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Policy Paper No. 6

Human Resources Development in Irrigated Agriculture Sector: Achieving the Potential

IMPSA

IRRIGATION MANAGEMENT POLICY SUPPORT ACTIVITY

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Preface

THIS PAPER IS a product of the Irrigation Management Policy Support Activity (IMPSA). IMPSA is a programme to assist the Government of Sri Lanka (GSL) in the implementation of its accepted policy of participatory management in irrigation and settlement schemes, in order to improve productivity, profitability and equity in the irrigated agriculture sector.

IMPSA was initiated by the Ministry of Lands, Irrigation and Mahaweli Development in association with the Ministry of Agricultural Development and Research. It is sponsored and financed by the United States Agency for Institutional Development (USAID) through the Irrigation Support Project for Asia and the Near East (ISPAN) and is assisted by the International Irrigation Management Institute (IIMI).

For the execution of IMPSA, the GSL set up an inter-ministerial advisory committee, the Irrigation Management Policy Advisory Committee (IMPAC) to provide broad guidance for the implementation of IMPSA and to institute a mechanism to achieve consensus among the Divisions and Departments of the concerned Ministries on the recommendations to be adopted and implemented by the GSL. IMPAC is chaired by the Secretary, Ministry of Lands, Irrigation and Mahaweli Development, and comprises the Secretaries of State of the relevant Ministries, together with the Heads of the Departments and Agencies under them. IMPAC is assisted by a Working Committee, the IMPAC Working Group, which consists of some of the IMPAC members as well as several other officials drawn from the relevant Ministries and Agencies.

Under the IMPSA Programme, ten Policy Papers are scheduled to be prepared and processed for presentation to the government. Each Policy Paper will be a concise statement of the recommendations of IMPAC. Five Policy Papers have already been approved by IMPAC.

Chapter 1

INTRODUCTION

THIS DOCUMENT IS the sixth in the series of ten Policy Papers to be prepared under the IMPSA Programme. It is based primarily on two Staff Working Papers on the issues related to the topic.

This document highlights the significance of human resources development (HRD) in enhancing the performance of irrigation management agencies and personnel and also that of farmers' organizations (FOs) and farmers, in the implementation of new irrigation management policies that are being formulated. It outlines needs and priorities and the institutional arrangements for the effective implementation of HRD programmes by irrigation management agencies in the future. It focusses attention on HRD needs arising from the proposed new institutional framework including FOs, and the implementation of related policies and strategies.

1.1. Methodology

THE FOLLOWING METHODS were used in the development of this paper.

- i. Examination of available literature on the subject;
- ii. Informal and formal discussions with key officials of the irrigation management agencies and the research personnel of the institutions concerned with training;
- iii. Information and feedback obtained from a consultative workshop held for a selected group of experts drawn from various public institutions;
- iv. Discussions between the IMPSA Secretariat and IIMI/SLFO staff in the IMPSA Team; and
- v. Consultation with senior government officials through the medium of a 'Consultation Panel' set up to develop the two Staff Working Papers that supported the development of this Policy Paper.

Chapter 2

BASIC CONCEPTS AND DEFINITIONS

2.1. Definitions

HUMAN RESOURCES DEVELOPMENT is the process of mobilizing individuals to achieve personal, work-place and country goals. A comprehensive HRD programme significantly contributes to enhancing the knowledge and skills and re-orienting the attitudes and behaviour of individuals within a group or society. It will lead to high performance of individuals and organizations at a sustainable level and ultimately lead to improved economic and social development.

An effective HRD programme in irrigation management constitutes a process of developing and implementing a systematic approach to motivate and provide opportunities for agency staff and farmers to enhance their knowledge and skills and to re-orient their attitudes and behaviour to implement new participatory management policies and to achieve the overall objectives and goals of the irrigation management agencies.

2.2. Rationale and Principles

THE VISION OF irrigated agriculture and irrigation management for the next decade and beyond as described in IMPSA Policy Paper No. 1, and the supporting policies and strategies proposed in Policy Papers 2, 3 and 4, in terms of that vision, envisage strong FOs taking over from the government many functions of irrigation management and agricultural production. This will include increasing responsibilities in O&M, rehabilitation and modernization of irrigation systems, production and production planning, monitoring and evaluation of performance of management and irrigation systems, and coordination.

The vision and the new policies call for a significant transformation of the existing irrigation management institutions. The role of the agencies will be primarily to assist FOs to undertake the new task. The shift from control to facilitation and provision of support services to FOs and farmers not only involves very significant structural reforms of these agencies, but also new and improved knowledge and skills, and changes in attitudes and behaviour of the personnel in these agencies. It also calls for an urgent need to enhance the skills and knowledge of farmers and farmer representatives, and to promote the organizational viability of the FOs to manage their own affairs with progressive reduction of their dependence on the government for support and assistance.

The institutional framework that will be necessary to implement these changes at the scheme level has already been proposed in Policy Paper No. 2, while institutional reforms of the irrigation management agencies at macro level have been proposed under Policy Paper No. 4. It is envisaged that the proposed organizational structures will give special emphasis to provide for creating the capacity and mechanisms to plan and implement a comprehensive HRD programme to meet the new challenges.

The development of a comprehensive HRD package includes two essential elements. First, a systematic identification of HRD needs and priorities on a continuing basis, and second, an institutional arrangement by which the identified priority needs are fulfilled through appropriate plans and implementation strategies.

Chapter 3

HRD NEEDS AND PRIORITIES

3.1. Key Areas

THERE ARE THREE broad areas in which the need for HRD is critically important:

3.1.1. *Managerial*

- a. The most critical area which needs special attention, if high organizational performance is to be achieved, is the overall management of the agencies. There exists an urgent need to strengthen the capacities and capabilities of agency personnel to conceptualize the mission and objectives, formulate organizational policies, define roles of personnel and to prepare programmes and implementation strategies.
- b. Equally important are the promotion and strengthening of managerial abilities and leadership qualities of the farmer representatives and enhancing farmers' abilities in communication, coordination and mutual interaction in fulfilling the management functions.
- c. For achieving high performance in irrigation agencies, it is imperative that job descriptions and performance standards of the personnel are clearly laid down, their expected standard of performance designed, and their actual performance measured in terms of the programme objectives. This requirement calls for a radical change in personnel management in the irrigation agencies. It is, therefore, necessary to institute a systematic personnel performance monitoring and evaluation system within each irrigation agency.

3.1.2. *Specialization*

THE IRRIGATION AGENCIES will need to update, generate and transfer technical and technological know-how in a number of specializations involved in irrigation management. They need to be specially equipped to provide consultancy services to Provincial Irrigation Agencies and FOs, whenever necessary, in various sub-disciplines of irrigation, and irrigated agriculture.

3.1.3. Organizational Development

IRRIGATION MANAGEMENT AGENCIES, faced with the challenge of change, have to develop their in-house capacity to plan and implement their own process of organizational change. This calls for a professionally competent cadre of personnel within each agency who will identify human resources development needs of the agencies, plan and develop programmes, allocate resources for the programmes and implement the programmes on its own.

Some of the principles, methodologies and actions required for successful implementation of HRD in relation to organizational reform are outlined in Policy Paper No. 4.

3.2. Managerial Skills

3.2.1. Policy Planning

AN OVERALL HRD package directed at meeting the needs outlined above, has to take into account the capacity and capability of the relevant Ministries and State Ministries to monitor implementation of the new participatory management policies. The macro-institutional transformation in the key irrigation management agencies and the resulting changes and re-orientation of the agency missions will assign a major responsibility on the present Ministries, including the State Ministries, to intensify their focus on the preparation of policy guidelines and directives to the agencies.

The envisaged macro-institutional transformations within the key irrigation management agencies call for major changes in the present strategies, programmes and projects, which will have to be re-planned and re-directed to support the fulfillment of the short-term and long-term visions. Plans and programmes have to be conceptualized, and new projects have to be formulated from a strategic approach. This would involve periodic review of policies and identification of gaps in the prevailing policy framework on a scientific basis. It is accepted that there is a tremendous scope for improving the capacity and capability of the management cadres of the Ministries and the Agencies to undertake this crucial responsibility and task. It would, therefore, be a function of the HRD package to provide for strengthening and enhancing the capacities of the policy planners of the key organizations.

3.2.2. Monitoring and Evaluation

IN IMPLEMENTING THE future irrigation management policies, one of the areas that should receive much attention is monitoring and evaluation. Policy analysis and planning and the preparation of policy directives at various hierarchical levels have to be done essentially on the basis of lessons and experiences of the implementation

processes as well as on the impact and performance of the policies already implemented. This calls for skill and capacity development of the agency personnel as well as farmers to monitor various implementation programmes and to evaluate their performance and impact in terms of their objectives. The new macro-institutional transformations being proposed emphasize the need to set up specialized units for monitoring and evaluation of the implementation of policies at different managerial levels. This new management task has to receive adequate attention in HRD plans and programmes.

3.2.3. *Farmer Skills*

THE SUCCESS OF participatory management primarily depends on the willingness and capacity of farmers to manage their own affairs. It is the responsibility of the government to initiate programmes that will develop the capacity and capability of farmers and farmers' organizations to enable them to fulfil those management functions on their own.

An essential element of an HRD programme is to recognize and utilize the latent potential and skills of farmers and to design appropriate training strategies to harness them for achieving the objectives of farmers' organizations and irrigation management. One strategy is to provide for skill development of farmers in irrigation water distribution, system maintenance, conflict resolution, decision making, resource allocation and utilization during the progressive stages of the turnover process. The government, through its assistance to FOs, should plan to impart necessary technical know-how to farmers through specially designed training programmes and strategies. This type of HRD intervention has a greater chance of recognizing strengths and weaknesses of individual farmers and farmer representatives and judging their ability to behave as a group to achieve common objectives. The essential task of the HRD programme is to tailor training to suit needs of each specific situation and to impart to the farmers necessary technical skills required to implement O&M, rehabilitation, production planning, monitoring and evaluation, and financial and resource management.

3.2.4. *Multi-Disciplinary Skill Development*

IMPLEMENTATION OF IRRIGATION management is conceived as a multi-disciplinary exercise which calls for an integrated approach. The approaches and strategies adopted hitherto in recruitment, deployment and training of personnel in irrigation management have somewhat overlooked this fact. While accepting the fact that training of personnel in specific disciplines that lead to specialization and building up of expert knowledge is an essential element, it is also necessary to open up avenues to managers of irrigation systems for training in other related disciplines in irrigation management. It is natural that agency personnel with mono-disciplinary skills and knowledge tend to implement irrigation management programmes and

activities in which their approaches are circumscribed by their particular disciplines. There is, therefore, a need for sensitizing the officials involved to the need for acquisition of an appropriate level of acquaintance with related disciplines, so that they deal with irrigation management in a systematic and holistic approach. This is another responsibility that hinges on HRD and training programmes.

3.3. Research and Development (R&D)

RESEARCH AND DEVELOPMENT are essential elements in any development process. They constitute the key to achieving high productivity, profitability and sustainability in irrigated agriculture. The emphasis given to and the progress achieved by R&D in irrigation management have so far been disappointing. A new initiative will have to be urgently taken to establish research capabilities in irrigation management agencies. This calls for emphasis on two specific areas of endeavour. One is the training of relevant personnel in the different disciplines and updating and improving the technical knowledge base relevant to irrigation management. The other is to train and develop the capacity of the agencies to develop and manage research programmes and also to tap all available resources, both local and international, to get the necessary research done. Through this process the agencies must acquire the skills and capacity to undertake R&D by themselves as much as possible. Appropriate HRD strategies and programmes must be developed to fulfil this need.

3.4. Organizational Development

3.4.1. Catalysts

IT IS AN accepted fact that the employment of specially trained personnel in transforming the behaviour and attitudes of farmers greatly accelerates and facilitates the formation of viable farmers' organizations. Irrigation agencies will need to have catalysts to assist farmers to group themselves into viable organizations and to take over gradually increasing managerial responsibilities. The catalysts must have a solid knowledge of irrigated agriculture, and excellent organizational and communication skills. They must acquire special skills to convince farmers to group themselves into viable FOs, and to convey to them the essence of the government's policies to achieve prosperity in irrigated agriculture through people-based management.

3.4.2. Trainers

EACH IRRIGATION AGENCY should build up a cadre of trainers skilled enough to provide various on-the-job training to irrigation managers, supporting staff of the agencies and the farmers. It is the responsibility of the agencies to identify agency personnel with aptitude for development as trainers and to provide them with special training. It may be necessary to obtain the services of trainers in recognized training

institutes and of resource personnel in the public and private sector for the training of trainers.

3.5. Personnel Management

3.5.1. Agency Staff Re-orientation

THE UNDERLYING PRINCIPLE of the proposed macro-institutional transformations is to transform the agencies from a purely administrative mode in which the resources are controlled by the government, to a managerial mode in which the control functions are transferred to FOs with the government assuming an increasing role as a facilitator. This calls for a radical change in the attitudes of the agency personnel to adjust to the new policy environment. It is natural that such a process of transformation usually faces bureaucratic resistance because of the possible loss of control, authority and autonomy. Appropriate HRD strategies must be developed to meet this challenge and to ensure a harmony between the agency staff re-orientation and the organizational and structural transformations called for.

3.5.2. Personnel Performance

THE PERFORMANCE OF an agency in achieving projected goals primarily depends on the performance of each individual in the agency in fulfilling his individual role and function. At present, there is no monitoring and evaluation of performance of agency personnel in relation to the job description, roles and tasks of each individual. This will be a serious constraint in achieving the goals of any agency. There is, therefore, an urgent need to institutionalize a system that measures performance of personnel against their respective tasks and roles. This means that a firm commitment by the government is required to enforce a personnel performance monitoring and evaluation system in the relevant agencies.

Salary structure and incentives though they are subject to government controls, have a great bearing on organizational performance of an agency. Although the provision of financial incentives may be limited, it may yet be possible to provide non-financial incentives. Motivating personnel through a system of performance evaluation tied up with the provision of non-financial incentives and rewards seems not only feasible, but may also be essential.

Chapter 4

INSTITUTIONAL ARRANGEMENTS

NO CHANGE IN irrigation management policy can be implemented without a full understanding and commitment of agency staff at every level. That can only come through their active participation in the change process. Farmers will only become more self-sufficient and self-reliant, if they are guided and helped to acquire the new skills required to carry out their new roles envisioned by the government. The interface between agency, staff and farmers can only be improved through better understanding of resources and limitations of each other. All irrigation agencies including those within Provincial Councils, should internally develop and agree on their mission in irrigated agriculture. The relevant staff at all levels of the organization should be involved in the preparation of plans and strategies for the development of human resources within an agency.

4.1. HRD Unit

AN OVERALL HRD package directed at meeting the tasks outlined above makes it imperative that the macro-institutional arrangements and organizational reforms which are presently underway incorporate special arrangements to plan and implement the prescribed HRD policies. Such special arrangements should also ensure mechanisms for vertical coordination of HRD activities between appropriate levels within an agency and horizontal coordination between appropriate levels between relevant agencies. The tasks related to formation and strengthening of farmers' organizations, implementation of turnover programmes, and other related activities to assist farmers' organizations to take over increasing responsibilities in self- and joint-management, are so immense that it would need much effort and time of irrigation agencies to fulfil them. It calls for a separate specialized division in each agency, including the Provincial Irrigation Departments, to satisfy the training requirements of agency staff. This unit could cater to the overall training and career development aspects of all agency staff.

A possible arrangement would be the re-organization of the existing Personnel and Administration Division of the agency which could thereafter take responsibility as a policy formulating, directional and monitoring body whose key objectives should be to set appropriate policy guidelines on HRD and oversee their implementation at various levels of the organization. The Head of this Division should be a senior staff person in the agency

with autonomy in exercising authority and control over the man-power resources and HRD programmes of the agency.

The specific functions of an HRD programme of an irrigation agency would be:

- i. The analysis of the human resources that will be required to carry out the agency mission and to realize the short- and long-term goals of the agency;
- ii. The assessment of the available human resources and identification of human resources gaps required to fulfil the human resources needs;
- iii. The development of an HRD strategy to strengthen the capabilities of the existing staff and a recruitment plan to identify new staff requirements;
- iv. The preparation of HRD policy guidelines, master plans and implementation programmes for various categories of staff and for assisting FOs in developing their human resources potential;
- v. The design and development of curricula for the various training programmes;
- vi. The close coordination with other divisions of the agency, and with other HRD Divisions of relevant agencies;
- vii. The allocation of resources to be deployed on human resources development programmes; and
- viii. The monitoring and evaluation of training and career development programmes.

4.2. Staffing

A CADRE OF appropriately qualified personnel must be made the core staff of each HRD Division. The personnel recruited should not be purely discipline-biased personnel, but preferably management scientists with a sound knowledge of irrigated agriculture, a sub-specialty within their various parent disciplines of civil engineering, agricultural engineering, sociology, or management science. The post of Head of this Division should be open to professionals of any relevant discipline.

The staff of the Division should be provided with clear job profiles and work targets. There must be recognition of professional needs and avenues to receive in-country and off-shore training. There must be adequate incentives and rewards available to the staff to encourage them to remain engaged in HRD activities. Even though they are specialized in HRD, they should have equal prospects for promotion and career development as the other employees of parallel categories of staff within the agencies.

4.3. Funding

IN THE IMPLEMENTATION of training programmes, the general tendency at present is to rely on foreign-funded projects for most of the necessary finances. Such reliance is not

conducive to proper and adequate treatment of this subject. Considering the new mission of the irrigation agencies to implement the new participatory irrigation management policies, specific provisions must be set apart for HRD in the annual budgets of the irrigation management agencies. This must be considered a priority at least in the initial years of this decade.

The necessary financial provision may be based on a percentage of the total budget for personnel emoluments of each Ministry or Agency. It is suggested that this be based on a sliding scale commencing at 5 per cent of the first one million rupees and decreasing by 1 per cent for each additional one million rupees with a minimum rate of 2 per cent. Separate funds should be provided, under donor-project funds, if necessary, to develop physical facilities required for training, and to fill any other gaps in financial resources.

4.4. Coordination and Linkages

IT IS PROPOSED in IMPSA's Policy Paper No. 2 that a sub-committee of the "Central Coordination Committee on Irrigation Management," will be set up for the coordination of training activities conducted by different irrigation management agencies. This committee will include representatives from the Ministry of AD&R, the Ministry of LI&MD, and other relevant agencies. It is suggested that the Heads of the HRD Divisions of the relevant agencies be also included as members of this committee. It should also have representation from the Ministry of Policy Planning and Implementation and the Ministry of Public Administration to ensure coordination of training policies and functions related to irrigation management with other related national policies including the national training policy. This committee should also establish links with similar committees set up at provincial and other levels.

In major irrigation projects, a sub-committee of the Project Management Committee, which should include a few selected farmer representatives and agency officials, may establish the coordination required within the project as well as with higher levels. In addition to the coordinating function, this sub-committee could take a leading role in planning and conducting training programmes at scheme level with the help of the government officials, NGOs and other private sector establishments.

4.5. Monitoring and Evaluation (M&E)

TRAINING IN IRRIGATION management, as in the other sectors, has been haphazard in the past. There has been a complete absence of effective monitoring and evaluation of training and education conducted at various levels. Long-term and short-term investments in HRD, as in the case of other investments, must also generate reasonable returns in the form of improved personal performance and improved irrigation system performance. It will, therefore, be the responsibility of the Central Coordinating Committee on Irrigation Management to ensure that proper systems of M&E of HRD programmes are available in each irrigation agency. This task can be delegated either to the HRD Divisions or to the

Planning and Monitoring Units of the irrigation management agencies. In regard to irrigation schemes that come under the purview of Provincial Irrigation Agencies, special arrangements should be established to fulfil this function, depending on the specific circumstances of each agency.

Chapter 5

RECOMMENDATIONS

5.1. Plans and Strategies for HRD

EACH IRRIGATION AGENCY should internally develop its mission in terms of the overall goals for irrigated agriculture. The staff at all levels of the organization should be involved in the preparation of plans and strategies for the development of human resources. A separate HRD Division should be set up in each agency with sufficient authority to develop and implement HRD programmes as necessary. The possibility of obtaining foreign funding should be explored to develop the infrastructure for HRD Units which need capital investment.

5.2. Staff Re-Orientation

SENIOR OFFICIALS WHO have been involved in shaping the new policies for irrigation management must take an active role in articulating the government's policy on participatory irrigation management, both to agency staff and to farmers. The HRD programmes should promote inter-disciplinary team work and encourage staff to seek training in related disciplines other than their own.

The agency staff must be helped to adjust to their new role as facilitators and catalysts of the transformation process leading to the new participatory style of management.

5.3. Finances

ADEQUATE ANNUAL FINANCIAL resources must be provided to support the HRD programmes in each agency. It is suggested that the quantum of funds set apart for this purpose should be a percentage of the agency's total budget for personal emoluments and on a sliding scale commencing at 5 per cent of the first million rupees and by 1 per cent for each additional one million rupees, subject to a minimum overall rate of 2 per cent.

5.4. Training

EACH IRRIGATION AGENCY should build up a core group of trainers to impart the necessary skills to agency staff and to members of farmers' organizations. The assistance of established local and foreign training institutes should be mobilized for the training of

trainers. The HRD programmes should provide for trainers to expose themselves to field situations and for practitioners to be posted for training assignments.

Agency staff must also be afforded off-shore training opportunities based upon the agency's HRD programmes and not merely on the short-term objectives of the donors. Where such facilities are offered under foreign donor-funded projects, they should also be made use of to meet the long-term needs of the HRD.

There should be a link between research and training. Research results should be made use of and included in developing training programmes.

5.5. Coordination of the HRD Activities

IT IS NECESSARY to ensure coordination of the HRD activities of the various irrigation related agencies, including those within Provincial Councils.

Training, which is a primary component of the HRD programmes, should be coordinated at the national level at the proposed Central Coordinating Committee on Irrigation Management (vide IMPSA's Policy Paper No. 2). It is suggested that the Heads of the HRD Divisions in each Agency be also included in this committee.

In major irrigation schemes, all training activities should be coordinated by a special sub-committee of the Project Management Committee (vide IMPSA's Policy Paper No. 2).