

JUST ENOUGH ORGANIZATION:

WATER USERS ASSOCIATIONS AND EPISODIC MOBILIZATION

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ABSTRACT

Much effort has been invested in forming water users associations (WUA), unfortunately often with little result. On their own farmers tend to take a minimalist approach to irrigation organization, relying where possible on informal, episodic mobilization to accomplish specific tasks. WUA development will be more successful if it is focused in the same way. Flexible, responsive intervention and an enabling institutional framework can provide resources - legal, technical and financial - to assist WUA in developing just enough organization to manage irrigation systems well.

INTRODUCTION

The unfortunate truth is that most efforts to develop formal water users associations bear little lasting fruit. In the short run meetings are held, leaders chosen and rules drafted. In the long run such organizations often only exist on paper, with little new activity beyond what farmers had already been doing.

This outcome of inactive, paper organizations is not for lack of trying on the part of government agencies. Many well intentioned people have spent large amounts of time trying to develop WUA. Procedures have been developed, forms devised and manuals written. Thousands of training sessions have been held. The term water users association (WUA) is used here as a generic term for all forms of water users associations, organizations, groups and informal institutions, both traditional and government developed.

The problem does not lie in a lack of resources. Instead we need to look more deeply at the assumptions which often underlie efforts to develop WUA and how those assumptions differ from the conditions under which rural people make decisions and choose to participate in institutions for collective action such as WUA. Such an analysis shows how it may be possible to improve the local institutions involved in irrigation management.

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This paper analyzes some of the opportunities which may exist for improving WUA development - if it is possible to rethink the goals and methods used. It is primarily focused on WUA in locally managed irrigation systems. Implications for WUA development in irrigation systems jointly managed by government and farmers are briefly discussed. The discussion here draws on experience in Thailand and Indonesia and on the larger literature on institutional aspects of irrigation development which suggests that problems in WUA development are widespread (Chambers 1988, Hunt 1986 and Uphoff 1986).

EPISODIC MOBILIZATION

Many of the most important tasks required to keep an irrigation system running are not routine. Repairs must be made, conflicts resolved, resources mobilized in connection with a

crisis such as a landslide or drought. Thus the key capacity needed for effective irrigation management is to be able to carry out such tasks quickly and effectively, without extensive planning or scheduling. In existing locally managed irrigation systems, institutions for carrying out such tasks almost always exist and they usually function fairly effectively.

For some irrigation systems those may be the only tasks. If water is in surplus then water division may be left up to users. If structures are simple then infrequent repairs are sufficient. In such systems there is little or no need for an ongoing organization. What is important is being able to respond to problems, often on short notice.

Routine activities may be present. There may be a need for someone to regularly operate an intake at the head of the canal or to distribute water. Again, if the need exists then farmers have usually developed institutions for carrying out such routine activities. Even in such systems many other tasks consist of infrequent episodes of organized activity. Before each cropping season farmers may join together to clean canals and repair damage that has occurred during the past season. Farmers may want to improve the system. So even where routine management exists the less frequent episodes where resources must be mobilized to address specific needs may be more important. And while routine management tasks may be delegated to relatively junior people, the more critical problems often require efforts by leaders.

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The existing literature may give an exaggerated impression about the level of organization, especially routine, formal organization, common in local irrigation management. There are several reasons why a bias may exist in the sites researchers choose to study and how they report their findings. Relatively complex organizations are easier to identify. They are easier and more interesting for social scientists to study. They are useful to hold up as models and refute the claims of those who would suggest that farmers are incapable of sophisticated organization for irrigation management. Researchers often tend to present a somewhat idealized view of organization. This may be useful for analysis but overlooks much of the messy ambiguity which characterizes real social action in the field.

Episodic, informal activity is much less likely to be observed and leaves little evidence in the way of records. The informal ad hoc nature of local irrigation organization often makes it relatively invisible to outsiders. This is part of the reason agencies often ignore existing local irrigation institutions and act as if they were starting from scratch in efforts to develop water users organizations.

There are sound theoretical reasons to suggest why farmers prefer to use informal mechanisms for organization. Farmers have many demands on their time and would like to avoid wasting their efforts on unnecessary meetings and paperwork. Local collective action grows out of community life, where farmers are already linked in many ways, and irrigation organization may be embedded in community institutions (Hunt and Hunt 1976). Collective action in irrigation can often take advantage of existing relationships, reducing the need for special meetings, specific sanctions, elaborate procedures and other characteristics of more formal organizations.

Such simple, flexible organization also helps to ensure that resources are not wasted (Russell and Nicholson 1981, Bates 1988). Activities are focused on specific goals. Funds are only collected for particular uses and completely expended on those tasks, reducing the

temptations for corruption. There is flexibility to recruit leaders and participants who are most interested in the issue at hand, forming a specific problem based coalition.

Keeping a low institutional overhead reduces the need to compensate leaders for time and effort spent on organizational activities. A minimalist approach to organization means that leadership may arise from community spirit or be rewarded by recognition, rather than requiring more concrete compensation. If demands on leaders are kept light then nonmaterial rewards alone may be sufficient.

So, if we look at how organization may evolve to meet the needs of farmers there are clear reasons why farmers will tend to develop institutions which can meet their needs with a minimum of formal, routine, organizational activities and will instead often prefer to rely on an episodic pattern of mobilization to meet specific needs. However this pattern of episodic organization is quite different from that which is usually promoted in government efforts to develop water users associations.

IRRIGATION TASKS

Local irrigation activities are oriented towards accomplishing specific irrigation tasks. The nature of the tasks varies. Often these can best be carried out through short term mobilizations for specific purposes.

There are a number of different frameworks available to analyze irrigation tasks. They range from a simple division according construction, operation and maintenance to elaborate multidimensional matrices covering physical, hydrological and institutional aspects of irrigation system management (Coward 1980, Uphoff 1986). What analysis using such frameworks helps to bring out is that for any specific irrigation system one particular task is often far more important than the rest. The institutions developed to accomplish this task may define how other less important tasks are carried out.

In hill areas of Nepal long supply canals along steep, unstable slopes are subject to failure (Yoder and Martin 1983). It is crucial that farmers are able to maintain the canals and quickly make repairs when canals are damaged by landslides or other problems. The institutions developed to solve this key problem then shape the ways in which farmers distribute water, share costs and make other arrangements.

In the flat and undulating areas of northeast Thailand diversion of water is a key problem. Collective action by villagers is focused on building and maintaining weirs. The fluctuations and unreliability of water supply mean that arrangements for water allocation are relatively less important. What brings villagers together is the need to divert water from the stream. Conveyance and distribution are much less crucial. In other regions, and for particular seasons, other tasks may have such a central role. Examples include acquiring water in competition with other systems along a stream or arranging to divide up a relatively fixed supply for dry season cultivation.

Theory is emerging concerning the factors which favor collective action in irrigation. A shared interest in headworks or the main conveyance canal acts to unify farmers (Yoder and Martin 1983, Ambler 1990). Heavy maintenance burdens requiring large investments by farmers and low, predictable flows may lead farmers to demand careful water allocation in return for their contributions (Ambler 1989). The need to collect variable, location specific information and make decisions creates a need and opportunity for more collective action, for example through local participation in design and construction (Montgomery 1983). Under intermediate conditions of relative water scarcity, where water is neither too scarce nor too

abundant, opportunities exist for improving production by carefully distributing water (Uphoff 1989). Conversely conditions are likely to be less favorable for collective action where interests conflict, conditions are stable enough so that management can just repeat past practices, or where water is abundant or very scarce or unreliable.

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The recurring element is that episodic mobilization is often more than sufficient to accomplish such tasks. This means that the formalized bureaucratic models proffered by development agencies often fit poorly with local needs. So how can bureaucracies facilitate improvements in the capacity of local irrigation organizations and why should farmers be interested in government assistance?

WHY FORM A WUA?

Farmers rarely need the full complexity of bureaucratic institutions in order to accomplish the tasks of irrigation management. Often attempts to develop WUA seem directed towards installing little bureaucracies in the village, complete with hierarchies of predetermined positions and complicated paperwork (Douglas Vermillion personal communication, Bruns 1988,1991). This is rarely necessary and usually quite inappropriate. It is a major reason why such organizations show little activity once the initial bureaucratic stimulus fades away.

When looked at from the farmer's point of view it quickly becomes clear that the needs and opportunities for improving irrigation management vary widely. A rigid approach to WUA development is unlikely to suit local conditions and will not be attractive to farmers. In many cases farmers feel little pressing need for changes in how irrigation is managed. If changes are required as a precondition for a project then farmers may go along with the formalities but then abandon them if the new organization does not offer lasting benefits. If we are serious about rethinking the process of WUA development then it is necessary to look at what government has to offer farmers.

Most directly government may provide money and technical assistance. These can help to improve the physical aspects of irrigation systems. This however is an episodic activity which may not necessarily require any formal routine organization to ensure operation and maintenance. The need is to organize farmer participation in design and construction. This may be done through an ad hoc committee or one or more leaders who act as a liaison and represent farmers in their dealings with the agency.

Usually agencies are unable to resist the temptation to try to "develop," "strengthen" or otherwise change local irrigation institutions at the same time that they improve physical structures. One exception to this pattern was the Thai-New Zealand Small Scale Water Resources Development Program based at Khonkaen University which worked with local leaders, but tried to leave decisions in their hands as much as possible and left it up to them how to arrange for management after construction was completed (Mayson 1984, Tantuvanit, Bruns and Angsuwotai 1986, Bruns 1989). Sometimes the new physical improvements may require better management. The more usual case is that they reduce the management demands on farmers, especially in the typical case of building permanent headworks. Reducing the burdens on farmers may weaken local institutions if joint action to build and

maintain headworks or canals had previously been the main factor unifying farmers (Ambler 1990).

If conditions favor collective action but such action seems not to be present, or is less than optimal then there may be scope for government intervention. The government may be able to facilitate local organization, for example by strengthening sanctions, for example concerning distribution when water is scarce. However such support is usually already potentially available from local government officials if severe conflicts occur. Severe conflicts are not usually a routine problem, but instead involve occasional episodes.

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The government may subsidize some of the costs of collective action for example through providing "community organizers." The government may hope to encourage a wider, more equitable distribution of the benefits of improvements, although rearranging local water rights may turn out to be much more complicated than expected (Pradhan 1982). As a condition of assistance the government may push for changes which help serve government goals such as economizing on water use and conformance with guidelines on cropping patterns. However the common case is that the government lacks the capacity to enforce such changes in the long run unless the changes also serve local interests (Johnston and Clark 1982). Even where such changes are successfully implemented, the situation usually remains one where the main irrigation tasks only require episodic mobilization, rather than a permanent organization with many routine activities.

Several other factors may offer incentives for farmers to establish and maintain a formal WUA. Farmers may want to formally establish their rights to water. Legal status of some kind may be needed in order for the WUA to be eligible for loans. Farmers might want legal status to be able to enter into and enforce contracts or receive assets. Farmers may want to be able to keep WUA funds in a bank account under the name of the WUA. Thus for both saving and borrowing the WUA may need legal status. Such needs for legal status are likely to apply only to a minority of WUA at any time. In these cases the need for formality largely comes from government requirements, while the internal management needed to keep track of funds can still be done quite simply.

Most locally managed gravity irrigation systems have little need for legal status or formal institutions but occasionally want to obtain government assistance in construction or managing conflicts. For pump systems the ability to use savings accounts and even receive credit are more important but still may be met through quite simple systems.

For farmers in large government managed irrigation systems an organization may offer a channel for communication with the agency. However for this to be successful it requires reforms in main system management, including a willingness to allow farmers influence over water allocation and the main system management capability to fulfill commitments (Chambers 1988, Hunt 1986 and Uphoff 1986). Without related changes formation of WUA alone is likely to do little to improve the performance of large irrigation systems.

For many, perhaps most, locally managed irrigation systems, existing irrigation management institutions are more than adequate. However, there are specific cases where farmers may want to have a more formal organization. How should government provide assistance in such cases, since a policy to develop all WUA in a uniform way is clearly unlikely to succeed?

JUST ENOUGH ORGANIZATION

The conclusion which emerges from the discussion above is that government intervention will be far more efficient and effective if it encourages and enables *just enough organization* on the part of farmers. The similarity to "just in time" inventory management is intentional. The goal for WUA development should be to avoid unnecessary, expensive institutional overhead. The goal should be to develop the ability to rapidly meet specific needs and keep the irrigation system operating, rather than wastefully building up excess capacity to deal with contingencies. With an approach of "just enough organization" much of the failure and waste of current approaches could be avoided.

We need to redefine our goals and our definition of what is an active, successful WUA. The most important indicators concern the adequacy of irrigation management, not holding routine meetings, keeping records or collecting regular fees. An active, successful WUA is one which efficiently and fairly distributes water and maintains and improves the physical structures of the irrigation system.

It may be possible to identify useful indicators of irrigation management performance, such as cropping intensity. However the most effective assessment method is likely to be as part of a walkthrough where WUA leaders go through the system to observe its current condition and discuss how to improve performance.

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Where potential exists for improving the level of performance of these key tasks then government efforts should focus on enabling farmers to help themselves. More formal institutions may be useful to farmers in some cases in obtaining funds and technical assistance. Such an enabling framework creates an environment in which WUA can evolve (Frances Korten 1987). This evolution can be based on local needs and the availability from the government of assistance for activities the governments feels should be supported.

Government intervention in such an environment should be selective and responsive, rather than extensive and top down. There is no need to build excessive WUA organization capacity. The implication of such an approach for current projects is that WUA development efforts should be simplified and focused much more specifically on enabling farmers to overcome particular problems. Diagnostic methods for identifying and prioritizing irrigation problems and opportunities may be useful for agencies in reorienting their approach to community requests for assistance.

Unless there is strong evidence to the contrary, it would be wiser to assume that current leadership and institutions are adequate. Reorganization is not automatically beneficial. Any changes in leadership or other arrangements for irrigation management should be based on local initiative and address specific local concerns. Government intervention in irrigation should be directed towards enabling farmers to develop just enough organization to manage and improve irrigation systems.

NOTES

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