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Final Report

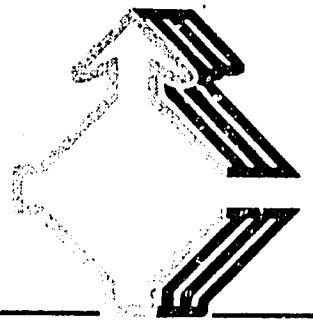
Submitted to

United States Agency for International Development (USAID)

on

Review of State of Development of Farmer Organisations

by



TEAMS

Consultants in Technology, Management & Development Studies

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8th April, 1993

Mr. Gary Alex,
Chief,
Agriculture & National Resources,
USAID Mission to Sri Lanka,
356, Galle Road,
Colombo 3.

Dear Mr. Alex,

Study on Farmer Organisations

Herewith we are submitting 3 copies of the Final Report of the above study.

We take this oppotunity to pay our gratitude to the members of IMD, ID, Mahaweli Authority, USAID and IIMI Sri Lanka Field Operations for Providing assistance and guidance to complete this study successfully.

Yours truly,

Professor Wimal Gunawardena
Chairman/Managing Director

Acronyms

AI	- Agricultural Instructor
AGA	- Assistant Government Agent
APC	- Agricultural Productivity Committee
BM	- Block Manager
CDO	- Community Development Officer
D CHL	- Distributory channel
DCO	- Distributory channel organisation
DO	- Divisional officer Agrarian Services
FC	- Field channel
FR	- Farmer representative
FO	- Farmer organisation
ICO	- Irrigation co.nmunity organiser
ID	- Irrigation Department
IDO	- Institutional development organiser
IE	- Irrigation Engineer
IO	- Institutional organiser
IMD	- Irrigation Management Division
INMAS	- Integrated management in Agricultural Settlement schemes
ISMP	- Irrigation Systems management Project
KVS	- Krushi Vyapthi sevaka
LB	- left bank
MARD	- Mahaweli agricultural and rural development
MIRP	- Major Irrigation Rehabilitation Project
NGO	- Non governmental organisation
OFC	- Other field crops
O & M	- Operation and maintenance
PM	- Project Manager
PSS	- Parakrama Samudra System
RPM	- Residential Project Manager
RB	- Right bank
TA	- Technical assistant
UM	- Unit Manager
HP	- Hume Pipes

The study also revealed the determination of F.OO to take up the challenge and embark into areas of interests outside the basic objectives of irrigation related activities.

The most successful F.OO in the systems under study, showed marked improvement in the equitable distribution of water and satisfactory maintenance of the canal network. The elected farmer leaders assisted by agency officials monitored these works thus minimising conflicts that were earlier prevalent in the areas. The efficiency and performance of F.OO in the MIRP and ISMP systems showed a marked improvement from that of these F.OO established in the Mahaweli Systems. The influence of the work done by Institutional Development officers acting as catalyst under the INMAS programme was chiefly responsible for this improvement, where as the success of the F.OO in the Mahaweli System had to largely depend on the dedication and leadership qualities of the FO officials.

The frequency of maintenance work, the quality of work executed and optimum use of the funds allocated were well planned and carried out by the successful F.OO under the INMAS systems, and it must be stated that the works carried out were appreciated by members of both the successful as well as the least successful F.OO.

The successful F.OO had extended their services to their members in the field of credit, inputs, encouraged the growing of other food crops, marketing and undertaking of civil works on contract in their areas. F.OO in the INMAS systems were the most successful in these ventures, whilst the F.OO in MIRP had even extended small scale credit facilities to its members depending on the availability of funds. In the Mahaweli System B OFC cultivation was successfully encouraged by F.OO with possible assistance by way of credit and inputs.

It was however, a matter for regret, to find that the performance of the least successful F.OO in the ISMP, MIRP and Mahaweli areas were poor and below expectations, compared to the others. Most members lacked interest chiefly due to misuse of FO funds and corrupt practices resorted to by FO

EXECUTIVE SUMMARY - FARMER ORGANISATION

The development of irrigation systems as part of the agricultural development programme aims to increase crop production through improvement of irrigation facilities and expansion of irrigated areas essentially to enhance the economic status of farmers through increased farm productivity. The beneficiaries involvement in this process was considered vital to achieve this end.

Farmer organisations were established to help carry out the operation and maintenance for equitable and efficient distribution of irrigation water to their farms to meet the desired level of water use efficiency. It was envisaged that members of the FO would participate in the O&M activities of the system to ensure an equitable water distribution and also in other essential services that would result in increased crop production and maximum benefits from irrigation.

This study concentrated on F.OO established in the MIRP, the ISMP and the Mahaweli Systems and selections were made for detail study of which some are categorised as the most successful and some of the least successful F.OO ih the above systems.

It is however, clear that F.OO have shown tangible progress in trying to achieve their objectives. Effective maintenance of the channel network has helped to minimise water losses. This contributed to the equitable distributions of water and amicable resolution of conflicts arising from water issues. The most significant contribution being the FO participation in the Agricultural planning of their system. This also meant the sharing of the responsibility of the operation and maintenance of the system and gave the members a feeling of ownership which was considered a change of attitude in the right direction. It was also observed that most farmers were willing and some had already taken up to improved methods of agriculture with the assistance and advise both from the FO leaders as well as the agencies.

The main contributory factor that helped in the determination and willingness of members of F.OO to uplift their existing quality of life was the training and awareness programmes organised for them and the institutional support and the continued close support of the agency, officials with the member of the F.OO during the implementation process.

A common feature observed in all F.OO was the emergence of capable and dedicated rural leadership willing to take over responsibilities of the F.OO and work towards its success.

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The frequency of maintenance work, the quality of work executed and optimum use of the funds allocated were well planned and carried out by the successful F.OO under the INMAS systems, and it must be stated that the works carried out were appreciated by members of both the successful as well as the least successful F.OO.

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It was however, a matter for regret, to find that the performance of the least successful F.OO in the ISMP, MIRP and Mahaweli areas were poor and below expectations, compared to the others. Most members lacked interest chiefly due to misuse of FO funds and corrupt practices resorted to by FO

The general observations noted during the study were that, if F.OO were to be efficient and viable the following basic requirements had to be fulfilled.

i) responsible, capable, dedicated and honest leadership.
ii) systematic and up to date keeping of records of all its operations
iii) proper financial records and frequent audit checks
iv) effective and continuing dialogue among members and between the agencies, and
v) a well planned curriculum of a continuing training programme for farmers and field level agency staff.

It was clear that proper guidance and close supervision by the agencies in the operation and management of the system will help identify weakness so that immediate remedial measures could be taken.

Most important of all was that financial, technical and other support services should be readily and adequately available to build the moral of the members and officers particularly when resources are lacking to manage on their own.

An observation met frequently at discussions with farmers for which serious consideration is worth giving, was the question of the provision of an incentive to F.OO and or the officials. This is bound to motivate and accelerate their growth and development in terms of both human and material resources.

Another noteworthy feature observed was that political interference was almost absent and even if it had any influence, the incidences did not have any significant impact and therefore, best ignored.

Reasons for Successful and Least Successful Farmer Organisations

Five successful Farmer Organisations and five of the least successful Farmer Organisations were selected for this study after having discussions with farmers and agency officials in the field, in each of the following systems given below. The Farmer Organisations thus selected were from:

1) Minneriya - Under ISMP
2) Parakrama Samudra Scheme - Under ISMP
3) Huruluwewa - Under MIRP
4) System B - Under Mahaweli Authority - Only 4 selected
5) System H - Under Mahaweli Authority - Only 4 selected

In each of the above systems, one of the successful organisations and one of the least successful Organisation were singled out for detail study. These detail reports are given in this report as annexures 1 to 5.

An overview of the success of the successful organisation as seen in the above 5 systems clearly indicate that the sustainability of the organisation depended very much on the confidence gained by the members in a trusted, effective and dedicated leadership. Decisions taken in consultation with its members and carried out to the satisfaction of the membership contributed to the success of an organisation.

In the case of successful farmer organisations in the ISMP and MIRP systems, the initial formation of the organistions were in the hands of the PMs together with the Agriculture Department and the Agrarian Services Department officials. They assisted in getting the farmers together and at a general meeting elected office bearers from amongst the farmers. Therefore regular meetings were held and minutes recorded. Farmers were exposed to likely problems connected with O & M of the system, land tenure, water shortages, distribution, inputs, marketing, fund raising projects, etc. These were discussed and decisions arrived at. This gave the farmers the opportunity to take collective decisions and solve conflicts amongst themselves. This compels the membership to take on the responsibility of equal distribution of the available resources as decided by the FO.

The provision of adequate training to farmer representatives as well as farmers in another aspect, that the Project Manager had arranged. The consensus of the majority of the farmers were that this training was useful. The training covered all aspects that farmers should know to successfully carry out the duties of an organisation. This included conducting of meetings, keeping of records, Financial Management and Accounting, preparation of budgets, preparing of cropping calendars, cultivation practices, water distribution, operation and maintenance of the system, interaction with government officials, use of agro chemicals, fertilizers, procuring of inputs, marketing and solving of conflicts. These indicators were present and member participation in these activities were evident in the successful organisations in the 5 systems visited. FOO have in the process developed a close rapport with the officials.

There was however, a visible difference noticed in the functioning of the successful Farmer Organisations in System B and H. These organisations were also assisted by the RPMs and BMs in the setting up and functioning of the organisations, but there is still evidence of the farmer members dropping out from performing their part of the work, once there is a withdrawal of the functions of the officials. This is particular to the farmers in the Mahaweli System, presumably because, the Mahaweli Authority had officials handling all the aspects now devolved on the Farmer Organisations. This lapse could be overcome with institutional strengthening and gradual withdrawal of agency support and building up of rapport. It is heartening to note that the efforts taken to form farmer organisations and hand over the system to the beneficiaries is slowly but steadily gaining ground and the realisation that the system belongs to them is seen in the change of attitudes by most farmers.

The study reveals that the least successful Farmer Organisations have none to blame but themselves. Lack of dedicated leadership is the prime cause. In many cases the office bearers have shown sheer lack of interest or have seeked office for their own gains or benefits.

Institutional development as in the case of the successful organisations have been provided. The P.M., I.D.O. and I.O. have got the farmers together and helped in forming the FO, but no sooner the Agriculture Department and the Agrarian Service Department officials withdraw, the duties expected of the organisation too dwindles, with numbers loosing interest in its activities. There are some valid reasons which have to be looked into for the lack of interest shown by farmers one is th t there is no close rapport with FO and officials and the other is that, officials do not visit the farmers as often as it should be, due to mainly mobility and the scrapping of the KVS system, which served as an effective extension service. Frequent transfers of officials was another contributory factor. In most cases member farmers lost confidence in the office bearers because their problems were not being attended to. Conflicts regarding land tenure and water distribution were not solved. Only the favoured ones benefitted. There was hardly any rapport with the officials. Training programmes were inadequate. Maintenance of the system was neglected. FO could not take action against defaulters, perhaps due to lack of legal status. Illegal tapping of water was rampant. In short, the FO was not in a position to help the farmer in obtaining credit, inputs extension, marketing, etc., as a result farmers lost interest in the organisation and did not adhere to its decisions. Even efforts to raise funds for the FO had not been attempted. In the alternative some FOO had obtained work from the agency on contract, but given it on sub-contract to other parties, thus depriving the members of some income. A concerted effort by the Agency to institutionally strengthen the FOO is the need of the hour. An incentive scheme for farmers as well as officials may be another proposition to sustain FOO.

1. Introduction

1.1 Background to the Study

The work on the consultancy services for the Review of existing experience in formation, functioning and sustainability of Farmer organisation commenced in August 1992 with United States Agency for International Development (USAID) as client. The main objective of the study was to compare Farmer Organisations (FOs) development under different conditions in different areas in order to isolate positive characteristics for their success or negative facts for this failure.

The scope of work as given in the Terms of Reference (TOR) can be broadly contained as follows:

1. Describe common characteristics, of both most successful and least successful FOs.

2. Identify reasons for success or failure of FOs under the study

3. Compare the FO stages of development processes, including strengths and weaknesses of FO's in the four areas studied.

4. Analyse the areas of emphasis needed for FO's in the future and the stages that needs to be adopted

5. Prepare a report documenting finding and conclusions of the study.

1.1.2 Selection of Geographical areas for study

TOR required to select 4 areas for the study. It was proposed in the TOR that the consultants should visit Mahaweli system B, Mahaweli system H, ISM Project systems in Polonnaruwa. Consultants in their proposal suggested to select the fourth area from Anuradhapura district and Major Irrigation Rehabilitation Project (MIRP). Since the purpose of the study involves comparison of the FOS in these areas in their development, they should all have some common base which would gain a meaningful comparison. The areas suggested by the client have the following common characteristics.

1. Three areas suggested comprised of Major Irrigation Schemes. (Major irrigation Schemes are defined as schemes managed by the Irrigation Department whose command area is more than 80 ha. The Mahaweli systems are classified as major schemes under this classification).

2. Mahaweli Projects and Polonnaruwa Systems namely Parakrama Samudra, Minneriya, Giritale and Kaudulla come under a special project (Mahaweli Project & ISM Project).

3. The intervention/support has been very recent.

Hence it is suggested that the fourth area to be selected should meet the same common base, so that a meaningful comparison is feasible. The selection of a major irrigation scheme coming under INMAS Programme which is being supported by a foreign aided project is the most relevant selection. Based on this analysis schemes coming within the purview of the Major irrigation Rehabilitation were selected as the fourth area for the study. The schemes are Rajangana, Huruluwewa and Nachchaduwa in the Anuradhapura district and Kantale in Trincomalee district. Since Mahaweli system H and B are in Anuradhapura and Polonnaruwa district respectively, ISMP scheme is in Polonnaruwa district, it would justify the selection of MIRP from Anuradhapura. Consultants did

not select Kantale for the study as the farmer organisations established under INMAS programme have undergone severe set back due to security situation prevailing in the Trincomalee district.

Selection of most successful and least successful organisations was done on the basis of indicators prepared on the basis of objectives of such organisations and the degree of achievement of such objectives in the implementation of various programmes under these systems. (Indicators are given in a separate section).

1.2 Methodology and Work done

As required by the TOR, the consultants carefully reviewed available information in order to determine the overall approach most appropriate for the study. The TOR suggested that 5 successful and 5 least successful FOS be selected from 4 areas namely ISMP schemes in Polonnaruwa District, Mahaweli system B & H and MIRP schemes in Anuradhapura as proposed by the consultants.

The consultants made arrangements to meet relevant officials in the selected systems including officials dealing with the farmer organisations in Colombo. These included Mahaweli Economic Agency and the Ministry of Land, Irrigation & Manaweli Development. The agencies covering INMAS systems such as Department of Irrigation. (ID) Irrigation Management Division (IMD), Water Resources Development Division of the Ministry of Lands Irrigation and Mahaweli Development were visited before (visiting) the officials operating in outstation offices.

Information regarding the number of farmer organisations established up to September 1992 by Mahaweli Authority and the IMD was obtained from the headquarters of the relevant subjects. Most important and knowledgeable officer in this respect was the Project Manager in charge of the scheme. In Colombo, Director/IMD or Director/ISMP, Director/MIRP and the Director Water Resources Development were very co-operative and a wealth of information regarding the development and establishment of farmer organisation were obtained.

The methodology of work included following 7 tasks as given in the proposals. The consultants more or less followed this methodology.

Task 1 - Mobilisation and study preparation. Team of Consultants met the client and also the relevant institutions for the study. Discussions were held with IIMI officials including Mr. Nanda Abeywickrama. Dr. C.M. Wijeratne and Dr. Jeff Brewer of the Sri Lanka Field Office.

Task 2 - Indicators were prepared for the selection of successful and least successful farmer organisations in the four areas. In ISMP and MIRP, lists of farmer organisations were obtained from the respective Project Managers. From these lists 5 successful and 5 least successful farmer organisation were selected on random basis after meeting the Project Managers IDO's and IOs and also some of the Farmer representatives. Final selection of one, each from 4 schemes in ISMP in Polonnaruwa and 3 schemes in Anuradhapura was selected from both categories - successful and least successful. In the case of Mahaweli system H & B, it was not possible to get the full lists of established FOs.

However consultants were able to meet the officials in system B & H to discus the setting up of farmer organisations and their functions especially with the Resident Project Managers of system B & H and his staff mainly Block Managers, Unit Managers, Community Development Officers and Agriculture officers. The discussions held with their officers were very useful. Four farmer organisations from System B and four farmer organisations from System H were selected. After meeting the farmer officials and farmer members in the field, consultants were able to select the final successful and least successful FO's from these two areas.

Task 3 - Further discussions were held in Colombo with the relevant officials and also with the Project Managers in MIRP and ISMP and also with the relevant officials. PPM, BM and UM before the consultants visited the field to meet the farmers and farmer representatives. Consultants kept in touch with the Project Managers till the draft final report was prepared.

Task 4 - A questionnaire was prepared to obtain the views of the farmers and farmer representatives. With the assistance of the Project Managers/Resident Project Managers, 5-10 farmers/farmer representatives were selected for obtaining required information. Field investigators were employed for the purpose of administering the questionnaire.

Task 5 - The compiling, analysing and interpretation of data collected under Task 5. This data was used to determine the degree of success of each FO in terms of the factors such as institutional ability, financial sustainability, ability to meet the needs of its members. Comparisons of functional activities was done at this stage,. A number of discussions were held again with the client and the relevant officials in Colombo and in the field, especially the Project Managers and his staff and Resident Project Managers and his staff.

Task 6 - Consultants were able to derive overall observations and observations related to degree of success and failure. The draft final report has been prepared incorporating findings, conclusions and lessons to meet the objectives of the study as specified by the TOR.

2. Evolution of Farmer Organisation Phases of Growth

The hydraulic civilization in the ancient Sri Lanka, resulting in a net work of irrigation system, was sustained and nurtured through family traditions which were handed down from one generation to another. The administration infrastructure at the village level was deep rooted, yet flexible enough to withstand any unstable political situation, and this ensured the smooth working of the irrigation systems in the country. The various norms, practices, and traditions that emerged in the ancient Sri Lanka hydraulic civilization were not only socially sustainable, economically viable but were also democratic enough to be broadly people based institutions.

During the Portuguese and the Dutch periods, the ancient traditional village level land tenure system and farmer organisation functioned with some changes, to suit the colonial administration. Constitutional and administration reforms were introduced by the British, on the recommendation of the Colbrooke - Cameroon Report of 1832, which abolished the ancient institution of 'Rajakariya' (compulsory labour) and headmanship. This resulted in certain changes, which had a negative impact on the customs & traditions pertaining to paddy cultivation. Sir John Keane in his report on the Irrigation in Ceylon commented "in ignorance probably of local conditions, they recommended the abolition of Rajakariya. It is doubtful whether the commissioners who made the recommendations fully understood the working of the communal machinery or realised the effect that so drastic change in customs which had existed from time immemorial would produce. The practical effect of this law went far beyond the mere abolition of Rajakariya. It struck at the very root of those very liberties which it was intended to procure. It destroyed the power of co-operation among people by which alone irrigation work could be left in working order. What was every body's business became nobody's business and the industrious majority was placed at the indolent few" (Keane 1900).

Before long, this resulted in alienating the farmer community from management. Therefore, the colonial government was forced to remedy it, by the enactment of the Paddy Lands Irrigation ordinance No.9 of 1856. Its objective was to resuscitate the customary practices among farmers for self management of village irrigation systems.

The ordinance of 1856 entrusted the government's responsibility for irrigation development to the Government Agent. The Government Agent was expected to perform his functions with the advice of the proprietors of the irrigated lands. In this role the GA was deemed to function as a benevolent judge, implementor and the planner.

The main constraint in implementing irrigation programmes was shortage of funds. Hence reciprocal contributions by the beneficiaries was considered to be the guiding principle to mobilise **local resources** in support of the programme.

For the conflict resolution; the ordinance was reviewed by the ordinance 21 of 1867, where the provisions were provided for the proprietors to select one or more headmen to ensure the maintenance of rights and any act militating against ancient customs and causing damage. The headman was accountable to the GA, although he was appointed by the proprietors.

In 1900 with the formation of Irrigation Department, some of the functions handled by the GA, were transferred to the Irrigation Department. But it was the opinion of the administrators that framing cultivation rules were better done by GA. At this time the basic institutional framework enunciated was that proprietors in an irrigation area should be allowed system maintenance.

The conditions in 1930's following the great depressio of 1920, and the expanding population, prompted th national politicians to launch a new developmen programme in the sparsely populated dry zone, fo resettlement on lands provided with irrigatio facilities. As a result, the Land Development Ordinance was enacted in 1935. This legislative enactment gave a impetus to the development of irrigation facilities fo the settlers for Agriculture production. With the settlement programme, welfare policies were introduced by the government, to provide incentives to settlers, by which the institutional building gradually phased away to rapid intervention by the government. These social welfare activities resulted in building up a dependency syndrome among settler farmers.

The Paddy Lands Act of 1958, is a land mark in the history of agrarian development, and it introduced certain reforms to remove certain constraints in the tenancy rights of the farmer. This piece of legislative enactment created the Department of Agrarian Services, added a new outlook to the administrative machinery in institutional development. The establishment of cultivation committees under this Act can be considered as a step towards the setting up of farmer organisations and also as an important milestone in a positive programme for institutional development in the agrarian sector. The abolishing of the old Velvidane system and the creation of an elected leadership through cultivation committees, intended to involve farmers in decision making process and share certain responsibilities for efficient management of irrigation systems (whether they were minor or major schemes) was a step in the right direction. In the process of implementation of Paddy Lands Act, the cultivation committees that were formed under the paddy lands act of 1958, was for tenure reform rather than for water management. However some of the cultivation committees were involved in the water management activities even though the act had not specifically mentioned about the water management.

Cultivation committees had to attend to all operation and maintenance work in the minor irrigation schemes (minor irrigation schemes have less than 80 ha. under their command) upto 1964. However with the amendments brought to the act in 1964, Major schemes were also included in the National food production programme. The most significant feature of the cultivation committee was the legal status given to it by the act as a body corporate. The cultivation committee had the sole authority in decision making, as the government official had no right to vote, as ex-officio members. The Department of Agrarian Services guided the cultivation committees, to manage the minor irrigation schemes in operation and maintenance work. One important feature in the Cultivation Committees established under the Paddy lands Act, was the **legal recognition** given to them by the act itself, which none of the previous acts provided. With the amendments to the Agrarian Services act in 1991, provision was made for the legal recognition of the farmer organisation.

In 1970 with change of government, the elected cultivation committee system was abolished and Agricultural Productivity committees were established under a new act called the Agricultural Productivity Law and the Agricultural Lands Law of 1972 and 1973. These committees consisted of a minority of farmers. Of these farmers some were non farmers, who were appointed by the politicians. There was politicisation taking place at this level.

The Agricultural Productivity Committees under the Agricultural Productivity law, established at village committee level, were at a higher level than the operational level of cultivative committees.

In 1979, Agrarian Services act was passed, replacing the previous acts of 1972 and 1973. This act also created 5000 new posts of Cultivation officers and 520 Agrarian Services Committees.

Late 1970 saw a new era in the irrigation and agriculture development. It was found that most of the major irrigation systems in the dry zone were in a dilapidated condition and the full use had not been reaped, due to poor maintenance and continuous neglect of the systems. The involvement of farmers in the planning of construction, rehabilitation and operation & maintenance of the systems had been completely ignored. The government was not able to provide sufficient funds for proper maintenance. As a result, the rehabilitation of most of the major Irrigation systems had become a real necessity, which required large sums of money, which the government was unable to provide in its annual budget.

Farmer participation in respect of maintenance, planning & design, of minor irrigation schemes was customary. The farmers took part in the process of construction of minor irrigation schemes during the last four decades or so. However, this is not seen as far as major irrigation systems are concerned during the same period. But during this period radical changes took place in the management policy of major irrigation schemes in the country. As minor schemes were planned and developed for the local community invariably in consultation with the farmer community, the participation of farmers in all activities of the village irrigation schemes has been a common feature. In the case of major irrigation schemes, the planning was done from the centre for a set of people, who, due to logistic reasons, could not participate in the planning or development. This in turn did not allow the participatory management principles to develop at the outset.

Some of the features contributed to non participation of farmers in the maintenance, planning and designs can be attributed to complex distributory system, large number of small farmers involved and the remoteness of the main system & the reservoir from the beneficiaries. This in turn compelled the respective governments, to solicit foreign donors, to obtain necessary funds for rehabilitation of some of the major irrigation schemes.

The most significant rehabilitation programme was launched in the late 1970s, when the Tank Irrigation Modernisation Project was started with World Bank (IDA) assistance in 1980s. This project did not give sufficient emphasis on farmer participation in planning and design of implementation schedules and this project had very clear bias towards engineering aspect of rehabilitation.

2.1 Minipe & Kimbulwana Oya experience

A programme for organising farmers in Minipe and Kimbulwana Oya was launched by two officers as catalysts, in order to involve farmers in decision making jointly with the officers.

The irrigation engineer who was in charge of the Minipe scheme took a personal interest in mobilising farmers' labour through Sramadana, on priority basis. All management decisions were held in an amicable way to solve farmer/officer and farmer/farmers conflicts. In this instance, in both these schemes, farmer leaders were acceptable to farmer community. In Minipe, the irrigation engineer who acted as a catalyst was completely withdrawn. Subsequently most of the farmer organisations established under this programme were absorbed into the INMAS programme under Irrigation Management Division.

2.2 Galoya Water Management Project.

The Galoya Water Management Project was implemented from 1979 - 1985 with USAID assistance. The main features of this project were policy management in irrigation with emphasis on farmer organisation in particular. For the first-time, specially trained catalyst agents called Institutional Organisers were employed to moderate, facilitate and educate the farmers. At the same time a dedicated team of officials and researchers were fully involved in this exercise. In the program , adoption of a bottom up approach to promote farmers' cooperation and development of FOs on hydrological boundaries at field channel level, D'channel level and sub-project level was first introduced in Galoya. This programme too was absorbed into the INMA System under the Irrigation Management Division of the Ministry of Lands Irrigation & Mahaweli Development in 1984.

2.3 Integrated Management of Major Irrigation Schemes (INMAS)

The INMAS Programme was first introduced by the Ministry of Lands and Irrigation of Mahaweli Development by creating a separate division of irrigation management under the direction of the ministry. The experience gained from the Gal Oya Water Management had prompted the Ministry to take such a step. The Irrigation Management Division (IMD) consists of a multi disciplinary team who would work together to achieve the objectives of Irrigation Management. The most outstanding objective of the INMAS programme was to organise the farmers for the management of the major irrigation schemes in which farmer participation is an integral part. In addition, the involvement of farmers in all aspects of irrigation such as planning, design and construction, rehabilitation and O&M , and also planning of agricultural programmes including supply of inputs, was necessary.

The INMAS programmes initiated by the Ministry of Lands, Irrigation and Mahaweli Development envisaged the management of Major Irrigation Schemes, through the farmer organisation. At the field channel level informal committees were expected to be set up. This informal group would consist of about 20-35 farmers: At the distributory canal level a formal organisation would be set up. This committee would consist of farmer representatives elected from the Field group level organisations. At the Project level, a Project Management Committee would be set up with the Project Manager being the co-ordinator of all activities related to the irrigation systems, with the farmer representatives at DC level and line agency officials covering the respective irrigation schemes. Some of the departments represented at the Project Management Committee are the Department of Irrigation, Agriculture, Agrarian Services, Land Commissioners, Agricultural

Development Authority and State Banks. Some of the functions of the Project Management Committee could be listed as follows:

- Planning and formulation of Agriculture Programme for the cultivation year.
- Holding of Kanna meetings on time
- Proper water management
- Supply of inputs such as credit, seeds, fertiliser and agro chemicals.
- Operation and Maintenance
- Recovery of O&M fees
- Promote and organise farmer organisation at field canal level and distributory canal level
- Training of farmer representatives and other officials.

2.4 Development of Farmer organisations in Mahaweli Systems

Mahaweli being a major construction oriented project emphasis given to the setting up of farmer organisation was minimal at the beginning. There had been a number of ad hoc experiments on the formation of farmer organisation in the Mahaweli system. In 1976, producer cooperative societies were established at D canal level. In 1978, these societies were dissolved. The water management or maintenance of field canals were not given sufficient attention in their overall objectives.

In 1978 in the system H, turn out groups were formed and two farmer representatives were selected from each group, one for water management and the other for agriculture activities at the field canal level. These farmer representatives were given training on water issues, water requirements for various crops, fertilizer and agro-chemical usages, credit and marketing. Training programmes were conducted by the project officials, except in the case of Bank Officers who were invited to conduct training courses in credit facilities available.

These organisations continued for about 3 years in the System H. Well organised groups had experimented on water distribution to D canals and field canals, and canal maintenance. Community Development Officials were responsible for the organisation of turn out groups. The officials of the Mahaweli System were responsible for appointment of farmer representatives, using top down approach which is very much contrary to INMAS concepts of farmer organisation.

Next came the Praja Sanwardena Samithi (Community Development Societies) in 1981-82, and continued till 1986. These societies were set up at D canal levels. Some of these societies were given contracts up to the value of Rs. 5,000 to Rs. 10,000/. In some of these societies, the performance was satisfactory, but majority of them failed due to lack of conceptualization of project management and non availability of trained officials who were responsible for farmer organisations. The official had numerous functions to perform in addition to organising farmers.

It is evident that there was no systematic organisation of farmers in the Mahaweli System, as explained above, except some ad hoc arrangement made from time to time to have the farmer groups established for a particular purpose. Secondly it is noted that there were some organisations that were set up following top down approach. Thirdly there were no trained full time officials who could have been entrusted the responsibility of organising farmers.

There are other organisations in the Mahaweli systems, whose objectives are not directly concerned on water management & systems management. Death donation Societies, Rural Development Societies, Youth Organisations, Religious Organisations and Community Development Societies are in existence in all Mahaweli systems. It is observed that most of the farmer representatives (farmer leaders) hold positions as office bearers in all these societies. This indicates that the men with leadership qualities are few in number in a particular DC organisation. This is also true with MIRP and ISMP. It is a common feature that same personalities hold responsible positions in any society in the village.

In Kalukele in Mahaweli System B, the President has been a well recognised and respected person in the area. He has been the President since 1990. Unit Manager attends the DCO committee meetings regularly. He has taken a keen interest in the particular DCO. He is responsible for organising training classes with the Irrigation Community Organiser (ICO). ICO has been appointed to the Unit Office to organise the FCO's and DCO's in the area coming within the Unit. Block Manager also attends the Committee Meeting of the DCOO when there are problems where he should be helpful to the DCO in order to facilitate the problem solving process. He also takes part in Kanna Meeting deliberations.

In Mahaweli areas "B" & "H" the unit manager acting as catalyst attends about 95% of the meetings. The community development officer and unit manager perform the role of monitoring the FO., while in ISMP, schemes and MIRP schemes the I.O. acts as a catalyst.

Conclusions

It is noted that in ISMP & MIRP schemes, momentum gathered has been gradually declining, due to limitation of funds allocated for training, the incentive payments to line agency officials who attend project management committee meetings and the absence of experienced IDOs and IOs for a continuous period. In Mahaweli systems especially in System B, MARD project continues with the programmes on Farmer Training on OFC cultivation and the MED/EIED is responsible for income generating projects of farmer organisations. The FO of the MARD/MEA is directed at crop diversification and the MED/EIED is directed at enterprise and commercial development of the Farmer Organisation, entrepreneur and micro enterprises.

3. DEVELOPMENT ON MANAGEMENT CAPABILITIES OF FARMER ORGANISATIONS

3.1 Formation

3.1.1 The Objective

The main purpose of forming farmer organisations is to achieve higher level of productivity and production through the participation of farmers in proper water distribution and maintenance of the irrigation system. To achieve this objective, the sustainability of the physical system has to be a prerequisite.

The following essential indicators could be used to assess the success or failure of the activities and functions of a Farmer Organisation. However, there can be other areas that could be expanded to cover the activities and functions effectively of FOs (indicators under basic functions as in para 3.1.3).

1. Water distribution assisted by ID
2. Maintenance of the channel system assisted by ID
3. Decision making and implementing assisted by government agencies
4. Improvement to agricultural production assisted by Agriculture Department.
5. Providing information to prepare seasonal Agricultural plan assisted by agencies.

Characteristics could be indicated under basic functions as shown below.

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3.1.2 Characteristics Categorised under basic functions

Functions	Characteristic
1. Water Distribution (Operations)	a. Decisions taken by DCO b. Effecting rotational issues of water c. Resolutions of farmer disputes in water distribution d. Operation of distributory system
2. Maintenance of Channels	a. Weeding on Channels b. Desilting of Channels c. Strenthening of bunds d. Upkeep of structures & components
3. Agricultural Implementation Programme	a. Cropping intensity, selection of crops b. Adherence to cultivation calendar c. Leadership d. Constitutions e. Legal provision
4. Improvement to agricultural productions	a. Yield increase b. Increase of cropping intensity
5. Off farm employment and enterprise development	a. employment creation b. enterprise development

3.1.3 The following indicators may be taken to cover the scope of FC functions expanded to other areas

1. Agro-Input Supplies
2. Undertaking contracts
3. Marketing of agricultural produce
4. OFC cultivation
5. Other activities beneficial to the farmers.

3.1.4 Characteristics Categorised for FO functions expanded to other areas:

Function	Characteristics
1. Input Supply	Provide fertiliser, agro chemicals, seeds
2. Undertaking contract work	Quality work Farmers satisfied FO earned profit Agencies satisfied
3. Marketing of Agricultural produce	Organise storages Purchase paddy Purchase farm produces FO earn profit
4. Activities beneficial to farmers	Organise Religious & Cultural activities provide employment to members and promote child education and welfare provide training to members.
5. Credit facilities	Financial assistance to membership

3.2 The Analytical View on Common Characteristics

The characteristics common to the majority of most successful and least successful FOO brought under the study in ISMP, MIRP & Mahaweli Systems B & H were viewed analytically and the findings presented in Diagram 2 & 3.

Table (i): Characteristics in F.OO.

Development on Basic Functions

Characteristics under Indicators	Most Successful										Least Successful									
	MIRP		ISMP				Mahaweli B		Mahaweli H		MIRP		ISMP				Mahaweli B		Mahaweli H	
	Huruluwewa		Minneriya		P.SS						Huruluwewa		Minneriya		P.SS					
	Meegahapattiya		Ulpothwewa		Mahasen		Kalukele		Konwewa		Padikaramaduwa		Sansungawa		Damana		Pahala-Ellewewa		404-D1	
															Gamunupura					
	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC
1) Water Distribution																				
(a) Decisions taken by DCO-with ID.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	Y	O	Y	O	Y	Y	O	O
(b) Effecting rotational issue of water	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	Y	O	Y	O	Y	O	O	O
(c) Resolution of farmer disputes over water	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	O	O	O	O	O	Y	Y	O	O
(d) Operation of distribution system	O	Y	O	Y	O	Y	O	O	O	O	O	O	O	O	O	O	O	O	O	O
2) Channel Maintenance																				
(a) Weeding on channels	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
(b) Desilting of channels	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
(c) Strengthening of bunds	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
(d) Upkeep of structures & components	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	O	O	O	O	O	Y	Y	O	O
3) Implementation of Agricultural Plan																				
(a) Cropping Calendar and selection of crops	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
(b) Adherence to Cultivation Calendar	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	O	O	O	O	O	Y	Y	O	O
(c) Leadership in F.O	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	O	O	O	O	O	O	O	O	O
(d) Constitution of FO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
(e) Legal framework within F.O. (Safe against threats)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	O	O	O	O	O	O	O	O	O	O
4) Improvements to Agricultural Production																				
(a) Yield Increases	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
(b) Increase in cropping intensity	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Y – Characterstics present. O – Characteristics not present.

Table (ii): Development on Activities Outside Irriation

	Most Successful										Least Successful									
	MIRP		ISMP				Mahaweli B		Mahaweli H		MIRP		ISMP				Mahaweli B		Mahaweli H	
	Huruluwewa		Minneriya		P.SS						Huruluwewa		Minneriya		P.SS					
	Meegahapattiya		Ulpothwewa		Mahasen		Kalukele		Konwewa		Padikaramaduwa		Sansungama		Damana		Pahala-		404-D1	
															Gamunupura		Ellewewa			
	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC	DC	FC
5) Cultivate OFCC	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
6) Deal with/Input Supplies fertiliser, agrochemicals, seeds etc.	Y	Y	Y	Y	0	0	Y	Y	0	0	Y	Y	Y	Y	0	0	0	0	0	0
7) Contract work																				
(a) Quality work	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0	0	0	0	0	0	0	0
(b) Farmers satisfied	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0	0	0	0	0	0	0	0	0	0
(c) FO earned profit	Y	Y	Y	Y	Y	Y	0	0	Y	Y	Y	Y	Y	Y	0	0	Y	Y	Y	Y
(d) Agencies satisfied	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0	0	0	0	Y	Y	Y	Y
8) Dealers in Marketing Agricultural Produces																				
(a) Storing produces	0	0	Y	Y	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) Paddy purchasing	0	0	Y	Y	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) Other produces purchases	0	0	Y	Y	0	0	Y	Y	0	0	0	0	0	0	0	0	0	0	0	0
(d) ~~Gain~~ profits gained	0	0	Y	Y	0	0	Y	Y	0	0	0	0	0	0	0	0	0	0	0	0
9) Other activities beneficial to farmers																				
Religious & Cultural activities	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y
Provided employment	Y	Y	Y	Y	Y	Y	Y	Y	0	0			0	0	0	0	0	0	0	0
Donations/Contributions	0	0	0	0	0	0	Y	Y	Y	Y			0	0	0	0	Y	Y	Y	Y
Training/awareness programmes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y
Child Education	0	0	Y	Y	0	0	0	0	0	0			0	0	0	0	0	0	0	0
10) Financial Handling																				
Maintaining a fund	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Membership collection	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shares collected	Y	Y	Y	Y	0	0	Y	Y	0	0	0	0	0	0	0	0	0	0	0	0
Credit to membership	Y	Y	Y	Y	0	0	Y	Y	0	0	0	0	0	0	0	0	0	0	0	0
Members satisfied with F. handling	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0	0	0	0	0	0	0	0	0	0
Agencies satisfied with F. handling	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0	0	0	0	0	0	0	0	0	0

Y = Characteristics Present 0 = Characteristics Not Present N : No action taken

3.2.1 Water Distribution

As distribution of water was considered a primary function of a Farmer Organisation, the characteristics viewed were:

a. making decisions with the assistance of agencies
b. effecting rotational distribution of water
c. Resolution of farmer disputes over water issues
d. operation of distribution system.

The DCOO brought under the study had always made attempts to interact with agency officials, the ID in the ISMP & MIRP areas and Mahaweli officers in Mahaweli Areas.

Kanna Meeting decisions related to water distribution for the cultivation season were further discussed at the monthly DCO meetings in ISMP & MIRP systems. In the successful FOO more participation by FRR were realised than in the unsuccessful FOO. In Mahaweli H water management committee meetings were held fortnightly. This has an advantage, as at least three water issue programmes are effected within a month. However, this approach provided more opportunities to the farmers. The poor participation of FRR in the least successful FOO in all the systems had created a negative effect in resolving farmer disputes surfacing during water issues.

Rotations were not effectively made at turnouts within the D channels in the least successful FOO brought under the study.

In MIRP & ISMP systems, the gates were operated by ID patrol labourers according to the decisions taken at the project committee meetings. The DCO officials were not in a position to make changes to the issue schedules even if farmers requested a change

In Padikaramaduwa-Huruluwewa MIRP the DCO officials were unable to effect controlled issues to prevent wastages even though rotations were necessary.

In 404 -D1 in Mahaweli H - DCO officials were not keen in working out turnout rotation and tail end farmers were continuously affected by this attitude. The affected farmers have resorted to assistance from various political groups for relief. The social unrest built up eventually made the DCO functions ineffective.

These examples clearly indicate the necessacity of rotational water issues to ensure timely, equitable and justifiable deliveries.

The lapse of a rotational issue was observed in all ISMP, MIRP and Mahaweli areas and the situations were worse in least successful FO areas. This if neglected may affect the most successful FOO as well.

In all ISMP & MIRP systems the project managers were held responsible for coordinating the line agency participation. The effectiveness on new approaches in water distribution had depended upon the capability and mutual understanding between the IMD & ID staff.

In MIRP (Huruluwewa), the ID had extended their support extensively as the Irrigation Engineer had taken personal interest in providing the technical guidance. The capability of the president of Meegahapattiya DCO was a factor that made ID efforts yield success. In the same system the least successful FO Padikaramaduwa, their attempts were not successful. This area was treated as a pilot area with a multitude of sophisticated structures provided to facilitate water distribution. The water wastages in upper reaches and deficits at the tail ends were common occurrences. I.OO appointed to this area were unable to build farmers awareness. Although several training and demonstration programs were launched, the attitude of farmers had not changed. The farmers interest in undertaking chena cultivation in adjoining forest areas was one factor that kept farmers away from taking an active interest in intensive cultivation within the FO area. The uncertainty of water in the reservoir was a major constraint. Huruluwewa Reservoir which is augmented from Mahaweli supply channel, is seriously affected by illicit tapping of water on the way. The planned out inflow into the reservoir is continuously affected.

These examples indicate that the assistance of trained and capable IDOO are necessary in building farmers awareness in the use and distribution of water.

In the most successful FO Ulpothawewa in the ISMP Minneriya Project, the implementing of rotations in D channel turnouts was successful because the ID staff and IMD staff had a better understanding with the farmers and their needs.

It was observed that the IMD officials were gradually focusing their attention to develop the capabilities of FOO out-side irrigtion related activities.

In Mahaweli Systems, initial efforts were centereo in getting participation of farmers in water distribution and field channel maintenance. Subsequent efforts were made on entreprenuership, input supplies and D. channel maintenance and agricultural practices.

The influence of RPM & Block Manager and Unit Manager was at a higher level than that in INMAS systems. The issue schedules are prepared by Irrigation Engineers. The irrigation labourers operate turnout gates. In the successful FOO the officials themselves supervise these operations and were able to effect rotations at turnout gates, but within field channels, rotation was not practised unless during crisis situation. This is similar to that at ISMP and MIRP systems.

Table iii : Performance by successful FOO in Distributing Water

Item	ISMP		MIRP				Mahaweli		Mahaweli	
System	Minneriya		PSS		Huruluwewa		System B		System H	
DCO	Ulpothawewa		Mahasen		Meegahapattiya		Kulukele		Konwewa	
	A	B	A	B	A	B	A	B	A	B
D. Chl level	3	2	3	2	3	3	3	2	3	2
F. Chl level	2	2	3	2	3	3	2	2	2	2
Rotational issues	2	2	3	2	3	3	2	2	2	2
Improvements to yields	2	2	2	2	2	2	2	2	2	2
Conflicts over water	3	2	3	2	3	2	3	3	3	3

A

Level - 3

D.C.O participating in planning water distribution and control gates
Envisaged timely, adequately, justifiable quantum of water to the satisfaction of farmers
Improvements to crop yields - > 20%
Rotations made effectively within D channels and in F channels in crisis time
No farmer conflicts over water issues.

Level - 2

FRR participate in planning of issues
Envisaged timely adequate and justifiable quantum of water to farmers
Improvement observed to crop yields 10% - 19%
Rotations made in D.C turnout areas only
Conflicts over water minimised considerably

A - Indicator

B - Continuity

Level - 1

DCO officials made aware of water issue calendar by agency officials

Water distribution to the satisfaction of 50-75% farmers

Rotations not implemented

Yields improved 5% - 09%

Farmers conflicts minimised compared to pre-project conditions

Level - 0

DCO officials informed of issue calendar by agency officials

Agencies operate DC & FC gates

No rotations implemented

Yield improvements observed 0-4%

Farmer conflicts over water prevailing at the same intensity as pre-project level

Continuity

Level - 3

Efforts can be continued without agency support

Level - 2

Efforts can be continued with present level of agency support

Legal backing to deal with defaulters envisaged for sustained effect

Level - 1

Efforts can be continued only with more agency intervention,
and with legal backing to deal with defaulters.

Level 0

FO unable to make water deliveries.

Table iv : Performance by least Successful FOO in Distributing Water.

Item	ISMP				MIRP		Mahaweli		Mahaweli	
System	Minneriya		PSS		Huruluwewa		System B		System H	
DCO	Sansungama		Damana Gemunupura		Padikaramaduwa		Pahala Ellewewa		404 D	
Item	A	B	A	B	A	B	A	B	A	B
D.Chl. level	1	1	1	1	1	1	1	1	1	1
F. Chl. level	1	1	1	1	1	1	1		1	
Rotational issues	0	0	0	0	0	0	0	0	0	0
Yield improvements	1	1	1	1	1	1	1	1	1	1
Conflicts over water	1	0	1	0	1	0	2	2	1	1

A - Indicator

Level - 3

D.C.O. participating in planning water distribution and control gates. Envisage timely, adequate, justifiable quantum of water to the satisfaction of farmers.

Improvements to crop yields.

Rotation made effectively within D channels and in F channels in crisis time

No farmer conflicts over water issues.

Level - 2

FRR participate in planning of issues.

Envisage timely, adequate and justifiable quantum of water to farmers.

Improvement observed to crop yields.

Rotations made in D.C. turnout areas only.

Conflicts over water minimized considerably

Level - 1

DCO officials made aware of water issue calendar by agency officials.

Water distribution to the satisfaction of 50 - 75% farmers.

B - Continuity

Level - 3

Efforts can be continued without agency support

Level - 2

Efforts can be continued with present level of agency support

Legal backing to deal with defaulters envisaged for sustained effect

Level - 1

Efforts can be continued only with more agency intervention, and with legal backing to deal with defaulters.

Level - 0

FO unable to make water deliveries.

3.2.2 Maintenance of the Canal System

The primary purpose of forming FOO in irrigation systems is basically centered on improving the efficiency of the irrigation distribution system. Canal maintenance on regular basis is necessary to avoid deterioration & early rehabilitation of the system. The conflicts in distributing irrigation water had surfaced as a result of inefficient functioning of channels and structures.

In all the FOO brought under the study, successful as well as least successful, the farmers have maintained the channels to facilitate water distribution. However, the frequency of routine maintenance work, various items taken up under the programs and the standards maintained were at different levels. In the most successful FOO the level observed was much higher than that observed in the least successful FOO.

It is observed that the quality of maintenance works in MIRP, ISMP & Mahaweli Systems B & H were satisfactory. It is noted that the quality performance in MIRP & ISMP was better than that of Mahaweli Systems. Progress control in maintenance work was done by the Project Manager with the assistance of I.OO. This contributory factor was lacking in Mahaweli systems. Irrigation Department was releasing maintenance allocations for D. channel maintenance and the contracted sum was credited to the FO funds. In Mahaweli areas there had been delays in settling these claims. The quality of maintenance work was found to be better in Huruluwewa (MIRP) than that in P.SS & Minneriya - (ISMP).

Meegahapattiya DCO in Huruluwewa (MIRP), was capable of maintaining the D. channels with repair and construction works to the satisfaction of farmers and ID officials. It was observed that the physical works were in a very satisfactory condition. Earthwork in channel bunds, weed free channel profiles, preservative protected cast iron gates and masonry structures were physically sound. The D channel maintenance allocations provided twice a year had been well utilised. The supervision by ID and the monitoring works by the IMD staff, the project manager and the IDOO, have rendered appreciable support.

However, the dedication and capability of the president of the DCO could be considered as one of the contributory factors that led to the efficient functioning of the DCO.

The participation of farmers in maintenance was satisfactory, in ISMP systems, Mahasen in PSS and Ulpothawewa in Minneriya, even though the frequency of routine maintenance works were not as high as that in the MIRP Systems.

The farmers who were dissatisfied with the DCO officials in area 404 D1 had refrained from attending to routine maintenance work since January 1992, in System H. Prior to this the farmers had contributed voluntary labour for maintenance work. Annexure 1.8 refers.

Handling contracts in construction and repair works were well established in the successful FOO in MIRP, ISMP & Mahaweli systems with DCO officials personally supervising the work and works executed to the satisfaction of farmers and agency officials.

It was noted that in least successful organisations the quality of work done under contract was unsatisfactory.

3.2.3 Agricultural Plan

In all the F.O. areas brought under the study Mahaweli B & H, ISMP & MIRP systems, an agricultural implementation plan has been prepared seasonally giving the extent cultivated under various crops with input requirements.

In Mahaweli systems this plan was prepared in accordance with the water issues recommended by the Water Management Secretariat. The RPM is responsible for arranging the kanna meeting where all the farmers are expected to participate. In ISMP & MIRP areas the kanna meetings are held by the Government Agent. Proposals made at the pre kanna meeting were generally accepted at the kanna

meeting. However it was found that farmers do not keep to the cultivation calendar agreed upon at the kanna meetings. Invariably water issue dates had to be changed. This was chiefly due to financial constraints, non-availability of seeds on time, short-age of labour and farm power.

In the MIRP and ISMP systems the F.O. is given the responsibility to prepare the agriculture plan in respect of their area of jurisdiction. In the case of Mahaweli Systems very rarely the farmer organisations take part in the Agriculture planning.

Decision making

The minutes of the meetings conducted by the successful F.OO. under ISMP, MIRP & Mahaweli systems "B" & "H" indicate that they had the capacity to make result oriented decisions to the satisfaction of its membership and the government agencies.

In unsuccessful FOs in all the systems, the involvement of farmers in decision making activities was minimal. This is mainly due to unacceptability of the farmer leaders by the general membership. The absence of catalysts to bring the farmers together for a common objective to maximise benefits to the farmers was felt in the Mahaweli System in particular.

3.2.4 Effect of Development of FOO on Improvement to paddy yields:

In MIRP and ISMP systems irrespective of the level of development of FOO whether most or least successful, yield increases were observed in the FOO areas. The improvements made under rehabilitation of the deteriorated irrigation systems could have been a contributory factor. In MIRP Huruluwewa, in the most successful Meegahapattiya and even in the least successful Padikaramaduwa Gemunu, over 20% yield increases in paddy production was observed. In ISMP PSS, the yield increases in the least successful Damana Gemunupura FO was observed to be higher than that of the

most successful Mahasen FO. Paddy production of 90 to 95 bushels per acre was reported in this area where as in Mahasen the production was 80-85 bushels per acre. The reasons for this achievement could be the assured supply of irrigation water to the FO area as a result of MIRP rehabilitation works. In ISMP Minneriya, the paddy yields have been improved compared with the pre project condition. In the least successful Damana Gemunupura FO area, nearly 30% yield increases were observed inspite of its failure to improve on essential basic objectives based on INMAS approaches, as to conflict resolution, political neutrality in dealing with FO activities, and input supplies. The improvement on water distribution techniques and farmer awareness of utility of water related to inputs had been a contributory factor. It was revealed that the trained staff; the IDOO were more attentive to this aspect of paddy production, this enabled the farmers to develop better relationship with the ID staff for timely supply of irrigation water through FO meetings held frequently. The improvement in paddy yields in Mahaweli areas was observed to be within a range of 8-10% in the successful FOO. However in tail end sections in Konwewa FO in system H the yield increases were over 15%, due to the effective remedies adopted by the FO to the long standing conflicts in distributing water in the area.

The reasons for variation in paddy yield increases in the INMAS systems to that of Mahaweli systems could be due to the following reasons. The Mahaweli farmers were getting satisfactory paddy yields since mid 1980 from the fresh and fertile paddy allotments. The Agency concentrated more on water deliveries and agricultural extension services. Working within a unified service, disputes had not surfaced in coordinating the water distribution services and supplies by the professional staff employed by the Agency. Possible avenues were open for the settlers to gain satisfactory yields throughout the period. Hence increases in percentage variations in paddy yields was made minimal, whereas in the INMAS systems, the MIRP schemes were those that were in operation for over 40 years and the cultivation under these systems affected by water stress, the channels deteriorated and hence paddy yields had been low. The

improvements therefore made it possible for the farmers to better their yields. Hence percentage variations had increased. This showed that INMAS systems had higher yield variations than in the Mahaweli systems.

It was observed that yield of paddy in the farm areas selected for the study have shown some increase during the 5 years. It can be attributed to better management practices deployed by the farmers.

3.2.5 Selection of FRR Under INMAS & Mahaweli Areas

In all the four systems the farmer representatives were elected at the annual general meetings:

In all the FOO the same group of farmers had been repeatedly elected as office bearers. Only a few FRR were replaced annually.

It was observed that the majority of FRR were holding, similar responsibilities in the other organisation within the DCO.

It is clearly seen that FRR personal capabilities and the experience gained in the similar post held, made them acceptable to the farmers. This is proved to be correct in the case of most successful farmer organisation Kalukele in system B. The President and the Treasurer could devote 4 days in a week to attend to the affairs of the DCO.

3.2.6 Leadership qualities

A common characteristic observed in the most successful FOO in ISMP, MIRP & Mahaweli B & H was their ability to bring about solutions to conflicts. This was an outcome of good leadership. In the most successful farmer organisations the leadership of the elected officials was observed to be an outstanding feature.

These officials have established themselves as rural leaders during preproject period in performing efficiently in social activities.

Under ISMP - PSS, the President, Secretary, Treasurer and majority of FRR were able to implement DCO decisions in compliance with the constitution in dealing with defaulters, even against strong political interference. In Ulpothawewa, DCO (Minneriya) the farmer officials were able to motivate the farmers to undertake construction works on contract basis and paddy purchasing, with a view of raising the DCO fund.

In Mahaweli H the President was able to settle long standing disputes in water distribution and in system B Kalukele, an income generating project of OFC crop cultivation was successfully undertaken.

In all these cases the dedication and capability and general acceptance of the leadership had been the key factor.

3.2.7 Training as a beneficial factor

Under MIRP and ISMP several programmes were implemented during the development process with a view to making the farmers knowledgeable. They were:

a. Distributory channel management and development
b. On the job training for farmers on operation & maintenance
c. Farmer exchange programmes
d. Training for field officers

In the successful FOO these programmes had brought in more benefits since the participation of farmers were much higher than that in the least successful FOO. The attitude of these farmers in maintainig their channels and proper water distribution was more prevalent.

However, environmental factors have brought in constraints in implementing the techniques. They are
a. water deficits to the area
b. financial constraints
c. leases and mortgages
d. lapses in extension services

3.2.8 Farmer Participation in Discussion

In Mahaweli system H - farmer training was undertaken by agency officials since 1981. The initial efforts were in view of participating more farmers in distributing water. The turnout group leaders were appointed by the agency in this respect. Under the T&V programme more awareness was introduced to the farmers on agriculture. Incentives were provided at the beginning as free meals, and Rs.10/= per day. Participation to these programmes declined once the incentive scheme was withdrawn.

In contrast to the efforts in training farmers in Mahaweli areas, the awareness and utility of training by farmers in MIRP and ISMP areas were observed to be more. The reason for this success could be the efficiency of I.OO who acted as catalysts in co-ordinating the training programmes.

In Mahaweli systems except in concentrated areas the above programmes were not effectively implemented. The farmer participation was more to the T&V programmes that provided incentives, subsequent FOO programmes the participation was less.

3.2.9 Supply of Inputs

In INMAS systems, the input supply was considered as a primary function of farmer organisation. The Most Successful FOO - Under INMAS, - Meegahapattiya, Ulpothawewa, and the least successful F.OO Padikaramaduwa, Sansungama, had made attempts to supply fertiliser and agro-chemicals to the member farmers.

In none of these areas the full requirement was met by the F.OO. but the successful organisations had made a reasonable profit from these attempts. The unsuccessful F.OO. had made an attempt to gain the confidence of farmers, but the efforts had added only negative responses from its members as the input distribution was subjected to criticism and due to descrepancies in handling cash.

In Mahaweli areas the input supplies were repeatedly attempted by the successful F.OO. The farmers requirements were directed to the Block Managers but DCO efforts to provide these were futile. It could be considered that the project managers under INMAS approaches were determined to promote input supplies by F.OO irrespective of the capability of the FOO to handle these aspects. That may be the reason why most of the successful as well as unsuccessful FOO had made attempts in this direction.

The stability and acceptability of the FO by the farmer members could have been assessed by the monitoring agencies before including these organisations in the more complicated aspects such as handling of public funds and input supplies.

However, the major constraints to implement the input supply by F.OO. had been,

(a) lack of credit facilities to farmers.
(b) Non-availability of funds.
(c) uncertainty of water (specially in Huruluwewa)
(d) lack of storage facilities

In Mahaweli System B, Kalukele DCO was very successful in assisting the agency in the input supply under MARD assistance programme. The efficiancy of the organisation coupled with the continued support by the agency through trained staff and Irrigation Community Officers (ICOO) were key factors to their success.

These efforts were not observed in Konwewa in System H where input supplies were not made due to financial constraints.

These two examples high light the capabilities that could be built up within F.OO with agency support.

This study shows that even some of the most successful F.OO under INMAS and Mahaweli have not attempted in the supply of inputs, where two least successful FOO's under INMAS had made attempts and failed.

3.2.10 Credit

The successful farmer organisation in ISMP, MIRP & Mahaweli system have organised various types of credit schemes for the farmers. It is a common fact that the majority of farmers were not eligible for institutional credit due to their failure to pay the outstanding loans taken for agriculture purposes. There are cases where the farmers were not able to pay loan instalments due to genuine reasons such as crop failures and the inability to meet the cost of production. The farmer organisation could be instrumental in having some arrangement with the lending authorities such as Peoples Bank & Bank of Ceylon to obtain credit for these members with a guarantee given to the Bank for repayments.

Kalukele in Mahaweli system "B" ,and Ulpothawewa in Minneriya (ISMP) are good examples of successful credit facilities arranged with the banks. The repayment has been nearly 99%. In 1991/92 Maha, Konwewa in Mahaweli system "H" arranged credit facilities for the supply of seed paddy. This scheme too was supposed to be very successful.

3.2.11 Fund Raising Activities by F.OO.

The F.OO in INMAS, ISMP & Mahaweli areas under this study whether successful or unsuccessful were able to maintain a fund.

The implementing agencies have brought about sufficient awareness into the F.OO. on various aspects in building up their funds from,
(1) membership collections (2) shares (3) fines imposed on defaulters on kanne meeting decisions. (4) profits from input supplies (5)Interests on loans (6) profits from sale of agricultural produce for eg. the most successful FOO, Kalukele in Mahaweli systems B, Ulpothawewa in ISMP Minneriya, were highly successful in these attempts.

The MARD assistance programme assisted the Kalukele FO in providing credit, input supplies, extension services, transport and marketing (See Annexure iii). This programme earned nearly Rs. 4.5 million to the 52 farmers selected in this trial of export oriented crops and about Rs. 12,000/= as income to the F.O fund.

The attempts made by Ulpothawewa D.C.O. (ISMP) in 1991 were successful in the sale of farm produce such as chillies and paddy. There was no outside financial assistance. In 1992 the DCO attempted sale of paddy on a large scale, investing over Rs. 1,000,000/= . The efforts of farmers constrained by high overhead charges on rents for stores accommodation, transport etc., were causes for reduction in profits.

In some cases the fund raised from membership, shares and fertiliser supplies, made it possible to give loans to adjoining DCO areas. The interest rate was 10%. These attempts however, were not continued due to low availability of funds.

In the successful F.OO in schemes with INMAS approaches, the purpose of undertaking contracts was given more emphasis for fund raising than remedying the existing irrigation difficulties. The limited fund allocations provided should have been well utilised with manual labour contribution by the farmers as an added input.

Table : (v) Fund Raising Activities by Most Successful FOO:

Item	ISMP				MIRP		Mahaweli		Mahaweli	
System	Minneriya		PSS		Huruluwewa		System B		System H	
DCO	Ulpothawewa		Mahasen		Meegahapattiya		Kalukele		Konwewa	
Item	Level	Cont.	Level	Cont.	Level	Cont.	Level	Cont.	Level	Cont.
Membership	3	3	3	3	3	3	3	3	3	3
Shares	3	3	0	0	2	2	3	3	2	2
Fines	2	2	2	2	2	2	2	2	2	2
Contract Work	3	3	3	2	2	2	2	2	2	2
Credit	0	0	0	0	2	2	3	3	1	1
Agricultural Input Sales	2	2	2	2	2	2	2	2	0	0
Marketing	2	2	1	1	1	1	2	2	1	1
Value of DCO assets	85000/-		40542/-		22000\-		125000/-		4000/-	

Self reliant - 3
Partial Agency support - 2
With Extensive Support - 1
Through Agency only - 0

Table : (vi) Fund Raising Activities by Least Successful FOO:

Item	ISMP				MIRP		Mahaweli		Mahaweli	
System	Minneriya		PSS		Huruluwewa		System B		System H	
DCO	Sansungama		Damana Gemunupura		Padikaramaduwa		Pahala Ellewewa		404 D	
Item	Level	Cont.	Level	Cont.	Level	Cont.	Level	Cont.	Level	Cont.
Membership	2	1	2	1	2	0	2	2	0	0
Shares	0	0	0	0	0	0	0	0	0	0
Fines	0	0	0	0	0	0	0	0	0	0
Contract Work	0	0	0	0	2	1	2	0	0	0
Credit	0	0	0	0	0	0	0	0	0	0
Agricultural Input Sales	1	0	0	0	1	0	0	0	0	0
Marketing	1	0	0	0	0	0	0	0	0	0
Value of DCO asset	13674/-		19748/-		20000/-		32000/-		40000/-	

Self reliant - 3
Partial Agency support - 2
With Extensive Support - 1
Through Agency only - 0

3.2.12 Projects outside irrigation activities

Non irrigation related activities beneficial to farmer communities were observed to be very few within the FO areas. The reasons for this could be noted as

(i) In-sufficient awareness among the farmers
(ii) Non availability of resources, credit, input, expertise and marketing
(iii) Stores and accommodation

In ISMP, Minneriya, Ulpothawewa DCO was able to start a montesory and a day care centre within the DCO area that benefited farmer families.

The membership has approved a proposal to start an oil mill to extract oil from gingelly and herbal seeds that could be collected. This will promote income and generate employment to farmer members.

The project to purchase agricultural produces such as chillies and gingelly was beneficial to farm families.

3.2.13 Agricultural Insurance Schemes

It is very unfortunate that Agriculture Insurance was not taken very seriously by the farmers. It is only a prerequisite for institutional credit. Farmers are not willing to take part in the crop insurance schemes mainly **due to delays in assessments and payment of compensation by the Agriculture Insurance Board.**

The number of farmers who participated in the crop insurance scheme was limited to the farmers who sought agricultural credit from the banks. It is high time the DCO took some action to encourage farmers to insure their crops against any damages due to drought, flood and pest diseases. The Agricultural Insurance Board & Farmer Organisations will have to work out an attractive scheme to get more & more farmers into crop insurance.

Farmer communities in Mahaweli areas, were able to construct permanent homes to homeless families. The materials were collected as contributions and construction done with voluntary labour.

Religious and social functions such as almsgiving, dansal and pirith ceremonies were held at the initiation of successful farmer organisations.

3.2.14 Political Interference

In ISMP - Minneriya, the Sansungama FO area. political influence was observed. The recent development in receiving water from Mahaweli supplies to PSS worsened the situation.

In system "H" Mahaweli area the 404 - D_1 area in Thelahiriyawa block, the community in tail end areas share different political opinions that are in conflict with DCO officials and hence suffer deficits of water. In MIRP Huruluwewa, the President of Padikaramaduwa was an organiser for a political party in the area, and this did create some misunderstanding amongst members.

In all successful DCOs selected for the study in ISMP,MIRP and Mahaweli systems, **political neutrality was clearly seen** in their day to day activities. At the discussions held with project officials and the farmer representatives and the farmers, the consultants were able to gather that the members of the DCO belonged to various political parties. However there had been no occasion at DCO meetings where issues with political bias being brought to the notice of the DCO. Similarly there was no evidence to show that the politicians had interfered in the implementation of the decisions taken by the DCO against the defaultors who were fined or warned by the DCO.

Table VII Political Interferences in Most Successfull Farmer Organisations

Item	ISMP		MIRP		Mahaweli		Mahaweli	
System	Minneriya		PSS		Huruluwewa		System B	
DCO	Ulpothawewa		Mahasen		Meegahapattiya		Kulukele	
Item	A Level	B Cont	A Level	B Cont	A Level	B Cont	A Level	B Cont
Water dis.	3	2	3	2	3	2	3	2
Electing FRR	3	2	3	2	3	2	3	2
Group work organ.	3	3	2	2	3	3	3	3
Legalising reserve	3	3	3	3	3	3	3	3
DCO decisions	2	2	2	2	3	2	3	3
Fund allocation	3	3	3	3	3	3	3	3
Contract Work	3	3	3	2	3	2	3	3

Item	A Level	B Cont	A Level	B Cont	A Level	B Cont	A Level	B Cont	A Level	B Cont
Water dis.	3	2	3	2	3	2	3	2	3	2
Electing FRR	3	2	3	2	3	2	3	2	3	2
Group work organ.	3	3	2	2	3	3	3	3	3	3
Legalising reserve	3	3	3	3	3	3	3	3	3	3
DCO decisions	2	2	2	2	3	2	3	3	3	3
Fund allocation	3	3	3	3	3	3	3	3	3	3
Contract Work	3	3	3	2	3	2	3	3	3	3

A - Indicator

B - Continuity

Level 3

a. interference or undue political organisers
b. impartial attitude by FRR on political grounds
c. farmer members had not resorted to political support contrary to FO decisions
d. members made aware of activities and satisfied

Level 3

Political influence on the FO had been nil. This has not affected the sustenancy of the FO

Level - 2

a. interference occurred, undue influence by political organisers
b. impartial attitude by FRR on political grounds
c. farmer members had not resorted to political support contrary to FO decisions

Level 2

Interferences through political means retarding FOO progress

Level - 1

a. interferences by local political organisers very strong
b. favouritism by FRR on political grounds

Level 1

Political interferences ahd been a major threat had set bias on decisions, DCO had become inffective.

Table VIII: Political Interferences in the least successful Farmer Organisations.

Item	ISMP		MIRP		Mahaweli		Mahaweli	
System	Minneriya		PSS		Huruluwewa		System B	
DCO	Sansungama		Dam.Gemun		Padikaramaduwa		P.Ellewewa	
Item	A Level	B Cont	A Level	B Cont	A Level	B Cont	A Level	B Cont
Water dis.	3	1	3	1	2	2	3	3
Electing FRR	1	1	1	1	1	1	2	2
Group work organ.	1	1	1	1	2	1	3	3
Legalising reserve	2	3	3	3	3	3	3	3
DCO decisions	1	1	1	1	1	1	2	2
Fund allocation	3	1	1	1	3	2	2	2
Contract Work	3	1	1	1	3	2	2	2
	14	9	11	9	15	11	17	17

Item	A Level	B Cont	A Level	B Cont	A Level	B Cont	A Level	B Cont	A Level	B Cont
Water dis.	3	1	3	1	2	2	3	3	1	1
Electing FRR	1	1	1	1	1	1	2	2	1	1
Group work organ.	1	1	1	1	2	1	3	3	1	1
Legalising reserve	2	3	3	3	3	3	3	3	1	1
DCO decisions	1	1	1	1	1	1	2	2	1	1
Fund allocation	3	1	1	1	3	2	2	2	2	2
Contract Work	3	1	1	1	3	2	2	2	2	2
	14	9	11	9	15	11	17	17	9	9

A - Indicator

level 3

a. no interference or undue political organisers
b. impartial attitude by FRR on political grounds
c. farmer members had not resorted to political support in contrary to FO decisions
d. members made aware of activities & satisfied

Level - 2

a. interference occurred, undue influence by political organisers
b. impartial attitude by FRR on political grounds
c. farmer members had not resorted to political support in contrary to FO decisions

Level - 1

a. interferences by local political organisors very strong
b. favouritism by FRR on political grounds

B - Continuity

level 3

Political influence on the FO had been nil. This has not affected the sustenancy of the FO

level 2

Interferences through political means retarding FOO progress

level 1

Political interferences had been a major threat had set bias on decisions, DCO had become inffective.

It is a common feature in any local organisation that politicians of the governing party attempt to control the working process through their political supporters. In most cases these party members get elected to such organisations as key office bearers, with a view to achieve the political support for their party in the event of local elections or general elections. However, the newly formulated farmer organisations especially at the D canal level, did not show any affiliation to a particular political party. This is true even in the case of least successful farmer organisations.

There have been certain instances where local politicians have threatened the officials of the DCOs over certain decisions taken against their supporters. It is encouraging to note, that such threats were faced with determination & will, to serve the farming community without bias. Honesty and straight forwardness in achieving the common objectives for the welfare of the fellow farmers by FO officials has distanced the politicians from interfering into the affairs of the farmer organisations. However farmer organisations have to be very cautious about political interference when the farmer organisations are given legal powers for they could be used as propaganda platforms for political advantages.

3.2.15 Contract Work

Majority of the farmer organisations brought under the study had made attempts to undertake contract work within the DCO area.

The successful organisations had viewed this opportunity as a measure to

a. execute quality work
b. raise DCO funds with profits
c. gain farmers satisfaction

The works undertaken had been closely supervised by DCO officials. In Konwewa, Mahaweli System H, Meegahapattiya MIRP and Mahasen (ISMP) the DCO officials had personally undertaken the supervision and in others, had appointed committees to oversee the works.

In the least successful FOO Sansumgama (ISMP) Padikaramaduwa (MIRP), 404-D1 and Pahala Ellewewa in Mahaweli Areas the attempts made were not successful. The work handled by a DCO official, was criticised by farmers as to

a. poor quality
b. fraud in cash handling

In view of the above, the progress of work had not been brought to the knowledge of the farmers. Further the supervision and monitoring of contract work by agency officials was also not to the satisfaction of farmers.

Hence the study shows that the offering of contracts to DCO should be only if the FO has the capacity to handle civil works through its members.

However thorough supervision of the work by agencies cannot be over looked.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

4.1.1 Water Distribution

With the functioning of Farmer Organisations in the INMAS system an improvement had been observed in DCO areas. Farmers views had been taken into consideration at the DCO meetings and at Pre Kanne meeting discussions held at Project level. At the kanne meeting these proposals were finalised.

In Mahaweli areas the decisions of the WMS prevailed. Farmers views were discussed only at weekly Water Management Committee Meetings, this too in the successful FO areas only.

Although water distribution was scheduled at monthly meetings in the INMAS Project area, and three water issue programmes decided, there was no flexibility for the F.OO to change these scheduled dates in case a necessity arose. The process was tedious. Difficulties had surfaced in the least successful F.O areas where farmer participation in F.O activities was poor.

Rotational issues had not been practiced during normal irrigation by the majority of F.OO selected under this study. Paid irrigation labourers had been employed by the agencies in distribution of water.

The need for training of farmers in basic water management and rotational distribution was clearly evident.

4.1.2 Maintenance

Channel maintenance had improved with the functioning of FOO. The approach to maintain D.Channels, with the allocation of funds to DCOO was observed to be working satisfactorily. The items undertaken were mainly desilting and weeding in channels.

In MIRP areas the maintenance to D. Channels as well as Field Channels was satisfactory. Repairs to structures including painting and lubricating and strengthening of bunds were also attended to.

In the Mahaweli systems lack of attention in the maintenance of field channels was seen.

Farmer participation in maintenance work in most cases was lacking and mobilising farmers depended mostly in the leadership given by officials of the F.OO.

Agency intervention too had to be improved with regular monitoring of maintenance activities. Their advice and assistance was heeded to by the F.OO.

4.1.3 Adherence to Cultivation Calendar

FO officials accepted the fact that farmer organisations has had its impact in increasing crop yields, optimum use of water, proper maintenance of physical works and interaction with the government agencies. With further institutional strengthening the F.OO could be made to be viable and sustainable.

In INMAS systems the views of the farmers were taken into consideration in decision making. But, it was not so in the case of Mahaweli Areas where the decisions taken at the top prevailed at the bottom. This approach was not intended in the F.O concept. However, in the Mahaweli Systems recommendations from the WMS/WPU were conveyed to the farmers through the RPMS and these decisions were as far as possible adhered to.

It appeared that on the advice of F.OO farmers were able to save water by adhering to shorter periods of water issues during the initial cultivation periods. This was a good sign and with agency support and proper guidance, the practice could be improved.

Extension services had almost ceased with constant adhoc changes at field level services. This has created a void and arrangements to provide the farmers with this essential extension service has not been remedied.

The functions of the DAS in the convening of kanne meetings, taking legal action against defaulters and strengthening of F.OO by conducting training programmes had to be revived. Farmers realise the need for this.

It is noticed that in INMAS areas the enthusiasm shown during formation of F.OO is now slowly fading away.

The evidence of the dependency syndrome amongst some farmers was still seen in some of the Mahaweli Systems.

4.1.4 **Effectiveness of FOO in Improving Paddy Yields**

Paddy yields had improved considerably with the functioning of F.OO. But the following constraints experienced durin_ the last four to five years, viz; lack of rainfall, increase in price of fertilizer, high cost of manual labour, spread of diseases and lack of extension services had affected the cultivation.

4.1.5 **Selection of office bearers.**

Farmer representatives were elected by consensus by the farmers annually. This provided an opportunity to change the office bearers if necessary, but in most cases the same office bearers being acceptable to the farmers, were re-elected. Most of them had to spend a great deal of their time and money to attend to these duties, sacrificing their well being for the sake of the farming community. Their work was full time and honorary. The Question that often arose was whether the next generation would devote their time and energy in taking over the responsibilities the elder generation undertook in carrying out their functions in sustaining the farmer organisations for their own well being?

4.1.6 **Non Irrigation related activities**

Involvement by F.OO in non irrigation related activities were observed to be minimal. This may be due to less income generation. Yet, to some extent F.OO were involved in the supply of inputs, execution of contract works, livestock breeding and organising cultural activities.

Although attempts had been made to encourage farmers to involve them in commercial ventures, The response had been very poor. The main constraint being finances, lack of raw materials, marketing and extension services.

4.1.7 **Input Supplies by F.O.**

Successful F.OO were willing to undertake the supply of inputs like seeds, fertilizer and agro-chemicals but most of them needed the assistance of the agencies, and this assistance in most cases was not forthcoming.

Their major constraints being lack of finance, lack of competent and dedicated people and lack of storage facilities.

4.1.8 Fund raising activities by F.OO

It was presumed that all FOO will generate and maintain a fund. This depended on the activities undertaken by each F.O to swell their fund. The most successful F.OO undertook contract works and the supply of inputs to its members, other than depend only on the membership contributions.

It was observed that basic training in maintaining of cash accounts will be an advantage, and this will enhance the confidence the members will have in the officials handling F.O funds.

4.1.9 Contract work by F.OO

Majority of F.OO interviewed were very keen to under take contracts. The most successful F.OO were able to organise and satisfactorily complete the construction work under the supervision both by the agency and members of the F.O. In contrast to this, in the work undertaken by the least successful F.OO, the quality was poor due to lack of supervision and corrupt practices resorted to by the F.O and agency officials.

4.1.10 Credit facilities

Most successful F.OO in INMAS & Mahaweli systems have assisted selected members in providing credit facilities at reasonable interest rates. Their recoveries had been satisfactory. Inadequate funds had been the major constraint.

It will be useful to work out a system by which the F.O can get credit from commercial banks for its members and repay these loans also through the F.O.

4.1.11 Crop Insurance

Majority of farmers in the systems visited are of the opinion that Crop Insurance Scheme is not beneficial. This is as a result of the delays experienced in getting compensation. It will be worth while to work out a convenient system and encourage farmers to come into the crop insurance scheme.

4.1.12 Political Interference

Based on the out come of this study it is clear that local level politics has had no impact or influence in the functions of Farmer Organisations. Few incidents of political interferene with the duties of the F.O officials and farmers were reported but were considered to be insignificant since the F.OO had not yielded to these pressures.

4.2 RECOMMENDATIONS:

4.2.1 Water Distribution

i) It is recommended that basic training programmes be formulated to create an awareness amongst farmers in operation and maintenance of their systems with a view to making optimum use of water. The curriculum should include crop water requirement, soil classification water issues, and identifying pests and plant diseases. Demonstration plots by agencies will be useful.

ii) Water issue schedules decided in consultation with farmers should be exhibited so that the farmers will be aware of dates and times of issues.

iii) Flow measuring devices with gauges be incorporated in to all turnout structures.

iv) Misuse or over use of water should be minimised by frequent field inspections by FRR and agency representatives.

v) The control and issue of water in Distributory and field channels taken over by the F.OO should be operated by their own representatives.

vi) Farmers including turn out cultivators should be involved in all activities of the farmer organisations.

4.2.2 Maintenance

i). It is recommended that Seasonal maintenance programms be decided by the farmers including tenant cultivators at a meeting convened by farmer organisation and this programme to be adhered to. This will include the main & branch channel and the D. and Field channel by the F.OO.

ii) The maintenance allocation approved by the agency for Main, Branch and D. Channels should be available for work and not withdrawn once allocated.

iii) The availability of maintenance fund and the items of work to be done should be exhibited for the information of all the farmers.

iv) All maintenance work programmed and executed should be monitored and the data available for future planning.

v) Inspection of all channels should be frequently made and their observations recorded for the preparation of future maintenance estimates.

vi) Farmer Organisations should be covered with legal powers to take stern action against defaulters.

4.2.3 Adherence to Cultivation Calendar.

i). It is recommended that all farmers including turnout Cultivators should strictly abide by the decisions of the farmer organisation in respect of the Cultivation Calendar and the cropping pattern.

ii). Agency support in this regard is vital, specially in the formative stages of the farmer organisations. IDO's as in the case of INMAS systems are recommended and their withdrawal should be considered only after the Farmer Organisations has proved itself to be strong and sustainable.

4.2.4 Non Irrigation related activities

i). It is recommended that a basic training in handling civil works, maintaining of cash accounts, in handling transport, storage, and marketing be made available to FRR to help them handle off farm activities. The system prevailing in Farmer organisations under the INMAS systems could be strengthened and applied to other systems as well. Major constraint observed was the lack of finances and storage. It will be worthwhile if the agencies could extend assistance in this regard.

ii). The question of obtaining credit on easy terms and a low interest specially during the initial stages of the organisation is another matter that needs serious thinking. It was observed that under the INMAS programme this question was looked into by the IDO's to operate a system of giving credit from the organisations own fund. The extent of success depended on the availability of their own fund. Therefore it is recommended that suitable arrangements be made with the commercial banks to extend credit facilities through the organisation so that recoveries too could be through the Farmer Organisations. Whilst encouraging F.OO to under take supply of inputs, marketing, and controls on Civil Works as a source of income generation, it should not however forget or overlook the objectives for which the F.O concept was conceived.

4.2.5 Selection of Office Bearers

i). It is recommended that selection of office bearers from amongst farmers by consensus by the farmers at the annual general meeting be continued. It is best that the agency convene these meetings and ensure that this procedure is followed.

ii). It is suggested that the members be made aware that maintaining political neutrality will be in the best interest of the organisation.

iii) It is recommended that a study be made to evolve a system of providing an incentive to FRR or the organisations to boost their moral, which appears to be slowly and steadily failing. This will accelerate the growth of both human and material resources.

iv). It is recommended that the Institutional Development Organisers be introduced to all irrigation systems until such time farmer organisations can handle their functions effectively.

ANNEXURES

Annex 1

1. Development of F.OO in ISMP systems

1.1 Farmer Organisations in Minneriya Scheme (ISMP)

The following F.OO were established in Minneriya irrigation system by December 1991. All distributory channels have been handed over to the DCOs for operation and maintenance with the assistance of relevant agencies.

1.1.1 Selection of most successful & least successful farmer organisations

Extensive discussions were held with the Project Manager, IDO, IOs, DCO officials and officials of the Irrigation Department. The consultants examined the office records at the IMD, Project Managers Office, I.E's office, records maintained by the farmer organisations including minutes of meetings.

The following DCOO were chosen for the study.

Most successful	Least successful
Raja Ela	Hinguraka
Ulpathwewa	Kumaragama
Kusum Pokuna Mahasen	Kotikapitiya
Vihara Mawatha	Kaudulla
Galamuna Perakum	Sansungama

Field visits were arranged to meet the farmer leaders and farmers in their fields with physical obervation of the channel system in the DCO areas and group discussions with farmers. Ulpothawewa DCO, and Sansungama DCO, were selected as the most successful and the least successful farmer organisations respectively in Minneriya scheme for the detail study.

1.1.2 The objectives of farmer organisations

At the discussion held it was revealed that the objectives of the Organisation were as follows:

Building up of farmer/officer relationship
Successful maintenance of channels
Systematic water management
Active participation in agricultural planning
Conflict resolution
Supply of inputs & marketing
Financial Accounting
Fund raising & income generating activities
Proper handling of contracts
Agricultural planning
Settlements to land problems
Promoting cultivating O.F.C. & crop diversification
Political neutrality to system management
Social and Cultural Activities

The farmer organisations thus formed, were able to elect their FRR and F.O. officials who provided with programmes on awareness, training, demonstrations, to meet the specific objectives.

The levels attained under specific objectives mainly depended upon the capability of the Institutional Development Officers & I.OO who mobilised the farmers to set up the organisation.
Most Successful Farmer Organisation:

Ulpothawewa D.C.O.

No. of farm families:	205
No. of farmer members	157
Extent paddy cultivated in acs.	650

The DCO registered in IMD on 29.10.90 and ID on 28.2.89 to undertake contract work.
Taking over of D canals on 30.12.90 to the DCO.

1.1.3 Implementation

The Project Manager and other agency officials were responsible for setting up of the farmer organisation at Ulpothawewa.

Majority of the farmers interviewed expressed the view that Divisional Officer, Agrarian Services was assisting the Project Manager and his staff at the initial stages of the farmer organisations.

Apart from these the agricultural officers had assisted the IMD Staff in implementing training Programmes and extending their cooperation at early stages.

1.1.4 Background

Ulpothawewa DCO was first established in 1984. The divisional officer agrarian services assisted by the cultivation officer had organised and formed farmer organisations.

The I.M.D had taken the initiative in the development of F.OO in the area in 1985 under the INMAS programmes. The Project Manager assisted by the I.D.O, I.O organised discussions with the farmers in this area in 1985.

1.1.5 Farmer Meetings

Regular meetings were held by the D. Channel organisations with the participation of Farmer representatives and line agency officers. The minutes of the meetings were kept. From the office records it was observed that participation by farmers at D.C.O meetings was around 70%, in 1992.

The main topics discussed at the D.C.O meetings were on channel maintenance, water distribution, farmer conflicts, land problems and purchase of inputs.

Seasonal planning was done by farmers with the assistance of government officers. The agriculture implementation programme for the cultivation season is prepared at the DCO level which in turn is forwarded to the project management committee for further discussions.

Discussions were held in respect of membership fees, shares, contract work. It was also decided to recruit an irrigator for the DCO, on a monthly salary of whom was Rs.2000/-.

However, it was observed that all the matters discussed were not brought to the knowledge of the DCO membership. It was apparent that the officials were sufficiently aware of handling routine work as well as new projects they were handling. Experienced businessmen, retired Government employees, were in the DCO membership to assist the farmer representatives on this project.

1.1.6 Election of Office bearers

The Project Manager assisted by the IDO, IOO conducted a series of awareness programmes on selection of FRR and officials. The ID officials, DO Agrarian Services, AI of the Agricultural Department extended their co-operation in this exercise. At the general meeting held in 1991, 15 Farmer representatives were elected to the society. The president, secretary, and the treasurer were elected from among the elected farmer representatives.

1.1.7 Training

Farmer leaders had to be trained to assume various responsibilities, for the efficient functioning of the DCO. Under the INMAS programme the project manager was able to provide sufficient training to the first group of FRR and officials with the available resourses. The subject matter of such training programmes included:

(i) To organise and hold farmer meetings
(ii) Keeping minutes & submission
(iii) Financial Management & accounting & Submission of Budget
(iv) Solutions to farmer conflicts

(v) Interact with government sector
(vi) Organising & executing maintenance work
(vii) In distributing water
(viii) On Paddy Cultivation
(ix) Use of Agro-chemicals
(x) Getting inputs, seeds, fertilizer & agro chemicals

During the study, it was observed that adequate training was provided to the FRR on above aspects. Descrepancies have occured in utilising DCO funds in supply of agrochemicals, but the subsequent efforts by the project manager with the assistance of the DCO members, this was settled.

1.1.8 Water Distribution

The Operation of the Distributory channel gates which were solely done by ID, was brought under the supervision of the DCO after the taking over of D.Chls. by the DCO in 1991. The Irrigators assisted by the farmer representatives effected the water distribution in field channels to the satisfaction of the farmers and officials. The water deficits to the tail enders, were remedied with the intervention of the DCO to a great extent.

66% of the farmers interviewed stated that the D.C.O organised the water distribution satisfactorily. The minutes of the meetings held during the period 1991-1992 reflect that the conflicts and complaints made to the DCO are gradually becoming less. It was brought to the notice of the consultants that the farmer leaders effect rotations within D Channel/turnout areas. However, rotations were not practised in the field channels.

34% of the farmers at informal group discussions, view that the farmer representatives were sufficiently involved in water distribution.

It was brought to the notice of the consultants that about 20% irrigation water is wasted in the DCO area. However this is a matter to be clarified on a further study taking into account the quantities supplied to the area and the rainfall pattern.

The opinion of the project manager regarding water deliveries was that the number of complaints directed to him for remedies, on conflicts in receiving water, was getting lesser since 1991 maha season.

The agricultural officers have conducted training programmes within the area since 1981 with the assistance of DO Agraririan Services. The Project Manager was able to organise training programmes for the farmers through the DCO on Paddy and OFC cultivation. 66% of the farmers interviewed expressed the view that they had gained sufficient knowledge in paddy cultivation, through the training programmes arranged by the Department of Agriculture. However since agriculture is an ongoing process farmers were keen in getting additional training on paddy cultivation. Since 1991 yala season, cultivation of paddy, and other field crops like chilles & B'onion have been very successful. The yields obtained were high. Farmer organisations had organised, purchassing of produce from the farmers. The DCO was able to earn a profit, while the member farmers were able to get fair prices for their produce.

1.1.9 Maintenance

Majority of farmers interviewed in the D.C.O area were of the view that handing over of channel maintenance works to the membership was an achievement. For several decades the farmers were facing problems in receiving water due to obstructed water ways and defective channel structures.

D canals were handed over to the DCO in 1991 for operation and maintenance.

The DCO was able to get the participation of farmers to do group work and attend to the essential works under maintenance and credit the fund allocated to the DCO account. Construction of structures under ISMP was allocated to few FRR who had the abiiity and resources to execute quality work. 5% commission was paid to the DCO.

The farmers have been maintaining the field channels in good condition and 84% farmers view that maintenance programmes effected during 1991/92 Maha and Yala 1992 were very satisfactory.

1.1.10 Contract on Irrigation Work

The records maintained reflect that the DCO had effectively handled works allocated to the Ulpothewewa DCO area.

(i) Rs. 11,800/ used on 30/05/1990. The maintenance of D channels done to the satisfaction of ID & IMD staff.

(ii) In September 1990 MIRP construction works undertaken and completed to the satisfaction of ID & IMD staff, worth Rs. 3,31,928/.

By October 1990, value of ISMP construction works done had been Rs. 9,38,203/-

The physical observations of some of the works done by the D.CO. during the study substantiates that quality work was done. This undertaking of responsibility to execute repairs and construction works to the satisfaction of the farmers and the supporting services is a contributory factor to the success of the D.C.O.

1.1.11 Fund raising Activities

Decisions were taken at the DCO meeting in 1992 yala season to start an oil mill in the D.C.O area with immediate effect. The total cost of the project had been estimated to be about Rs.25,000/-. The Bank of Ceylon has agreed to grant this loan.

1.1.12 Input Supply

84% of the farmers felt that adequate extension services were available in the DCO area. However, the abolision of the KVS cadre, has affected the extension services at the village level. In the event of a major pest attack, the absence of an extension officer at village level will be felt.

Training Undergone

	Paddy %	Chillies %	B.Onions %	other crops %
Farmers view adequate	66	66	66	33

The information furnished proves that the programmes were successful in about 66% of the area

1.1.13 DCO Purchasing agricultural produce

To date	Item Purchased	Assessed value in Rs.
16/09/91	Paddy & Chillies	37,619/=
24/09/91	Paddy & Chillies	92,819/=
30/09/91	Paddy & Chillies	1,01,674/=
04/10/91	Paddy & Chillies	1,36,040/=

The organised efforts by the DCO to purchase farmers produce could win the confidence of the lending authorities especialy the Bank of Ceylon. DCO was able to raise a loan of Rs. 250,000/- in yala 1991, for paddy purchasing. During maha 1992, arrangments were made by the DCO for the purchase of paddy, on a much larger scale. The DCO could purchase the paddy at Rs.6.50 a kilo which was higher than the price paid by the private traders at the site.

For this purpose the DCO was able to get a loan of Rs.900,000 from the cooperative society. FO was able to rent out a store for storing paddy at Rs. 2000/- a month. Watchers employed from among farmer members. The D.C.O was not able to make a high profit as expected as paddy prices remained low until September 1992. This was due to a decision taken by the government to import rice with a view to build up a buffer stock. However this has brought adverse effects on the paddy cultivators islandwide. As the bank interest for the loan and rents on P.M.B stores were accumulating the DCO had taken measures to sell the paddy stocks, at a lower price.

1.1.14 Employment

Farmers furnished information on those who found employment in the government sector as follows:

1 as an executive
12 as teachers.
12 as security personnal
20 in other government departments and corporations.

Out of 205 families, members of 45 families were able to get employment in the government sector. With the initiative of the DCO two were appointed as watchers and one girl was appointed as a teacher in the montessori class.

1.1.15 Political influence

It was observed that although rural level political organisers participate in D.C.O. activities, undue favouratism or interference were not reported during decision making or implementation of such decisions.

1.2 The least successful Farmer Organisation - Sansungama. D.C.O.

Sansungama DCO was selected for the detail study due to its complex situation viz. its administrative, technical, resources, political, and social problems which the farmers were unable to remedy. .

Data:

Number of farm families	238
Number of farmer members	140
Extent of paddy in acs.	650
Reservations cultivated in acs.	60
Attendance at meetings	
General	57
Executive committee	7
Registered in IMD on 5.7.91	
Registered in ID on 30.5.91	

1.2.1 Institutional Development :-

100% of the farmers interviewed for the detail study and during group discussion are of the opinion that the Project Manager, IDOs and I.Os have taken the initiative to form farmer organisations. The objectives of the FOs at the initial stage as understood by the farmers are as follows.

(i) Supply of irrigation water to the area under the DCO.
(ii) Assistance and involvement of government officials in the affairs of the farmer organisation.
(iii) Maintenance of distributory canals by the Irrigation Department.
(iv) Resolution of irrigation problems.
(v) Resolution of farmer conflicts.
(vi) Provision of inputs for cultivation of crops.

40% of the farmers interviewed, indicated that D.O of the Department of Agrarian Services participated in the initial phase of organisational works. The extension officers of the Department of Agriculture also had taken an active interest at the initial stage to assist the Project Manager and IOs in setting up of FOs.

However, the officials of the Department of Agriculture and the Department of Agrarian Services had withdrawn from active participation in the project activities. The main reason can be attributed to the remoteness of the location of the Sansungama DCO area from the Agrarian Services Centre. The extension officers at the grass root level Krushi Viyaptha Sevakas (KVSs) were absorbed into the Grama Niladharis cadre in 1990. This has created a vacuum in the extension services at the village level. The Grama Niladharis are expected to attend to the agricultural extension work in addition to other duties, However, it is noted that the Grama Niladharis prefer to pay more attention to administrative duties which will give them better recognition in the village, rather than to the extension work.

The extent covered by Sansungama DCO is comparatively large. This falls into two AGA divisions of Lankapura and Medirigiriya. There have been certain difficulties for the Divisional Officer, Agrarian Services to pay much attention to Sansugama DCO as he is attached to the Medirigiriya AGAs office. The first DCO meeting after setting up of the organisation was held on 28.2.91. On the perusal of the minutes of the meeting it was revealed that farmers' main concern was the resolution of water shortages to their paddy fields. It was suggested at this meeting, that IO should intervene in getting the farmers together to solve their irrigation problems.

At the general meeting held, the office bearers were elected. However on inquiry from the individual farmers, the impression created was, that the elected President was not acceptable to the farmer community of the DCO area.

There are 238 farmer families in the DCO. The first general meeting of this organisation at Sansungama was attended by 75% of the total number of farmer members. The attendance at this meeting seems to be satisfactory. This shows that beneficiaries were looking forward to have a strong viable and sustainable farmer organisation initially for water management and other welfare activities for the improvement of the quality of life of the whole community. However, it was revealed that attendance at the committee meeting was gradually declining. It was also found that the urgent water distribution problems, for which farmers were very keen to find solutions were not attended to, to the satisfaction of the farmers.

Illicit siphoning of water in the double banking section of the D canal was very common. The blessings of influential personalities in the village were also involved in illegal tapping of water. It came up at the discussion the consultants had with the farmers, that the local priest was instrumental, to some extent, in getting water illegally. It was observed that the government officials responsible for water allocation were not taking sufficient effort to provide required quantity of water as decided at the DCO meeting. This has led to the gradual declining in the interest shown by the individual farmers.

There had not been a proper dialogue and understanding between the officials and the farmers. There had been frequent changes in the posting of IOs to cover Sansungama DCO. During the last 10 months there had been four IOs who assumed duties and later transferred to other areas. The farmers also expressed the view that IOs who served the DCO during this period did not have the necessary experience and training to motivate the farmers in the formation of a strong farmer organisation.

1.2.2 Training

80% farmers view that the elected FRR received sufficient training in community organising works.

The Project Manager had arranged a number of training programmes for the officials of the farmer organisation. The training programmes included in its curricula subjects on water management, agriculture, marketing and subjects concerning awareness programmes. However farmers still feel that the training given to the farmer representatives is not quite adequate.

60% of the farmers interviewed mentioned, that they have undergone inadequate training programmes. However further attention is needed in encouraging farmers to build up the social cohesiveness. It is clear that training of farmer representatives and farmers is considered an essential factor in institutional building whether it is in the INMAS areas or Mahaweli systems. The authorities will have to consider this aspect very seriously. In some FO areas under INMAS programme there had been constant training organised with ISMP and MIRP assistance. While some FO areas coming within the purview of the INMAS programmes, have had some financial constraint in organising effective training programmes for the farmers.

The inadequate and ineffective training can contribute to the failure of any farmer organisation. Sansungame in Minneriya under ISMP could be sighted as a good example.

In Sansumgama, there had been a number of discrepancies in money transactions. This can be mainly due to the lack of training to the officials of the DCO. The following examples could be quoted to substantiate this fact.

(i) A cheque for Rs. 5029 was returned due to non availability of funds.
(ii) Shortage in stock of fertiliser worth Rs.8,560/-
(iii) Non accountability of an agro chemical stock worth 7,406/-
(iv) The maintenance allocation not accounted to DCO fund.

These audit queries have not been satisfactorily answered.

Consultants found that the membership has lost confidence in the office bearers of the DCO.

1.2.3 Maintenance of Channels

In 1991/92 maha season, Sansungama DCO was able to organise Shramadana work for the maintenance of the canal system coming within its jurisdiction. In lieu of the maintenance work done, they received Rs.5,000/- . In addition the DCO was awarded a number of contracts to do some repairs to the canal net work, The quality of work done on contract was not satisfactory according to the majority of farmers interviewed.

80% farmers were of the opinion that the contracts, awarded to DCO were subsequently given over to a third party on sub-contract basis. Most of these sub contractors are government officials, whose work has been rated as of poor quality by the farmers.

The maintenance of Field channels are done by the farmers, only at the beginning of the season.

The DCO elected officials were unable to get the majority of farmers to participate in quality maintenance work.

This attitude of farmers in their failure to maintain the channel system properly is a key factor that the DCO was unsuccessful.

It is suggested that more awareness programmes and field demonstrations essential to make the farmers knowledgeable, be conducted so that they will be aware that optimum benefits from an irrigation system could be realised only if the channels are well maintained through out the irrigation delivery period.

1.2.4 Water distribution

During the Maha 1991/92, the tail enders had experienced an inadequate water supply to their paddy fields. 60% of the farmers expressed dissatisfaction over the issue of water and the majority of the farmers did not appreciate the work done by the farmer representatives in water distribution, even though this question of water shortages to the tail enders were discussed at the DCO committee meetings. The decisions taken at these meetings have not been properly and effectively implemented.

The following problems were raised by the farmers.

(i) Irrigation authorities had ignored the decision taken at the DCO meetings regarding water issues.

(ii) There had not been a proper dialogue between the farmer representatives and government officials.

(iii) Low yield due to inadequate water supply to the tail enders.

(iv) Inability to rehabilitate the existing control structures and provide additional structures for smooth water distribution with equity of water to tail enders as well.

1.2.5 Conflict Resolution:

60% farmers, view that the ability of the DCO in conflict resolution was very weak. They also blame the irrigation agencies for not attending to the irrigation defects in the irrigation system such as:

(i) Defective structures
(ii) Shortages of water to D.C.O areas.
(iii) Farmers not complying to the decisions taken by the D.C.O.

1.2.6 Fund raising activities

90% farmers interviewed mentioned, membership fee was collected as a measure of raising funds. The DCO was able to sell fertiliser at a reasonable price which was less than market price, worth Rs.30,000/- and agro chemical worth Rs.70,000/- in Maha 1991/92.

This attempt however did not solve the requirement of fertiliser and agro chemicals on time and in sufficient quantities.

Majority of farmers view, that inspite of the numerous requests made to the FRR, the DCO was unable to supply fertiliser and agro chemicals on time. This resulted in farmers losing confidence in the DCO.

1.2.7 The farmers view of the efficiency of elected officials

80% farmers said that the president was the most devoted person working for the D.C.O. However the president's efforts were not properly utilised by the community. The DCO was not able to build the social cohesiveness of the community. This led to conflicts in water distribution where tail end cultivators were not provided with sufficient water. Inabilities of this nature ultimately made the DCO functions ineffective.

1.2.8 Legal framework

The DCO had taken prompt action against the farmers who did not follow the decisions arrived at the meetings. But these efforts were not successful. The officials said that lack of a legal frame work to deal with defaulters was a major draw back for the successful performance of the DCO.

The FRR were not able to convince the farmers of their duties in water management and maintenance of the system.

1.2.9 Credit Facilities

No efforts had been taken by the D.C.O to provide credit facilities, through the banks. Most of the successful DCOs have made arrangements with the Bank of Ceylon, and Peoples Bank or Rural Banks to obtain credit for their membership. In Huruluwewa Scheme most of the farmers are defaulters who did not repay their agricultural loans. However, DCO have stood as guarantors to obtain loans for their members. This individual credit scheme have proved successful as the repayment has been almost 100%.

1.2.10 Marketing of other Field Crops (OFC)

Efforts were made by the Project Management Committee and other line agencies viz Department of Agriculture and Agrarian Services Dept. to grow OFC in Yala season. DCO was not able to organise training programmes for the farmers on OFC. The marketing facilities made available for the sale of OFC was inadequate. Farmers had to dispose their produce at very low prices. Private traders had monopolised the purchase of OFC at the farm gate level and farmers were not able to get a reasonable price.

The farmers had repeatedly encountered the same problem in selling their produces at reasonable prices, since government establishments had not assisted the farmers to maintain a ceiling price for OFCs.

1.3 Selection of most successful and least successful farmer organisations in Parakrama Samudraya System - PSS

After discussions with the Project manager, IDOO, I.OO, DCO officials and farmers, and perusal of office records maintained at the Project Manager's office and by DCO officials, the following FOO were selected for further study, as the 5 most successful and 5 least successful FOO.

Successful FOO	Least successful FOO
Mahasen	Lakse uyana
Pulasthigama	Kalahagalla
Somapura Abhayapura	Damane Gemunupura
Manikkampattiya	Sungawila
Thalpotha	Singhapura

Extensive discussions were held with the project manager of PSS, institutional development officers, institutional organisers, DCO officials, farmer representatives, and farmers. The consultants visited the areas covered by the respective FO's before final selection was made for the study. The consultants met the farmer representatives and farmers in their fields. With careful examination of the information collected, Mahasen FO was selected as one of the most successful FOO and Damana Gemunupura as one of the least successful FOO in PSS, for the detail study.

1.3.1 Indicators for the selections to substantiate the findings were categorised as follows:

Attendance at meetings
Organising maintenance work
Utilisation of Government Funds
Shramadane works
Effectiveness in water distribution
Development in farmer/officer relationship
Ability to solve farmer conflicts
Active participation in agricultural programme
Financial progress and accounting
Ability to organise Inputs
Ability to handle contract work for optimum benefits
Interaction with other organisations
Development of social and cultural affairs
Income generating and fund raising activities

1.3.2 Mahasen DCO - Successful FO in PSS

Background

Mahasen DCO area is located in a remote area near the eastern border of PSS and had been receiving less attention from the state sector during pre project period due to its location and subsequently due to terrorist activities. The IMD continued with its farmer organisation activities utilising its available resources. Elected farmer representatives in place of the FRR who resigned due to personal difficulties, were observed to be in control of the development activities, inspite of the inadequate support from the state sector.

Data on the DCO:

Number of farmer families	113	
Number of members	194	
Paddy extent in acres	565	
Average attendance -		
general meetings	150	(60%-80%)
executive committee meetings	09	(90%)

1.3.3 Meetings

The DCO was holding meetings on monthly basis. Attendance of 90% FRR, and 60 to 80% of farmers for general meetings were reflected on records. The farmers said that the attendance by line agency officials, were encouraging.

The participation of IO and IDO were adequate and the Work Supervisor (WS) attended DCO meetings with the irrigators. Farmers felt that the participation of TA, and AI was not adequate and that it was very essential.

Since 1991, 18 executive committee meetings were held to organise the DCO activities in the area and the farmer representatives were able to communicate with the farmer members and implement common needs such as,

Organising group work on

- water distribution
- channel maintenance and repair works
- supply of inputs
- and conflict resolving. These were the main topics discussed at the meeting. The members were satisfied with the attitude of the line agency officials, since they have contributed possible assistance to the DCO activities. However, more active participation by members is expected by the DCO officials to show improved progress.

1.3.4 Decision Making ability of DCO

From the minutes of the meetings it was observed that the FRR were able to identify the common needs that has to be attended to for the efficient functioning of the DCO.

The following decisions were taken on their own initiative as a result of guidance and awareness programmes implemented by the IMD, through the Project Management Committee

(i) constitution to suit the community.
(ii) Collecting membership fee to maintain a fund.
(iii) Employ an irrigator for water distribution.
(iv) Supply of fertiliser inputs.
(v) Undertaking contract work.

1.3.5 Maintenance of Channels

The D channel had been turned over to Farmer Organisation in 1991 for O&M, and taken over by the DCO. As per decisions taken at the Kanna meeting a maintenance programme was launched before the commencement of water issues, weeding, desilting, filling scours on channel bunds, arresting leaks at structures were the main items undertaken. A subsequent maintenance programme, mainly for weeding, desilting & removal of debris was undertaken towards the end of maha rainy season. Consultants observed that the channels were partially over-grown but the channel bunds and profiles seemed to be in good condition.

The awareness programmes arranged by the Department of Irrigation and the project manager had been instrumental in getting the farmers to do maintenance on Sramadana.

1.3.6 Water Distribution

Under normal irrigation the standing crop, in the command area of the DCO gets 4 days continuous water issue from the D channel. The DCO officials assisted by the irrigator does water distribution., They had effected a rotation for turnouts in D channels but continuous deliveries were made in the field channels.

However, more water could be saved if rotations are practiced within field channels from tail end towards headend, and frequent checks be made to stop illegal tapping of water.

The yields obtained from the paddy allotments located in headend and tailend of channels, as per records were 100 & 80 bu/ac. respectively, the yield differences could be rectified with the implementation of effective water rotation.

1.3.7 Selection of Officials

Opportunities were made available to elect their representatives at the general meetings. In place of members who resigned due to personnel problems new officials were elected by consensus.

The President, secretary and treasurer and FRR were elected. The elected officials are below 50 years of age and have actively participated in community development works. The majority of DCO members have attained primary to secondary levels of education.

Majority of farmers view that the farmer representatives do their duties very efficiently. In the opinion of farmers the DCO officials devote more than three days per week on DCO activities.

The IMD officials, PM, IDO & IOO view that the youths presently elected to hold responsibilities are more capable and efficient to carry out the activities of the DCO.

1.3.8 Conflict Resolution

The DCO officials view that they are not strong enough to take decisions to pursue action against the membership but minor conflicts are settled with the assistance of the IO & IDO and the project manager. However they were able to impose fines on farmers who failed to attend to channel clearing and maintenance.

A decision was taken by the DCO on 24/2/91 to impose a fine of 100/- in respect of 5 farmers who failed in their duties on maintenance. The money was later spent to do the clearing and maintenance of the area affected.

The participation in channel maintenance was satisfactory.

With the registration of the DCO under section 56A & 56B of Agrarian Services Act, legal recognition and eligibility to receive bank loans through the DCO was possible.

However, the strengthening of the DCO to solve conflicts and pursue preventive measures has to be considered as vital and encourage the DCO officials to provide sufficient awareness to the community. The services of the DO agrarian services will be essential and be very helpful.

1.3.9 Input Supply

As per decisions taken at the DCO meeting fertiliser was supplied to the membership during 91/92 maha season. The assessed value of fertiliser supplied was Rs.80,250/-. The DCO was able to make a profit of Rs.7000/-. However, no attempt was made to supply seed paddy or agro chemicals.

It was observed that the need to supply inputs was a prime objective of farmers.

Objectives of the DCO to Raise more funds

i. To continue its efforts in increasing shares to membership
ii. To implement marketing of produces
iii. To provide loan facilities to membership on interest
iv. Undertake contract work

Factors affecting in meeting there needs

i. Shortage of DCO funds.
ii. Inadequate knowledge and awareness in marketing strategies.

It was observed that the DCO officials were capable in handling their works and a gradual building up of their skills could be achieved by providing necessary guidance. Monitoring and evaluation will help improve productivity and thus help in raising the living conditions of the community.

1.3.10 Contract

With a view to keeping the channel system in an efficiently functioning condition, the executive committee had decided to handle the maintenance and repair works through their DCO. The work was done to the satisfaction of the membership and the ID officials.

During 91/92 maha season, earthwork in strengthening of channel bunds and provision of wooden planks for regulators were undertaken by the DCO, utilising a sum of Rs.14,000/-. The work had been successfully completed.

In 1992, D-channel maintenance work was satisfactorily carried out on a contract signed with the ID, for a sum of Rs.6,000/-.

As per a decision taken by the DCO, an irrigator was appointed from among the membership on a monthly salary of Rs. 2000/- for the period of water issue. This was a successful attempt, as the irrigator was able to interact with the ID officials, and effected water deliveries satisfactorily.

1.3.11 Fund Raising Activities

The DCO had taken a decision to collect 10/- as membership fee and Rs.250 for a season to raise the DCO fund.
The bank balance was Rs. 30,000/= in the DCO account.
The total assessed value of DCO holdings was Rs.40,542/-.

The DCO had progressed successfully in its activities launched to raise funds for the DCO.

1.3.12 Institutional Credit

It was observed that farmers are unable to meet the cost of production of crops due to non-availability of credit. Majority of farmers are not eligible for institutional credit, as they have failed to settle previous loans. Due to their low financial position, the DCO was not able to provide credit facilities to the membership.

1.3.13 Political Threats

Up to now the DCO was able to prevent political interferences in their activities. A defaulter who illegally cut open a channel bund during a water issue, sort assistance from a local politician. But, the swift action taken by the DCO solved the problem. The police intervened and the politician had to abide by the decision taken by the DCO.

It is observed that participation in DCO activities by government officers in ID, DAS, Agriculture and LCD were not very effective. IMD involvement through Project Manager, IDO and IOs is working well under the INMAS programme.

OFC cultivation has to be promoted as in Huruluwewa Scheme during the Yala season where the supply of water from the tank is doubtful. The government agencies, including the Department of Agriculture, Agrarian Services and Land Commissioners Department with Irrigation Department must work with the project manager as a team to achieve these objectives.

1.4 Least Successful Farmer Organisation Damana Gemunupura

Number of farmer families	:	110
Number of farmer members	:	20
Paddy cultivated area	:	600 acs.
Number of farmer reps.	:	10
Number of D canals	:	01
Number of F canals	:	07
Registered in IMD & ID to undertake contract works	:	1991
Distributory canals taken over by the DCO	:	1991

1.4.1 Background of the settlers:

The settlers have come to this area from Kotmale at the inception in 1950. Farmers did not experience shortages of water when they first settled in the scheme. Hence, they were able to do successful paddy cultivation. The main crop grown during that period was paddy. As settlers in the PSS did not encounter frequent water shortage problems, the necessity to organise themselves for water management never arose. Yet the tail end farmers in Damana-Gemunupura area had faced problems in the dates approved for deliveries and adequacy of water. The pre project maintenance and water distribution was done under the guidance of vel vidanes and ID. By early 80 s the 40 year old system was in need of Rehabilitation. Most of the canals, bunds and structures were not fully functioning to achieve maximum benefits from the scheme.

1.4.2 Rehabilitation process:

Irrigation System Management Project (ISMP) with assistance of USAID was launched in 1986. ISMP programme envisaged to rehabilitate areas selected on priority basis from four schemes in Polonnaruwa district, namely PSS, Kaudulla, Minneriya and Giritale. It was revealed that Damana-Gemunupura, was selected as a pilot area to implement the rehabilitation programme in 1986. The identification of necessary repairs and improvements were not fully identified in this area. The construction was undertaken by private contractors. Labour requirement was met from outside.

1.4.3 Institutional Development

An Institutional Organiser was appointed to cover the DCO. Farmer Representatives were elected for the seven field channels, FO was formed, the president, secretary, and treasurer elected from among the farmers. The IO was able to work only for seven months.

The DCO chairman is a well experienced farmer who had held similar positions in other societies in the DCO area. Special mention has to be made about his untiring work done for the peace committee where he held the position of the president. He has necessary leadership qualities to guide and direct the farmers who would abide by the decisions taken at the DCO meetings.

In this instance he was unable to get the majority of the farmers to participate in group activities initially. He however, was able to get the co-operation of the farmer membership especially for the maintenance of the system through the intervention of the police officers. This was not voluntary. This is one of the causes for failure of the DCO. The defaulters in the DCO area who did not participate in the group work could not be dealt with as decided by the committee. The participation in group activities since then declined. The farmers did not depend on the DCO officials for proper water distribution.

1.4.4 Maintenance

The distribution net work was not satisfactorily maintained by the DCO. However, the farmers interviewed mentioned that all the channels are cleared prior to a Cultivation season.

1.4.5 Water Distribution

The turn out gates are operated by the irrigators appointed by the ID. The issue dates are decided by the Project Committee. The tail end farmers have experienced water shortages during critical growth period of paddy. The DCO was unable to remedy the situation.

1.4.6 Leadership of FRs

Majority of farmers expressed the view that the president, secretary and the treasurer worked with devotion and commitment to the well being of the farmer community.

The farmers who were interviewed, were of the opinion that farmer representatives except the office bearers were ignorant of the duties that they are expected to perform.

1.4.7 Support Services

Damana-Gemunupura was selected as the pilot area for the rehabilitation programme under ISMP. The farmers were not involved in the rehabilitation work at the very beginning. They did not take part in planning, selection, design, construction nor in the prioritisation of rehabilitation work.

Out side contractors were offered the rehabilitation work. Majority of the farmers felt that their irrigation problems were not sufficiently carried out to facilitate irrigation water distribution.

The farmer participation at meetings and Sramadana was poor. At present the support from the Agrarian Services Department was minimal, even though the Divisional Officer of the department was a willing worker. This was mainly due to logistic and administrative difficulties this officer had to face.

1.4.8 Input Supply

Unlike in the case of most of the successful farmer organisations in this study who organised the distribution of fertiliser and agro-chemicals during the last two cultivation seasons, Damana Gemunupura in PSS was unable to make such arrangements with the relevant officials to provide fertiliser and agro-chemicals at a reasonable price to the farmers. This lapse may also have discouraged the farmers to lose interest in the DCO activities.

1.4.9 Fund Raising Activities

Since the formation of the DCO in 1989, membership fees were collected from the farmers. A sum of Rs.19,042/- was collected and deposited in the DCO account. However, the DCO was not able to motivate the farmers to implement any fund raising activity. Though attempts were made to collect shares, the farmers interest could not be gained.

1.4.10 Interaction with government officials

80% farmers view that they are not getting sufficient attention by the govt. officials. Other than the IMD officials, other agencies have still not built up a satisfactory rapport with farmers. At the D.C.O. meetings they had tried to continue the dialogue with the DO, but due to administrative problems, efforts were not successful. As the area of extension services grew wider and with the discontinuation of KVSs agricultural extension services were not adequately available to the farmers.

1.4.11 Threats

Lack of Managerial Capabilities

The elected officials of the DCO are from among the low income group and their educational levels are not very high. The office bearers of the DCO are at times not acceptable to more educated and affluent farmers. It was observed that majority of these officials do not possess managerial capabilities to manage the DCO as a viable farmer group. This can be another reason attributed to the failure of the DCO.

Political Affiliations:

The farmers in this area professed divergent political views and were divided. Unity among community members seriously was disturbed by the division of the Community into political groups. Over the last two decades the social cohesiveness of the community members were also gradually diminishing. During JVP activities this area was considered to be the most affected in the PSS system. The DCO leaders had also resigned from their responsibilities.

Annex 2

2. Development of Farmer Organisations in (MIRP) Schemes

2.1 Farmer Organisations in Huruluwewa Scheme: (MIRP)

2.1.2 Farmer Organisations Established:

Name of DCO	Extent paddy cult. (in ha.)	No.of farmers	Member ship	Fund allo-cation (1990)	contracts awarded 1992
Meegahapattiya	240	124	124	21512	7027
Maradankalla	236	128	128	10752	0
LB Tract 5	349	199	199	21062	4665
LB Tract 6	218	284	284	21161	1100
Padikaramaduwa (Gamunu)	188	206	206	2300	0
Padikaramaduwa (Mahasen)	225	101	101	18620	6620
Gatelawa	490	463	463	26400	5200
Kokawewa	502	292	292	17354	0
Dutuwewa	256	141	141	40187	22835
Kiulekada Uhathgama Janasirigama	267	209	209	6890	0

2.1.3 Selection of Successful and Least successful FOO

Extensive discussions were held with project manager, IDO, I.OO, DCO officials, farmers, I.E. T.AA, in Huruluwewa system. The consultants carefully examined the records kept at the office of the MIRP Director, at IMD Director's office. project manager's office, I.E's office and records maintained by the farmer organisations as regards to minutes of meetings and financial records, in arriving at the selection of five most successful and five least successful F.OO.

The following DCOO were chosen for the study.

Successful FOO	Least Successful FOO
Meegahapattiya	Padikaramaduwa Gemunu
LB Tract 5	Kiulekada
Kokawewa	Janasirigama
Getalawa	Unathgama
Dutuwewa	Maradankalla

Field visits were organised to meet farmer leaders and farmers in their fields with physical observation to channel system in the DCO areas and group discussions with farmers, the Meegahapattiya, and Padikaramaduwa DCOO were selected as the most successful and the least successful farmer organisations in Huruluwewa Scheme for the detail study.

2.1.4 Most successful farmer organisation in Huruluwewa scheme:

Meegahapattiya DCO

Meegahapattiya DCO is located at the upper reaches of LB main channel, bounded by the Huruluwewa Head works, Kaha oya and the L.B. main channel. This area is about 6 miles from the project manager's and Irrigation Engineer's offices.

2.1.5 Background of settlers in Meegahapattiya area:

The villagers whose ancestral lands inundated with the restoration of Huruluwewa were settled in this area. Only five families were brought from Anuradhapura district. An Agricultural Productivity Committee (APC) and a co-operative society were made available to the community and they were able to form a death donation society. An Agriculture Instructor who served in this area in early 80's had launched several programmes to improve paddy cultivation in the area. He also assisted the project manager appointed by the IMD in organising farmers in participatory management works. The farmers felt water deficits in early 80's, when illicit water

tappings from Huruluwewa feeder canal increased. In 1986 more than 75% of the maha paddy cultivation was abandoned due to shortage of water. Though a project manager was appointed by the ID, the farmer participation in the scheme activities was not realised effectively. The govi samithi functioning in the area was able to maintain the field channels, effect water distribution, and settle farmer conflicts, to a certain extent.

2.1.6 Implementation and development of successful FO:

The FO was initiated by the IMD with the commencement of Rehabilitation construction works. Farmers whose participation was not considered in rehabilitation works extended their cooperation in the formation of farmer organisations. The AI assisted the Institutional Development Officer in holding meetings. At the preliminary meetings, the farmers were kept aware of the benefits that could realise if they participate in scheme activities.

Data on Meegahapattiya DCO:

Number of farm families - 124
Number of farmer members - 124
Paddy extent in acs. - 240
Reservation cultivated in acs. - nil
Attendance at meetings, for the period 1991-1992
General meetings - 90
Executive com. meetings - 12
Registered in DAS, and ID to undertake contracts.
Taken over the maintenance of Distributory channels in 1991.

- The DCO registered under the section 56A & 56B of Agrarian Services Act
- Realising their eligibility to receive bank loans undertake contracts, legal recognition

2.1.7 Selection of office bearers

During 1986 Meegahapattiya and Maradankalla FO areas, were functioning together and the farmers elected their office bearers to represent both the D.Channel areas. Subsequently, the Meegahapattiya D.Chl group separated out due to poor attendance of farmer leaders of Maradankalla. Remoteness, and conflicts in water distribution had been the factors that led to the separation. The farmers were able to elect eligible community members as their farmer leaders. Annually opportunities were made available to the farmers to change the representatives.

2.1.8 Objectives at the time of implementation

In discussing with the project manager and farmer representatives the Objectives of the FO at the time of formation were revealed as follows:

i. planning and executing field channel maintenance works,
ii. making water deliveries effectively,
lll. selection and cultivation of crops in the area,
iv. to interact with government departments.
v. conflict resolving.
vi. agricultural planning,
vii. credit and loan facilities to members,
viii. supply of input materials,
ix. raising FO fund,and promoting income generating activities,
x. improving paddy yields,
xi. realising political neutrality,

Initially the govt. departments were reluctant to have farmers intervene in their works. As a result of FO development, started by the IMD, a change of attitude of state officials was observed. The I.E. who came incharge of the scheme resorted to share farmers views in identifying irrigation difficulties and shortcomings in water deliveries. The farmers were able to undertake construction works in the FO area on contract basis.

2.1.9 Communication with farmers

Monthly meetings held continuously since 1991,with over 75% attendance by farmer members and over 95% attendance by FRR. The main topics discussed were on maintenance, contract works, irrigation difficulties, remedies for farmer disputes, agricultural planning. The minutes of the meetings submitted to the project manager were observed to be satisfactory. Improvement in the attendance by the government officers clearly observed. I.E. had attended with his field officers, with a positive attitude in looking into pressing irrigation difficulties and remedying those with farmer participation. The I.OO were monitoring the activities and the project manager furnishing necessary guidance.

2.1.10 Training

The farmer leaders were given training on,
organising farmers,
interaction with government officials,
holding of meetings, keeping minutes, & submission,
keeping financial records,
The farmers participated in field demonstrations on OFC cultivations,
maintenance activities,
water distribution under rotation,
bee keeping etc.
The attempts by the project manager had been successful. However further improvement to be made in maintaining financial records.

2.1.11 Maintenance of channels by the DCO

It was observed that the field channels were maintained by the farmers. The channels were in good physical condition free from weeds and silt, even though there was no cultivation underway at the time of the study, the distributory channels were maintained satisfactorily by the Farmer Organisation utilising the maintenance allocations provided by the ID. The field channels were maintained through shramadana works with farmer participation. At the initial stage the farmers contributed the labour component, while fund allocations were used in executing the repair works on structures.

2.1.12 Water Distribution

The FRR of the DCO were able to distribute the irrigation water supplied to the area. The farmers interviewed share the view that water distribution was effectively made. As decided at the DCO meeting irrigation water is provided to the area for 4 days continuously, and rotations effected in turnouts in the D channel. However, rotations not effected within field channels unless during a crisis situation. The project manager and the Irrigation Engineer consulted during the study were satisfied with the performances by the DCO in water distribution.

2.1.13 DCO Funds

The DCO was able to raise their funds by collecting a membership fee of Rs. 10/=, and sale of a share at Rs.100/=.
Improvement shown in the collection of membership,are as follows:

year	membership	profit from contracts	interest from loans
1987	523/=	-	-
1988	158/=	-	-
1989	Nil	-	-
1990	8250/=	-	1100/=
1991	2625/=	5000/=	1500/=

At the time of the study there was a sum of Rs 30,000/= in the DCO fund. Profits from contracts undertaken, interests on loans provided to members and other DCOO, were the items that contributed to the DCO fund.

2.1.14 Contract work undertaken by the FO:

Year of Work done	Estimated Expenditure	mode of exec.
1991 const: of struct. in FC-2.	126857/=	labour component by farmers

In the execution of the work 3% of the commission was paid to FRR as incentive and 5% was credited to the FO account.

1991 culverts & retaining walls in DC 2	77972/=

farmers undertook contracts and 5% credited to the bank account.

1991 D.ch1 maintenance	21000/=

The contract work completed by the DCO were observed to be in a satisfactory condition. Quality of work observed to be satisfactory. The incentive given to the FRR can be considered as a factor that contributed to the successful attempts made by DCO in undertaking these works.

2.1.15 Credit facilities:

A decision was taken to provide cultivation loans to farmer members, upto Rs.10000/=, with an item of value to be kept as security, and 10% interest accrued to the FO. A loan of Rs. 5000/= on 10% interest granted to an adjoining society to assist them to undertake channel repair works on contract.

This loan scheme was to the satisfaction of the farmers within the community and outside farmers as well, but the lack of sufficient funds has had its limitations. This factor of providing loans to the farmers could be considered as a successful attempt by the Meegahapattiya DCO, which won the confidence of the officials and of other DCO officials as well.

2.1.16 Maintaining financial records:

During the study careful examination was made on the financial records kept by the DCO. It was observed that financial records were kept satisfactorily up to the end 1991, and copies of the statements sent to the project managers office. The treasurer was keeping all the vouchers, receipts, etc. but observed to be meeting difficulties in maintaining the ledgers. In April 1992 a new treasurer was elected and at the time of the study; was making an effort to keep the accounts in order. The DCO was getting the assistance of a retired accounting officer for this purpose on a hired basis. However financial records were not submitted to the membership for a considerable period and the farmers were frequently pressing the officials to submit the accounts for their perusal. Timely action to be taken to provide the officials with more knowledge in keeping accounts and submit the accounts to the community to gain their confidence. This factor is considered very essential for the DCO to function effectively.

2.1.17 Supply of Inputs:

Attempts were made by the DCO to assist the farmers in the supply of Fertiliser. Loans from DCO funds were provided to a limited number of farmer members, as the fund position was very low. Continued efforts to be made with the improvement of funds. Attempts were made to provide the seed paddy requirement in 1991, but the idea was not put into practice due to the uncertainty of augmentation of water to the reservoir. The DCO officials were reluctant to provide seed paddy as planning had to be done several months ahead of the season at a time when the reservoir had hardly any water.

2.1.18 Efforts to improve on farmer income:

1. The DCO has taken the initiative to provide lift irrigation water from the drainage waters in Kaha-oya, to 10 acres of land for OFC cultivation. However this proposal is in its preliminary stages. So far, measures have not been taken to obtain necessary funds for the lift irrigation project.

2. The fishermen who make a living by fishing in the reservoir, were included in the DCO activities. In return the fishermen will be provided with financial assistance when in need. This approach could be considered as an effort by the DCO to build social cohesiveness in the community. The need of the farmers to get their quantum of fish for consumption too will also be met by this approach.

2.1.19 Incentives provided to FRR

Though the majority of farmers consulted during the study viewed that the FRR were actively participating in the DCO works, and devoting more than 3 days a week in carrying out their responsibilities, steps had not been taken to compensate their services with any incentive by means of a quantum of paddy or cash. However, at the General meeting it was decided by the membership to provide travelling allowance to FRR on the following basis:

Attending a DCO meeting	Rs. 25/=
Travelling on duty	Rs. 50/=

2.1.20 The factors that contributed to the success could be;

a. Initiative of capable Institutional Development Officer and IOO under the guidance of the project manager on INMAS objectives.
b. The agricultural officer taking a keen interest in improving the standard of cultivation in the area,
c. The acceptance of the rural leadership, having a devoted president who has volunteered rural organisations and gained farmers confidence,
d. The unity among farmers, and ability of the FRR to interact with government sector and change their negative attitude.
e. The DCO taking an effort to provide financial assistance to farmers to buy fertiliser.
f. Ability to provide irrigation water justifiably.
g. The positive attitude of the Irrigation Engineer, in providing possible assistance.

2.2 Least Successful F.O. in Huruluwewa Scheme

2.2.1 Padikaramaduwa Gemunu DCO

The DCO area is located at the beginning of R.B. main channel. The settlers to this area have come from various parts of Anuradhapura District, from villages inundated during Restoration of Huruluwewa. Compared to the water deficiencies in other areas, the availability of water for paddy cultivation had not been a problem to the cultivators in Padikaramaduwa DCO area . There had been excessive water usages as per office records.

2.2.2 Farmers Views on MIRP Construction

The following factors were observed:

(a) No farmer participation in identifying MIRP rehabilitation works.
(b) Farmers had no active participation in construction works
(c) Farmers were not satisfied with the construction and improvement done under MIRP.
(d) Sufficient awareness was not realised among farmers in proper usage and the benefits fron the works.

Number of farm families	206
Encroachers legalized	10
Number of farmer members	216
Extent of paddy in acs.	625

Attendance at meetings for the period 1991-1992

General meetings	50
Executive committee meetings	07

The DCO registered in IMD, ID for contracts, in 1991

2.2.3 Implementation of FO works:

The Padikaramaduwa Gemunu DCO initiated by IMD patronage in 1988. The I.O. was responsible for the implementation works and organised the farmers in the area. The initial approaches were based on the INMAS objectives for organising the community to receive optimum benefits that would be rendered under the MIRP. Meetings, Training Programmes, Demonstrations have been promoted as for any other DCO areas. Yet the attitude of farmers were observed to be slacking during the process. Three IOO have been placed since 1988 up to date. It was presumed that the encouragement given at the initial stages were inadequate, compared to other DCO areas. Loss of social cohesiveness in the community caused the implementing agency officers vest their interests in other DCO areas.

2.2.4 Communication ability

The participation by farmers for DC or FC level meetings observed to be about 25% when organised by the DCO officials and about 50% when requested by the Project Manager. This factor reflects that the farmers were less satisfied with their appointed leaders and their activities. This could be due to the inability of the FRR to fulfill the needs of the membership. The farmers were able to form a separate DCO in 1990 under a president whom they thought would lead the organisation to success. Four FRR were reappointed out of 25 FRR elected in 1990. The official records show that the monthly meetings were not held regularly and attendance was about 50.

2.2.5 Training

(a) At the monthly meetings that were held intermittently the IO had made an effort in making farmers aware of their responsibilities, O & M, group work, in decision making etc.

(b) 2 FRR were trained at Maha Illuppallama on bee keeping. This project was not continued.

(c) 4 farmers trained in Soya bean cultivation. About 10 acres cultivated during 1991 Yala. Project not attractive to farmers. The farmers interest in chena cultivation in adjoining forest areas and deficit of water in the reservoir, were the factors affecting their poor performance in OFC cultivation in DCO area.

It was observed that insufficient number of programmes on training, awareness, and field demonstration were some of the factors that affected the progress in the development of FOO.

2.2.6 Financial Records

The accounting and keeping of financial records had not been to the satisfaction of farmers. The financial statements were not submitted during monthly meetings since 1991. Majority of farmers were unaware of the utility of cash collected as membership and allocations from ID for channel maintenance works. The Cash books, or statements were not prepared upto date, although the project manager has made frequent requests to submit the accounts. The majority of farmers were keen in getting information on the activities done utilising the DCO funds, and frustration was apparent due to this failure. Dissatisfaction of farmers observed to be high regarding the manner the DCO was handling its finances.

2.2.7 Maintenance Works

Farmers maintain the field channels once a season. At the time of the study the channels were overgrown as there was no Yala cultivation in progress. The constructed channels and the multitude of structures designed to suite the pilot area under MIRP were not maintained satisfactorily. The D channels were maintained by the DCO once in 6 months depending on the maintenance fund allocation and was in satisfactory condition. However, the conditions observed in the physical works in general were not satisfactory.

2.2.8 Operation

The water deliveries were made by the Department of Irrigation as per decisions taken by the Project Committee. The irrigation labourer operates D channel gates as instructed by the work supervisor, and the farmer representatives distribute water from head of the channels to the tail ends.

2.2.9 Water Management

The water consumption was observed to be excessive as the D channel is located near the LB head works. The command area of 625 acres is being adequately supplied with irrigation water for 7 days. The views of the president indicated that farmers were not interested in managing water as they have easy access to irrigation water. This could be a factor affecting the progress of the DCO. However, the tail end farmers encounter problems in receiving irrigation water during critical growth periods of paddy. The yield differences in Head and tail end of channels substantiate the information received in the usage of water.

2.2.10 Conflict Resolution

The lack of confidence by farmers in the DCO officials is due to the ineffectiveness in remedying farmer conflicts related to water distribution, and other activities. The functioning of Sama committees have managed to remedy this situation to a certain extent.

The Areas In Conflict

(a) Boundaries - The DCO was able to handle and remedy a few conflicts on boundaries in 1991.

(b) The existing distribution net work was improved under MIRP to function as a pilot area. The 3" dia. hume pipe FTOO were replaced with 9" dia. pipes and a multitude of new structure components provided to make calculated irrigation deliveries. However it was understood that these provisions were not maintained properly. These were not to the acceptance of the farmers. Several farmer conflicts have surfaced as a result of this. Unless sufficient awareness is brought to the farmers the sustainability of the physical works cannot be realised and issues or conflicts will be accumulating. This could be considered as a factor contributing to the unsuccessful performance of the DCO.

Specially in pilot areas where 3" pipes were replaced with 9" dia. HP and improved water distribution with new structural alterations were not to the liking of farmers. Hence conflicts have arisen.

The President of the DCO viewed that the DCO was able to solve about 80% of the water distribution problems - the unsolved 20% were directed to the Project Committee, but has yet to be solved. However solutions to conflicts surfaced from technical aspects can only be remedied by the intervention of the ID with training awareness and demonstration programmes. Monitoring and follow up works to be considered essential.

2.2.11 <u>Election of Farmer Representatives</u>:

Elections were held in 1990 and 15 FRR selected by the community. Subsequently 7 FRR were re-elected in place of inefficient representatives. The president of the DCO had been holding this post since 1990. The secretary resigned due to personnel problems and another was elected in 1991. However the FRR elected were unable to gain the confidence of the farmers or the government officials working in the system. The attendance at meetings were declining since 1991. The officials were unable to get members to participate at the meetings. 25%

farmer participation was realised for general meetings and 7 out of 15 FRR attended the executive committee meetings held. The participation of Government officials to the DCO meetings was not satisfactory. The involvement of farmers in chena cultivation in adjoining jungle area could be considered as a factor that kept farmers away from the area, and from community development works.

2.2.12 Input Supplies

Efforts were made by the DCO to provide inputs to the members. 45 bags (65 kg) seed paddy was supplied to the DCO members. For 1992 Maha season a fertiliser stock was made available to members and no profit was made. Since only part of the members were afforded this provision, the community had complained of favouritism. However, failure of the members to make requests in time and financial stresses have been the reasons for the short supply. Providing credit facilities to the DCO to organise input supplies to the membership was to encourage participation by farmers in the DCO activities. This can be attained only after a series of awareness programmes to farmers and training to FRR on proper utility of funds, and keeping financial records and submission of statements in time to win the confidence of farmers and government officials.

2.2.13 Fund Raising Activities

(a) Contributions from members
(b) Profits from contract works
(c) Fertiliser sales - no profit was kept.

The stores in possession of the APC was handed over to the DCO to be made use of.

2.2.14 Contract Work

The DCO was provided the opportunity to undertake the construction and maintenance of works in the channels in the DCO area on contract basis.

Year	Nature of work	Estimate	Allocation	Farmers Attendance	Remarks/work done
1991	D. Channel maintenance work	12,000	8,000	75%	Weeding, desilting, minor repairs to structures. Lubrication works: done Satisfactorily. No profit to D.C.O.
	Construction of retaining walls.	12,000	12,000	D.C.O	Profit 7,000/ due to farmer participation.

It was observed that the DCO's attitude in undertaking contract work involving farmers had changed in 1991. The subsequent approaches had resulted in losing the farmers confidence.

Value of DCO assets to date is about 22,000/-

2.2.15 Credit Facilities

Efforts had not been taken by the DCO to provide credit or Loan facilities to the membership. This could be one reason for the community to lose confidence in the DCO's for failing to assist them with credit.

2.2.16 Action on Defaulters

The DCO was unable to get majority of farmers to participate on O & M and has not tried to impose punishment to defaulters.

This vital factor of inability to mobilise the majority of farmers to comply with decisions taken by DCO had been a reflection of the poor organisational capacity of the DCO. There were no valid legal frame to support the DCOO to deal with defaulters.

The DCO president was the organiser of the party that is in power. Since the community members share different political views this could be one of the factors that was affecting the progress. It was the general opinion that since the president was a businessman in the area, that farmers were under obligation. Yet the farmers had not taken measures to remove him from the leadership.

Annex 3

3.0 Development of Farmer Organisations in Mahaweli System B

The consultants after having extensive discussions with Mahaweli Agency officials, the Block Managers, Unit managers, Community Development Officers and ICOs, FRR, and farmers, were able to gather information on the implementation procedure of Farmer organisations in the area.

In 1984 Nation Builders, a non governmental Organisation with the assistance of Mahaweli Authority took the initiative to organise farmers.

The FO areas were not located within Hydrological boundaries, but within the jurisdiction of the unit manager. This programme was continued for nearly 3 years. The farmer groups were named as Praja Sanwardena Samithi (Community Development Societies) and subsequently by Cultural Societies and, Health and Welfare Societies. The objectives of these groups varied from time to time. All the settlers living within the societies were made to join as members and the membership was about 200.

Rural leadership surfaced as a result of continuing interaction with agency and NGO personnel. The farmer groups were renamed as Govi Sanwardena Samithi (Farmer Development Societies).

The Unit Manager acted as a catalyst in organising farmers. The farmers groups were organised at Unit level.

In 1987 Mahaweli Agricultural and Rural Development Project (MARD) started functioning within the system B.

Though the objectives of the organisations were similar to INMAS objectives, the groups were mainly guided on
(a) Proper channel maintenance and group work
(b) Water Distribution
(c) Conflict Resolution

The progress and development of Unit level farmer organisations were slow and inefficient since the concept was new to the farmers.

The consultants after having discussions with agency officials, knowledgeable persons, with FRR and farmers, selected the following unit level organisations as most successful and least successful organisations in System B.

Most Successful	**Least Successful**
1. Damminna (Arunapura)	1. Mahasen in Damminna
2. Kalukele	2. Pahala Ellewewa
3. Mahindagama	3. Dimbulagala Dalukana
4. Wijayapura (Galtalawa)	4. Sevanapitiya (Senapura)
5. Wijayapura (in Pimburettewa)	5. Wijayapura in Yaya B

After careful examination of office records and discussions with farmer groups and agency officials the Kalukele, and Pahala Ellewewa, in Ellewewa Block Managers area were selected as the most successful and least successful Farmer organisations respectively.

3.1.1 The Most successful farmer organisation (Kalukele):

Number of farm families	- 293
Number of Farmer Members	- 240
Extent of Paddy cultivated in acs	- 723
Number of D channels	- 2
Number of F.channels	- 26
Number of FRR	- 26

The FO is registered in RPM's office System B, to undertake contract.

3.1.2 Background of the Settlers:

Majority of the farmers have come from Haragama area in Hanguranketa in 1983. 10 families came from Matale in 1990.

The first meeting of the farmers was held on 6/04/1990 with the participation of 147 farmers (50% attendance). The block manager, unit manager, agricultural officer and marketing field officer represented the agency.

The agency officials explained to the farmers, the benefits of a farmer organisation. The subjects of discussion were centered on water distribution, maintenance, conflict resolution, OFC cultivation and marketing. The farmers elected 26 Farmer Representatives, and officials to the unit level Farmer Organisation.

At this meeting the Farmer Representatives insisted in identifying repairs that had to be attended to on a priority basis. The minutes of this meeting indicated that the farmers had gained the confidence to interact with agency officials to meet their needs. The issues were initiated by the farmers and the response by the agency officials were encouraging. The farmers decided to undertake maintenance of channels as group work and utilise the funds allocated to build up the FO fund.

At the meeting held on 14/12/1990 the following decisions were taken by the FO.

(a) to construct three houses for needy farmers
(b) To improve the roads by Shramadana
(c) To maintain the channel system.

According to the minutes of the Executive Committee Meetings held during 1990-1991 the the following items were discussed.

- Farmers suggestion - the IE to identify the irrigation difficulties
- FRR decisions on social works, alms giving.
- Marketing facilities for sale of produce.
- On agricultural planning
- House construction programmes.
- Sramadana work

At the meeting held on 4.4.91. It was revealed that Sramadana work had been done to the value of Rs.120,000/=.

In view of the successful yala OFC cultivation, the FRR discussed inputs arrangements and extension services.

The BM, UM, IE briefed the farmers on proper channel maintenance. Selection of Channels on priority basis was done.

The farmers Shramadana labour contribution on the Mahaweli week assessed to be worth Rs. 13,000/-.

The minutes of the general meetings and executive committee meetings were kept in order and were made available during the study.

The minutes of the meetings reflects that the FRR were elected unanimously. Annual general meetings were held to elect office bearers and the farmer representatives.

3.1.3 Maintenance

A satisfactory condition of maintenance of the channel system was observed by the consultants during the visits. The information furnished by the farmers and officials indicate that due consideration was given by the FO to maintain the channels at a satisfactory level. The farmers successfully maintain the channel system by group work, undertaking two maintenance programmes during one cultivation season.

The agency had assisted the DCO on prioritising the work.

The satisfactory level of maintenance of channels which resulted in justifiable delivery of water, could be considered as a successful effort made by the DCO.

3.1.4 Water Distribution

Water issues to the D canals and Field canals were satisfactory. The distributory channel gates were operated by the agency employee but the turnouts were controlled by the DCO. Majority of farmers viewed that the distributions made under rotations were only within the D channel and rotations not effected within field channels. However, the farmers were satisfied with the water distribution made by the DCO.

3.1.5 OFC Cultivation:

Majority of farmers and representatives interviewed expressed that they have been given adequate training on OFC cultivation.

The agency officials had taken great pains to assist the DCO in training and the supply of inputs and agricultural implements. DCO was able to arrange credit facilities with the banks. B.onions, Soya cultivation and variety of grams were successfully cultivated. For the 1992 Yala cultivation, MARD in collaboration with a private firm TESK introduced cantaloupe melon cultivation.

The big onion production in yala 1992 was very successful. It was observed that quality onions to specified weights (exceeding 350 grams per onion) were produced, farmers however were not able to get a reasonable price for the produce due to over production of onions island wide. This aspect should be studied, since it can frustrate OFC cultivators.

In Kalukele, the cultivation of Soya in Yala 1992 was a great success. DCO with the assistance of the Mahaweli Officials, made arrangements to sell the produce to the Health Department.

This attitude of the Kalukele Farmer organisation was a step taken in the right direction and adds to its success story.

Abstract of the membership Register to date 14.10.92

Income from the membership of 210 § 10/-	
enroll fee	210.00
Collection for the season § 60/=	5,520.00
55 members of 500/= share	29,500.00
1 member of 250/= share	250.00
Rs.	35,480.00

3.1.6 Accounting and Book-keeping

The treasurer has kept the accounts of the DCO up to date. The president and the treasurer make it a point to present the financial statements regularly of the transactions made by the DCO. This has helped the executive committee to win the confidence of the General Membership.

The consultants were able to examine the registers maintained by the DCO on

a. The membership collections
b. The accounts of shares collected
c. The income and expenditure on the two wheel tractor provided by the Mard.

The annual budget statements were available for reference and found to be in order. The records were maintained satisfactorily. This attitude by the DCO to keep financial records in order was considered to be a contributory factor for its success.

However improvements could be effected in maintaining financial records in accordance with a suitable accounting system, provided sufficient guidance is given by the agency.

3.1.7 Input supply:

The DCO was successful in undertaking the supply of inputs to the farmer members. Encouraging results were gained over the two experiences in the supply of fertiliser during 1991 maha for paddy cultivation and 1992 yala in the cultivation of OFC. Seed paddy producers could be provided additional support with extension services to grow quality seed paddy.

Action taken by the DCO to provide credit and loan facilities was an encouraging factor.

3.1.8 Credit Facilities

102 farmers were given Rs.5,883/- each to grow cantaloupe in 1/4 acre area per farmer. Farmers were able to earn about 40,000/= per head from cantaloupe sales. The crop was purchased by Tesk, for export market and local markets.

The DCO assisted farmers in transporting, weighing and disposing the stocks.

The DCO earned Rs.1/- per kilo of Cantaloupe.
Total production supplied through the DCO was 12,000 kgs.

The farmers were able to sell no. 1 quality for 16/- a kg.
no.2 quality for Rs.1/- a kg.

The total income of the farmers within the DCO could be estimated to be around Rs.4 million.

This successful venture where DCO was directly involved earned a good income as well as good reputation for their hard work and dedication towards the well being of the farming community.

DCO made arrangement with the Bank of Ceylon for cultivation loans up to Rs.50,000 at 9% interest in maha 1991/92. 52 farmers were benefited from this schemes.

The farmer members are to settle these loans, at the end of the season.

The total revenue to DCO fund is 4,728.00

Loans Provided for 92 yala cultivation.

32 members § 1027/-	32,716.00
10 members § 1540/-	15,400.00
1 member § 804/-	800.00
1 member § 500/-	500.00
	Rs.49,416.00

an interest of 9910/60 expected from the loan scheme.

3.1.9 Supply of Agricultural Implements:

A hand tractor - Kukje was provided to the DCO under the MARD assistance programme. A local driver was employed and the farmers made use of the tractor for agricultural and transport purposes.

The DCO however, was not satisfied with the make of the tractor, as spare parts were not available and cost of repairs was very high.

Kalukele DCO with its capability to interact with officials of Mahaweli agency and the MARD assistance programme, and local banks, provided financial assistance to 52 farmers, out of 208 farmer members.

The ability of the FO to arrange credit to the farmers was considered as an achievement by this successful Farmer Organisation.

3.1.10 Leadership:

It was revealed that the majority of the farmer representatives were dedicated to the cause of farmers' welfare. They have identified the following as the objectives of farmer organisations.

i. Organisation of Sramadana for maintenance of the canal system
ii. Training of farmers on maintenance
iii. Efficient Water Management
iv. Conflict resolution among the farmers
v. Embark on income generating activities
vi. Supply inputs
vii. Provision of credit through lending authorities.

The success of Kalukele DCO has been mainly due to the personal interest and dedication of the President. He had experience in community development work before he came to Kalukele as a settler in 1983. He took part in all social activities organised by the Mahaweli Authority, MARD and Nation Builders. He is honest in his dealings, according to the farmers interviewed and the farmers have the highest respect for him. He is active healthy and knowledgeable.

Secretary of the DCO is an equally able man who could win the confidence of the farmers. He is 48 years old and willing to spend about 4 days a week on DCO's activities.

3.2. Least Successful Farmer Organisation in Mahaweli - System "B"

Pahala Ellewewa F.O. has been selected for further study as a least successful Farmer Organisation.

Pahala Ellewewa:		
Number of farmers	-	236
Number of farmer members	-	85
Extent of paddy cultivated in acs	-	582
Number of D channels & SD chls.	-	4
Number of Field channels	-	22
Number of FRR	-	22
Attendance at meetings held		
General meetings	-	37
Executive committee meetings	-	11

This area was considered as a pilot area and settlements were not made till 1987. Sources say this was earlier reserved for a Foreign firm (Japanese) and due to social unrest the proposals were changed.

The LB. LI Channel provides irrigation water from Maduru Oya to two tanks. The D9 channel augments Ellewewa from which water is delivered to 94 Ha. of command area through SD, D9 to FCC 92 to 100, and SD-3/D14 to the Irrigation Block 101 by FCC- 58,59,60, and through SD-3/D14 to FCC 55,56,57.

3.2.1 Settlers Background :-

The majority of settler families were brought from Aralaganwila within system B in 1987. They were supposed to be the children of old settlers in Aralaganwila. There are some families who had encroached land around Pahala Ellewewa. They were also given land in Pahala Ellewewa. Each settler family has been given 2 1/2 acres of land and 1/2 acre of high land. The paddy lands are situated about 3 miles away from their homesteads. They were provided with food under World Food Programme from 1983 to 1987 until they were given paddy allotments for cultivation.

3.2.2 Farmer Organisation

The Block Manager, Unit Manager and Community Development Officers were responsible for the formation of the farmer organisations in Ellewewa in 1990. The first general meeting was held in March 1990 t elect office bearers. 23 farmer representatives were elected at this meeting. This organisation did not have hydrological boundaries as the unit of operation. DCO was set up to cover the area coming within the unit managers authority. The Unit Manager very often attends the committee meeting of DCO. There have been occasions where Block Manager had to attend some meetings where his presence was necessary for resolution of problems related to irrigation and other administrtive matters. The dependency on the officials of the agency still continues. The farmers as well as the DCO, still depend on the officials for decision making.

3.2.3 Farmer Participation

The attendance at the first annual general meeting conducted by the unit manager was satisfactory, but out of 236 farmers only 85 farmers became members. The attendance at general meetings were about 37 and participation at the executive committee meetings of the FRR was encouraging at the beginning since 17-20 FRR out of 23 attended.

During 1990, two general meetings were held. In 1991 six meetings were held and the last meeting held on 13.11.91 was attended by only 27 farmers. According to this study, the need for a farmer organisation is felt by the majority of farmers though the response has been discouraging. The agency officials had made continuous effort to organise training programmes for the farmer representatives on water management, crop production, marketing and input supply. These training programmes are normally arranged by the unit manager. He acts as a catalyst. But in system B it was found that Irrigation Community Organisers (ICO) were appointed as catalysts. Kalukele DCO had the services of such an officer who acts as a catalyst. This officer has been appointed with MARD assistance. Services of ICOs should have been made available tc a weak DCO such as Pahale Ellawewa.

3.2.4 Maintenance of channels by the F.O.

The maintenance of channels by farmers were observed to be unsatisfactory. Though the farmers interviewed mentioned that canals were maintained once a season. It was observed that majority of the field canals were not cleared to facilitate water distribution even though initial stage preparatory work was in progress for 92/93 Maha cultivation season. The drainage channels were over grown, restricting the flow of surplus water in the paddy fields. Even though the decisions were taken at the kanna meeting to attend to the essential maintenance work in the distributory system, the DCO was not able to mobilise the farmers for that purpose. This lapse of the DCO could be considered as a factor indicating its unsuccessful performance.

3.2.5 Water Distribution by the D.C.O.

The Pahala Ellewewa paddy fields are fed by two tanks, the Singhewewa and Ellewewa. Since drainage waters from two DCO areas augment the command area in Pahala Ellewewa, the availability of water was not a problem in this area. The crop damages occurred due to surplus water. However, during dry spells the farmers had conflicts in getting adequate water. 60% of the farmers viewed that rotations were not effectively made in the field channels. As there is adequate water for crop cultivation, farmers were not interested in getting themselves organised for water distribution. The tank sluices were not controlled by the DCO and the channels were continuously supplying water to the command area. The farmers have observed yield differences from paddy lots located in head, middle and tail. This was as a result of inequity in water distribution during critical growth stage of paddy. 60% farmers viewed, that farmer leaders and farmers are not very keen in using water saving techniques, as there was no scarcity of water. This could be a likely factor for the DCO to perform ineffectively.

3.2.6 Leadership

The president, a retired government employee had been the president since 1991. He was very keen and interested in the welfare of the farmer community. He was not able to do this single handed, due to the weaknesses of the other farmer representatives. He expressed the view that within next few months, with the assistance of the Mahaweli officials it will be possible to arrange for training of other FRs, then he would be able to reorganise the DCO. He expected an Irrigation Community Organiser (ICO's) assistance for the reorganisation of the DCO will be available. 23 farmer representatives were elected at the first meeting held in 1990, and 6 leaders elected to coordinate works on Irrigation, Land disputes, and Community development.

3.2.7 Input Supply

The DCO was not able to supply necessary inputs to the farmers as done by the neighbouring Kalukele FO. 20% of the farmers mentioned that they have seed paddy cultivators within the DCO area and they could get quality seed paddy from them. However, the farmers expect the DCO to provide them with seed paddy. The inability of the DCO to supply seed paddy to the membership could be one of the factors that contributed to the failure of the farmer organisation.

The DCO had not taken steps to make arrangements for the sale of farmers produce (paddy and OFC). Private traders invariably used to pay very low prices for their produce.

3.2.8 Credit Facilities:

The DCO was unable to arrange credit facilities to its membership. Local banks were prepared to provide cultivation loans up to 16,000/-. The president's effort to promote a loan scheme for the members did not materialise. The inability of the DCO to provide credit facilities to the membership could be considered as a factor contributing to its unsuccessful performance as an organisation.

3.2.9 Farmers view on Training on Agriculture

The consultants were able to visit the area at the time of initial stage of paddy cultivation. It was found that the preparatory works done was not satisfactory. Field ridges, channel bunds were unattended to prevent water wastages, The drainage channels and water ways were not cleared in order to facilitate draining of surplus water. 80% of the farmers view that they have received sufficient training in paddy cultivation.

60% farmers view that they are sufficiently trained on cultivation of Chilies, Grams, Soya and B.Onion. Farmers have cultivated about 50 acres under OFC in yala 1992.

Credit had not been provided for OFC cultivation. DCO was not strong enough to arrange such facilities with the lending authorities. The consultants noted that in system B, the lending authorities have come forward to assist the farmer organisation in providing credit facilities. The successful DCO guaranteed the repayment of credit on time.

3.2.10 Financial Stability

Farmers view that sufficient awareness was built within the community. The Block Manager, Unit Manager Communication Development officers and IEE have assisted the DCO to continue their work efficiently. However the enthusiasm of the farmers gradually declined. This is evident from the attendance at the meeting held in Sept. 91. Out of 236 farmers, only 79 farmers attended this meeting.

Main Issues discussed at the meeting were undertaking or Contracts by the unit farmer organisation. The Constitution of the DCO was prepared by the Unit Manager.

As the Financial position of the DCO had not improved and the fund raising activities were minimal, the interest of the farmers declined. This could be attributed as the main contributory factor for the failure of the DCO. It was also revealed that the office bearers of the organisation were responsible for the mismanagement of funds. The following reasons were given by the farmers for bad accounting.

(i) Non payment of money due to a contractor
(ii) Awarding of contracts to private individual on commission basis without the approval of the executive committee.

3.2.11 Societies functioning within the DCO area:

Several organisations were functioning in the area before the DCO was formally set up.

Society	Membership
1. Perakum Grama Sanvardane	72
2. Samagi Youth	54
3. Gomathi Women	77
4. Visaka Women	83
5. Youth's Buddhist	64
6. Death Donation	88
7. Mahaweli Tharuna Kantha	56
8. Sama Mandalaya	
9. Govi Sanvidanaya	208

The above societies were formed with different objectives. Of all the organisations the Death Donation society was able to function well. The DCO had sought the assistance of the two societies "the youths" and the Gomathi Women's Society to build three houses for the most deserving farmer families in the area.

3.2.12 Legal Framework:

Perusal of the minutes of the meetings held during 1991-1992 indicate that a decision had been taken to impose a fine of Rs. 250/= for defaulters in channel maintenance and from stray cattle owners. The farmers felt that the defaulters could not be dealt due to lack of Legal Status.

Majority of farmers viewed that 50% of the farmer representatives are not performing their duties to the satisfaction of the farmers. However, the FO had been functioning effectively, at the beginning. Misappropriation of DCO funds, and frauds observed in contract works contributed to the failure of the DCO even though this had functioned as a successful organisation.

Annex 4

4. Development of Farmer Organisations in Mahaweli System H

4.1 Successful Farmer Organisation Konwewa DCO.

Number of farm families	-	526
Number of farmer members	-	526
Paddy extent cultivated in Acs.	-	485
Number of farmer representatives	-	24
Taking over of D.channels by the DCO	-	1986
Registered to undertake contracts	-	18.12.91 in Mahaweli H.

4.1.1 Konwewa DCO

This DCO has been selected as one of the successful farmer organisations in the system H of Mahaweli Authority. The first settlement commenced in the year 1976. Most of the settlers have come from Dambullupura, Rajapaksegama, Malwanegama, Solame, Gurugama and Paindikulama areas. They belong to various cast groups. At the initial stages due to the heterogeneous nature of the settler population, conflicting views arose when trying to get the farmers together for a common programme.

Initially the Block Manager and the community development officer were responsible for setting up of the farmer organisation in Konwewa in 1985. These organisation were called 'Govi Samithi' (Farmers society). The farmers selected their representatives once a year. Under these societies 'Jala Palaka Committee' (water management committees) functioned. Their responsibilities included water distribution, field canal maintenance and resolution of farmer conflicts. The water management committee meetings were held once a week during the cultivation seasons - Yala/Maha. The attendance at these meetings has been recorded as 80% of the committee members. It was at these committee meetings, that decisions were taken on water distribution.

The Govisamithi - (Farmer's Society) were dissolved in 1988 and a new DC level organisation was established with the assistance of the Block Manager, Unit Manager and the Community Development Officer. The President, secretary and the treasurer were elected at a general meeting in 1988. In Konwewa DCO, regular monthly meetings were held since then to discuss farmers problems.

Unit Manager, under the Block Manager was mainly responsible for the establishment of the Konwewa DCO. He received the co-operation and support of the Agricultural Officer, Community Development Officer, and the Irrigation Engineers attached to the Resident Project Manager's office (H-area) at Tambuttegama.

The range of items discussed at the DCO meetings held in 1991 could be summarised as viewed by farmers and according to the minutes maintained by the FO, as follows:

a. Maintenance of the canal system and the allocation of funds for maintenance.
b. Prioritisation of items on irrigation problems that had to be attended by the agency
c. Fund raising activities such as purchasing of paddy, fertiliser distribution and bidding for contracts.
d. Extension work on agriculture programmes
e. Preparation of the annual agriculture programmes.
f. Collection of membership fees
g. Training requirements for the farmer representatives and farmers.

4.1.2 Training

The Project Managers, assisted by the Block Manager, Unit Manager and Community Development officer had arranged regular training programmes for the farmer representatives on maintenance work, water management, agriculture programme, cultivation practices, use of fertiliser and agro chemicals. The farmers were exposed to a number of training programmes arranged under the ADB, "Institutional Strengthening Programme", in 1992.

This programme was able to instill in the mind of the farmers that the systems belongs to them and should be managed by them. Even settling farmers especially in the Mahaweli systems and attending to their day to day activities, especially irrigation facilities for paddy and other field crop production was a part of their duty. As a result the dependency syndrome is gradually fading away with the establishment of farmer organisations in the system and making them self reliant and more independent. Agency officials still have control over the settler population until the farmer organisations are developed into strong and viable management institutions. In Konwewa DCO, consultants found that the strength of the present organisation has been acquired through the dedicated efforts of the farmer representatives motivating the farmers to manage the affairs independently in the system, especially water distribution to their fields and other agricultural activities.

4.1.3 Maintenance

The DCO of Konwewa was able to organise regular Shramadana campaigns and mobilise the majority of farmers for the maintenance of canal system within the DCO twice a season. Individual farmers have been persuaded to attend to weeding three times during maha season. Desilting, filling scours and washways were included in the programme.

The distributory channel has been maintained by the DCO with agency assistance. The personal interest taken by the president and the secretary of the DCO is appreciated by the farmers. The consultants observed that the distributory channel has been satisfactorily maintained by the DCO, including channel profiles and reservations.

4.1.4 Water Distribution

Water distribution programmes had been worked out smoothly during the last two seasons. (1991/92) tail enders, getting sufficient quantum of water for their cultivation. Field canals 30, 32, 33, 34 and 36 had difficulty in getting sufficient water at the beginning.

This was solved by the farmer representative for that area when he was elected the vice president of the DCO. The intervention of the agency officials were also imperative in such instances. The 4 day water issue for the DCO area was equitably distributed by the FRs. The rotation programme worked smoothly and effectively within the D. Channel. However higher efficiency in water deliveries could be achieved when rotations are effected within field channels as well.

4.1.5 Supply of inputs

The organisation is financially not very sound. They were not able to build up their financial position, even though they were willing to embark on fund raising activities. However, they made an attempt to provide fertiliser amounting to 100 bags (50 kg. each) during maha 1991/92. They were not able to continue this progrmme in 1992 yala as no paddy cultivation was undertaken.

Seed paddy distribution was done satisfactorily during the maha 91/92 . The farmers were given seed paddy on credit and were expected to pay it back after the harvest. The repayment has been almost 100%.

4.1.6 Financial Management

The DCO was able to build up their funds from contracts undertaken and from fines imposed on defaulters in 1991 and 1992.

Financial records were maintained satisfactorily. However, it was observed that the treasurer encountered difficulties in following a standard accounting system. Basic training was considered necessary.

4.1.7 Conflict Resolution

The President proving himself to be a good honest and devoted rural leader was able to rectify majority of the farmer conflicts prevailing in the area. The DCO was successful in remedying conflicts in water distribution, farmer participation in group work and land disputes. The Sama committee functioning in the area too had

4.2 The Least Successful DCO, 404 - D^1

4.2.1 Least Successful FO

404 - D_1 - DCO.

No. of farm families - 365
No. of farmer members - 357
Extent of paddy in acs. - 881
No. of farmer representatives - 13
No. of D canals - 1
No. of F canals - 38
DCO registered in Mahaweli H, RPMs Office, Thambuttegama to undertake contract work.

4.2.2 Background of 404 - D_1 area in Thelahiriyawa Block

The first settlers came to the DCO area in 1978. The majority (95%) of these settlers are from Kotmale, about 5% from Thambuttegama. They were given 2 1/2 acres of paddy lands and 1/2 acre of high land. There are 734 farm families settled in the DCO area.

404 - D_1 & D_2 area comprised of 1315 acres with 734 families. 3 Sub Distributory channels and 65 field channels for distributing water to paddy fields. The condition of the channels were not satisfactory. As these structures and the channel system are now more than 15 years old, early rehabilitation is required for better functioning of the system. This was a pilot area for experimenting with underground pipelines as sub D canals and designed to supply water to field canals.

4.2.3 Farmer Organisation

The farmer groups were selected on Turnout basis in 1979. There were 65 such Turnout groups. In 1979, 65 Turnout Leaders were selected to represent the area by Mahaweli Authority. These leaders were not elected but selected by the Mahaweli agency, number of training programmes including awareness programmes were conducted by the officials of the Mahaweli Authority. A significant feature is the emphasis placed on crop production programmes and the extension work on Training and

More than 90% of the farmers attended these training programmes at the inception. The T & V was programmed till 1981. The participants were paid Rs. 10/- for attending the training programme. Later this incentive was withdrawn and the attendance at meetings steadily declined.

4.2.4 Turnover of D Canals

It was brought to the notice of the consultant by the farmers that D channels had been handed over to the farmer organisation informally in 1991/92, for maintenance of the canal system. A special meeting of the DCO was convened in September 1991 with the agency officials namely Block Manager and Unit Manager. These officials were able to explain to the farmers the objectives of the taking over of the D canal for maintenance with the assistance of the Mahaweli Agency. Some element of participatory management had been included in the discussion held by the DCO with officials of the Mahaweli Agency. Subsequently, fortnightly meetings were held to disucss the detail work plan for maintenance and water distribution. It is noted that 8 meetings of the Executive Committee of DCO were held during Maha 1990/91 and 6 meetings in 1991/92. On perusal of the minutes of the meeting kept by the farmer leaders, shows that the deliberation held with the farmers were very encouraging and useful till the meeting held on 19/2/92. As an outcome of this meetihng, they were able to organise Sramadana for Salvinia eradication in the David Reservoir.

4.2.5 Maintenance of Canal System

It was found that the maintenance of the channel system was very unsatisfactory even though such maintenance was expected to be done by the farmers. Distributory canals are normally maintained by the Mahaweli Authority. In 1991/92 Maha season, farmer organisation was allocated Rs.9,000/- for the maintenance of the D channel. it was however, strange that the DCO had handed over this contract to the Death Donation Society to do the maintenance work. .pa

The members of the DCO were satisfied with the work done by the Death Donation Society. It is presumed that the DCO was not strong enough to undertake such work. In 1992 the maintenance contract of the D channel was handed over to the adjoining DCO (404 D1). This has created displeasure among the farmers and farmers have lost confidence in the farmer leaders. Within the jurisdiction of DCO, there are 8 Death Donation Societies, and four Rural Development Societies and 3 Kantha Samithis. The Death Donation Societies are supposed to be functioning efficiently. Their main objective is to assist members in the event of a death in the family. They have extended their services to other areas such as maintenance of irrigation systems and water management as well.

4.2.6 Water Distribution

The Mahaweli Authority has appointed Irrigation Labourers for water distribution and operation of turnout gates. Farmer leaders do not have control over the water distribution. The dates of water issues were discussed and decided at the DCO meetings. These dates were made known to the farmers by the farmer representatives. The survey results indicate that the tail end farmers do not receive adequate water for land preparation. The sub distributory canals in the pilot area are all buried hume pipe lines. These pipes were to carry adequate water to the field canal at the designed discharge, but it was noted that these pipe lines were carrying discharges less than designed, resulting in water shortages to the field canal.

4.2.7 Conflict Resolution

The DCO officials were able to solve most of the problems within their area related to water distribution. According to the survey findings more than 60% of the problems on water distribution were solved with the assistance of the Unit Manager and the Block Managers. However, the problems related to land disputes and irrigation channel structures were not solved by the DCO.

These were subsequently directed to the Resident Project Manager (RPM) Thambuttegama for settlement. It was noted that these disputes had not been solved. Farmers are disgruntled and dissatisfied that these disputes have not been solved as yet.

In 1992 April, the DCO convened a general meeting to elect office bearers. However, the members did not attend this meeting as they felt no purpose was going to be served in changing the office bearers. The number of members who participated at this meeting was 84 out of 357 members. It was noted that the following subjects were mainly discussed at the meetings of the DCO.

(1) Irrigation problems - Structures & Canals
(2) Water Distribution
(3) Inability of farmer representatives to carry out their responsibilities.
(4) Action to be taken on defaulters in maintenance
(5) Maintenance work to be attended by groups of farmers.

4.2.8 Input Supplies

At the initial stage of the DCO in 1991, requests were made to the Mahaweli Authority to supply fertilizer and agro-chemicals at concessional rates to the farmers. They had experienced shortages in fertilizer during the cultivation seasons. Therefore, such arrangement by the DCO will be appreciated by the members of the organisation. In 1991/92 Maha, the Mahaweli Authority made some attempts to meet the requirements of fertilizer, agro chemicals and seed paddy. This programme did not meet the aspirations of the farmers. Majority of the farmers did not have the required quantity of fertilizer, agro chemicals and seed paddy on time and when they really wanted it for their crop production in the year 1991/92. The most affected area was Maliyadevapurayaya at the tail end of D1 canal.

4.2.9 Factors Related to Failure of DCO

According to the farmers the following factors have been highlighted for the failure of the DCO.

(i) Inability of FO to attend to structural repairs and canal maintenance, which could be handled by the DCO.
(ii) Inadequate supply of water to tail enders
(iii) Favouritism in water distribution & supply of inputs and regularisation of encroachments.
(iv) Inability to take action against the defaulters in maintenance.
(v) Inability to undertake contract work.
(vi) Inability to organise marketing of produce.

Annex 5

5. Indicators used to assess successful Farmer Organisations:

The ability and the efficiency of a F.O. to interact with the relevant government departments and getting necessary assistance from the professional fields to improve the living conditions of the community they represent, is the main indicator for a successful organisation.

The following factors related to the Department of Irrigation are essential and of prime importance for the sustainability of the physical systems.

To ensure efficiency of a channel system it is essential to maintain designed Channel parameters, namely

(i) Bed width (ii) Side slopes (iii) Depth of flow (iv) gradient of channel.

Other factors are that with time, conditions of earthen embankments settle and deteriorate, masonry structures are undermined depending on the climatic conditions and the nature of the soil. In settlement schemes too the physical system is subjected to deterioration as a result of stray cattle movements, usage of channel bunds as an access for transportation and during land preparation times when farm tractors and cattle are used in ploughing etc. thus causing much damage. During water deliveries too the bunds are eroded due to over loading of channels.

An these indicate that frequent maintenance work is essential for the efficient functioning of a distribution system.

5.1 Water Distribution

(i) Planning water deliveries before a Season:

To implement a successful water distribution programme it has to be planned. An efficient FO, having dialogue with the ID, keeps its membership aware of the issue plan prepared based on the following;

(ii) Availability of water at the time of planning,

(iii) Supply into the reservoir from sources other than rains:

(iv) Adequacy of water to undergo successful cultivation:

(v) Adherence to the Cultivation Calendar

(vi) The level of participation of farmers and farmer representatives necessary for efficient distribution of water.

Ability of a farmer organisation to meet the needs of farmers to receive water without interference is a good indicator of a successful farmer organisation.

5.2 Maintenance work:

Maintenance work in the physical system is an essential component and should be launched prior to a cultivation season. These works have to be identified with the assistance of the ID officials. The information that can be obtained are the nature and kind of work that is essential, the availability of government funds to execute the work, the programme for the implementation and the kind of assistance the F.OO. will have to render to keep the system functioning efficiently.

Maintenance of Structures:

Attention must be paid to structures provided within the distribution system for the safety of the system and for control and issue of water. Hence maintaining them in good working condition is a pre-requisite for efficient water issues.

5.3 Agriculture Planning

A successful farmer organisation should be able to have frequent dialogue with the extension officers as the latter can have a great impact on the production of crops. The extension officials could assist the farmers to:

(i) Improve on the prevailing cultivation practices.
(ii) Selection of crops and extents to be cultivated
(iii) To provide knowledge to farmers in identifying crop diseases, pest diseases, and pursue remedial measures.
(iv) Preparation of seasonal agricultural plans,
(v) Assist in marketing and planning of market oriented cropping.

5.4 Conflict Resolution

Possibilities of farmer conflicts mainly on water distribution, lands, and encroachments cropping up among themselves are comparatively more in settlement schemes.

5.5 Fund Raising Activities

The ability of a farmer organisation to build up its funds is an indicator of a successful farmer organisation. The opportunities through which the F.OO can explore possibilities of building up such funds are as follows.

(a) Membership
(b) Undertaking contracts:
(c) Sale of fertiliser and Agro chemicals:
(d) Credit facilities to members:
(e) Purchasing and marketing of agricultural produce:
(f) Hire of agricultural Implements and accessories:

5.6 Off farm employment:

The programmes prepared on awareness, training, and demonstrations have made it possible for farmers to get themselves involved in additional income generating projects. Cottage industries, marketing of produces, supply of inputs, packaging, storing, transport facilities, repair workshops, milling, grinding, etc. have provided off farm employment to the members of the DCO and their families.

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