

# THE TRAINING OF MAHAWELI TURNOUT GROUP LEADERS

by  
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## Introduction

System H of the Mahaweli Project is essentially an irrigated agricultural project. Its main objective is the maximum utilization of the 2.4 acres of irrigable land that has been given to the settlers. It was hoped to achieve this by producing high yielding and high value crops. Maximum possible use was to be made of the irrigation water that was available for cultivation. In the project activities of System H, community development was to be given an equal emphasis with agriculture and water management. This was in order to achieve a social cohesiveness amongst the farmers so that through their active participation in agriculture and water management, the best use could be made by them of the various Mahaweli inputs and programmes.

In order to achieve these objectives, it was necessary to organize farmer groups and to train them in the various aspects of agriculture and water management. It was also necessary to upgrade their managerial and organisational skills, so that the farmer participation in group activities would make their organisation strong and less dependent on the Mahaweli Authority and the Government. The general belief that the Government and its functionaries have to do everything for the settler had to be corrected.

Initially, it was necessary to establish an effective dialogue between the farmers and the officers. Once this dialogue was established it was hoped to make the farmers aware of their obligations. These included:

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- To assist in organizing the farmers in a turnout to work as a group in water management and agriculture.
- Clean, maintain, and repair their field channels and drainage channels for their mutual benefit and that of the management.
- Distribute equitably amongst themselves the irrigation water that is given to them without wastage.
- Keep to the cultivation calendars that they have helped to formulate, so that maximum use is made of the water available and to ensure better yields.
- To make maximum use of the agricultural extension and input services that are made available to them by the management.
- To enforce sanctions on those who do not keep to the cultivation calendar and those who damage irrigation structures, and to resolve disputes amongst themselves.

The need for a strong and effective farmer organisation was obvious if these objectives were to be achieved.

## **The Irrigation System**

In designing the irrigation system for the Mahaweli areas, management considerations too were an important factor. There was an emphasis on rotational water issues as opposed to the conventional practice of continuous flow. In the older irrigation projects, long distributory channels were a common feature and from these channels individual pipe cutlets were given to each field. This allowed little room for the collective organisation of farmers for water distribution.

The irrigation design for System H provides for water to be ultimately released to a turnout group of 15-20 farmers, who then have to manage and use this water by sharing it equally among themselves. The Mahaweli Authority is responsible for the delivery of this water from the reservoir via Main, Branch, Distributory, and Sub-Distributory canals to the point where the water was turned out to the Field Canal. The Field Canal has a capacity of 1 cusec. The 1 cusec canal necessarily requires irrigation at night as well, and this naturally poses problems to the farmers as well as to the officials.

## The Turn-Out Groups

It was assumed by the planners that the farmers in each turnout would, on their own, organize themselves for the equitable distribution of the water allocated to them. They **also** assumed that the farmers would maintain their field channels and irrigation structures on their own. It was found early that, in addition to the problems of land preparation, the farmers were not in a position to distribute and share this water equitably among themselves because they did not have any basic organisation within their turnout area. They were not maintaining the field canals nor the irrigation structures. It was evident that there was an urgent need for a farmer organisation at the field channel level.

It was felt that the basic farmer organisation that was necessary, had to be at the turnout level where such an organisation would be most effective. It was easy to organize the farmers within a turnout as they had common objectives and common problems. It was necessary therefore, to get the farmers in each turnout area together, so that they could be organized for group action and trained in water management where initially the farmers had the biggest problems. These problems were more acute with the farmers who were cultivating the tail-ends of the turnout areas, who did **not** get sufficient water for cultivation. In some instances, this was due to over use and wastage by the head-end farmers and in some instances, due to faulty construction within the irrigation system.

There was no formal or informal relationship among the farmers in a turnout area which would have enabled them to work together and to discuss and solve their problems. With the organisation of the farmers at the turnout level, we hoped to develop social cohesiveness among them around water management and agriculture. We also hoped to build a strong relationship between farmers, farmer leaders, and the officers which would form the base on which problems could be surfaced and identified and solutions found suitable to all farmers in the group.

The co-ordination that was necessary between agriculture, water management and community development was to be emphasized when organizing the farmer group. Community Development activities that hitherto had been given little emphasis in the pre-Mahaweli settlement projects, played an important role not only in assisting the farmers to organize themselves but also by acting **as a** catalyst for all the other project activities. It was through the active participation of all the farmers in a turnout area that maximum use could be made of the land and water given to them. This was especially so with regard to the equitable distribution of the limited irrigation water that was available.

## Training Strategy

It is difficult to organize and train 24,000 farmers, each of whom has an individual land holding. Therefore in August 1979, the strategy that the Mahaweli Development Board decided to adopt in the organisation and training of farmers, was to take representatives of a turnout group for initial training. These farmer representatives (FRs) would receive training in agriculture and water management and would also be given any special messages that the Mahaweli had for its farmers. They would in turn disseminate this training and information to the other farmers in their group.

In System H there are over 1,730 turnout areas. The Unit Manager together with the Engineering Assistant convened meetings of the farmers in each of the turnout groups and asked them to elect two farmers to represent them as the Turnout-group Leader and the Contact Farmer.

A joint team of all the field staff attached to the Range met all the farmers in that Range and explained the need and purpose of a farmer organisation. This team consisted of the Agricultural Instructor, (AI) Assistant Community Development Officer, (AO) Development Assistant, (DA) and the JPS and KVS.

It must be noted here that all FRs were elected by the farmers and not selected by the management. The Turnout Leader was for water management and the Contact Farmer was for agricultural extension activities.

These farmer leaders were brought, once a fortnight, to the Community Development Training Centers which were located in various parts of System H. Their training was organized by the Unit Manager. The Block Staff were engaged in the main aspects of training these farmers in water management, agriculture, marketing, credit, etc., and also in community development. The Project level staff were also involved in this training, in that some members of the project staff visited each of these training sessions and spoke to the farmer leaders. The farmer leaders could also use these sessions as a forum where they could surface the various problems of their group and find suitable solutions for them.

After each training session, the Turnout Group Leaders were supposed to organize meetings in their turnout areas and to disseminate the training and information that they received at these session: to the other farmers and also inform them of the solutions to their problems.

## Training Administration

The farmer leader training programme was well organized and was held on a regular basis at a prearranged time and date so that the participants were well

aware of the dates of their training programme. The farmers were given folders, pen, and paper so that they could keep a record of all their training activities together with the literature that was distributed. During these training sessions, the farmers were given instruction sheets on the different subjects in which they were trained.

These instruction sheets, which were prepared by the project staff related to the particular aspects of training that was given to the farmers. Instruction sheets were issued not only on subjects relating to agriculture, irrigation, and community development, but on other relevant topics as well. All these instruction sheets have now been put together in the form of a handbook which is being used for future training, not only in System H, but in other Mahaweli systems as well (Jayawardene 1983). The lectures at these training sessions were given mainly by the staff working in the project areas, but in some instances, specialists from outside were invited to deliver special lectures on important topics.

The farmer leaders were paid Rs. 10/- for attending each training session as partial compensation for the wages that they would lose in coming continuously to these training sessions. Their continued attendance was important as the farmer leaders were one of the major links between the Mahaweli staff and the other farmers. This payment meant that they did not have to make too great a sacrifice on behalf of the community. Lunch was provided on the days that the sessions were held. It was argued by some, however that the continued enthusiastic attendance of the farmer leaders at these sessions was due to this payment. This theory was disproved later on when the payment of Rs. 10/- was withdrawn without an effect on the attendance. It was evident that the farmer leaders attended these sessions because they saw its beneficial aspects.

## Evaluation

An evaluation of these training programmes shows that turnout group training has had a positive effect on the farmers in enabling them to organize themselves to make maximum use of the land, water, and other resources available to them. The increase in productivity has meant higher income which in turn has helped them to improve their quality of life.

These training sessions have also helped the farmer cultivate other more profitable crops like chillies, which they were not used to cultivating.

Through these training sessions and turnout organisations we tried to wean the farmers away from paddy cultivation during the Yala season to adopt the cultivation of other field crops.

These changes have now proved to be beneficial in that large areas are cultivated during the Yala season with other field crops, especially in the red-dish brown earths which constitute 60% of the soils in System H. In 1979, 414 acres were cultivated in other field crops, increasing to 22,500 acres in 1985. The positive effects of our farmer training programme can be seen broadly in the following observations:

1. A rapid reduction of the irrigation problems that beset most of the farmers in the initial stages of the project, especially in the receipt and equitable distribution of water. This is revealed by the reduction in the number of problems listed by the respective Unit Managers before the commencement of each season.
2. The adoption of new agricultural methods and techniques. This is borne out by the fact that System H has been able to reach yields higher than the yields in any other district in the country (Table 1 below).
3. System H produces over one third of this country's chillie requirements. This is reflected by the increased acreage under chillie each year shown in Table 2 below.
4. The progressive reduction in water use as shown in Table 3 for the cultivation of both paddy and other field crops, can be positively related to the training of farmers in water management.
5. Many turnout group organisations now take on small maintenance contracts within their turnout areas or on the distributory channel close by. This gives those farmers in the group an added income and ensures the proper and satisfactory maintenance of their irrigation system.

**TABLE 1: Paddy Cultivation in Maha Season**

| Maha Season | Kalawewa Average Yield (Bu/Acre) | National Average Yield (Bu/Acre) |
|-------------|----------------------------------|----------------------------------|
| 1978/79     | 92.3                             |                                  |
| 1979/80     | 87.68                            |                                  |
| 1980/81     | 95.68                            |                                  |
| 1981/82     | 71.74*                           |                                  |
| 1982/83     | 104.23}                          |                                  |
| 1983/84     | 81.27                            |                                  |
| 1984/85     | 92.33                            |                                  |
| 1985/86     | 87.57                            |                                  |

(\*Excessive rain was recorded during this season)

Source: (1) Records of Resident Project Manager, Kalawewa (b) Agric. Economic Division, Dept. of Agriculture.

**TABLE 2: Chilli Cultivation: Extent and Production in Kalawewa Area**

| Cultivation Year | Extent (h/a) | As % of National Extent | Production (Metric tons) | As % of National Production |
|------------------|--------------|-------------------------|--------------------------|-----------------------------|
| 1978/79          | 91           | 0.45                    | 45                       | 0.29                        |
| 1979/80          | 1719         | 6.79                    | 1403                     | 5.58                        |
| 1980/81          | 608          | 2.32                    | 617                      | 2.89                        |
| 1981/82          |              |                         |                          |                             |
| 1982/83          | 3021         | 9.4                     | 2077                     | 10.3                        |
| 1983/84          | 6194         | 20.19                   | 6812                     | 25.28                       |
| 1985/86          | 7910         | 18.79                   | 11540                    | 29.5                        |

Source: K.P.Wimaladharma: The Incongruence Between Agricultural Research Policy and Development Planning : the case of chillies in the Kalawewa Settlements under the Mahaweli Development Project. PGIA, Peradeniya University: 1985.

**TABLE 3: Water Duty in System H - Kalawewa**

| Maha Season | Water Duty in AC. FT. | Yala Season | Water Duty in AC. FT. |
|-------------|-----------------------|-------------|-----------------------|
| 1979/80     | 5.93                  | 1979        | 7.7                   |
| 1980/81     | 6.64                  | 1980        | 6.0                   |
| 1981/82     | 4.90                  | 1981        | 5.30                  |
| 1982/83     | 4.93                  | 1982        | 5.67                  |
| 1983/84     | 1.68                  | 1983        | 5.70                  |
| 1984/85     | 4.35                  | 1984        | 5.14                  |
| 1985/86     | 4.05                  | 1985        | 5.57                  |

Source: Resident Project Manager, Kalawewa, MEA Office.

It was interesting to note that in most instances a farmer at the tail end of the turnout was elected the leader. This probably was due to the fact that he had problems in receiving water to his field which necessitated his active participation in the group's activities. In a number of other instances, it was noted that the more affluent and influential farmer became the leader. It was observed latterly that the Farmer Leaders who were elected, represented the interest of the fellow turnout farmers as well. Each year when the farmers have an opportunity of electing new leaders, only 5% of the leaders are replaced.

We have found, in certain instances however, that the Farmer Leaders were not disseminating the information that they were given at the training sessions to the others in their groups. This was in the region of 10% to 15% of the Farmer Leaders. We also found that in certain instances, the Farmer Leader was now considered an extension of the bureaucracy and therefore, other farmers in the group did not readily accept whatever training or information this Farmer Leader tried to impart to them. These leaders did, however, make use of this training themselves. In these instances the effect of agricultural extension was limited to the demonstration effect of the farming activity of the turnout leader.

Where there was no group activity or organisation, it was difficult for the farmers to manage their water and to solve the problems that arose with regard to its equitable distribution. This was also evident in turnouts where farm allotments had been leased out. The lessee was not at all interested in group activities. As a result the other farmers of that turnout too did not show much interest in the activities of the group. These instances of leasing were sometimes difficult to detect. Though there is no clear or authentic data, it is estimated that approximately 15% to 20% of the lands are leased out. In such situations we have tried to change the attitudes of the turnout group by paying special attention to the whole group at the field itself.

All in all, it has been found that the turnout leader training programme has had beneficial effects in helping farmers to organize themselves as a group for profitable cultivation activity. There is now a strong relationship between the officers and the farmers in a turnout group where the Farmer Leader was the initial link. This has contributed to the quick and effective solution of farmers' problems which was one of the main objectives in organizing the farmers at the turnout level.

Group activity and the early solution to problems have also enabled the farmers to settle down quickly and to stand on their own feet. It has also helped to achieve high agricultural production, thereby justifying the large investment that has been made in developing these lands and settling the people. The higher incomes that they earned have led to an improvement in the quality of the lives they now lead.



It must be recorded that these training programmes would not have been successful, if not for the positive role played by the field staff as organizers and trainers. The strong relationship that was built up between the farmers and the officials was important. No effective farmer participation is possible in irrigation management, especially in schemes like System H, without the initiative shown by officials. The field staff engaged in farmer training activities, had to be initially trained as trainers to effectively organize and train the farmer leaders. A special programme was drawn up for the training of the Mahaweli officers as trainers and this programme continues even now.

## Future Programmes

Since the turnout leader training programme has been successful and its objectives met to a great extent, we decided to try the training of the whole turnout group in certain selected areas. Here all farmers in a turnout were brought together. The Mahaweli staff could then by way of lectures, discussions, etc., give all of them the special messages and training that was necessary for the group.

These sessions were informal and were conducted in a location within or close to the turnout area itself. This was a departure from the class room type of training that was conducted for the turnout leaders hitherto. The farmers in the turnout were now engaged in a more field-oriented training. The response to this type of training was encouraging and of benefit to all the farmers in the turnouts that were chosen for this experimental training programme. However, due to logistical reasons -- there are over 1,700 turnouts in System H -- it was not possible to extend this type of training to everyone of the turnout group areas. Therefore, in System H, we now have turnout training in certain chosen locations in each RPM's area. We also continued the farmer leader training programme as done earlier, so that we continue to keep in touch with all the farmers either directly or through their turnout group leaders.

Organising the turnout groups and training the farmers with the same objectives, has been started in the new Mahaweli project areas, System Band C as well. The experience that we have gained in System H is proving useful to our future work.

In the Tambuttegama RPM's area of System H, D-channel organisations were formed at the beginning of the Maha 1985-86 season. All the Farmer Leaders of the turnout along each D-channel constituted the membership of these new organisations. The main objectives of the new D-channel organisations were:

1. To establish a continuous dialogue between the farmer and the officers in respect of the operation and maintenance of that D-channel.
2. To assist in the organisation of the land preparation and other agricultural activities so that the water distribution programme could be carried out smoothly.
3. To arrange for a water distribution system among the turnouts that would ensure a uniform flow in the D-channels during the periods of water issue for each cultivation season.
4. To ensure that there is no wastage of water at the D-channel level and that there is no willful damage to structures and the D-channel.
5. To get the D-channel farmer organisation to effect necessary repairs to the D-channel and structures, to give the farmers the opportunity to earn an income and to ensure that the work would be done satisfactorily.

The obligations of the Farmer Leader who are the members of the D-channel organisations were: (a) they must attend all meetings of the D-channel organisation; their active participation at these meetings was necessary and they are encouraged to keep notes of important decisions taken at these meetings; (b) they should keep all the other farmers in their turnout fully informed of what happens at these D-channel organisation meetings and the decisions taken; (c) Farmer Leaders should maintain a good relationship with the officials of the Mahaweli and strive to assist them actively in their work so that they can eventually take over some of their functions.

The observations made during the last Maha season on the functioning of these D-channel organisations showed that they had started off well (Scudder and Wimaladharma 1985). It has been decided to continue these programmes in the coming Yala season as well. At the end of the Yala season an evaluation will be made of the performance of these organisations with a view to deciding future programmes.