representatives of sample DCOs.

With complete turnover a major source of income of DCOs i.e. contracts will cease to exist. At the same time they will not have an obligation to pay O&M charges to the state. The DCOs and farmer leaders have announced a multiplicity of strategies for raising funds for O&M. Some of them are:

- (a) Farmers do not pay "Salaris" to Vel Vidanes. Nor are they liable to pay O&M fees to government. So they can easily contribute, say 1/2 bushel of paddy every season.
- (b) It is within the capacity of every farmer to pay Rs.10/- per season per acre. The total amount collected on this basis will be substantial.
- (c) Levy an initial contribution for a fund which will be utilised for generating funds - sale of fertilizer and agro-chemicals, purchasing and processing of paddy etc.
- (d) Donations - already two Regional Council Members have agreed to donate their first salary.

Most of the above schemes are yet to be launched.

Table 4: Assets & Liabilities as at 31-7-91. Sample D C O S

Name of DCO	Item	Liabilities Rs	Assets Rs
Chandana Pokuna	Membership fees	14100	
	Profits from contracts	6804	
	Shramadana	14540	
	Implements for metal quarry	-	2000
	Padlocks and bags	-	1500
	* Debtors	-	16960
	Cash in hand	-	7225
	Bank balance	-	7759
Total		35444	35444
Sevagama	Membership fees	80	
	Profits from contracts	2525	
	Unspecified sources	748	
	Padlocks	-	117
	* Debtors	-	2348
	Bank	-	525
	Cash in hand	-	363
Total		3353	3353
Ulpathwewa	Membership Fees	1400	
	Profits from contracts	25129	
	Income from shramadana	9481	
	Income from sale of agrochemicals	1175	
	Filmshows	1805	
	Unspecified sources		142
	* Debtors		36804
	Bank		2044
Total		38990	38990

Kadawalawewa	Membership fees	25235	
	Sale of agrochemicals	1280	
	Profits from contracts	6361	
	Stock in hand		17000
	* Debtors		7641
	Bank		5177
	Cash in hand		2042
	Amount unaccounted		1016
<hr/>			
Total		32876	32876
<hr/>			
Sama	Membership fees	2616	
	Shares	10600	
	Training allocation	1100	
	Profits from contracts	3526	
	Sale of fertilizer	87	
	Shares in Proj.Farmer Organisation		1000
	Contribution to fertilizer fund		4500
	* Debtors		11000
	Bank		510
	Cash in hand		537
	Amount unaccounted		382
<hr/>			
Total		17929	17929
<hr/>			
Talpota	Shares	2450	
	Profits from contracts	15889	
	* Debtors		3750
	Bank		10100
	Cash in hand		210
	Amount unaccounted		4279
<hr/>			
Total		18339	18339
<hr/>			

Source : TEAMS Field Investigators

\* Debtors represent unpaid bills by I.D. for contracts done and amounts advanced to DCO officials for different purposes.

#### 4.6 Conducting Meetings and Record Keeping

Table 5 refers to the number of meetings held by the sample DCOs and the percentage of attendance at the meetings. Attendance at meetings had been above 80% in Sama and Chandanapokuna, above 66% in Thalpotha and Kadawalawewa, above 55% in Ulpathwewa and above 50% in Sevagama. Frequency of meetings in 1991 compared to 1990 is on the increase in Chandanapokuna, Sevagama and Kadawalawewa. Sama DCO has held more meetings in 1990.

In Sevagama until upto March, 1991 proper minutes of meetings, and accounting records have not been kept.

All other DCOs have kept minutes of meetings. Records on monetary transactions are kept satisfactorily by 3 DCOs namely, Kadawalawewa, Sama and Thalpotha. The Treasurer of the Chandanapokuna DCO has misappropriated some funds and resigned his post. Even his successor resigned the post mainly due to the failure of the DCO to hand over to him a proper record of transactions prior to his appointment. As a consequence, the financial records of this DCO are not kept properly.

The agro-chemicals sales venture started by the Ulpathwewa DCO though operated satisfactorily for nearly six months has collapsed due to misappropriation of funds. This fraud would have been avoided if proper records of transactions were kept on a daily basis. The DCOs need more training and guidance for keeping complex accounting records for business enterprises.

All DCOs in the sample except Sevagama are keeping records of disputes reported. When the disputes are settled the solutions are recorded and the signatures of the parties concerned are obtained.

Chandanapokuna DCO maintains a register to record all transactions pertaining to lands like leases, mortgages and share cropping arrangements. When disputes arising out of these transactions arise the solutions found are also recorded.

Table 5:

ATTENDANCE AT DCO MONTHLY MEETINGS -SAMPLE D.C.O.O.

Name of D.C.O.	Number of Members (FC) (Representatives)	Year	No of Meetings Held	Average Attendance
Chandana pokuna	9	1990	3	85%
		1991	4	75%
		(up to 31-7-91)		
Sevagama	19	1990	4	48%
		1991	6	53%
		(up to 31-7-91)		
Talpotha	10	1990	4	70%
		1991	3	66%
		(up to 31-7-91)		
Kadawalawewa	14	1990	4	73%
		1991	5	67%
		(up to 31-7-91)		
Ulpathwewa	15	1990	4	55%
		1991	4	58%
		(up to 31-5-91)		
Sama	16	1990	7	82%
		1991	3	83%
		(up to 31-3-91)		

Source : TEAMS Field Investigators

#### **4.7 Other Management Roles**

Inadequacy of agricultural extension services particularly for non-rice crops, shortage of quality seeds, the high cost of agro-chemicals and fertilizer and poor marketing facilities for farmer produce, are some of the hurdles the DCOs have to clear. They have resorted to following devices to overcome the above problems.

- (a) Training of members as agriculture extension volunteers. The Department of Agriculture trains the members nominated by the DCOs in their Training Centres as part of the project inputs. The volunteers at present provide a free service.
- (b) Establishment of seed farms to produce quality seeds - mainly paddy. This scheme needs considerable expansion to reach self-sufficiency. Seeds are produced in farmer plots managed by the farmers themselves with extension services provided by the agricultural officers.
- (c) Opening of agro-chemical sales outlets.
- (d) Bulk purchase of fertilizer and sale of same at concessional rates to farmers. (c & d had a salutary effect in stabilising prices of agro-chemicals and fertiliser sold in the area at reasonable levels).
- (e) There is evidence of some efforts to resolve marketing problems, eg: Kaudulla FOs bringing pressure through the Presidential Secretariat at Anuradhapura to release sufficient funds by the authorities to Cooperatives to purchase farm produce. Besides this major effort, we have seen Ulpathwewa DCO operating a tiny sales outlet for vegetables, fruits, eggs etc. Some DCOs are planning to operate rice mills, but on the whole a lot remains to be done in this sphere.

Some DCOs have taken the initiative to promote high income yielding non-rice crops - e.g. gotukola cultivation project sponsored by Thalpotha DCO.



A metal quarry organised by the Chandanapokuna DCO as a fund raising device had been abandoned as the Treasurer of the DCO has misappropriated the funds.

#### 4.8 Crop Diversification

For enhancing farmer incomes and to rationalise land and water use for conservation of scarce irrigation water, a combined effort by the Project Offices, Department of Agriculture and the Farmers Organisations at DC Level had been launched in Yala 1991 to promote non-rice crops.

This campaign has been partially frustrated by:

- (a) Scarcity of seed and poor quality seed.
- (b) High cultivation costs, beyond the capacity of the ordinary farmer.
- (c) Inadequacy of agricultural extension services.
- (d) Uncertainty of marketing arrangements.

However, about 5% of the irrigable area in all 4 systems is under non-rice crops. Taking historical factors into consideration, even 5% is a big break through.

Most of the farmers who successfully cultivated non-rice crops have bought their seeds from the private traders. Some of them used their own seeds and have financed their cultivation with their savings and loans obtained from friends and relations. None of them are satisfied with the extension services and the marketing arrangements.

It is not possible to buy certain seeds like B' onion seeds from the private sector. To promote non-rice crops, seed supply, marketing arrangements and extension services have to be improved.

## 5. CONCLUSIONS AND RECOMMENDATIONS

The important conclusions emerging from the study can be summarised as follows:

- (i) Under the Agrarian Services (amendment) Act No.4 of 1991, the Department of Agrarian Services is the authority that registers the Farmers' Organisations. In Major Irrigation Schemes such registration should be with the concurrence of the Secretary of the Ministry in-charge of Irrigation. Although the relationship between the officers of the Department of Agrarian Services and that of the ISMP at the higher levels is positive, at grass roots level the inter-departmental rivalry is prominent. Prior to ISMP the Department of Agrarian Services provided all inputs like seeds and fertilizer and hence played an "important" role. Due to the arrangements made by the ISMP and the FOs, such role playing of the Department of Agrarian Services is no longer required. The DCOs are settling the disputes among farmers relating to crop damage by cattle, etc. and hence even in that sphere the Agrarian Services Department has no role to play. On the other hand, to register the DCOs as legal entities the services of the Department are required. The fact that some functions of the officers of the Department are been taken over by the ISMP and the FOs the incentive payments for Departmental Officials for attending Project Management Committee meetings are being suspended may have caused this inter-departmental rivalry.
- (ii) It was found that DCOs have had a reasonably higher number of meetings during the early part of 1991 compared to the number of meetings held during the same period of 1990. However, the percentage of attendance has dropped almost in all sample areas.

- (iii) There is a paucity of leaders in the community. Consequently the key DCO officials hold many similar offices in other organisations. Some of them, due to lack of time for their private economic and social activities, look for an opportunity to handover their DCO responsibilities to others. Though there are young educated youths who are reasonably active in the agricultural pursuits, they are reluctant to commit time on voluntary work. The study concludes that this situation is a threat to the efficient functioning of the Turnover Process and the expected outcomes there after.
- (iv) The study revealed that the degree participation of farmers in shramadana work under certain DCOs is below the level one could expect in the light of all catalytic work carried out by the Project. It was noted that a certain DCO was unable to mobilise even 25% of their members for Shramadana.
- (v) The cooperation of all Public Officers working in the Project Area representing ID, Departments of Agriculture, Agrarian Services, Paddy Marketing Board, Agricultural Crop Insurance Board, etc. is a prime requirement for a successful turnover of O&M to the DCOs. For soliciting same in good measure, one of the first and very significant tasks as turnover process commences, is to identify different **new roles of different Public Officials** concerned and to prepare them for such roles. This is extremely important in the case of ID officials. The study revealed that this has not been done at the outset. If it was done, some of the teething problems that surfaced would have been avoided.
- (vi) The study notes that even after complete turnover, no retrenchment of staff will take place. The freeze on new recruitment, non-filling of vacancies, incentives given to public servants for

early retirement and the availability of positions in the Main Canal and Head Works for redeployment of workers, have led to this happy situation in the ISMP systems.

- (vii) On turnover, DCOs will inherit age old problems of mass scale encroachment of reservations, bund roads, etc. They also will be saddled with the problem of wide-spread illicit tapping of water. Damage to systems by cattle and tractors is another problem area. Whether the DCOs will have the will, political, social and legal backing to tackle them, are to be seen. Table 6 illustrates the gravity of the two problems.

Table 6

Irrigable area (as per design) and actual area fed with  
Irrigable Water

Scheme	Area Designed acre	Issued with water acre
Parakrama Samudra	19,650	25,000
Giritale	6,400	7,340
Minneriya	16,374	18,000*
Kaudulla	10,400	12,000

\*(Excluding Galamuna)

Source: DDI Office Polonnaruwa

- (viii) It was found that different DCOs are functioning with different organisational structures even though they are working on a common constitution towards a common objective in broad terms. This is a healthy situation as it will enable the functional dynamism to suit the internal "strengths and weaknesses" of each DCO and to meet specific goals of DCOs in the light of their external functional opportunities and requirements.

- (ix) It was concluded that some distributory systems to be managed by the DCOs are in extremely poor physical condition and to bring them back to an acceptable functional level requires the mobilisation of vast resources and the investment of large sums of money. This is not feasible under present economic conditions and management capabilities of the DCOs. Over burdening the DCOs at this stage may lead to negative results.
- (x) The constitution of the DCOs does not permit their key officials to involve in active politics. This stipulation is observed in the breach as at least eight DCO officials contested the last local government elections without relinquishing their positions. There are two schools of thought regarding the DCO officials participating in active politics. Some argue that the DCO officials should not do active political work as they will not be able to discharge their duties in the DCOs impartially. Those who support the view that the DCO officials should be permitted to do politics say that all important organisations at National, Provincial, District and Regional level consist of elected representatives of political parties. If such institutions perform more important development related activities, the DCOs should also be able to function efficiently with officials actively involved in politics.

Whatever the arguments for and against, it has been noted that the DCOs, where the key officials contested elections, were virtually non-functional during the election campaign. As priority had always been given for campaign work, the DCOs concerned did not hold even the monthly meetings.

In Sri Lanka, political affiliations are not confined to the political platform and to the election campaign. These affiliations surface in most of the day to day activities. Implementation of the rules in the constitution of the DCOs preventing DCO officials from involving in active politics should be considered, as the divisive politics may hinder the achievement of aims and objectives of the DCOs.

- (xi) The study reveals that the farmers, DCO office bearers and Project Officials are much concerned about the inadequacy of marketing facilities for farm produce. The limited success of the crop diversification programme was partly attributed to inadequate marketing arrangements.
- (xii) Sheladia Associates Inc. is in the process of preparing detailed operation and maintenance manuals for each DCO in Giritale Scheme. For other schemes the ID will provide the manuals. These manuals will be translated to Sinhala. The DCOs will find them very helpful after turnover in order to function efficiently and effectively. These plans are prepared on the basis of work identified by a team representing Sheladia, ID and FOs walking through the system.
- (xiii) A major issue that was surfacing frequently was a strained relationship between the FOs and the ID officials. The FOs were accusing ID officials of "deliberate under estimation" of contracts awarded to FOs, delays in payment and giving more profitable contracts to private contractors. Some ID officials on the other hand, dismissed these allegations as baseless. Such officers were critical about the capacity of FOs to perform contracts. In this respect one should remember that the ID officials were called upon to perform a completely different role with the turnover process. Their principal task became imparting knowledge and skills to FOs to do what they themselves were doing earlier. Such a drastic change of roles demanded a clear **redefinition of the new roles** and training including **attitudinal changes** to perform the new functions effectively.
- (xiv) It is surprising to observe that none of the sample DCOs are undertaking any maintenance work which are over and above the assignments for which the ID

has allocated funds. This implies that the DCOs are not taking their own initiative to mobilise funds and energies of their own to implement maintenance activities. This is not a sound situation to observe in the light of the seriousness of the turnover programme.

- (xv) The observations clearly indicate that the DCOs are functioning quite well as regard to the activities related to water management. The DCO representatives are actively participating in the preparation of water schedules for their respective areas. This function has brought farmer representatives and ID officials to close functional interaction, which is an interesting development. The DCOs are exercising their water management efficiently and effectively as regard to persuading the farmers to adhere to the cultivation programme and to refrain from siphoning water while taking the responsibility of operating distributory outlets.
- (xvi) The present study revealed that inspite of recent institutional development and policy implementation, still the DCOs are lacking legal authority to enforce decision making and action taking in relation to collection of fees.
- (xvii) It was encouraging to note that some DCO's have become quite innovative in their functioning. Some have set up enterprises to deal with agricultural inputs such as agro-chemicals, fertiliser and seed farms. Such entreprenuerial spirit of work of DCOs will take them a long way in the positive direction of "farmer's participation in irrigation management."

- (xviii) It is an interesting development to note that action is being taken by Project Offices to ascertain the registration of DCOs as "Body Corporates" under Agrarian Services (Amendment) Act No.4 of 1991. This will facilitate the overall functioning of DCOs while providing them the necessary institutional base to undertake legally valid maintenance contracts with the ID.
- (xix) Selection of educated youth of the community as IOs is a commendable step taken by the ISMP. Though some village elders do not take them seriously, their living in the community itself and their ability to speak the idiom of the people, demolish most communication barriers helping them to function as effective change agents. The original role of the IOs is being conceived at a stage prior to the commencement of Turnover Process and at the present stage their role need to be different and hence the contribution of IOs can be enhanced if some reorientation is provided.
- (xx) The observations clearly testify the usefulness and efficiency of IOs. The IOs are functioning very well in playing their role as catalysts in encouraging farmer's participation related to turnover activities. They meet farmers individually and in groups to motivate them and make special attempts to strengthen weak FC level farmer groups. They also play an important role in Project Management Committee meetings.
- (xxi) The role played by IOs in conducting training programmes for farmer representatives is remarkable. They also have functioned well in catalysing the linkages between farmers and their groups with governmental agency officials. The overall functioning of the IOs is extremely satisfactory.



- (xxii) The study concludes that the Project Management Committee meetings are playing an important role in relation to the turnover process. The roles played by ID and IMD in these meetings are quite encouraging. However, the participation of some other government agencies in these meetings are alarmingly unsatisfactory. The observations made in this study indicate that there are some problems brought to the Project Management Committee by the DCOs are beyond the decision making capacity of the committee itself.
- (xxiii) The study revealed that the main activities related to maintenance work undertaken by the DCOs are limited to weeding and desilting. According to expectations of the ISM project the DCOs need to shoulder a complex array of maintenance activities related to roads, canal bunds, canals, etc after complete "turnover". What DCOs are actually doing is far away from what is being expected from them in the near future. The gap is so wide that, one may wonder whether the DCOs can respond to the task of meeting the required challenge at the required time. This is an important feed back for project management authorities to consider in developing immediate action.
- (xxiv) According to the analytical observation the amounts of money collected by the DCOs via membership fees is small even though the amounts collected in 3rd quarter of 1991 shows some improvement. After

complete turnover the DCOs will not enjoy undertaking contracts with ID which can derive some financial benefits to the DCOs. Hence considerations should be given to improve the future financial capabilities of the DCOs.

(xxv) It is very interesting to observe that some DCOs have recognised the need for readiness to takeover the total management of the distributory system. Such DCOs have well recognised that they have to takeover the overall management and also that they can handle the necessary task by hiring professionals. These observations are providing a base to recognise the worthiness of the efforts taken by the ISM Project and also a foundation for other DCOs to react positively.

(xxvi) After the initial phase, the Project Management has been concentrating their attention mostly on DCOs. In the hierarchy of farmer organisations the FC group at the bottom should be strong. A cohesive FC group will contribute in many ways. It will identify and elect good leaders: it will ensure better farmer participation in voluntary and shramadana work; it will more effectively solicit cooperation of fellow farmers to prevent illicit tapping of water and damage to irrigation system and motivate farmers to pay their bi-annual and annual dues.

- (xxvii) For strengthening FOs they should be given more responsibility by placing the onus of collecting membership dues of the farmers in the group on the group itself, and persuading the FCGs to do the planning and execution of the maintenance work of FCs and the preparation of water issue schedule in the FCs by the groups themselves. The FCGs also be encouraged to register all water users in the FCs irrespective of their tenurial status as FCG members. All training programmes for FCGs should be opened to all water users in the FCS.
- (xxviii) Most of the farmers in the Irrigation Schemes under this study belong to the second generation. Widespread fragmentation of plots among the children of first generation farmers is a reality. The collective strength of farmer community depends on their individual strength and specially on their economic strength. Under these circumstances promotion of high income yielding crops that give the highest return per unit of land area should be encouraged more and more. The farmer's organisation should be used as the catalyst in this attempt.
- (xxix) The crop diversification efforts have met with only partial success due to lack of quality seeds, inadequate extension services, poor marketing facilities and non-availability of credit. It is suggested that for the four irrigation schemes, task forces be created with representatives of system level farmer organisations, Agricultural Department, ID, Banks operating in the area, Agricultural Crop Insurance Board & the CWE to sort out problems relating to seed supply, extension, credit and marketing. The Project Managers can be the Conveners and Chairmen of the task forces.

- (xxx) For strengthening FC groups, it is essential to enroll all farmers in the FC, irrespective of the plot size and the status as FC group members (the magnitude of this problem is highlighted in Table 2. More attention of the project staff to organise them as a cohesive group is quintessential. Table 5 shows the number of meetings held by the DCOs in the sample and the percentage of attendance. The number of meetings held is below the desired level but the attendance except in Sevagama and Ulpathwewa had been satisfactory. The project staff should give serious thoughts for a special campaign to strengthen weaker DCOs. Some are of the view that meetings should be held only when there is business to transact and in these terms, the failure to hold meetings regularly should not be considered a weakness. However, the study revealed that at an infancy stage DCOs should meet regularly to give more vigour to the turnover process and to strength their own organisation. For example Thalpotha DCO according to 8 FCG representatives had not held meetings in 2nd quarter of 1991 not for want of an agenda but because the key officials were busy in some other activities.
- (xxxi) As young educated leadership has proved more effective, more and more youths should be encouraged to assume leadership roles in DCOs. This should be incorporated as an essential catalytic role of the IOs. Those dependent on farming for their livelihood cannot afford to commit a lot of their time on voluntary work. Nor can they spend their hard-earned money for DCO activities. Payment of an honorarium for key officials and reimbursement of expenses incurred may motivate capable people to accept positions in DCOs.

(xxxii) Training is the principal strategy adopted for strengthening FOs and importing skills to DCOs to manage O&M. The trainees of all farmer training programmes are of varying levels of education in making the task of the trainers more difficult. To achieve maximum results training programmes should be evaluated and follow up training programmes should be conducted on the basis of needs identified through evaluation.

The DCOs are extending their activities to business enterprises like sales outlets and purchasing centers. For running business enterprises successfully the DCO officials who manage them need training in enterprise management. Further keeping books for business ventures is a complex task requiring theoretical and practical experience in accounting methods such as preparation of trading and profit and loss accounts and balance sheets. For DCO officials responsible for managing enterprises training in business management and accounting methods should be given.

(xxxiii) To facilitate better services to farmers, and to remove the confusion that exists, proper clarification of roles of officials of different Departments working at grassroots level and creation of team spirit among them is vital. The officials should be oriented to understand that different officials are playing different roles which are all equally important and the expected outcome can be achieved only by coordinating these roles to the highest degree.

(xxxiv) The functions and responsibilities of public officials managing the turn over process are quite different from the work that they were trained and used to do. Especially the ID officials have to change their roles to empower FOs to perform the duties they performed.

As turnover process begins in a particular scheme the public officers who are to manage the process should be fully oriented about the process, aims and objectives of the exercise, the government policy relating to the effort. They should also be guided to change their attitudes to suit the new roles emerging from the turnover process. The new duties and responsibilities should be clearly written and explained to them preferably in a workshop. The training to impart new skills for performing new duties should also be given. In doing so teething problems can be minimised. Conflicts with farmers and officials can be avoided and a cordial relationship between the two parties can be created.

(xxxv) Analysis revealed that the contribution of women in many spheres is considerable. It has often been observed that women are performing more difficult operations like manual transplanting of paddy. Their involvement in the decision-making process such as the choice of crops, variety of rice to be cultivated and in regard to application of fertilizer and agro-chemicals cannot be over-emphasised. However, at present the participation of women in FOs in a formal sense is not well visible.

Promoting women office bearers in DCOs and exposing women to managerial and leadership training should be considered. Ulpathwewa DCO has a very active women' organisation. This organisation with the help of Sheladia conducts a sewing class for young girls. Recently, they held an exhibition of the items produced by the women.

- (xxxvi) It is recommended that in order to increase the efficiency of the outcome of the Turnover Process a detailed annual maintenance schedule for each DCO should be developed by the Irrigation Department with the active involvement of the DCO itself. To implement such a maintenance schedule efficiently and effectively, "on-the-job training" and supervision of carrying out of maintenance activities should be provided by the ID to DCOs over a period of 1 year. During this period special guidance from the ID is absolutely essential.
- (xxxvii) The farmers do not know clearly the type of assistance they will receive from the state agencies after turnover. On other hand the officials of the state agencies are not fully aware the assistance that they should provide to FOs after turnover. It is suggested that the ways in which Public officials should assist FOs after turnover and under what circumstances such help can be given should be clearly defined and explained to both the FOs and the officials. Similarly, if the FOs are entitled for any financial assistance from the government, the terms and conditions and the procedure of obtaining such assistance should be spelt out and explained to FOs.
- (xxxviii) It is suggested that turnover process should be planned and implemented over a pre-determined time frame. The details of the plan including the time frame should be made available to the relevant employees and the farmers. Such a plan will prevent adhoc decisions and facilitate a smoother turn over process. It should clearly state when the maintenance phase begins, the joint operation phase begins and the complete turnover will be effected.

- (xxxix) Joint operational phase is a very important period where the farmers acquire knowledge and hands on experience in O&M. As cultivation activities are planned according to two seasons, the water availability for two seasons and the crops cultivated in the two seasons differ. It is suggested that the joint operation phase should extend to two seasons to enable FOs to acquire sufficient experience in O&M.
- (xxxx) Turnover of O&M functions related to Distributory Channels to DCOs involves 2 main activities :
- (a) Handover of the responsibilities to DCOs while motivating them and to provide them with necessary guidelines and supervision and
  - (b) Takeover of the responsibilities by the FOs and undertaking the necessary action to plan and implement O&M programmes.

This work should be closely monitored by the ID /IMD officials for a period of atleast 2years from the point of turnover. For this purpose a Form for Monitoring Turnover Process is being prepared and presented in this Report as Annexure 1. It is suggested that this Form should be filled by the IO responsible of the DCO with close collaboration of the ID officials and the officials of the DCO, every 6 months. The necessary action should be further undertaken by ID/IMD officials based on the feed-back gathered from the monitoring process by jointly reviewing the filled form at the Project Management Committee level.



MONITORING FORMAT (QUARTERLY REPORT)

System ..... Name of DCO .....

For the period ..... to .....

No: of FCS ..... No: of FCGS ..... No: of Farmers.....

Meetings	No held	No: attended	No:of agency officials attended
AGM	.....	.....	.....
General Meetings	.....	.....	.....
DCO Meetings	.....	.....	.....

<u>Finance</u>	Amount	No paid during the quarter	No paid to date (cumulative)
Membership fees collected	.....	.....	.....

Income from other sources

.....

.....

.....

.....

.....

Maintenance work Done

<u>Shramadana</u>	<u>No: Participated</u>	<u>Estimated value</u>
Type of work	.....	.....
.....	.....	.....
.....	.....	.....

Work Done on Contract/paid labour

<u>Type of work</u>	<u>Value</u>
.....	.....
.....	.....
.....	.....

Operation

Quantity of Water Issued

Acreage that did not get irrigation water

Expenditure incurred : .....

Agriculture

Extent under crop

Acres

Any comments - regarding pests & disease

Paddy

Chillies

Unions

Settlement of Disputes

No: of Complaints Received

No: of disputes settled

Other Management Roles

Performance of Business Ventures

Type of venture

Turnover for  
the Quarter

Estimated  
Profit

No: employed

Social Development Activities

Type of activity

Remarks

Training Programmes Held

<u>Title of Programme</u>	<u>Duration</u>	<u>No: held</u>	<u>No attended</u>
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Date of Taking over maintenance: .....

Date of entry to Joint Operation Phase : .....

Date of Complete Turnover: .....

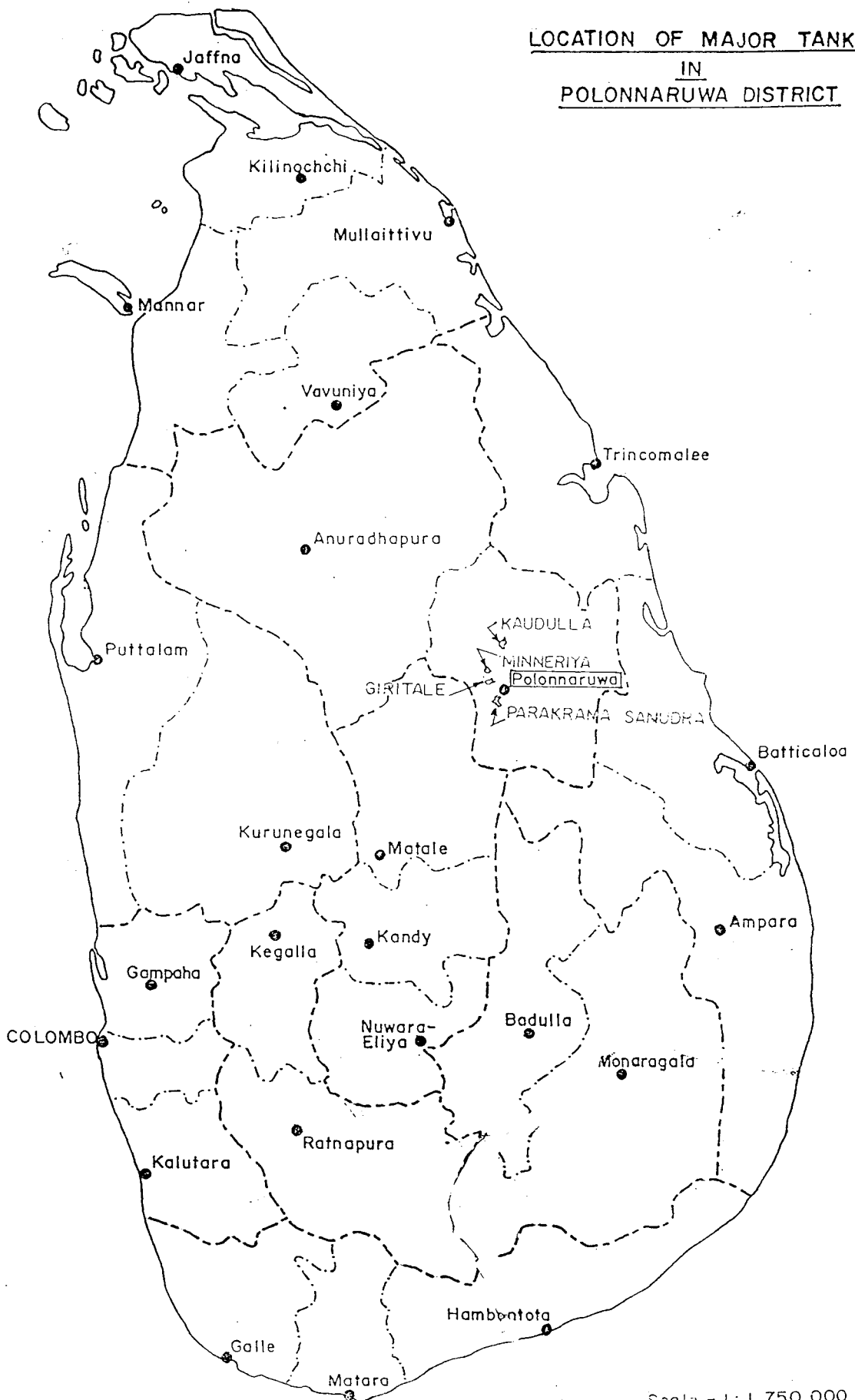
Date of Registration Under } .....  
Agrarian services Act } .....  
If not registered why and } .....  
likely date of registration } .....

Any other comments: .....

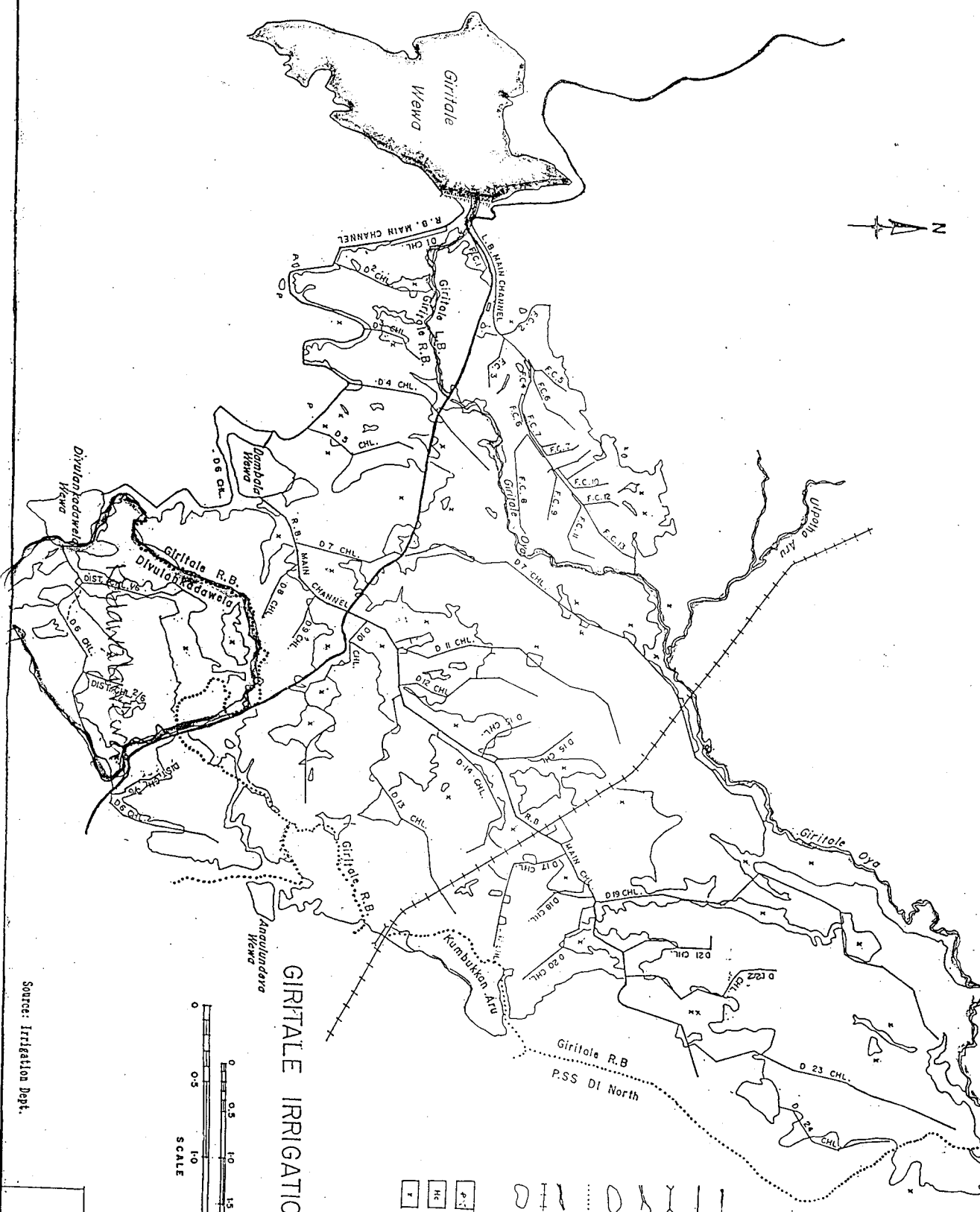
Signature of Project Manager/

Secretary DCO

LOCATION OF MAJOR TANKS  
IN  
POLONNARUWA DISTRICT



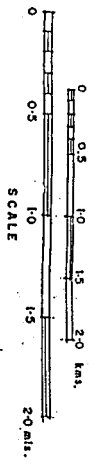




**LEGEND**

- Main Canal
- Distribution Canal
- Ariseul
- Stream
- Tent, Wewa
- Blasting Out Pien Boundary
- Main Road
- Rail Road
- Land Use Boundary
- Land Classification
  - Paddy
  - Wetland Crop
  - Other

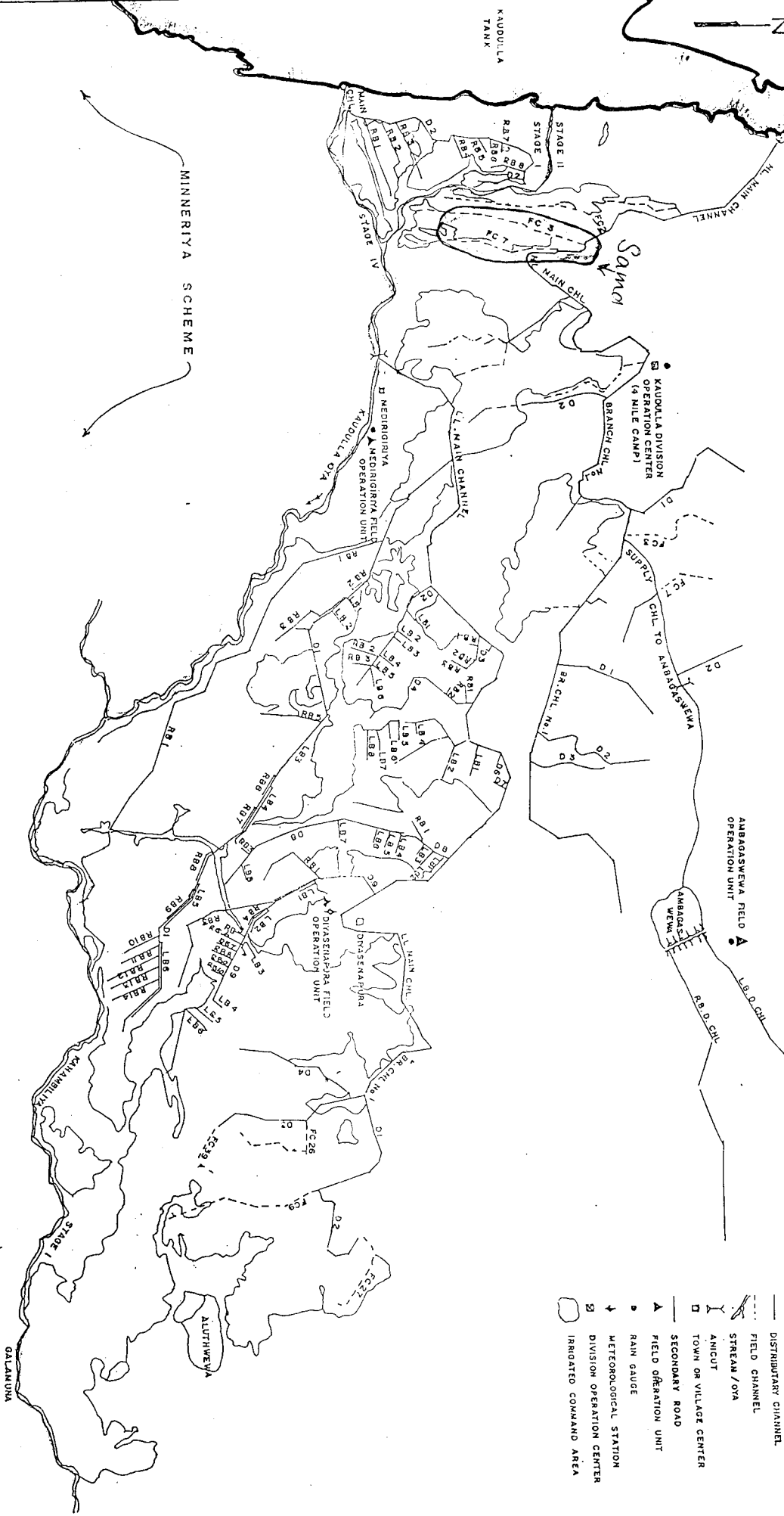
**GIRTALE IRRIGATION SCHEME**



Source: Irrigation Dept.

THMS (Pvt) Ltd.  
55, Rosared Place  
Colombo 7.





# KAUDULLA SCHEME

SCALE 0 0.5 1.0 1.5 2.0 KILOMETERS  
SCALE 1:24000

Source: Irrigation Dept.

TELAKS (Pvt) Ltd.  
55, Rosserd Place  
Colombo 7.

- DISTRIBUTARY CHANNEL
- FIELD CHANNEL
- STREAM / OVA
- ANCUT
- TOWN OR VILLAGE CENTER
- SECONDARY ROAD
- ▲ FIELD OPERATION UNIT
- RAIN GAUGE
- ↑ METEOROLOGICAL STATION
- DIVISION OPERATION CENTER
- ⊗ IRRIGATED COMMAND AREA



# SKETCH MAP OF SAMA D.C.O.

- - - D.C.O. BOUNDARY
- == MAIN ROAD
- - - MAIN CHANNEL
- - - DIST. CHANNEL
- - - FIELD CHANNELS

