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WATER, ENVIRONMENT AND MANAGEMENT

Public sector provision of irrigation services

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I want to ask the question "What is the role for Government in minor irrigation"? to answer this question I wish to look at the Deep Tubewell II Project (DTWII) in Bangladesh, which has just finished.

Minor irrigation projects tend to start with an assessment of the capacity of the aquifer. If this is sufficient, project design begins. DTWII was designed to install 4,000 wells, and farmers would have access to water by joining one of 4000 co-operative groups, which were also to be formed under the project. This traditional central role for government in design, planning and implementation is supposed to lead to benefits such as economics of large scale resource mobilisation, technical uniformity, quality control, and rapid and widespread implementation. These benefits are undoubtedly available. However, what do we see? Falling command areas, little or no maintenance, schemes lying unused for years for want of a few spare parts. Why is this? Is it because we have not yet mentioned the farmers?

There are two way to receive resources. Either you can take them or you can be given them. To take a resource, that is to earn it, you first have to decide that it is worth expending time and energy for. If the time and energy required - the cost - is too great, you will not take the resource - you will not buy it. If the cost seems fair then you will buy it, and, having paid for it, you will value it accordingly. This is true of many types of resources - economic and physical, friendships, knowledge, health and so on. It is the level of demand for a resource that indicates how it will be used and looked after.

A deep tubewell is an expensive and complex piece of equipment. To be able to operate and maintain one, a group must not only demand it, they must be prepared to look after it. This level of preparation has been lacking in many, if not most, of the groups in the Bangladesh project. Should the level of preparation of a group of potential beneficiaries be measured and, if found lacking, be raised? Given time, perhaps ten or twenty years, the group's internal dynamics would overcome problems of lack of funds, knowledge, cohesion and management skills required to establish effective demand for irrigation equipment. A project, however, does not have time. Traditionally it is a five year exercise in technical and engineering problem solving followed by a few years of "consolidation" or "O+M phase" or whatever. Is the large scale promotion of minor irrigation by government inappropriate using a project format? Well, perhaps. Certainly there are few big project that meet targets within the stipulated period.

However, it should be possible to speed up the process by which a potential users group is formed and then by which it comes to understand what level of preparation it requires and what the total costs will be.

In the Bangladesh project there was a pilot programme covering 60 tubewell groups, or 1½% of the total. the pilot used NGO methodologies by employing two "group activators" or "catalytic agents", called Irrigation Programme Officers" (IPOs), to act as consultant to farmers. It soon become apparent that they had to work as consultants to government staff as well, encouraging cajoling, even transporting officers. The IPOs were employed directly by the project under the technical assistance budget. In this way they were seen by farmers and line agency staff to be impartial and outside the internal politics of the upazila government officers.

What have been the results of this pilot programme? Perhaps the most encouraging does not involve savings or loan repayment, co-operative principles or adoption of bye laws. It is the sheer amount of very specific training that groups have demanded and been willing to pay for. The demand for training is an indication of a group's understanding of its own management short comings.

First, and still most popular, has been training for pumpset operators. This should have been provided under the terms of the project but quality has been variable and coverage has been less than complete, even after the project was extended to twice the initial design period. Now, with farmer's groups paying for training through their co-operative federation, they have the responsibility to monitor the quality of the training and to demand recompense should it not be good enough.

Interestingly, book-keeping proved to be a popular course with at least one person from each of the groups being trained to keep an irrigation ledger and to report back to the membership on incomings and outgoings. Other popular training has been conducted by the Agricultural Extension staff on specific crop husbandry particularly irrigated winter and summer vegetables.

Other improvements in performance of schemes falling under the pilot programme have been largely within group management. For instance, many groups have developed emergency funds by members contributing a percentage of their harvest or a given quantity which is put aside, usually as cash, to cover repair of the pumpset or distribution system, flood relief, pest control or any other unforseen problem. Some groups have started system development funds along the same lines. Each year funds will be used to extend and improve the distribution system, increasing the command area and bringing in new group members.

Adam Smith once argued that government should provide only those services that would not be provided by the private sector. Just which services will or will not be provided by the private sector in many developing countries, including Bangladesh, is not clear as very often the private sector has been "legislated out" by public sector monopolies and so has not been able to develop. Secondly, it is not absolutely clear just which services to minor irrigation are crucial and which are imposed. Farmers will tell us which services they value if we are willing to listen.

I would like now to propose briefly a model of a system designed to increase our ability to listen to the demands of farmers. I will not talk of "feed-back and feed-forward" of "on farm research" or of any other academic hocus pocus by which we, the educated elite seek to stay in control. I hope to talk only of listening and of action or inaction.

First, forget technical specifics. If the project requires groups then start with groups not with installation of the technology. Be prepared to spend time on group function and strengthening. This is your market or, as Nils Roling puts it, your constituency. Without a viable group the equipment will not meet its full potential. Use a task force, not full time government staff. Your objectives are simple, their tasks are not recurrent - assist groups to manage irrigation; once this has been achieved the skills are in place and there is no need for the task force. The task force can then move on leaving the irrigators in charge of themselves. Do not set physical targets: you might find your task force comes back to you saying that, once formed, farmers groups placed a low priority on irrigation. What they actually wanted to do was build a mosque or a temple or a school or a bridge. Be prepared to call the group formation - the formation of a potential customer for irrigation services - a success rather than rely on physical targets which once met might then require continued rehabilitation and subsidy.

Finally, use all possible media to inform farmers of what services - advice, training, credit, spare parts, fuel, seeds, fertilizers, whatever - are available and where to find them. These might be supplied by government through a project or through its programme activities or through the private sector or both.