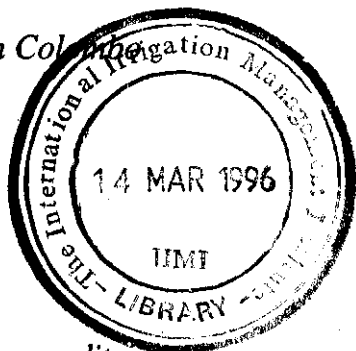


**Farmer Participation in Planning, Design
and Rehabilitation of NIRP Schemes:
Current Status and Needed Improvements**

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Farmer Participation in Planning, Design and Rehabilitation of NIRP Schemes: Current Status and Needed Improvements

*Proceedings of a Workshop Held in Colombo
on 14 October 1994*



K. Azharul Haq and B.M.S. Samarasekera, editors

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**IRRIGATION RESEARCH MANAGEMENT UNIT
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Cover photograph by A.J. Vincent: Farmers participating in "Shramadana" at Haltota Scheme.

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Foreword

It is becoming increasingly evident that to maintain the sustainability of irrigation schemes, effective farmer participation in operation and maintenance is essential. The National Irrigation Rehabilitation Project (NIRP) has mandated organized farmer participation in different stages of rehabilitation of irrigation schemes with the ultimate objective of turning the systems over to the user groups. The consultation workshop on *Farmer Participation in Planning, Design and Rehabilitation of NIRP schemes: Current Status and Needed Improvements* was held at the head office of the Irrigation Department in Colombo on 14 October 1994 to discuss the NIRP's planned strategy for farmer participation, the actual level of participation and to identify measures that NIRP should take in order to further strengthen farmer participation.

Two papers were presented for discussion. Mr. I.K. Weerawardena, Consultant, NIRP discussed the strategies for the development of farmer participation in the National Irrigation Rehabilitation Project and Mr. W.J.J. Upasena, Research Officer, IIMI/IRMU presented the findings of an action-research on the level of farmer participation in five NIRP schemes.

A problem encountered with farmer participation is that the farmer organizations were formed as a prerequisite for rehabilitation and adequate lead time was not available to them to make them properly functioning entities. Farmers are also not yet fully convinced that they can get additional material benefits by joining a farmer organization. They, however, indicated that once fully operational, these organizations will be of benefit to them. Continued and active support from government agencies will be needed for this purpose.

Thirty-nine participants from the Irrigation Department, National Irrigation Rehabilitation Project, Irrigation Research Management Unit, Mahaweli Authority, Agrarian Research and Training Institute, Department of Agrarian Services, Department of Agriculture and universities attended the workshop.

Based on the deliberations of the workshop, a set of recommendations have been formulated, which if adopted are expected to transform the farmer organizations into strong and dynamic bodies capable of addressing issues related to rehabilitation as well as long-term and sustainable operation and maintenance of irrigation schemes.

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Inaugural Session

Welcome Address

B.M.S. Samarasekera

Deputy Director, Irrigation Research Management Unit

Distinguished Guests, Ladies and Gentlemen:

I welcome all of you to the workshop on *Farmer Participation in Planning, Design and Rehabilitation of NIRP Schemes: Current Status and Needed Improvements*. I, however, would like to especially welcome the chief guest, Mr. L.U. Weerakoon, Additional Secretary, Ministry of Irrigation, Power and Energy; special guest Dr. Roberto Lenton, Director General, International Irrigation Management Institute; Mr. K. Thurairajaratnam, Senior Deputy Director, Planning, Design and Specialized Services; and Mr. K.S.R. de Silva, Project Director, National Irrigation Rehabilitation Project; who, in spite of their busy schedules, have very kindly agreed to participate in the workshop.

The workshop is very important in that it will provide the necessary input to the National Irrigation Rehabilitation Project's effort to further strengthen organized farmer participation in the rehabilitation of irrigation schemes. The needed improvements, I am sure, will not be limited to the hardware of the scheme but include improvements in the functioning of the farmer organizations as well as in their effective participation in the rehabilitation process.

The workshop has two specific objectives:

1. To make the participants aware of NIRP's planned strategies for farmer participation and the actual level of their participation as has been documented in five pilot schemes.
2. To identify measures NIRP should take in order to maximize effective farmer participation.

To achieve these objectives, the structure of the workshop has been designed to include presentation of two keynote papers with a follow-up discussion, brainstorming session, group discussions on specific topics, group presentations and finalization of recommendations.

I again take this opportunity to thank all the participants and guests for their interest in the workshop.

Methodology of the Workshop

B.M.S. Samarasekera
Deputy Director, Irrigation Research Management Unit

Introduction

The idea behind this workshop is to share experiences with others and disseminate the information gathered through the research conducted by IRMU.

1. Objectives of the Workshop

Mainly, it has two purposes:

- i. To make the participants aware of the NIRP-planned strategy for farmer participation and of the actual level of farmer participation.
- ii. To identify measures that NIRP should take in order to maximize farmer participation.

2. Workshop Structure

- a. Presentations (1 hour)
- b. Discussion (1 hour)
- c. Brainstorming Session (1/2 hour)
- d. Group Discussions (1 hour)
- e. Group Presentations (1 hour)
- f. Summary and Finalization of Suggestions

3. Presentations

To achieve the above-mentioned objectives, there will be two presentations: one covering plans and concepts and the other covering the actual field situation with regard to farmer participation in NIRP schemes.

4. Discussion

The presentations will be followed by a one-hour discussion. The discussion will be facilitated by a chairperson with the help of four panel discussants. At the end of the discussion, participants will identify and refine the relevant issues that hinder participation of beneficiaries as well as the implementing agency.

5. Brainstorming Session

Having identified the relevant issues, the participants will prioritize them based on their varying experiences in the rehabilitation of irrigation schemes. A facilitator has to be selected for the brainstorming session.

At the end of the brainstorming session, participants will identify the four most urgent issues with regard to farmer participation.

6. Group Discussions

There will be four working groups, each consisting of about six persons. Each group will take up one of the four key issues. It will be the responsibility of the group to select the chairperson before commencing the discussion on the given issue.

- Group 1 — Issue one → Chairperson + five members
- Group 2 — Issue two → Chairperson + five members
- Group 3 — Issue three → Chairperson + five members
- Group 4 — Issue four → Chairperson + five members

The groups will have one hour to suggest ways to handle the issues.

7. Group Presentations

Each group will get only 10 minutes to present the results of its discussions. A representative from each group will present the agreed solution/solutions to each issue. Highlights of the four group presentations will be given at the end of the presentations. Transparency sheets, flip charts, OHP pens, etc. will be provided.

8. Final Discussion and Summary

There will be a short general discussion on the presentations followed by a summing up and an attempt to come to a general agreement.

9. Output of the Workshop

Following the workshop, a working paper containing the suggested solutions and improvements to the NIRP farmer participation program will be issued.

Introduction to the Workshop

K.S.R. de Silva

Project Director, National Irrigation Rehabilitation Project

Honorable Guests, Ladies and Gentlemen:

The National Irrigation Rehabilitation Project (NIRP) will rehabilitate 60 major/medium irrigation schemes and 1,000 minor irrigation schemes. To optimize rehabilitation investments as well as to ensure sustainability of the NIRP schemes, farmer participation is essential. The workshop is expected to discuss in detail the findings of a study on farmer participation conducted in 5 NIRP schemes.

I have gone through the draft report of the study conducted in the 5 NIRP schemes, which will be presented to the workshop later in the morning. I would like to comment on some of the important findings of the study. The findings indicate that during the planning and design of irrigation schemes, adequate farmer participation was not considered. It is now universally recognized that farmer participation helps to improve the quality of rehabilitation work as well as the cost-effectiveness. NIRP also took advantage of this and farmer representatives were taken along during walk-throughs while the schemes were appraised. But the adequacy of their participation is arguable as there is practically no way to properly reflect on such participation in terms of the number of farmers to be involved, how exhaustive these appraisal walk-throughs should be, etc., NIRP will definitely benefit from specific recommendations on this.

It has also been indicated that in many cases farmers preferences are not accommodated in the rehabilitation works. Desiltation has been cited as an example. In my opinion, in 75 percent of the minor schemes, farmers request desiltation. In some instances, these requests are justified. For example, in the Wennoruwewa Tank Scheme in Kurunegala District, the bulk of the storage is at the center of the tank because of siltation. According to the World Bank, minor tank rehabilitation in Sri Lanka costs as much as US\$750/ha, which is the highest in the South Asian region. Inclusion of desilting is expected to push the cost even higher. Though the majority of the rehabilitation requests are, in general, accommodated, some of the capital-intensive works cannot be accommodated for the financial reasons mentioned above. Economists and social scientists associated with the project also felt that the cost is higher on the hardware part of the rehabilitation.

Even though farmer organizations are supposed to take over O&M of the rehabilitated schemes, the study observed that the farmers were losing interest in farmer organizations. One of the reasons attributed to farmers losing interest in farmer organizations is that they are convinced that they cannot obtain additional benefits by getting involved in farmer organizations. I also agree that farmer organizations to date have not shown definite signs of long-term sustainability. But given adequate time and support from line agencies and Institutional Organizers, the farmer organizations are expected to respond more positively to the needs of the general membership.

Farmer organizations have performed better in the supervision of the contracts awarded to private contractors but their performance in handling the contracts awarded to them had mixed results. Some organizations made some profits, some came out even and some incurred losses. Reasons for the losses have been attributed to several factors including lack of capital, lack of experience and low rates set by the Irrigation Department. This is an area, I think, the study should

have concentrated more to recommend appropriate steps to be taken to reverse this situation and keep farmer organization interest alive for further contract execution.

It was also observed that the quality of rehabilitation work (mostly earth work) contributed by farmer organizations was not good. This is another area which needs further investigation.

In closing my introductory remarks, I would like to commend the organizers for arranging this consultation workshop, the recommendations of which, I am sure, will help strengthen NIRP's effort to involve farmer organizations more effectively in the rehabilitation process for long-term sustainability of the rehabilitated schemes.

Address by the Special Guest, Dr. Roberto Lenton, Director General, IIMI

Good morning, Distinguished Guests and Ladies and Gentlemen:

As the Director General of the International Irrigation Management Institute (IIMI), it gives me great pleasure to be with you this morning at the inaugural session of the workshop on *Farmer Participation in Planning, Design and Rehabilitation of NIRP Schemes*. This is particularly so for three reasons.

First, I have followed the development of the National Irrigation Rehabilitation Project, and especially of the Irrigation Research Management Unit, with great interest. My colleagues and I at IIMI have been very pleased by the Government of Sri Lanka's invitation to assist in the development of this important research management unit. This workshop gives me an opportunity to see first-hand how the work of the unit is progressing; and to meet and get to know those persons who are responsible for its development.

Second, IIMI has had a long and fruitful association with participatory irrigation management in Sri Lanka, and thus we have a central interest in the issues to be discussed today. As outlined in an article in the recent special issue of the *Economic Review*, entitled "Irrigation Management—from Bureaucracy to People," Sri Lanka has a very long history in participatory irrigation management, dating back (at least in modern times) to the Paddy Land Act No.1 of 1958. There have been many important milestones along the way, such as the approval by Cabinet of a key policy paper for participatory irrigation management in 1988, and the initiation of the Irrigation Management Policy Support Activity (IMPSA) in 1990. IIMI has been pleased to have been associated with many of these events in a partnership that I believe has been beneficial for all parties involved. Today's workshop will undoubtedly be yet another important milestone in the evolution of participatory irrigation management in this country.

Third, the topic of this workshop—Farmer Participation in Irrigation Schemes—lies at the heart of IIMI's research program on the local management of irrigation systems, one of the five major programs that define IIMI's research activities worldwide. The objectives of this program are to increase international understanding of local management approaches and results; to assist interested governments to develop successful programs to support existing farmer-managed irrigation systems and to transfer management to farmers; and to help ensure (through the use of research findings) that such programs are launched on a sustainable, productive and equitable basis. I have no doubt that your discussions today will contribute to each of these objectives.

A key strategic principle identified at the United Nations Conference on Environment and Development in 1992 was the need for local communities to participate in the planning, investment and management of agricultural water use and water conservation. Especially since the mid-eighties, governments around the world have been implementing programs to transfer full or partial responsibility for management of irrigation systems of all sizes to local organizations of users, on the assumption that such management transfer will increase water user efficiency and generate higher productivity, and allow operating costs to be covered out of rising farmer income. However, there has been little research to document the results of such management transfer

progress. The research that is being conducted by the Irrigation Research Management Unit under the National Irrigation Rehabilitation Project here in Sri Lanka is therefore an important first step in developing this much needed information. In particular, the data presented in the draft report to be discussed in this workshop, which monitors the involvement in rehabilitation of farmers in five irrigations schemes under the NIRP project, will be a very valuable addition to the knowledge base. Good decision-making on farmer participation in irrigation cannot be made unless there is solid information on what works and does not work and I am confident that this study will play a role in making decision-making on participatory irrigation management more effective, both in Sri Lanka and elsewhere.

Let me close by expressing my appreciation to the organizers of this workshop for their kind invitation to address you at this inaugural session, and by wishing the organizers and each of the participants a very successful workshop.

Thank you very much.

**Address by the Chief Guest, Mr. L.U. Weerakoon,
Additional Secretary,
Ministry of Irrigation, Power and Energy**

Distinguished Guests, Ladies and Gentlemen:

First, let me congratulate the organizers for organizing this workshop on a subject which is vital to the successful implementation of NIRP. As NIRP enters the third year of its implementation, a review of farmer participation and its impact is expected to help NIRP management strengthen this important aspect.

I, however, feel that even after decades of farmer organization (FO) involvement in irrigation, the process of their participation continues to remain top down. Farmers are asked to organize into FOs as a precondition to undertaking rehabilitation or O&M of the schemes. For the purpose of implementation of NIRP or any such time-bound, target-oriented projects, FOs are nearly forced on the farmers. This often yields mixed results. In some cases, FOs become successful primarily due to strong leadership and in other cases, they totally fail to make any impact. It has also been observed that the rural elite and the power structure take over these institutions and use them for their benefit. To maintain sustainability of FOs, farmers should be convinced that they have to get together for mutual benefits. It is, therefore, essential to find ways and means of getting the fullest participation of all the farmers.

I also believe that awarding contracts to FOs and setting them up for a profit-loss scenario may not be the best approach, as losses from such contracts might severely undermine even short-term sustainability. Ways, therefore, shall have to be found to minimize the risk of such losses.

I have no doubt in my mind that farmers must participate effectively both in rehabilitation and O&M of their irrigation schemes, if desired benefits are to be derived. But the process should be transparent and offer adequate incentives so that their participation can be meaningful and productive. For this, NIRP may consider allowing a longer period for establishment and functioning of the FOs before undertaking rehabilitation.

With these few words, I declare this workshop open and wish it every success.

Technical Sessions

Strategies for the Development of Farmer Participation in the National Irrigation Rehabilitation Project

I.K. Weerawardena¹

Introduction

First, farmer participation implies a significant role for farmers in decision making in the management of their schemes. It is a role which goes beyond mere consultation. It is the ability of farmers to say "no" to what they do not want. Second, if farmers are to play an active part in decision-making, they must have their own organizations. It is the duty of the irrigation agencies to clearly facilitate the efforts of farmers to organize themselves. However, in order to facilitate this process, the irrigation agencies should develop a planned intervention strategy. Third, the timing of farmer involvement in decision-making is a crucial issue. Farmer participation is most effective when it takes place from the initial stages of project development, including the stages of plan formulation and design.

The National Irrigation Rehabilitation Project (NIRP) has, more than any other rehabilitation project in this country, emphasized all the above stages in participatory management and that is why this project should be considered as an important experiment for the future of farmer participation in irrigation management.

This project insists that farmer participation should form the basis of rehabilitation. As such, the farmers are involved from the very beginning of selection of the schemes to the final handing over and aftercare of such schemes. The broad objective of NIRP is to stabilize and increase agricultural production and incomes; its subsidiary objective is aimed at upgrading the skills of both farmers and staff, and creating viable farmer organizations for management of such rehabilitation schemes.

The activities identified by the project to be implemented include:

- i. Establishment of farmer organizations (FOs).
- ii. Employment of Institutional Organizers (IOs).
- iii. A close dialogue between the farmers through farmer organizations and the implementing agencies.
- iv. Farmers contributing 10 percent of the rehabilitation costs in order to bring about a sense of ownership.

¹ Consultant, National Irrigation Rehabilitation Project.

- v. Handing over of the management of the schemes to the farmer organizations at the conclusion of the rehabilitation.

One of the conditions essential for effective farmer participation is that the government should have a planned intervention strategy. Such a strategy should clearly define the respective roles that farmers and government agencies should play as well as contributions that are expected from each other.

The strategies utilized by NIRP to achieve the project objectives are as follows:

- i. Fielding of nearly 300 Institutional Organizers.
- ii. Strengthening of farmer organizations.
- iii. Development of coordinating mechanisms.
- iv. Establishment of farmer federations.
- v. Training aimed at bringing about greater participation.
- vi. Handing over procedures—O&M.
- vii. Monitoring and evaluation of schemes managed by FOs.
- viii. Aftercare activities.

1. The Institutional Organizers Program

A key element in NIRP is the use of catalysts from outside the local community to organize the farmers.

Institutional Organizers (IOs) come under the administration of two agencies: the Department of Agrarian Services in the case of minor schemes and the Irrigation Department in the case of medium/major schemes. This is the first time IOs have been appointed to minor schemes.

The role of the IOs have been very clearly outlined and explained at training programs held after recruitment. They are essentially rural catalysts. They should first gain acceptance in the community, get a knowledge of the resources available in the schemes and endeavor to bring about greater participation of the farmers. They should be able to develop the existing farmer organizations. If the farmer organization that have been established by the Department of Agrarian Services are suitable, they are not expected to go and establish fresh farmer organizations. One of the main objectives of IOs is to build the abilities of farmer groups to interact effectively with government agencies. They are expected to work hard to get the farmer organization to be of use to the people. The reason for employing institutional organizers is therefore to mobilize and enlarge the pool of dedicated, trained farmers who can function as farmer representatives. One of the main tasks of the institutional organizers therefore is to communicate the concept of democratic participatory farmer organizations to their representatives and to the farmers themselves; to impart skills of operating organizations and to spread an appreciation of how collective action rather than selfish thinking within the farming communities can benefit each other. The role of catalysts

calls for individuals with proper motivation, training and experience. How far we have been able to achieve this goal will be discussed later.

2. Strengthening of Farmer Organizations

It is extremely vital that established farmer organizations (FOs) should continue to exist as strong and viable institutions. They must be made sustainable and must continue to perform the responsibilities towards the farming community. NIRP aims at achieving the following goals to qualify for such sustainability:

- i. FOs should provide visible, tangible and immediate benefits to its members. They should see that irrigation water is shared equally, provide some support services to the farmers, help women and youth to foster their interests, organize income-earning activities and act as adjudicators in disputes among farmers concerning land and water. Efforts have been made to identify the common-felt needs of the farmers and these needs have been used as entry points in mobilizing farmers until the rehabilitation begins.
- ii. FOs should be organized effectively and legally; i.e., they should have certain specific hydrological boundaries and be registered under section 56A of the Agrarian Services Act with the ultimate objective of registration under Section 58B before the handing over.
- iii. The quality of farmer representatives should be of a high standard and this has to be achieved by IOs through training and motivation.
- iv. FOs should gain support from agencies like the Department of Agrarian Services. The Irrigation Department and the Provincial Councils could contribute much towards the strengthening of FOs. Support can be in the form of technical assistance, funding, contracts, services like loans and implements, etc. The Divisional officers of Agrarian Services and *Grama Niladharis* must all help FOs to be viable institutions.
- v. FOs must see that there is financial accountability to the people and this means keeping correct records and accounts. All FOs are expected to keep a bank account and report to the general membership about their financial transactions.
- vi. FOs must generate their own funds either through member contributions, contract profits or other income earning methods which will help them to take over the scheme and manage it by themselves and engage in income-earning activities.

In order to achieve the above objectives, NIRP has started implementing a series of programs aimed at changing attitudes of both farmers and agency staff. The project has embarked upon a number of programs aimed at helping the FOs to be self-reliant and give up their dependency syndrome. Establishment of better coordination, involvement in agricultural development activities through agricultural demonstration programs, establishment of nurseries, engagement in input supply and marketing are some of them. They are also expected to be involved in the development of programs for women and youth. The smooth transfer of O&M activities from the agencies to the FOs in stages is another

program being planned and pursued. Sufficient support needs to be extended to the farmer organization by the agencies to enable them to handle the responsibilities expected of them.

The NIRP work has been drawn up on this basis and it is our endeavor to see that all involved in the activities will help to achieve the goals. However, we must confess that the project has still not been able to achieve most of the ambitious objectives due to certain inherent constraints which are discussed later.

3. Development of a Coordination Mechanism

To realize this concept of farmer participation, NIRP has established Project Management Committees (PMCs) in all medium/large schemes taken up for rehabilitation. Usually, the technical assistant attached to the scheme is designated as the Project Manager. He chairs the PMC, which consists of the farmer representatives and other officials like the Divisional Officer of Agrarian Services, Agricultural Instructor, Agricultural Development Authority, Assistant Director, etc. The PMC meets every month and overall policy questions relating to O&M, finance and general matters are discussed at this meeting, which helps in promoting the participatory process. Monitoring of farmer organization progress is done at these meetings and the project manager and officers present are able to assist a FO in most matters concerning the management of the scheme. At these meetings, items connected with cropping schedules, *shramadanas* (voluntary work), and rehabilitation planning are discussed and decisions arrived at.

In the case of minor schemes, no such mechanism is available. It is the FO of the scheme that is expected to play this role. Officials like the Divisional Officer of Agrarian Services and Agricultural Instructor are expected to attend these monthly meetings held by the FOs and they should assist them in their day-to-day activities; but this does not happen as most officials do not attend these FO meetings. The FO in a given geographical area has a nominated representative in the Agrarian Services Committees (ASCs) and he is expected to be the link between the FO and the ASC. But this arrangement too does not work satisfactorily. The ASCs are centers providing inputs and services and are hardly involved in agriculture development planning.

Establishment of Farmer Federations

NIRP encourages the development of scheme-level farmer federations in the medium/major schemes. The need for such federations has arisen because rehabilitation should be considered a package and that FOs should not confine their activities to a mere distributary channel. FOs in a scheme should have the correct approach and agree on common needs. They also should be able to identify priorities when it comes to scaling down any rehabilitation proposals due to pro rata costs escalations, etc. In the final analysis, the FOs should be made to look at the scheme in its totality rather than on a distributary-channel basis. The Federation Chairman should one day take the place of the Project Manager of the scheme.

Linkages

Participatory management is directly dependent on this vital requirement of building effective linkages between organizations.

Within the periphery of irrigation schemes, the farmer organizations (FOs) should establish close links with other village-based organizations, like the Death Donation Societies, Rural

Development Societies, etc. Very often, the same leaders are in one or more of these societies. This is very much true in minor schemes where there is a close kinship link between farming communities.

In addition, there are other official institutions which indirectly have an influence over the activities of the FOs. At the Divisional Secretary level, there are the Divisional Agricultural Committees, at the Provincial Level there is the Provincial Agricultural Committee, at the Range Deputy Director of Irrigation level there is the recently established Irrigation Management Cell, and at the level of Deputy Commissioner of Agrarian Services there are the proposed Institutional Development Unit and the Farmer Federation Union. All these institutions should therefore establish and assist the FOs in their day-to-day activities and should also provide for farmer representation in these organizations.

Farmer Involvement in Rehabilitation

Mere physical rehabilitation of the structures and the canal system would be futile if the underlying causes of the deterioration of the system are not studied and remedied. Therefore, it has been accepted that any physical rehabilitation should be linked to a parallel program for the formation and development of FOs for effective participation and management by the beneficiaries. The project provides for field verification of assumptions on cropping patterns and yields, development of appropriate operational schedules with the participation of the beneficiaries in the drawing up of feasibility studies and preparation of estimates, and environmental and institutional sustainability of rehabilitation.

Even before rehabilitation starts there should be planning sessions between agency staff, farmers and the catalysts. The farmers must have access to information on items to be included, tendering, contracts, etc. A final ratification meeting of farmers must be held and important decisions on the following taken:

- ❑ Farmers agree to the rehabilitation proposals as prepared by the agency.
- ❑ Farmers agree to contribute 10 percent of the value of the rehabilitation.
- ❑ Farmers will take over the management of the scheme after rehabilitation.

It is the role of the IOs and the agency staff to provide continuous assistance to FOs to accomplish the tasks before them. The FOs should organize themselves to make their 10 percent contribution. Adequate training, resource mobilization and organizational capacity are needed to undertake this task, specially if this involves complex activities rather than mere earth work. There have been several instances where the FOs have failed to fulfill their undertakings. In one instance, the agency officials took an easy way out by giving a contract to the FO and deducting 10 percent out of every payment due to them. The present progress on the 10 percent contribution seems to be better than it was at the beginning. To obtain greater participation, the agencies have always granted contracts to FOs provided they have the capacity to carry them out. But some of the FOs have not been able to perform their contractual work properly due to financial constraints. This is a problem we will have to face in view of the poverty prevailing in the rural sector. We have to assume that through better motivation the farmers will take on this responsibility as they have a direct interest in rehabilitation.

Wherever private contractors are involved, the FOs have been requested to appoint construction subcommittees to supervise the work and help contractors to do a better job. The subcommittee members are given a training in construction procedures.

Training

Training is an important means of generating commitment and support for a participatory strategy. It is essential in building the required skills and values among farmers and agency personnel at all levels. Therefore, farmer training is a major item of this project. There is a need to correctly identify the training needs with a view to bringing about awareness and helping farmers to organize themselves. The project training programs are aimed at motivating the farmer representatives to help the farmer organizations to carry out their new functions and responsibilities and to involve the farmer organizations in construction activities, O&M, monitoring and evaluation and the final handing over of schemes to farmers.

Ten farmer training modules have been drawn up in collaboration with the Galgamuwa Training Institute and the Agrarian Services Department and are being implemented in all the schemes taken up for rehabilitation.

Trainers training programs have been held and training coordinators have been appointed to cover all Deputy Director (DD) Ranges. With regard to the Department of Agrarian Services (DAS), we are in the process of establishing similar units in each district. These training programs will no doubt help the participatory process to succeed.

Handing Over Process

Handing over of rehabilitated schemes to farmer organizations is a very crucial activity under NIRP. All the actions from the point of establishment of farmer organizations and completion of the physical rehabilitation should culminate with the handing over exercise. A prerequisite for the handing over is that a farmer organization (FO) should have the capacity and the financial ability to take over and manage a scheme. The FO should, before taking over, sign a memorandum of understanding. In the case of minor schemes, the handing over will be accomplished no sooner the rehabilitation is complete. But in medium schemes, this will be in two stages; first the handing over of the distributary system and then the handing over of the whole scheme.

NIRP has already handed over about 4 minor schemes and preliminary action is being taken to hand over the distributary systems in 2 completed medium schemes, one at Kurunegala and the other at Buttala. At the handing over stage, each farmer organization will be provided with a condition report and a revised O&M plan. The agreement will specify the relationship between the new roles of the respective agencies and the FO. It will therefore be self-management in the case of minor schemes and joint management in medium/major schemes. The whole issue as to whether the FO should take over and manage the totality of the scheme with agency assistance is one which needs further experimentation and study.

Monitoring and Evaluation

Effective and useful performance monitoring and evaluation are essential for the success of the participatory irrigation management program. However, in doing these, one should keep in mind the need to be cost-effective, simple and use only basic measurable indicators. Furthermore, monitoring should be done at all levels with a view to educating the FO and the agency to identify defects and to provide immediate remedial measures.

Aftercare

By aftercare we mean looking back and assessing the strategies introduced to see whether the scheme had been successful in increasing the level of performance without threatening its future prospects. The sustainability of the system involves four main areas of activity: (1) Institutional framework, which includes the farmer organization, irrigation agencies, the Project Management Committee, etc. (2) The physical irrigation system, which includes the annual maintenance plans, involvement of FOs in decision making, evaluation of the operational activities, and timely intervention to attend to O&M activities. (3) Environment, which includes conservation of the catchment, maintenance of the drainage system, avoiding pollution, etc. (4) Agricultural production and incomes, which include activities to improve production, preparation and implementation of a cultivation plan, input requirements and marketing, and involvement in training to promote these activities.

Issues and Constraints

Self-Management. This project contemplates handing over of the entire management of all medium/major rehabilitated schemes to the farmer organizations (FOs) within a two-year period. This has not been done in any medium/major schemes to date, and as such it should be considered a new concept in management. All medium/major schemes are gravity-fed systems serving a large number of subsistence farmers. The question is raised as to whether it is possible to impose on these farmers a new concept, that they should manage their own scheme and that any recovering of costs should be done by the FOs themselves. Unless the demand for self-management comes from the farmers themselves, it may be unwise to lay time frames for the farmers to manage their scheme. However, managing upto field-channel (FC) and distributary-channel levels can be justified, but not beyond these levels. Therefore, this concept should be given sufficient thought before being implemented.

2. *Role of IOs.* IOs form the backbone of the development of sustainable FOs. Unfortunately, in this project, due to procedures on recruitment laid down by the government, it has been found difficult to get the correct catalysts for this purpose. More than 90 percent of those selected are mere school leavers and they lack motivation and commitment. Training by itself cannot bring about the desired changes to be a good catalyst. Most IOs think that this is just another government job. This has resulted in the quality and the standard of the IOs being very low and most of them have failed to play the role of catalyst.
3. *Project Management Committees.* The project management system itself does not seem to work satisfactorily in most medium schemes. The technical assistants appointed as project managers have other departmental responsibilities and have to work within the hierarchical framework of the department. The officers from other departments and agencies do not provide the necessary cooperation and support. Some do not even attend Project Management Committee (PMC) meetings regularly. This has resulted in the PMC meetings being another departmental meeting with farmer representatives participating.

4. *10 Percent Contribution.* The 10 percent contribution is an undertaking given at the beginning of rehabilitation. Most farmer organizations kept to their word but a few have defaulted.
5. *Attitudinal Changes.* The expected attitudinal change is taking place very slowly. The middle-rung officials need to change their approach towards the FOs and farmer representatives and this is specially so in the Provincial Engineering Units. There is a need to understand the limitations of FOs; they are not financially viable, their technological standards need improvement and, above all, they need encouragement to build themselves as community groups.
6. *Agency Diversities.* The three agencies, namely, the Irrigation Department (ID), Department of Agrarian Services (DAS) and the Provincial Council work at three different levels. While ID is mostly concerned with medium schemes, DAS is more involved in institutional aspects, and the Provincial Council approach differs in each province as the Provincial Councils are separate entities. This has made it difficult for the project to work as one integrated program.
7. *Role of Provincial Units.* The project has problems in working as an integrated national project. The provincial engineering setup is not fully geared to handle rehabilitation. The Provincial Chief Secretaries who are expected to coordinate the progress at provincial level are not playing their role properly except in a few provinces. The situation in the Southern, Western and Sabaragamuwa provinces has to improve. In certain provinces, we have noticed that the provincial administration does not see eye to eye with the centrally managed DAS. The provinces are still construction oriented and the concept of participation is not fully accepted.
8. *Legal Support.* How far the recent amendments to the Irrigation Ordinance have contributed to more effective farmer participation is another issue that needs the attention of researches and academicians.

Finally, in conclusion, we could say that with FOs being made sustainable institutions there will be broad social benefits that will help the community on a long-term basis. There will be a development of local leadership, enhancement of farmer skills and strengthening of capacities to manage their own affairs.

The benefits thus derived from promoting farmer participation through FOs will go beyond the immediate interests of both farmers and agency officials. The impact will not only cover the concerns for better management of the schemes but will also address more broader issues like harnessing the full potential of the rural community for building local capacities for self-reliant and self-sustaining development.

Monitoring Farmer Involvement in Rehabilitation: The Case of Five Irrigation Schemes under the National Irrigation Rehabilitation Project

W.J.J. Upasena, J.D. Brewer and K.A. Haq²

Summary

Farmer participation is an essential part of the National Irrigation Rehabilitation Project (NIRP). The Irrigation Research Management Unit (IRMU) has been asked to undertake a study aimed at monitoring and evaluating farmer participation in NIRP rehabilitation, with assistance from the International Irrigation Management Institute (IIMI). This report is a product of Phase 1 of the study. For this phase, Rapid Rural Appraisal was used to assess farmer participation in three medium schemes and two minor schemes.

Generally, the initiation of farmer organizations (FOs) was not a difficult task because of help from enthusiastic farmer leaders, Institutional Organizers (IOs) and other officers, although a variety of problems were reported by the IOs. To convince farmers of the importance of the FOs, the IOs and other officers used rehabilitation as the main motivation for the farmers to form FOs. The efforts of the IOs and other officers, together with training for farmers, have created an adequate awareness of the rehabilitation project and FOs among most of the farmers.

Most of the FOs in the sample schemes are weak and continue to need direct assistance from the IOs and agencies. In most cases, farmers showed high interest in the FOs when rehabilitation was first mentioned. However, the interest waned over time in all of the systems. Reported reasons for the declining interest include:

- ✘ Lack of perceived benefits from FOs.
- ✘ Shortcomings of the agencies.
- ✘ Disputes among farmers.
- ✘ Part-time farmers and seasonal tenants.
- ✘ Political interventions.
- ✘ Weak leadership.

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- ❏ Absence of an IO.
- ❏ Not honoring rehabilitation requests from farmers.
- ❏ Losses from construction contracts.

Rehabilitation is the main reason farmers have shown interest in FOs. Additional benefits are needed. Handling of finances has also been identified as a major problem for FOs.

In all of the sample schemes, there has been farmer participation in walk-through surveys and in meetings with Irrigation Department (ID) officers for planning purposes. More effort at getting farmer input during the planning stage would help. Major concerns in the sample schemes include the following:

- ❏ In all of the sample schemes, farmers want to spend funds on major items that were vetoed by officers for reasons of violation of NIRP rules and/or fund limitations.
- ❏ At meetings, there are difficulties in communication between ID officers and farmers because of the different conventions used.
- ❏ Rehabilitation planning does not include attention to operations after rehabilitation.

Farmers in all five schemes profess their willingness to contribute to the rehabilitation work and their actions support their words. There remain difficulties, including difficulty in completing earthworks, and confusion over the 10 percent contribution with contract work. The implementing agencies do not know what to do if farmers neglect their 10 percent commitment while some FOs have difficulties in dealing with defaulters.

Construction contracting is problematic. In the two sample schemes where FOs had undertaken contracts, most FOs lost money and had complaints about the rates fixed by ID. One FO in a minor scheme refused to accept contracts. The FOs have managed to maintain the quality of the work. Farmers report two major problems with contracts:

- ❏ Lack of capital (preferably cash to give them flexibility in management) to begin contracts.
- ❏ Unreasonably low rates for work because of inflation.

Subcontracting has been used by many FOs in other rehabilitation projects to avoid the problem of lack of capital. For NIRP, ID has disallowed subcontracting to avoid abuses.

In all three schemes where construction had commenced, farmers took construction supervision very seriously at the beginning. However, interest waned considerably because of the lack of response by the agencies to reports of problems. Neither the FOs nor the agencies have clear procedures for handling construction supervision by farmers.

The evidence indicates that farmer participation is helping to make the rehabilitation more cost-effective and more appropriate to farmers' needs. However, there are serious deficiencies in the preparation of FOs for takeover of O&M responsibilities and the general weakness of the FOs does not bode well for the future O&M of the systems.

The following are the key issues that should be addressed:

1. Work with FOs has focussed solely on rehabilitation; strong attention needs to be given to O&M by IOs and other officers. Also, additional benefits from FOs for the farmers need to be identified.
2. Agency support for FOs can be improved: (a) IOs need better transportation; (b) the time and responsibility pressures on ID Project Managers should be investigated; (c) FOs should be given more assistance in maintaining financial records; and (d) the agencies should set up a system to monitor and report on the progress of the FOs.
3. Indirect agency support for FOs can be improved: (a) processes for repayment of loans through the FOs need to be improved; and (b) ID, DAS, Provincial Council agencies, and others should search for ways to channel their support through the FOs.
4. The models used for creating FOs should be reviewed: (a) in minor schemes, conflicts between existing irrigation management organizations and FOs created to satisfy NIRP requirements should be avoided; and (b) the INMAS (Integrated Management of Irrigation Systems) model used by ID in medium schemes is not appropriate for many schemes; alternative models need to be explored and evaluated.
5. Farmer participation in planning and design under NIRP can be improved: (a) agencies should respond more positively to farmers' ideas about the improvements to their systems; this may require revising NIRP rules and regulations; (b) the planning process should incorporate operations planning; and (c) ways to get around difficulties in communication between farmers and officers should be explored.
6. To reduce problems in getting the farmers' 10 percent contribution, the following can be considered: (a) providing assistance to FOs in dealing with defaulters; and (b) defining the agencies' response to failure to provide the 10 percent contribution.
7. To get improvements in the effectiveness of construction contracting, the following can be considered: (a) a cash mobilization advance of 20 percent of the contract value should be offered to the FOs in lieu of materials; (b) subcontracting to individuals could be allowed if the work is subcontracted to members of the FO and the decision to subcontract is consciously taken by the FO as a whole; and (c) the rates provided in the contracts offered to the FOs should be reviewed at frequent intervals.
8. The effectiveness of construction supervision by FOs can be greatly improved if: (a) the implementing agencies adopt explicit procedures for responding to reports of problems from the FOs; and (b) clear procedures are taught to the FOs.

1. Introduction

1.1 The National Irrigation Rehabilitation Project

The objectives of the National Irrigation Rehabilitation Project (NIRP) are to stabilize and increase agricultural production, and raise incomes and standards of living of farmers through rehabilitation and improved operation and maintenance (O&M) of selected irrigation schemes. NIRP aims to rehabilitate 1,000 minor and 60 major/medium irrigation schemes by 1998. In every case, the rehabilitated schemes are to be turned over to farmers

for O&M following rehabilitation. The subsidiary objectives are: (a) upgrading the skills of farmers and staff of the implementing agencies and (b) creating viable farmer organizations (FOs) to manage the rehabilitated schemes (Staff Appraisal Report, World Bank 1991). NIRP is being undertaken by the Irrigation Department (ID) with assistance from the Provincial Councils, the Department of Agrarian Services (DAS), and other agencies.

NIRP requires that the implementing agencies organize farmers in the selected schemes and then come to an agreement with the FOs about what work will be done before the physical works begin. There are two reasons for this:

- ❑ By utilizing farmers' knowledge and experience in planning, design, and implementation of the rehabilitation, better quality and more cost-effective rehabilitation will result.
- ❑ Farmer involvement in rehabilitation will help to prepare the FOs for the subsequent takeover of O&M of the rehabilitated scheme by strengthening the FOs and by creating an interest in and a "sense of ownership" of the system among the farmers.

Farmer participation thus is an essential part of NIRP.

1.2 Monitoring and Evaluation of Farmer Participation in NIRP

The Irrigation Research Management Unit (IRMU) with assistance from the International Irrigation Management Institute (IIMI) has undertaken the study aimed at monitoring and evaluating farmer participation in NIRP rehabilitation. The overall goal of the study is to review NIRP practices with respect to the development of sustainable FOs and suggest suitable alternative options wherever applicable.

Therefore, the objectives of this study are:

1. To evaluate the strength and preparedness of the farmer organizations (FOs).
2. To assess farmer involvement in rehabilitation planning and implementation.
3. To evaluate the contribution of farmer participation in rehabilitation to preparing the FOs for taking over O&M responsibilities after rehabilitation with regard to (a) organizational management abilities, (b) technical knowledge concerning O&M, and (c) financial standing and management abilities.
4. To determine the constraints to effective farmer participation in rehabilitation, in the sample schemes.

The study is being carried out in two phases. Phase 1 consists of a preliminary assessment of five irrigation schemes in various stages of rehabilitation under NIRP. These include 2 minor and 3 medium schemes. This report is a product of Phase 1 of this study.

Phase 2 will survey, in more detail, a larger number of schemes being rehabilitated by NIRP in order to test the generalizability of the tentative conclusions reached in Phase 1 and to find a cost-effective way to monitor farmer participation in the future.

For Phase 1 of the study, Rapid Rural Appraisal was used to monitor and assess farmer participation in rehabilitation. The basic components of farmer participation in rehabilitation under NIRP were defined in a field preparation workshop held before the data collection. In the same workshop, a field guide was developed and it included the questions to be answered for each component, sources of the data to answer the questions and sources of the data to check the answers.

1.3 Components of Farmer Participation in Rehabilitation

There are five components of farmer participation in NIRP rehabilitation to be evaluated:

- ☒ Farmer organization (FO) formation and preparation.
- ☒ Farmer participation in planning and design.
- ☒ Farmer contribution of 10 percent of the resources needed for the rehabilitation.
- ☒ Construction contracting by FOs.
- ☒ Construction supervision by FOs or farmers.

The latter four are directly related to rehabilitation. However, the formation of strong, viable FOs to represent the farmers in these and other activities is a prerequisite to effective participation in rehabilitation. Therefore, FO formation and preparation must also be evaluated.

Each of these five components is discussed separately in the following sections.

1.4 The Sample Schemes

Three medium irrigation schemes and two minor schemes being rehabilitated by NIRP were selected for the study. Some basic information on the five selected schemes is given in Table 1 and brief descriptions on the schemes are presented below.

Table 1. Basic information on the sample schemes.

Scheme	Command (ha)	No. of farmers	No. of FOs	Area per FO (ha)	Rehabilitation	
					Start	Finish
WW	188	425	4	47	1992	1994
GWRE	180	588	9	20	1992	1994
UBE	122	500	12	10	1994	1995
KMW	33	150	1	33	1992	1993
UME	24	100	1	24	1994	1994

Notes: WW = Wennoruwa Wewa.
 GWRE = Gampola Wela Raja Ela.
 UBE = Udugoda Bandara Ela.
 KMW = Kobeigane Maha Wewa.
 UME = Uda Wela Maha Ela.

1. *Wennoruwa Wewa Scheme.* Wennoruwa Wewa (WW) is a tank-based irrigation scheme located in Kurunegala District. The total command area is 188 hectares (ha) of which 97 ha are irrigated by the Right Bank Canal and the balance 91 ha come under the command of the Left Bank Canal. There are about 425 farmers in the scheme operating 480 parcels of land. The farmers include owner-operators, tenant cultivators, and absentee landlords who cultivate using hired labor. There are four FOs based on tracts, two under each main canal. The Project Management Committee is the apex-level organization in which office bearers of FOs, and officers of the Irrigation, Agriculture and Agrarian Services departments sit. Rehabilitation of this tank commenced in mid-1992 and was expected to be completed in 1994.
2. *Gampola Wela Raja Ela Scheme.* Gampola Wela Raja Ela (GWRE) Scheme is located in Kandy District. Water is derived from an anicut and irrigates a total command area of about 188 ha. The canal system is more than 16 km long. The command is cultivated by 588 farmers. There are 9 FOs and a Project Management Committee in the scheme. Rehabilitation started in mid-1992 and is almost complete.
3. *Udugoda Bandara Ela Scheme.* Udugoda Bandara Ela (UBE) Scheme is also located in Kandy District. The scheme derives water from an anicut and has a command area of about 122 ha. This scheme has a complex water receiving and distributing system. The headworks comprise a total of 8 diversion weirs including a main weir and two embankments impounding two reservoirs. The main canal passes through 5 km of steep terrain before entering the main command area. There are 500 farmer families in the scheme grouped into 12 FOs. A Project Management Committee exists at the scheme level. Rehabilitation work will commence in 1994 and is expected to be completed by 1995.
4. *Kobeigane Maha Wewa Scheme.* Kobeigane Maha Wewa (KMW) is a minor tank scheme in Kurunegala District. The command area is 33.2 ha. The delivery system includes a main canal, two branch canals and several field canals that distribute water to the field plots. The control and regulatory structures include two pickup anicuts and 26 regulators and farm turnouts. The number of farmers in the scheme is about 150. There is only one FO in the scheme. Rehabilitation of this tank scheme commenced in mid-1992 and 80 percent of the work has been completed.
5. *Uda Wela Maha Ela.* Uda Wela Maha Ela (UME) Scheme is a minor scheme located in Kandy District. Water is derived from an anicut and irrigates a command of 23.6 ha. The length of the canal system is over 2.4 km. About 100 farmers are cultivating under the scheme at present. The FO was established in 1992 but only became active after the appointment of an Institutional Organizer from DAS. Rehabilitation work was scheduled to start and be completed within 1994.

2. Farmer Organizations in the Schemes

NIRP is providing Institutional Organizers (IOs) and training programs intended to create farmer organizations (FOs) and to prepare the farmers for participation in rehabilitation and in O&M after the rehabilitation is completed. In addition, the Department of Agrarian Services (DAS) is also creating and strengthening FOs in some schemes with the help of

IOs and training programs. Organizational efforts, including the activities of IOs and training programs for farmers, and the current status of the FOs are discussed below.

2.1 Organizational Efforts

Efforts to create and strengthen FOs have been made by both DAS and ID at different times and places. In several of the areas, the first FOs were created by DAS in 1990 based on *Grama Niladhari* (government administrative officer at village level) Divisions. Only one of the schemes (GWRE) had FOs before 1990. In some cases, DAS used IOs for this purpose.

Once a medium system has been selected for NIRP, ID generally places its own IOs there, often to revive FOs created by DAS. These IOs are managed through the MANIS (Management of Irrigation Systems) program under which the Technical Assistant in charge of the scheme is named the Project Manager and made responsible for creating and supporting the FOs. DAS, however, has continued to handle organizational activities in minor schemes even after NIRP had taken over the responsibility.

The basis of definition of FOs varies. Each minor scheme has one FO to represent the whole command area. Each medium scheme has several FOs. These are based on some mix of topographical, hydrologic, and administrative units; settlement tracts, valley bottom areas, villages, and *Grama Niladhari* Divisions are used. Unlike the major schemes, many medium and minor schemes do not have distributary and field channels which can be used as the basis for creating organizations. Thus Farmer Representatives (FRs) often represent different *yayas* (tracts) instead of field-channel groups.

In a medium scheme, there is a Project Management Committee, consisting of the representatives of each FO and officers from the relevant agencies, to take management decisions regarding the scheme. Although KMW is a minor scheme, it has three tract committees to represent different locations.

Generally, the initiation of FOs was not a difficult task because of help from enthusiastic farmer leaders, IOs and other officers. In UBE, it has been difficult to organize farmers in one village at the very head-end of the scheme because the farmers have no scarcity of water.

IOs in the minor schemes have been appointed by DAS. Depending on the extent of the scheme, these IOs have to look after more than one scheme. Each medium scheme in the sample has two IOs appointed by ID. These include some experienced people from the Irrigation Systems Management Project. These IOs have had a great deal of training.

At the beginning, IOs had to convince farmers of the importance of FOs. In the three medium schemes, FOs had been formed by DAS but were inactive when the present IOs arrived. In the minor schemes, IOs had to begin from scratch. The basic technique used by the IOs from both agencies to convince farmers of the importance of FOs was to focus on rehabilitation; that is, getting the scheme rehabilitated was used by the IOs and by the other agency people as the main motivation for the farmers to form FOs.

According to the IOs in the five sample schemes, the difficulties in organizing farmers include:

- ❑ Convincing farmers of the benefits of being members of a FO.
- ❑ Delays by the agencies and breaching of the confidence in the agencies by failure to live up to promises.

- ❑ Travelling difficulties for IOs (and FRs); in the medium schemes, farmers (and absentee owners) are scattered over a large area while in the minor schemes, each IO is responsible for more than one scheme.
- ❑ Lack of interest by part-time farmers and short-term tenants.
- ❑ Caste divisions.
- ❑ Economic and political disparities among the farmers.
- ❑ The IOs' lack of knowledge of agriculture.

Training classes for farmers have been organized by both DAS and ID. For the most part, these have been specifically for FRs. Subjects covered include:

- ❑ Crop diversification and how to make profits from agriculture.
- ❑ Water management.
- ❑ Construction: concrete mixtures, earth work, construction quality control, contracts and contracting procedures.
- ❑ Farmer organizations: objectives of FOs, farmer roles and responsibilities with regard to FOs, etc.
- ❑ Conducting organization meetings.
- ❑ Financial management: bookkeeping, use of checks, bank accounts, etc.

These, together with the efforts of IOs and other officers, seem to have created an adequate awareness of the rehabilitation project and FOs among most of the farmers.

Handling of finances has been identified as a major problem for FOs. Although training in financial management has been given to some FOs, additional assistance may be needed. Auditing of FO accounts would help. ID thinks that assisting with audits is a responsibility of DAS. According to DAS field officers, they received no instructions to help with audits until September 1993, when they were ordered by the Commissioner of Agrarian Services to report on the progress of the FOs. In addition, the ID Project Manager at UBE wanted to make his signature on checks a requirement for the FOs to make bank withdrawals. Farmer leaders protested at this, saying it is not necessary as they have the necessary authority under Article 56A of the Agrarian Services Act.

2.2 Present Status of Farmer Organizations in the Sample Schemes

Most of the FOs in the sample schemes are weak and continue to need direct assistance from the IOs and agencies. Two examples are:

- ❑ At KMW, there was no IO for a short period. During this period, a dispute arose among the FO office bearers causing the secretary to resign. Without an IO, they could not resolve the problem.

- At GWRE, the usual practice is to summon FRs to the Project Management Committee meetings by sending letters via the IOs. Since the meeting schedule had been finalized at the beginning of the year and it is displayed at the unit office, the Project Manager decided to see whether the FRs would come if they did not send the letters. The turnout was very low and the FRs who came said that they wondered whether the meeting had been canceled since they did not receive letters.

In most cases, farmers showed high interest in the FOs when rehabilitation was first mentioned. However, the interest waned over time in all the systems and progress in developing the FOs has slowed. Thus, despite the fact that all the schemes have had at least two years of work with FOs, only one FO has been registered under Article 56B of the Agrarian Services Act. All the others have been registered under Article 56A. One reported problem is failure to keep good financial records and to report on financial matters to their membership.

The reasons for the declining interest are various; some reported examples are:

- Farmers' interest in FOs at UBE has declined due to the delay in commencing the rehabilitation work and cuts in the initial plans.
- The FO at UME was weakened when DAS failed to provide agricultural inputs on credit as promised, for reasons beyond the control of the local DAS officers.
- Some of the FOs at GWRE were disappointed because they lost money in construction contracts, in part, because of low rates and delays in payments by ID.
- One FO at GWRE has lost interest because of the strictness of DAS in recovering payments for a two-wheel tractor provided on credit, even though it was clear to the officers that the FO could not employ the tractor effectively because the cultivation was foregone to allow the rehabilitation, and a trailer was not available for this tractor to be used for other purposes such as transport of goods.
- In all five schemes, part-time farmers and short-term tenants show less interest in supporting FOs than do others; where these are a large group, the FOs are generally weak.

The only places where FOs seem to be working well are where there are enthusiastic leaders. However, over the long term, the FOs cannot depend on the enthusiasm of a few individuals.

Table 2 summarizes the reasons for weak FOs reported in the sample schemes. The last two reasons shown in Table 2 are issues directly related to NIRP rehabilitation activities and are discussed in later sections in some detail. All of the others, however, are problems that have been faced by FOs in INMAS and other successful farmer organization programs. These problems can be solved through work by IOs and other officers with the cooperation of the agencies.

The single biggest problem is that many of the farmers see little or no benefits from the FOs. Unless the farmers can perceive benefits of maintaining the FOs they are not likely to do so.

Table 2. Reasons for weak FOs.

Problem	Schemes affected
1. Lack of perceived benefits from FOs, UME, UBE, GWRE, WW, KMW	
2. Shortcomings of the agencies	UME, UBE, GWRE, WW, KMW
3. Disputes among farmers	UME, UBE, GWRE, WW, KMW
4. Part-time farmers and seasonal tenants	UME, UBE, GWRE, WW, MW
5. Political interventions	KMW, UME
6. Weak leadership	GWRE
7. Absence of an IO	KMW
8. Not honoring rehabilitation requests from farmers	WW, KMW, UBE, UME, GWRE
9. Losses from construction contracts	GWRE, WW

Notes: WW = Wennoruwa Wewa.
 GWRE = Gampola Wela Raja Ela.
 UBE = Udugoda Bandara Ela.
 KMW = Kobeigane Maha Wewa.
 UME = Uda Wela Maha Ela.

If the FOs serve as an effective channel for interacting with the government agencies, particularly, the Irrigation Department (ID), the Department of Agrarian Services (DAS) and the Department of Agriculture, it will be one of the prime motivations for farmers to sustain the FOs. The ability of the FOs to serve as channels for interaction depends greatly on the willingness of the agencies to work with the FOs. In the sample systems, the agencies have chosen to channel only two types of interactions through the FOs:

- Interactions with ID and DAS in regard to rehabilitation are channelled through the FOs.
- DAS has tried to use the FOs to distribute inputs and two-wheel tractors.

Rehabilitation is the main reason why farmers have shown interest in the FOs. However, once rehabilitation is finished or even well underway, there is no longer much need to pay close attention to FO affairs. Rehabilitation is not a motivation for sustaining the FOs.

Attempts to use FOs as channels for input supplies have not worked well in the sample schemes for a variety of reasons. In one case (GWRE), the demand from DAS for repayment for a two-wheel tractor appears to be a major cause for the collapse of an FO.

The failure of agencies to keep promises made to the FOs (UME and UBE), sometimes for reasons beyond the control of the local offices of the agencies, tends to weaken the motivation of farmers to support the FOs. Also, interagency coordination is weak (WW) and tends to make the agencies less effective in responding to FO needs.

3. Farmer Participation in Planning and Design

Specific procedures have been defined for NIRP to assure effective farmer participation in planning and design of rehabilitation. Such participation is intended to ensure that farmers understand and consent to the works to be done and their obligation to take over O&M following rehabilitation. The procedures include joint walk-through surveys, discussions between farmers and technical officers, and the signing of a formal agreement between the FO and the government under which the farmers agree to pay a 10 percent contribution and to take over O&M following rehabilitation.

In all of the sample schemes, there has been farmer participation in walk-through surveys and in meetings with ID officers for planning purposes. This is a big advance over earlier rehabilitation projects. In general, implementing agencies feel that farmer involvement in identifying problems in the schemes greatly helped in the planning and design of rehabilitation.

However, some difficulties remain. Farmers often make new requests to be included in the rehabilitation program even after the program is finalized. In one case (GWRE), such requests were made even halfway through the rehabilitation program. Requests of this sort can only be avoided by more effort at getting farmer input during the planning stage. According to reports from farmers and officers, attendance in the earliest meetings to discuss rehabilitation was satisfactory but declined at later meetings. Also, in two of the cases (GWRE and WW), a significant group of farmers was seriously affected as they had to abandon the cultivation; they felt that their rights were not adequately taken into account in the procedures.

Issues widespread in the sample schemes included the following:

1. *Failure to Meet Farmers' Requests.* A major reason for the loss of interest was that the farmers' major requests have not been met. In all five schemes, there were major differences of opinion between the farmers and ID about how the available funds should be spent.
 - ❏ At WW and KMW, farmers wanted to invest in tank desilting.
 - ❏ At UBE, farmers wanted to invest in an augmentation scheme.
 - ❏ At UME, farmers wanted to line more of the main channel.
 - ❏ At GWRE, farmers wanted improvements to a stream that serves as part of the main canal.

In every case, although the officers were sympathetic to the farmers' requests, they decided these requests could not be accommodated because of NIRP rules and regulations and/or budget limitations. Failure to respond positively to what the farmers see as the major problems has tended to discourage farmers and weaken the FOs. Requests such as those to desilt the tanks should be considered seriously and NIRP regulations must be flexible enough to accommodate such requests wherever possible

2. *Communication Difficulties.* There is a reported communication problem at meetings. ID officers generally refer to locations in terms of distance along a channel. Farmers often have difficulty in visualizing the exact location when referred to this way. This

makes discussions about proposed works confusing and misleading, particularly, to the farmers who are generally put in the position of reacting to the proposals of the officers. This problem does not arise during walk-throughs.

3. *Lack of Discussion of Operations.* Reports from the sample schemes indicate that rehabilitation planning has generally not included any discussion with the farmers on operations after rehabilitation, although the operations plan is critical to the success of the rehabilitation. In one case (KMW), there may well have been an undiscussed difference in understanding operations following rehabilitation. If the rehabilitation design assumes an operations plan that the farmers are neither accustomed to nor willing to follow, the rehabilitation may actually make the system less functional rather than improving it.

Overall, the procedures and standards for farmer participation in planning and design could have been made more clear to both the farmers and the officers.

4. Farmer Contribution of 10% of the Cost

A requirement for support from NIRP is that the farmers formally agree to contribute 10 percent of the cost of the works. This is often done by assigning labor to the farmers to be done without pay. Other techniques are used in some schemes.

Farmers in all five schemes profess their willingness to contribute to the rehabilitation work. KMW farmers completed the earthwork that made up their contribution within two weeks after the allocation for rehabilitation was made. UME farmers are not hesitant about undertaking their earthwork and are confident that they can complete it when the demarcations are done. Farmers will sometimes do more than 10 percent of the work, if they can contribute in the form of labor (WW and UME).

However, there remain some difficulties. For example:

- ❑ WW FOs agreed to undertake earthwork and tried to get them done through *shramadana*. However, to date, they have failed to complete their work. They now plan to complete it on a share basis (a share of the work is assigned to each farmer).
- ❑ At GWRE, the earthwork was 20 percent of the total estimate. All of this was given to the FOs on contract but half of the value was deducted to cover the 10 percent contribution. Farmer involvement was very weak and farmer leaders managed to complete the work using laborers at low wage rates, with the available money. They feel that they faced enormous difficulties in achieving this target. This situation arose because the 10 percent was not clearly separated from the contract work. Therefore, the 10 percent share must be separated from contract work given to FOs, when and where possible.
- ❑ At UBE, there is not enough earthwork to cover 10 percent of the estimated cost. Because the FOs have agreed to undertake all the construction works, ID expects to deduct 10 percent from all the contracts offered. This may affect the performance of the FOs in handling the contracts.

The major problem of the implementing agencies is that they do not know what to do if farmers neglect their 10 percent commitment. The major problem faced by the FOs is

dealing with defaulters, since they have no legal powers to enforce their decisions. The FOs use various strategies to avoid this problem and several appear to be very successful while others are not. For instance, the KMW FO informed farmers that defaulters would be fined Rs 200.00 per fathom (6 feet). Because these farmers had the experience of this type of action at the time of the *Vel Vidane* (VV; Irrigation Headman) system, farmers completed their share of work just after the allocation. The ability to mobilize labor appears to be related to general FO strength.

5. Construction Contracting by Farmer Organizations

Contracts for some of the construction work are offered to the FOs. This practice is expected to help prepare the FOs for the takeover of O&M responsibilities in three ways: (a) by giving them experience in mobilizing and organizing labor and resources to undertake jobs, (b) by giving them experience in and knowledge of various technical aspects of irrigation structures, and (c) by providing them with funds that can be used for O&M and to raise further funds for O&M.

At the time of the study, FOs had undertaken contracts only in WW and GWRE. The FO at KMW had refused to accept contracts due to problems with officials and politicians. The president of the KMW FO was an opponent of the Member of Parliament (of the ruling party) of that area. It was said that due to this reason, he wanted to dissolve the FO to pave the way for his supporters to be appointed for all the positions of the FO but failed because the FO had been registered at DAS by that time. Farmers felt that the officers of ID too did not want to offer contracts to the FO though they promised contracts. FOs in UBE had agreed to accept all the contracts in the program. UME farmers had not decided on whether to accept contracts; they are hesitant because of lack of capital and time to devote to the work. Most of the FOs lost money in their first contracts due to lack of experience. The FOs have managed to keep the quality of the work up to standard levels with the help of officials.

Farmers report two major problems with contracts:

- ❏ Lack of capital to begin contracts: ID has provided materials in some instances to overcome this problem. However, the cost of materials supplied by ID to the FOs is higher than materials purchased in the open market since ID charges 25 percent as departmental overhead.
- ❏ Low rates for work set by ID: Even private contractors abandoned work halfway due to this problem (WW and GWRE). According to the Project Manager at GWRE, all private contractors demand rates higher than those set by ID. The estimates were prepared long before implementation. Even the price escalation allowance was not adequate to meet inflation. This factor was not considered before offering contracts to the FOs and ID was not in a position to revise the contracts. ID has promised to revise the rates of estimates for subsequent contracts. Sometimes, due to the slowness of the revising procedure, revised rates would not be able to match the current market rates. Therefore, if NIRP can adopt a mechanism to expedite this process, FOs will benefit greatly.

Some of the FOs in WW and GWRE have managed to earn very small amounts of money due to hard work by interested leaders with prior experience in handling contracts. Because the FOs are not maintaining proper financial records, it is not clear whether total

amounts earned from contracts have been credited to the FO accounts. To avoid this situation, better financial discipline must be adopted.

One practice adopted by many FOs under rehabilitation projects has been subcontracting to individuals in return for a commission, generally 5 percent of the estimate. This is a way of benefitting from the contract without having to put up the capital. Under NIRP, ID has disallowed subcontracting, presumably to avoid the abuses reported from some places where contracts have been managed by FO office-bearers for their own personal advantage. Subcontracting to an outsider also has the disadvantage that the farmers fail to get organizational management and technical experience from the work. However, these problems can be avoided if (a) the work is subcontracted to members of the FO, and (b) the decision to subcontract is consciously taken by the FO as a whole.

All the FOs at UBE were prepared to undertake all contracts under the rehabilitation program. Although the UBE farmers understood that all contracts were to be offered to the FOs, the contracts were advertised in newspapers thus causing some farmers to doubt the word and goodwill of ID.

6. Construction Supervision by Farmer Organizations and Farmers

In order to develop interest and responsibility among farmers for the irrigation scheme, FOs are encouraged to help supervise the work done by private contractors and the implementing agency. A group of farmers from each FO has been trained on the construction procedures for this purpose. These farmers have shared their knowledge with other farmers so that the latter too can help. Shortcomings or imperfections are to be reported to the implementing agency. It is presumed that the farmers will do a good job since they have a direct interest in the quality of the work.

In all three schemes where construction had commenced (WW, GWRE and KMW), farmers took construction supervision very seriously at the beginning. However, interest has waned considerably, primarily because of the lack of response by the agencies to reports of problems. For example:

- ❑ At GWRE, farmers reported to the ID officers, and directly to the contractors, problems observed with the retaining walls at Bothota *Amuna* (anicut). The contractors told the farmers that they were following ID standards. The ID officers neither took action nor responded to the farmers. The problematic walls collapsed with the first rains.
- ❑ When KMW farmers complained that structures were being set at the wrong levels, no appropriate remedial actions were taken by the officers. As a result, the farmers suspect that the officers are in collusion with the contractor. They have now given up any attempt at construction supervision.

Neither the FOs nor the agencies have clear procedures for handling construction supervision by farmers. The FOs have mostly left construction supervision to the FRs without setting schedules and defining the way supervision will be carried out. Also, the agencies have not defined procedures for responding to farmer reports of construction deficiencies, either in terms of actions to be taken or in terms of reporting those actions back to the FOs.

7. Achievement of the Goals of Farmer Participation in Rehabilitation

As indicated earlier, there are two main goals of farmer participation in NIRP rehabilitation:

- ⌘ Making the rehabilitation works more cost-effective and more appropriate to the needs of the farmers.
- ⌘ Preparing the FOs to take over O&M of the systems following rehabilitation.

Each is discussed below.

7.1 Making Rehabilitation More Cost-Effective

Evidence from the sample systems would seem to indicate that farmer participation is helping by making the plans and designs more responsive to farmer concerns and by getting farmer contributions to the work. Quality of work by the farmers appears adequate. However, the expected gains in quality through construction supervision by farmers are not being realized. Overall, there appear to be only small gains.

7.2 Preparing Farmer Organizations for Takeover of O&M

The evidence from the sample schemes indicates that there are some deficiencies in the preparation of FOs for takeover of O&M responsibilities. These include the following:

- ⌘ Because the agencies have emphasized FO involvement in rehabilitation to the virtual exclusion of O&M, the farmers have not yet begun to understand the O&M functions of the FOs.
- ⌘ The FOs themselves are weak, in part because the farmers have not yet realized that they have benefits other than the rehabilitation.
- ⌘ In some cases, the FOs may not be appropriate for management of O&M; generally, the minor schemes already have O&M organizations other than the FOs created for rehabilitation, while in the medium schemes the FOs have been created on a wide variety of bases but all with the intention of mimicking the INMAS model for farmer organizations.
- ⌘ Farmer involvement in planning and design of rehabilitation, while good, could be improved: more attention could be given to the major concerns of the farmers, and efforts could focus also on planning operations following completion of rehabilitation.
- ⌘ The difficulties faced by some FOs in getting the 10 percent contribution are evidence of the need for strengthening the FOs so that they will be able to mobilize labor needed for maintenance in the future.
- ⌘ Construction contracting by the FOs does not seem to be serving the function of providing funds for the FOs; however, it may be helping by giving some organizational management and technical experience to the FOs.

- ❑ FO experiences with construction supervision are generally discouraging the FOs rather than strengthening them.

The general weakness of the FOs in the sample systems does not bode well for the future O&M of the systems.

8. Emerging Issues

The following are key issues arising from Phase 1 of this study that should be addressed both by the NIRP management and by the Phase 2 of the study:

1. *Organization for Rehabilitation.* As promoted by the agencies, the FOs have been created solely to implement rehabilitation; thus they are unprepared to take on O&M responsibilities. The following are needed:
 - ❑ IOs and other agency personnel have to focus their attention on O&M to prepare the FOs for the take over of O&M.
 - ❑ IOs and others need to work with farmers to identify additional FO activities that will benefit the farmers over the long run.
2. *Direct Agency Support for FOs.* Direct agency support for FOs is provided through Institutional Organizers (IOs) and other officers and through training programs. The following would help:
 - ❑ Transportation is reported as a particular problem for IOs; some improvement would help greatly.
 - ❑ ID Project Managers may not have the time to provide effective support for FOs, and they may have a conflict of interest between their roles as Project Managers and as Technical Assistants; this matter should be reviewed.
 - ❑ Assistance with auditing FO accounts could be given, in addition to mere training in bookkeeping and financial reporting. A common financial discipline may be adopted.
 - ❑ The agencies should set up a system to monitor and report on the progress of FOs.
3. *Indirect Agency Support for FOs.* The way the agencies carry out their activities affects farmer willingness to support the FOs. Although some agency services are now channeled through the FOs, this can be improved:
 - ❑ Necessary steps have to be taken to redress and strengthen the process of repaying loans provided through the agencies without damaging the relationship between farmers and the agencies.
 - ❑ ID, DAS, Provincial Council agencies, and others could search for effective ways to channel more of their support through FOs. For example, the

Department of Agriculture might be able to channel agricultural extension services through the FOs. DAS might look for ways to make its programs for supplying inputs, two-wheel tractors and other items, more supportive of the FOs.

4. *The FO Model.* The current models being used for creating FOs may not be the most appropriate. Two issues should be explored:
 - ❑ In minor schemes, if there is already an effective irrigation management organization, should a new FO be created solely for the purpose of satisfying NIRP requirements?
 - ❑ The INMAS model for an FO is currently being used by ID but it is not appropriate for many schemes; alternative models need to be explored and evaluated.
5. *Participation in Planning and Design.* Farmer participation in planning and design under NIRP has not been fully satisfactory to the farmers. The following issues should be explored:
 - ❑ Agencies could respond more positively to farmers' ideas about improvements to their systems; this may require revising the NIRP regulations.
 - ❑ The planning process should incorporate planning of operations following rehabilitation.
 - ❑ Ways to get around the difficulty in communication between farmers and officers at meetings should be explored: these might include more extensive use of walk-through surveys or use of the walk-through surveys to establish common reference points, which can then be used in discussions at meetings.
6. *Farmers' 10 Percent Contribution.* Although it appears that getting the farmers' 10 percent contribution is not a major problem, there is a need to consider the following:
 - ❑ What assistance can be provided to FOs in dealing with defaulters?
 - ❑ What should be the agencies' response to failure to provide the 10 percent contribution?
 - ❑ The 10 percent share must be clearly separated from the other contracts given to FOs to avoid confusion.
7. *Construction Contracting with FOs.* Exploration of the following issues may allow improvements in the effectiveness of construction contracting in serving the desired goals:
 - ❑ A cash mobilization advance of 20 percent of the value of the contract should be offered to the FOs in lieu of materials to be provided so that they can purchase their own materials if so desired. In this case, there should be a procedure to ensure that individual Irrigation Engineers (IEs) are not held liable in the case

of FOs that have been registered under Article 56(a) of the Agrarian Services (Amendment) Act, No. 4, of 1991.

- ⌘ Subcontracting to individuals could be allowed subject to the conditions that (a) the FO as a whole makes a formal decision to subcontract, and (b) subcontracts go to one or more members of the organization rather than to outsiders.
 - ⌘ The rates provided in the contracts offered to the FOs should be reviewed at appropriate intervals, preferably less than one year, if inflation is rapid.
8. *Construction Supervision by FOs.* The effectiveness of construction supervision by FOs can be greatly improved while strengthening the FOs:
- ⌘ The implementing agencies should adopt explicit procedures for responding to reports of problems from the FOs; these procedures should cover (a) the actions to be taken in response to the report; i.e., the responsible agency officer should inspect and order whatever changes are needed, and (b) a procedure by which the responsible agency officer reports back to the FO on the action taken.
 - ⌘ A clear procedure of supervising contracts should be introduced to the FOs.

Summary of Group Discussions and Recommendations

One of the major objectives of the workshop was to identify measures that NIRP should take in order to maximize farmer participation in NIRP schemes. To facilitate achieving this objective, each presentation was followed by a one-hour discussion. A brain-storming session was organized to enable participants to prioritize the issues that emerged during the discussion sessions. At the end of the brain storming session, with the help of the facilitator, the four most important issues were identified for group discussion. Issues identified were processes involved in strengthening FOs, agency support for strengthening FOs, turnover process and monitoring mechanisms for FOs and models of mobilization of farmers and resources. Four working groups were formed and each group consisted of six members. Guidelines in the light of the above mentioned issues were developed and distributed to the respective group. Each group selected its chairperson, and the chairperson presided over/guided the discussion. A representative from each group presented the outcome of their discussion to the participants. The suggestions and recommendations made by the respective groups for the identified issues are given below.

It was recognized that the strength and effectiveness of FOs depend primarily on the roles played by IOs in the formation and management of FOs and in preparing them for project implementation, the quality of the training received by farmers in O&M of irrigation systems, status of financial management of FOs and FOs' ability to survive political pressures. While analyzing the role played by IOs, it was recommended by Group No. 1 that IOs should be more closely supervised to make them understand that they play the most important role in the establishment as well as proper functioning of FOs. The group felt it necessary to identify/develop indicators to monitor the performance of IOs. Evaluation of IOs' performance by FOs was also suggested as a means to increase the effectiveness of their support to FOs.

Alternatives to IOs in supporting FOs were also discussed. It was suggested that instead of appointing IOs for organizing FOs, farmers can be asked to designate a suitable person and that the pay and allowance of this person can be borne by the project. A second suggestion was to involve NGOs in providing necessary institutional support to the FOs as catalysts on contract from the implementing agencies.

The group observed that FOs are being hurriedly formed to satisfy the specific needs of NIRP. In many cases, most of the members are not even aware of the responsibility of a FO and the roles the members need to play. Therefore, when the rehabilitation starts, they are often not fully ready to play their specific roles. It was therefore recommended that adequate time should be allowed for the FOs to settle down before they are ready to accept higher responsibilities. This period can be profitably used to train farmers and their representatives in different aspects of FO management. The group also felt that FOs can be formed even without specific projects for routine O&M and when specific project support is provided (like rehabilitation) they can easily adapt to the project requirements.

The group commended the NIRP's efforts to improve the training program. The group, however, emphasized the necessity of developing a comprehensive training manual. It was recommended that training programs for farmers should be a permanent feature, independent of projects and conducted regularly by a competent agency like DAS or ARTI (Agrarian Research and Training Institute). Specific project requirements can be built into the regular programs as and when necessary. It was noted that the number and quality of trainers also play an important role in the quality of the training received by the farmers. While recognizing the NIRP's effort in training the trainers, it was recommended that a core group of trainers be assembled, as far as practicable, in the agencies mentioned above. Emphasizing the necessity for improving financial management of FOs, it was suggested that it can be improved by the training of members in general accounting procedures and monitoring the activities in relation to it, such as maintenance of standard accounting ledgers, auditing, making the accounts more transparent to the members, etc.

Adoption of different FO models such as enrolling all farmers of the D-canals (Distributory Canals) in the FOs in major/medium schemes, formation of FOs in minor schemes by considering it as a cascade system, etc. were also suggested. In addition, it was recommended to test community-based FOs which can deal with the procurement and distribution of agricultural inputs and the marketing of agricultural produce. In dealing with political demands on the management of FOs, it was recommended that a charter be drawn up based on accepted national policy to enable FOs to withstand unwanted political pressure.

When it comes to agency support for strengthening FOs, it was recognized that field officers should be encouraged to support FOs more positively. Interagency cooperation also needs to be further improved in order to improve coordination. In handling contracts, it was recommended that FOs should be provided with technical assistance by the relevant agencies to enable them to successfully execute contracts. Also, there should be effective supervision of contracts awarded to contractors so that the quality of construction can be improved. Another suggestion was that the present practice of awarding contracts to FOs on a profit/loss basis should be reviewed and ways and means should be incorporated to ensure that FOs do not incur any financial loss in this learning exercise.

Group No 3, which defined turnover as a process by which the farmers in the major and medium schemes will be given a sense of ownership while expecting the FOs to conduct O&M of the systems below D-canals and contributing to the O&M of the main system, recommended that turnover should be implemented when the schemes are reasonably well rehabilitated and operable. The status of FOs at the time of turning over should be such that they are strong enough managerially and are at a technical level capable of undertaking O&M of the system and, at the same time, financially viable. It was recognized that by establishing mutual trust between FOs and agency officials, FOs can be assisted in creating mechanisms to mobilize resources. Turnover also involves empowering FOs to effectively run O&M of the system. In empowerment of FOs, the steps suggested were training agency officials to achieve objectives, training FOs in financial management, monitoring and evaluation, joint preparation and implementation of seasonal operational and O&M plans with agency officials, etc. The group also recommended that instead of turning over the systems immediately after rehabilitation, the agencies should jointly work with the FOs in the O&M of the systems for about two years and then withdraw gradually from O&M of D-canals and below. At this stage, it was suggested that the capability of FOs in handling O&M of D-canals and below should be assessed. As for farmers' contribution, it was recommended that it should be about 25 percent at system level, 75 percent at D-canal level and below and O&M should be entirely handled by FOs at field-channel level.

In developing appropriate monitoring mechanisms for FOs, it was pointed out by Group No. 4 that indicators for evaluating their efficiency and effectiveness have to be identified. It

should, however, be recognized that performance of FOs will depend greatly on the coordination and interaction among the agency officials and the coordinated support they provide to the FOs.

It was also suggested by Group No.4 that models for the mobilization of farmers and resources should be flexible enough to take into consideration different variations in social, cultural and ecological aspects and allow farmers to decide their needs such as frequency of meetings, memberships, nature of catalyst, etc. Training modules also should be reexamined to allow for variations mentioned above.

The important recommendations of the groups are:

- ✘ To ensure effective support to FOs, IO activities should be supervised more closely by senior officials.
- ✘ FOs should be formed well in advance to allow them adequate time to prepare for rehabilitation work.
- ✘ Training programs should be made more effective by including topics like financial management.
- ✘ Wherever possible, different FO models, including community-based FOs instead of channel-based ones, may be tried.
- ✘ Field officers should be encouraged to support FOs more positively.
- ✘ Progress should be continuously monitored to check achievements against targets. An appropriate feedback and monitoring mechanism should be institutionalized.
- ✘ Interagency cooperation needs to be further strengthened.
- ✘ There should be more effective supervision of contracts awarded to contractors by the FOs. FOs should be provided with technical assistance by the relevant agencies to enable them to successfully supervise as well as execute contracts.
- ✘ The present practice of awarding contracts to FOs on a profit/loss basis should be reviewed and ways found to ensure that they do not incur any financial losses during this learning exercise.
- ✘ FOs need to be properly oriented before the handing over of the rehabilitated schemes.
- ✘ FOs should be assisted to develop appropriate mechanisms for resource mobilization for O&M of the schemes after turnover.

Appendix I

Workshop on Farmer Participation in Planning, Design and Rehabilitation of NIRP Schemes: Current Status and Needed Improvements

Date: Friday, October 14, 1994

Place: Irrigation Department Head Office, Colombo

PROGRAM

Inaugural Session

- Chairperson — Mr. L.U. Weerakoon,
*Additional Secretary,
Ministry of Irrigation, Power and Energy*
- Rapporteurs — Mr. K.A. Hemakeerthi, *Research Officer/IRMU*
Ms. C. Ramachandran, *Research Officer/IRMU*
- 8.30 – 9.30 a.m. — Registration and Lighting of the Oil Lamp
- Welcome Address
Mr. B.M.S. Samarasekera, *Deputy Director, IRMU.*
- Workshop Methodology
Mr. B.M.S. Samarasekera, *Deputy Director, IRMU.*
- Introduction to the Workshop
Mr. K.S.R. de Silva, *Project Director, NIRP.*
- Address by Mr. K. Yoganathan, *Director, Irrigation
Department*
- Address by the Special Guest, Dr. Roberto Lenton,
*Director General,
International Irrigation Management Institute*
- Address by the Chief Guest, Mr. L.U. Weerakoon,
Additional Secretary, Ministry of Irrigation Power and Energy
- 9.30 – 10.00 a.m. — Tea Break

Technical Session I

- Chairperson — Dr. R.D. Wanigaratna,
Director,
Project Monitoring Unit, Mahaweli Authority of Sri Lanka
- Rapporteur — Eng. T.P. Alwis, *IRMU*
- 10.00 – 10.30 a.m. — Strategies for the development of farmer participation in the National Irrigation Rehabilitation Project
Mr. I.K. Weerawardena, *Consultant, NIRP*
- 10.30 – 11.00 a.m. — Level of farmer participation in NIRP schemes
Mr. W.J.J. Upasena, *Research Officer, IRMU*
Dr. J. Brewer, *Social Scientist, IIMI/SLFO*
Dr. K. Azharul Haq, *Technical Advisor, IRMU*
- 11.00 – 12.00 noon — Discussion
- 12.00 noon – 1.00 p.m. — Brainstorming session to identify Issues for Group Discussions
- Facilitator — Dr. K. Azharul Haq
— Concluding remarks by the Chairperson
- 1.00 p.m. – 2.00 p.m. — Lunch Break

Technical Session II

- Chairperson — Mr. L.T. Wijesuriya,
Senior Deputy Director, Irrigation Department
- Rapporteur — Ms. C. Ramachandran
- 2.00 – 3.00 p.m. — Group Discussion
- 3.00 – 4.00 p.m. — Group Presentation
— Summation of Group Presentations
Mr. S.M.K.B. Nandaratne, *Research Associate, IRMU*
- 4.00 p.m. — Concluding remarks by the Chairperson
— Vote of Thanks by
Mr. B.M.S. Samarasekera, *Deputy Director, IRMU*
- 4.15 p.m. — Closure

Appendix II

Workshop on Farmer Participation in Planning, Design, and Rehabilitation of NIRP Schemes: Current Status and Needed Improvements

List of Participants

Mr. L.U. Weerakoon (Chief Guest)
*Additional Secretary,
Ministry of Irrigation Power and Energy*

Dr. Roberto Lenton (Special Guest)
*Director General,
IIMI*

Irrigation Department

Mr. K. Yoganathan, Director (Special Guest)
Mr. L.T. Wijesooriya, *Senior Deputy Director, Rehabilitation*
Mr. D.W.R.M. Weerakoon, *Senior Deputy Director (Operation and Maintenance)*
Mr. W.P. Jinadasa, *Senior Deputy Director (Regional Works)*
Mr. S. Senthinathan, *Deputy Director, (Major Construction)*
Mr. R.A. Nandasena, *Deputy Director, Training*
Mr. S. Somasiri, *Deputy Director, Kurunegala*
Mr. M.B. Pemasena, *Deputy Director, Kandy*
Mr. H.M. Jayatilleke, *Deputy Director, Irrigation Training Institute*
Mr. Gamini Kularatna, *Irrigation Engineer*

National Irrigation Rehabilitation Project

Mr. K.S.R. de Silva, *Project Director*
Mr. G.O. Uittenbogaard, *Team Leader*
Mr. Roelofsen, *Training/Extension Specialist*
Mr. Eng. H.A. Karunasena, *Chief Irrigation Engineer*
Eng. N. Samaratunge, *Irrigation Engineer*
Mr. I.K. Weerawardana, *Consultant, DHV/NIRP*
Mr. S. Jayawickrema, *Consultant, DHV/NIRP*

International Irrigation Management Institute

Dr. Jeff Brewer, *Social Scientist*
Dr. R.S. Sakthivadivel, *Senior Irrigation Specialist*

Mahaweli Authority

Dr. R.D. Wanigaratna, *Director, Project Monitoring Unit*

Irrigation Management Division

Mr. G.T. Jayawardena, *Additional Director*

Provincial Councils

Mr. C.K.B. Seneviratna, *Deputy Director, Irrigation, North Central Province*

Mr. D. Mangalagama, *Irrigation Engineer, Central Province*

Department of Agrarian Services

Mr. Jayasena Perera, *Deputy Commissioner*

Mr. W.M.U. Navaratna, *Engineer*

Agrarian Research and Training Institute

Mr. R.de.S. Ariyabandu, *Research and Training Officer*

Mr. D.G. Karunaratna, *Statistical Officer*

Department of Agriculture

Mr. W. Ratnayake, *Additional Deputy Director, Extension and Communication*

Freedom From Hunger Campaign Board

Mr. Dunston Fernando, *Project Director*

Janasaviya Trust Fund

Mr. Srimath Wijesooriya, *Specialist, Community Projects Division*

Universities

Prof. Marcus Karunanayake

Prof. Weeramunde

NWP Water Resources Development Project

Mr. S. Balasinghem, *Project Director*

Researchers/Consultants

Mr. S.L. Thilakasiri, *Research Officer, Peoples' Bank*

Mr. Kapila Wimaladharma, *Former Director, Sri Lanka Institute for Development Administration*

Dr. M.U.A. Tennakoon, *Director, Central Bank Staff Training College, Rajagiriya*

Mr. Wimal Attudawage, *CARE International*

M.H.S. Dayaratna, *Deputy Director, Ministry of Planning and Implementation*

Irrigation Research Management Unit

Mr. B.M.S. Samarasekera, *Deputy Director*

Dr. K Azharul Haq, *Technical Advisor*

Mr. T.P. Alwis, *Irrigation Engineer*

Mr. S.M.K.B. Nandararatna, *Research Associate*

Mr. K.A. Hemakeerthi, *Research Officer*

Mr. W.J.J. Upasena, *Research Officer*

Ms. C. Ramachandran, *Research Officer*