POTENTIAL FOR DEVOLUTION OF MANAGEMENT TO FARMERS' ORGANIZATIONS IN AN HIERARCHICAL IRRIGATION MANAGEMENT AGENCY: THE CASE OF THE MAHAWELI AUTHORITY OF SRI LANKA

by

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INTRODUCTION

The question addressed by this paper is, "What is the potential for decentralization of decision-making and control given the scale, complexity and hierarchical organization of the Mahaweli Authority of Sri Lanka?" The paper examines the past experience of the Mahaweli Authority of Sri Lanka (MASL), with special reference to irrigation management. It is intended as a forward-looking paper. Therefore, other questions have to be asked. For example, the Government has declared a policy of participatory management, involving devolution of substantial responsibility and authority for irrigation system management to farmer organizations (Merrey, de Silva and Sakthivadivel, 1992). Is it realistic to try to implement this policy through the MASL? Part of the answer to this question lies in the answer to another: what has been MASL's experience in promoting farmer organizations during the 1980s? How does the MASL experience compare with other agencies' experiences with farmer organizations in Sri Lanka? The hypothesis behind this paper is that there are serious impediments within the MASL itself to decentralization and devolution of authority to farmer organizations. If this is the case, there are two alternatives: reform of the Authority itself to enable it to work effectively with local organizations; or hand over the Authority's management responsibilities to existing line agencies as has happened on previous settlement schemes.

A third, hypothetical, alternative is of course that the MASL should strengthen its centralized control, and attempt to do what it does now more effectively. But this alternative is not feasible, for several reasons. MASL is not likely to become a permanent agency; the Government will not be able to provide it sufficient resources to further increase an already very costly management system; and the Government is not likely to renege at this point

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on its own policy for devolution and decentralization. In all of this the author's perspective (or bias) should also be clear: a system that maximizes effective broad-based democratic local control of resources is likely to be more productive and sustainable over the long term.

The paper is structured as follows: first, the management philosophy of the MASL is briefly described and contrasted with current government policy and intentions. Second, the experiences with farmer organizations for irrigation management in three Mahaweli Systems and one non-Mahaweli System are reviewed for the light they shed on experiences to date with farmer organizations in different contexts. Third, the structural impediments to participatory management inherent in the MASL field-level organization are identified. Fourth, some recent proposals for reforms in the MASL to enable it to implement a participatory management policy involving substantial devolution of responsibility and authority to farmer organizations are briefly discussed. Finally, the paper concludes with some suggested next steps.

This paper focuses almost exclusive attention on irrigation management. Aside from reflecting the author's own interest, this emphasis is justified because management of irrigation water is the key to the success of the Mahaweli settlements, whose agriculture is totally dependent on water provided from relatively large irrigation systems. Irrigation is the key common productive resource which must be allocated, delivered, shared, and often rationed.

OVERVIEW OF MAHAWELI PHILOSOPHY

Other papers in this volume describe the evolution of the Accelerated Mahaweli Programme, the emergence of the Mahaweli Authority of Sri Lanka (MASL) from the previous Mahaweli Development Board, and the special legislation which has enabled the MASL to implement a very ambitious mega-project over the past decade or more. During the peak period of construction, roughly the entire decade of the 1980s, a special Ministry of Mahaweli Development had overall responsibility. Since early 1990 this Ministry has been part of the Ministry of Lands, Irrigation and Mahaweli Development. The Mahaweli Ganga Development Project is a very large-scale multipurpose project; and even today the project nature of the management system, as reflected in its centralized nature and its "temporary" outlook, is important to recognize.

The MASL is made up of a "family" of organizations with different specializations; the Mahaweli Economic Agency (MEA) is the one most relevant here, as it is responsible not only for implementation of irrigation and agricultural management, but a wide range of other settler services through an integrated matrix management system. At project level, the resident project manager supervises a team of specialists dealing with irrigation, agriculture, land, marketing, and community development; under him are block managers who also have a team of specialists in their offices. They in turn supervise unit managers. Unit managers are intended as the main contact between the settlers and MEA for provision of a wide range of services; they are supplemented by field assistants for agriculture and water management, and irrigation labourers who report to the block irrigation engineer for management of the irrigation system. The details of this structure at field level vary among systems. In recent years, the density of project, block and unit managers has been drastically reduced in the more mature schemes; thus a unit manager who used to relate to about 100-150 families now is responsible for about 1,000 families in "mature" schemes like System H.

The planners of the Mahaweli project were idealists, bent on avoiding what they perceived as the mistakes that had been made on earlier settlement schemes. Considerable emphasis has been given to community development, in addition to introducing "modern" irrigation management and diversified agriculture. "Integrated management" rather than the fragmented line departmental approach found in older schemes is another important value. More recently, major efforts are underway to promote agro-businesses to support economic and regional development. The high degree of idealism, commitment, and paternalism emerges very clearly from the various official documents and the articles written by officials.

Although an objective of establishing self-sufficient local organizations is also stated frequently, the means to achieve this could be characterized as "guided democracy". That is, MEA has assumed from the beginning that settlers are disunited and require a great deal of guidance and training from officials. Hence, there is an emphasis on developing a "partnership" with the settlers, but not an equal partnership: the proto-type of the officer-settler relationship was borrowed from the tea and rubber estates (Jayawardene, 1984; Raby and Merrey, 1989, pp. 57-58). A number of the most important and dynamic officials of the early years were also drawn from the estate management sector, which had recently been nationalized.

System H, whose settlement began before the Accelerated Programme was initiated, was the testing ground for many of the ideas of the early planners, and remains closest to the hearts of most top MASL managers. From 1979, a series of efforts were implemented to form settler organizations. The policy was inconsistent, sometimes emphasizing water user groups at the turnout level (the lowest irrigation "field" channels. serving 10-20 settlers), sometimes emphasizing multi-functional community development activities; the irrigation-related organizational efforts are discussed further below. The key point here is that throughout these efforts, a major focus has been on "training" of farmers so that they would conform to the expectations of the officials in water management and agriculture. In all of the organizations, the unit manager was a member (part of the "partnership management") and the group was never given any clear rights or authority. The turnout groups were always seen by both settlers and officials as an extension of the Agency with carefully limited functions (Lundqvist, 1986; Raby and Merrey, 1989, pp. 57-58; Karunatilleke, 1986).

To reiterate the point of this section: the MASL from the beginning has been driven by a pervasive paternalism towards the settlers, that led its management "naturally" to make strenuous efforts to mould the settlers to fit their own ideal of an ideal agricultural settlement. To devolve real authority to settler organizations "prematurely" was therefore inconceivable; settlers had to be guided and trained, until at some ever-receding date they would be ready to take over. The dependency of settlers on officials was not necessarily perceived as a drawback, but rather as necessary at this stage (see Bandaragoda, 1987; Karunatilleke, 1986 for confirmation). It should be emphasized that this important value was-and largely remains-real and is not to be understood as some cynical plot to retain control over resources. The value has been so strongly held, that despite another stated value emphasizing learning from experience and experimentation, MEA officials have found it difficult to respond constructively to evidence that all was not well with the settlers and that their own policies may be having an effect opposite their intentions.

ORGANIZING FARMERS FOR IRRIGATION MANAGEMENT: THE MAHAWELI EXPERIENCE

An important question to be addressed is, "What has been the experience of MASL in organizing farmer organizations?" Have other organizations in Sri Lanka had a different experience? It is recognized by everyone, including MEA officials, that its record in organizing farmers leaves much to be desired. But there is no agreement on the reasons for this. Many Sri Lankans assert that new settlers cannot form effective organizations until a much later stage of development. There is not much evidence available to counter this assertion, so it remains a viable hypothesis. But MEA manages an older irrigation settlement scheme, Uda Walawe, where it has also been unsuccessful in its efforts to organize farmers. This raises the question, "Is there something inherent in the MASL itself that impedes the development of farmer organizations?"

As a basis for addressing this question, the experience on four systems is briefly analysed. Three are managed by MEA: System H, Uda Walawe, and System B; the fourth, a cluster of four major old settlement schemes in Polonnaruwa, is under the Irrigation Department and the Irrigation Management Division's integrated management programme.

System H Farmer Organizations

System H was planned and nearly completed before the sudden "acceleration" of the Mahaweli development programme. It has received a great deal of attention from the beginning, both from the MASL and its consultants and donors, and from researchers. A number of people who became top managers in MEA gained their experiences, "cut their teeth" so to speak, in System H. There is a relatively large literature on System H, which was seen as a "labouratory" for testing innovations in the early stages. The reports used in this section include articles by former or present MEA officials and consultants as well as researchers (Karunatilleke, 1986; Jayawardena, 1986; Bandaragoda, 1987; Lundqvist, 1986; Tilakasiri, 1985; Khan, 1986), and a series of IIMI studies (Bulankulame, 1986; Moragoda and Groenfeldt, 1989 & 1990; Raby and Merrey, 1989; Weerakkody, 1989). Since this section focuses on problems, it is important to note that in terms of overall rice yields, and adoption of diversified crops during the dry season, System H is considered to be one of the most successful systems in Sri Lanka.

The early planners had assumed that by designing the irrigation system with turnouts (field channels) consisting of 10-20 one-hectare holdings, the organization of the farmers into turnout groups would occur automatically. When such groups did not emerge spontaneously, the Mahaweli authorities in 1979 initiated a formal programme to organize turnout groups throughout System H. Farmers were to choose two leaders, one for water management, the other as a "contact farmer" for agricultural extension. These two leaders were to attend regular training classes, and work closely with field level officers. At that time there was no thought of federating them for irrigation purposes, though Khan (1986) discusses an intention to "federate" turnout groups at the Hamlet level for community development activities. The turnout groups were intended for very limited well-defined purposes, such as to make farmers aware of their obligations, and to create better relations among farmers and between farmers and officers. Training was assumed to be the main problem to be addressed—but curiously, training needs of farmers were assessed through the field officers (Khan, 1986, p. 241).

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In the mid-1980s, based on several informal experiences in System H, MEA decided to encourage the development of distributary channel organizations as well. These were intended to "revitalize" the turnout organizations, and were to consist of the representatives of the turnouts along with the unit manager, but their functions were again limited, with no authority and definitely no autonomy from the bureaucracy (see Weerakody, 1989, pp. 27-28). Some of the earlier consultants and planners had envisioned strong organizations at the block level—but blocks had been formed on administrative, not hydrological, lines, and therefore do not form a logical basis for irrigation organizations (Raby and Merrey, 1989, pp. 62-63).

The "official" literature asserts that these groups were quite successful in achieving their limited purposes, and down-plays the seriousness of problems such as dominance by affluent farmers, or the negative impact of the high incidence of leasing out of land (for example Jayawardena, 1986; Karunatilleke, 1986; Khan, 1986; Weerakkody, 1989). But researchers have been more critical of the results. They have presented evidence that leaders were often selected by the authorities rather than farmers; and the groups were often controlled by "power groups", i.e., influential and affluent farmers. They have emphasized that these groups were no more than an extension of the Mahaweli Authority, dominated by the officers in collaboration with the powerful farmers who were often "deputized" to act for the officers, and that they actually increased the gap between the officers and farmers (Lundqvist, 1986; Tilakasiri, 1985). Studies of on-farm water management suggested the turnout groups were ineffective in this important task (Alwis et al, 1982 & 1983).

IIMI's slightly later studies in the middle 1980s tended to confirm these negative assessments: farmers are reported as "confused" about how their turnout and distributary group leaders were selected; as dealing directly with the unit managers, bypassing the leaders; and the leaders seem to be more associated with officers than with farmers. Turnout groups and distributary channel organizations are reported as not functional and "ad hoc", and, again, as extensions of the agency. Maintenance was not done regularly, the turnout groups were not effective in water distribution, MEA continued operating distributaries, and water distribution was described as chaotic in many places. About half of the cultivators were not legal settlers. The IIMI studies, after a season of "intervention" to improve communication between officers and farmers, concluded that no actual farmers organizations existed, that there is little scope for their development in the absence of their acquiring water management functions, and that the rotations experimented with during the intervention could not be implemented without strong farmer organizations (see Dulankulame, 1986; Moragoda and Groenfeldt, 1989 & 1990).

Scudder and Wimaladharma (1989, pp. 9-10) report, amidst the "spotty" performance of irrigation turnout groups, that they did come across some reasonably effective turnout groups and distributary organizations in Systems H and C. More important, they document a number of successful farmer organizations for other non-irrigation purposes. While the MEA programme as a whole has shown limited success, there are enough positive examples to suggest settlers are capable of organizing themselves for a variety of tasks.

Walawe Farmer Organizations

Some people may attribute the mixed experience with farmer organizations in System H to its being a relatively "new" settlement scheme. But an even more dismal record characterizes MEA's experience in a mature settlement scheme, Uda Walawe. MEA took over the management of this, scheme in early 1982 from the River Valleys Development Board (RVDB), which most observers claim had proven very ineffective in the management and development of the system. MEA was to bring new ideas and dynamism, and its supposedly strong integrated management system. The Government was able to obtain funds from the Asian Development Bank for a capital-intensive rehabilitation project in part at least because MEA was thought to be an organization that could deliver the goods.²⁸

IIMI has been working with MEA doing diagnostic and applied research on system performance, the implementation of the rehabilitation project, and the management and organization of the system since 1986. The results are reported in a series of reports (IIMI 1988, 1989a, 1989b, 1990). For the period up to early 1990 (after which some important changes began to occur), IIMI's reports are a dreary and discouraging record of ineffective over-centralized management of the rehabilitation project, which was characterized by an almost purely technocratic approach, and falling further and further behind schedule. The rehabilitation was being managed from Colombo, with no involvement (except active behind the scenes opposition) of project level staff. Project management was characterized by a lack of coordination and integration; the planning, decision-making, operation and maintenance of the irrigation system were not effective. And the relationships between MEA staff and farmers were not very good-though not as bad, according to farmers, as they had been with the RVDB.

In regard to farmer organizations, apparently there had been no functioning groups, or attempts to form groups, before 1986. But in 1986-1987, MEA made some sporadic attempts to "form" farmer organizations; these soon disappeared, primarily because MEA was not clear about the objectives, and its management was not very supportive. Again, in 1988, an effort to form water user groups was re-initiated as part of the rehabilitation process. One agricultural officer with three unit managers (later reduced to one) as assistants were asked to form these groups. Since the designs of the channels were completed, and construction was being done by a foreign contractor, farmers' only role was as "watchdogs" to report on the contractors' work. Again, there was no long term plan, and no clear objectives. The results were minimal. To be fair, the area was affected seriously by the disturbances of 1989.

For the wet season of 1989-1990, MEA tried a different approach: it contracted with an experienced nongovernment organization (NGO) to assist in the process of organizing farmers. The initial response of farmers was very encouraging, but the whole effort became controversial and was discontinued. The fledgling organizations also disappeared. At the moment, there are sporadic attempts continuing to form farmer organizations. Even IIMI's research officers have formed one, as part of an action research programme; and there is one person assigned to work on this issue by MEA (the same agricultural officer mentioned above). However, there is still no clear overall strategy, and no evidence of strong commitment by the agency to this process.

System B Farmer Organizations

System B is one of the newer Mahaweli settlement schemes. In recognition of the importance of developing strong local institutions, and a diversified agriculture-based economy including cultivation and marketing of diversified high value crops, MEA is implementing the Mahaweli Agriculture and Rural Development Project (MARD), with USAID support and the assistance of a large technical assistance team. The project has a major focus on creating the conditions for development of a diversified agricultural system based on high value export crops supplemented by traditional crops. An important component of this project is an effort to build farmer organizations. Unfortunately, while MARD has reported detailed results of much of its crop diversification work, there are no published reports on results of the farmer organization programme. This section is based on two MARD reports (Perera 1990a & 1990b) supplemented by an annex to a paper by Jayawardena (1990), but is subject to revision as new data become available.

Before the MARD project, the NGO which was involved briefly in Walawe had implemented a programme in an older system that had been incorporated into System B, Pimburattewa (see ADRC, 1990; and Athukorale, Athukorale and Merrey, 1992). This activity was initiated after considerable negotiation: while the resident project manager wanted the NGO's assistance, others in MEA doubted their approach would fit within the MEA management system. The NGO developed "informal" farmer organizations at the field channel (turnout) level, with joint farmer-official committees at the distributary, sub-project and project levels. An important difference between this system and that of MEA is that these organizations and committees were given some decision-making authority; they were not intended as simply extensions of the agency. The researchers' report is mixed in its evaluation of the effectiveness and sustainability of this management system though the results during the time the NGO was working was impressive. They document the strong resistance in the early stages of the programme by some MEA project staff; but after the NGO's period was over, some of the organizations continued because of the personal interest of some officers.

The MARD project claims to have built on this and other previous. efforts. But the organizational model chosen by MARD is actually closer, to the System H model of turnout groups dominated by officials, with unitlevel farmer organizations (with a strong official presence) and subcommittees for management of distributaries. Turnout groups are to focus on water management; unit-level committees on agricultural matters. The reports suggest more emphasis is given to the unit-level agricultural functions than to water management, possibly because System B has at present a surplus of water. Jayawardena (1990, Annex IV) proposes more emphasis on turnout and distributary groups for water management than has actually come about, and sees the distributary group as evolving into a multipurpose organization. The previous consultants on System B irrigation management had also strongly recommended focusing on strong distributary farmer organizations (CH2M Hill, 1988) but this recommendation was not followed.

From the beginning there has been some degree of resistance to the emphasis on farmer organizations within MEA's management (this is not reflected in the consultants' reports). In the early stages, some alternative models for field and block level reorganization, such as creation of an institutional development division, were discussed (whether implemented is not clear); but as comes out clearly in Perera's reports, a main theme has been "how to operate [farmer organizations] within the MEA framework," and "changing farmers' attitudes and commitments" (Perera 1990a, pp. 2 & 5) ---but not adapting the MEA management system to encourage working with farmer organizations. One important innovation has been the use of "Institutional Community Organizers" (ICOs). Though the use of special catalysts to facilitate the formation of farmer organizations is now almost standard practice on non-Mahaweli Systems where farmers are being organized, MEA has resisted this idea, insisting that its own staff of unit managers, perhaps with some additional training, are quite adequate to organize farmers. MEA resisted and delayed introduction of the ICOs for a long time; and in informal discussions with MEA officials, it is clear they are not considering adoption of this innovation outside the MARD Project.

Unlike for System H and Walawe, we have no data on how effective the farmer organizations are in System B. Given the relatively high water supply, and farmers' own perceptions that water management is not a problem, conditions do not seem promising for this function. Farmers may organize for other purposes related to the diversified cropping programme, but such organizations are outside the irrigation management system. Given the high level of inputs into developing System B, it could be considered as a test case on whether the present MEA structure is compatible with self-reliant responsible farmer organizations. Initial results appear unpromising, but at present there are not adequate data to arrive at a firm conclusion.

Other Experiences with Farmer Organizations: Polonnaruwa

The previous sections have shown that the Mahaweli Authority has generally been unsuccessful in implementing effective farmer organizations, and has resisted sharing authority with farmers. But Sri Lanka itself is wellknown for its experiments in farmer organizations over the past two decades. Gal Oya is almost a "household word" among irrigation management specialists because of the high degree of success in forming farmer organizations, and getting them involved in taking a degree of responsibility in the planning and implementation of system improvements, as well as in operation and maintenance. This positive experience, and others like it, have been outside of the Mahaweli areas.²⁹

Building on the Gal Ova experience, a far more ambitious project has been under implementation since 1987 on four older major settlement schemes in Polonnaruwa District, Parakrama Samudra, Giritale, Minneriya, and Kaudulla. Under a USAID-funded project intended to build Irrigation Department and farmers' capacities for "sustained renewal" and operation of irrigation systems, farmer organizations have been strengthened on field channels (turnouts) and distributary canals, and joint project (and in a few cases sub-project) committees of farmer representatives and officials formed for overall system management. As part of the implementation of improvements in the channel system, farmers have been consulted on the improvements required, and contracts for the physical work have been awarded to farmer organizations. More recently, in conformity with government policy, the Irrigation Department has been negotiating agreements with distributary farmer organizations to turn over full responsibility for maintenance and operation of their sub-systems. In some sub-systems, farmers report they have been able to improve the equity of water distribution and even irrigate new areas since they have taken over (see TEAMS, 1990 & 1991). Farmers are now organizing system-level organizations of their own, and some farmer representatives speak confidently of eventually "taking over" the entire system from the Department.

One can cite other examples of successful farmer organizations in Sri Lanka (for example Gunadasa, 1989; de Silva, 1984) —all outside the Mahaweli areas. One can also cite unsuccessful cases of course, but the existence of positive cases is strong evidence that it is feasible to develop farmer organizations and devolve management responsibility onto them in Sri Lanka. This positive experience has led to government commitment to a participatory management policy (Cabinet Paper, reproduced as an annex to Jayawardena, 1990), which has been further elaborated and operationalized through a two-year policy analysis and consultation process (the Irrigation Management Policy Support Activity, IMPSA³⁰). Within IMPSA, the question of how MASL would adapt itself to implementing this policy has remained a serious and unresolved problem.

The discussion to this point strongly suggests that the problems faced within Mahaweli Systems is not simply the result of working in "new" settlement schemes, but is inherent in the Mahaweli management system itself. The next section looks more closely at this issue.

IS DEVOLUTION POSSIBLE WITHIN THE PRESENT MAHAWELI STRUCTURE?

The MEA managers of the early to mid-1980s are quite explicit about the limited objectives of the turnout groups; one of them, Bandaragoda (1987), perhaps responding to some outside criticisms, vigorously defends the "cautious approach" to organizing settlers. These officials' high degree of paternalistic idealism led them to develop a management system that was intended to provide an integrated multi-disciplinary support system to the settlers. But this system also made the settlers dependent on management, both substantively and ideologically. By 1990, the views on this management system within MEA had begun to diverge, with the irrigation engineers in particular continuing to defend it and argue against devolution to responsible farmer organizations (Wickremaratne and Karunatilleke, 1990) while some of the others had come to recognize the need to promote farmer organizations—but still within the existing management system (Jayawardena, 1990; compare this paper by the then Managing Director of MEA to his earlier writings, for example 1984 & 1986). Is this feasible?

In a detailed study of the management response on System H during a crisis created by an unexpected drought, Raby and Merrey (1989) show how at the macro-level (i.e., system and main canal level), a rigid approach to allocating water among sub-systems based on supply was reasonably effective. At the micro-level, i.e., the block and unit, distributary and field canal levels, what was required was a flexible approach to try to match available water supply to varying demands. Here, the management system was far less effective, not because local managers did not attempt to manage flexibly, but because such flexibility was not recognized as necessary and legitimate by higher management. They suggest that what is required is an "administrative" management style at the macro-level, driven by normative rules; an "entrepreneurial" style of management at the micro-level in which field staff would attempt to respond to the needs of their "clients" or 'customers", the water users; and more effective management of the "interface" between the administrative and entrepreneurial levels. We return to this recommendation below.

Research by IIMI staff in both System H and Walawe have clearly documented the limitations of the "unitary" management system at block and

unit levels (see Raby and Merrey, 1989; IIMI, 1988; 1989a & 1990). Contrary to the expectations of at least some of the planners, MEA operates as a top-down hierarchical organization. Decisions are taken at either Colombo or project level, and communicated downward. The block and unit managers have no effective authority; their job is simply to communicate decisions downward and some (selected) information upward, and implement decisions made at higher levels. The performance of the block manager is evaluated in terms of his achievement of goals set from above, but the performance of the block as a team of people working together is not evaluated systematically. The most frequent form of performance monitoring is by "exception", i.e., calling for explanations after the fact. Block managers have no authority, and little flexibility. Unit managers, who are supposed to work at the interface with farmers, ought to be the contact with, and catalyst for, distributary organizations. But since the unit manager's job has been conceived in the image of an estate labour supervisor, the relationship with farmer organizations becomes competitive, not collaborative.

Unit managers presently provide important services to farmers, and settlers require their signature to obtain bank loans and other resources. The relationship is therefore plainly hierarchical and its structure creates and maintains the dependency of settlers on the agency. Given this patron-client relationship, it is difficult to see how a unit manager could be expected to act as a facilitator and catalyst for forming independent authoritative and selfreliant farmer organizations. In fact, it is in his interest to ensure that such farmer organizations, if they must exist, remain dependent on him, as extensions of the agency.

To conclude this section, we return to the recommendation of Raby and Merrey (1989) that while higher management should operate in an "administrative mode" at least with regard to the water-scarce System H irrigation system, the lower levels, i.e., block and unit managers, should be entrepreneurs, working to match supplies with their customers' demands. In order to optimize agricultural returns in an increasingly market-driven environment with uncertain resources, farmers must be entrepreneurs, able constantly to adjust their strategies. In a system characterized by small farms with minimal resources, in which the most important resource, water, must be shared, such flexibility and entrepreneurship should extend to higher levels. But it seems unrealistic to expect that unit and block managers, having operated in a certain style for so long, and having developed a stake in continuing a hierarchical relationship as patrons to their client farmers, could easily make such radical changes. Nor is it likely that the larger organization itself could either change its entire management philosophy and style, or accommodate and foster simultaneously two quite opposite styles as suggested by Raby and Merrey. The MEA therefore faces a serious dilemma: how could it overcome and transform itself sufficiently to implement a participatory management system and foster strong and authoritative farmer organizations?

RECENT PROPOSALS FOR CHANGING MASL

At a workshop in early 1990, the then Managing Director of MEA presented a paper that indicated important changes within the agency were beginning (Jayawardena, 1990). Agreeing that previous efforts to promote farmers' participation had not been effective, he asserted that farmer organizations can be built only if the dependency on the agency staff could be reduced. He advocated a management system that included farmer organizations on turnouts and distributaries, and joint committees at the block and project levels. He suggested that the reductions then being implemented in the number of unit managers would contribute to reducing dependency on the agency; and he advocated that farmers should be the leaders in turnout and distributary groups, with the unit managers acting as "advisors". He expressed the hope that in the long run as farmer organizations evolved, the role of the unit manager would change radically. In order to bring this about, he proposed one change within MEA, the setting up of a special unit to promote farmer organizations, at both head office and project levels.

In mid-1990 the Secretary of the Ministry of Lands, Irrigation and Mahaweli Development appointed a "Committee on Farmer Organizations in the Mahaweli Project," chaired by the Secretary in charge of Mahaweli Development. This Committee made detailed recommendations on the types of farmer organizations, and the strategy for their development, that built on Jayawardena's proposals, and the experience to date within and outside the Mahaweli Systems (see "Committee" n.d.). The strategy proposed was to establish an Institutional Development Division at the head office, with branches at the project and block offices, and operations at the unit level. This Division would supervise a cadre of community organizers who would live and work with farmers under the close supervision of the resident project manager. The Committee's recommendations were accepted by the Ministry, though apparently not with any enthusiasm. But the institutional development unit was subsequently established at head office and at least some projects, but with very minimal resources, no clear mandate, and no community organizers except those under the MARD Project in System B.

The Committee on Farmer Organizations assumed that this participatory management system would evolve within the context of the existing MEA management system—or at least it did not deal with the question of reform of this system. But in 1991, under the IMPSA Project, a series of consultations were held with MASL officials to discuss the possibility of restructuring in order to facilitate the implementation of participatory management (See IMPSA Staff Working Paper 4.3; & Policy Paper 4). An early draft of the Policy Paper had contained detailed proposals, some of them proposed by MASL officials themselves, and reflecting a consensus within a group of MASL officials and outsiders; but these were later removed when it was revealed that a separate detailed consultancy on restructuring of the MASL had been initiated by the Ministry. The latter report is said to be completed in draft form, but not made public.

The final IMPSA proposals emphasized several basic principles: that MASL should be consolidated to remove overlaps and redundancies; authority should be decentralized; the density of field level officials should be reduced; authority should be devolved to farmer organizations; the MASL should shift from a control-oriented implemented agency to being a "facilitator" supporting farmer organizations; and the mission and objectives of the MASL should be focused and clarified, with an emphasis on supporting joint management with farmer organizations. No action has been taken on these proposals to date.

Although two IMPSA Policy Papers (No. 1 and 4) assert that irrigation agencies, including MASL, should evolve over time with a view to establishing one national agency and separate provincial agencies by the end of the 1990s, the issue of whether MASL should withdraw and its functions turned over to established agencies has not been addressed. More broadly, the changes that have in principle been agreed to, especially the promotion of a participatory management system through the institutional development division, have not been vigorously implemented. There is still substantial resistance to making these changes, which threaten the interests of many of the existing staff of the agency. Thus, in the same 1990 workshop where the former managing director advocated development of effective farmer organizations, the two chief irrigation engineers in MEA's head office expressed their reservations and opposition (Wickremaratne and Karunatilleke, 1990). The institutional development unit exists, but has no capacity to implement a programme. The efforts being made in Walawe and System B are not actively supported within MASL management. Present evidence would therefore suggest that MASL is not able to transform itself sufficiently to implement the participatory management policy effectively.

CONCLUSION

Scudder and Wimaladharma (1989) in the most recent of their series of reports on the Accelerated Mahaweli Programme have strongly recommended that MASL begin handing over management responsibilities for a variety of tasks including irrigation management to settler organizations. The evidence of settlers' capabilities, and the increasing bureaucratization of MASL in the context of reduced funding led them to this recommendation. In a separate paper, Scudder (1991) has provided a conceptual rationale for this recommendation. In an analysis of international experience with new settlement schemes, Scudder observes that the success of settlement projects is positively associated with settler organizations. Since agencies are often ambivalent about this, he suggests that the handing over mandate should be included in the legislation establishing such agencies-which has not been done in the case of the Mahaweli Development Act. Handing over should be the culmination of a long term planning and implementation process, not an after thought when all else has failed. While a highly centralized agency may be effective in the early stages of implementing such projects, in later stages such centralization is a major impediment to progress. This observation clearly applies to the Mahaweli Project.

Other work, both empirical and conceptual, has also shown the importance and feasibility of farmer organizations taking substantial management responsibility on large irrigation systems (for example Uphoff, 1986 & 1991; Freeman and Lowdermilk, 1991; Freeman, 1989). Freeman has argued strongly for designing irrigation organizations "in the middle ground between central bureaucracies and farmers", i.e., at the interface where management needs to shift from a rule-driven administrative mode, to a flexible demand-driven entrepreneurial mode (Raby and Merrey, 1989).

These recommendations are consistent with the declared participatory management policy of the government. This policy calls for the evolution of a "joint management" system on large irrigation systems, in which farmer organizations take full responsibility for management of lower portions of the system, while the government retains responsibility at main system level, but guided by a joint committee of farmer representatives and government officials. As noted above, there are positive experiences on non-Mahaweli Systems that suggest this policy is realistic and over time can be implemented effectively. But the experience to date on Mahaweli Systems is not promising, though the evidence from the MARD Project in System B is incomplete. This paper has tried to show that there is a fundamental conflict between the policy objective of participatory management, and the structure and philosophy or ethos of the Mahaweli Authority of Sri Lanka. The prospects for rapid reform sufficient for MASL to implement the new policy are not very bright.

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But we cannot conclude that the best alternative is simply handing over MASL's systems to the existing line agencies, as had been done in the past on settlement schemes, and indeed as is intended, in principle, under the Mahaweli Act. The alternative agency for irrigation management is the Irrigation Department. But this Department is also not equipped to implement effectively the joint management policies of the government; it is expected that the Department will be restructured as recommended and agreed under the IMPSA Project (IMPSA Policy Paper No. 4). But to simultaneously burden it with the Mahaweli Systems would be unrealistic.

Further, in recent years there has been increased interest in developing diversified cropping patterns to supplement rice cultivation on irrigation schemes, and even more recently, to develop agro-based industries as part of a broader rural economic development programme. But it is only in Mahaweli Systems that these efforts are being seriously pursued; on those systems managed by the Irrigation Department, there are no vigorous efforts in this direction, as there is no agency with this kind of mandate. The point, then, is that handing over of Mahaweli Systems to line agencies is also problematic.

The approach suggested here, therefore, involves accepting the need to continue MASL for the rest of the decade, and taking the following actions:

- 1. The Government should adopt legislation changing the mandate of MASL to one emphasizing the promotion and strengthening of selfgoverning institutions among settlers, and handing over of irrigation system and other management responsibilities to these organizations. This follows from Scudder's (1991) suggestions noted above.
- 2. The Government should charge the management of MASL with effectively achieving this handing over objective, set specific targets with a clear time frame, carefully monitor the progress, and taking advantage of the flexibility of the Mahaweli Act, provide effective incentives for achieving the objectives.
- 3. The Government should obtain expertise in promoting organizational change through contracts with appropriate firms or organizations

consisting of a consortium of local and outside specialists. These consultants should be given a long-term contract with payment tied to actual performance against agreed targets.

- 4. The Government should ensure that active sharing of experience occurs among the irrigation-related agencies, all of whom will be going through similar changes, not only to promote mutual learning but to ensure an adequate uniformity of approach. The approach should be based on the models already tested and agreed to, as articulated through the IMPSA Policy Papers.
- 5. Although implementation of these changes would require some resources, as shown by IMPSA's analysis, promoting of participatory management and implementation of necessary institutional changes could be done by re-allocating planned irrigation investments, and would therefore not require additional investments.

Implementation of these proposals could go a long way toward achieving the original objectives of the Mahaweli Project and fulfill the ambitious dreams of the planners, and the settlers themselves.

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