Participatory Development and Management: A Cornerstone of Philippine Irrigation Program

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The National Irrigation Administration (NIA) is the government agency in the Philippines mandated to develop water resources for irrigation purposes. It is classified as a government-owned and controlled corporation. A major strategy implemented by NIA is the application of the so-called "*participatory approach program*" (PAP) concept in the irrigation environment. This approach enables all stakeholders to be involved in practically all phases of the irrigation endeavor. The concept was introduced in the early '70s and with its positive results was institutionalized in all projects implemented by NIA. Before the introduction of PAP, the agency was doing all the planning, designing, construction and operation functions with almost no participation from the project beneficiaries -- the farmers.

Central to PAP is the organization of irrigation beneficiaries into formal groups called Irrigators Associations (IA). Through a professional NIA staff member called an Institutional Development Officer (IDO) deployed to the irrigation area, the IAs are trained in various aspects of basic leadership, financial management and irrigation system management to equip them with the capability to manage their associations. Eventually, the IAs are granted legal recognition by the government allowing them to enter into contracting arrangements in the management of the operation and maintenance (O&M) of the irrigation systems. The formal organization and legal recognition of the IAs have empowered the irrigation beneficiaries to become self-reliant and independent organizations. The contracting agreements, collectively called O&M contracting, are canal maintenance, irrigation service fee (ISF) collection and complete management take over of small irrigation systems. In the canal maintenance agreement (called Type 1) an IA receives approximately Phillipine pesos 1,400 (US \$ 26) per month while under ISF collection agreement (called Type 2), the IA gets a commission ranging from 2 to 15% of the collected amount. Under complete management takeover (Type 3), the IA assumes complete management of the system and pays, through annual amortization, the construction or rehabilitation costs.

An expanded version of the O&M management turnover program called Irrigation Management (IMT) was later introduced. IMT affords IA and NIA the option for a joint system management of canal systems or complete management takeover of relatively small systems. One salient feature of IMT is negotiation between the two parties regarding the sharing of the collected ISF and responsibilities for the repair and maintenance of facilities and structures. Contracting provides an opportunity for the IAs to generate funds that are in turn used to finance some projects and activities.

Overall, participatory management has generated optimistic gains in the improvement of NIA and IA operations. But some refinements to the program still have to be instituted in order to upgrade these initial gains. Areas needing more attention include: (a) the issue of delayed payment of IA remuneration in both the O&M contracting and IMT agreements as these affect the ability of IAs to finance projects and activities; (b) pulling-out of the IDO in the service area just one year after the IA has been organized may be pre-mature as the association still needs assistance including additional training and capability building during its infancy stage; and (c) the redundancy of IMT displaced NIA staff must be remedied if acceleration of the program is seriously desired.

Key words: NIA-National Irrigation Administration, PAP-Participatory Approach Program, IA-Irrigators Associations, O&M-Operation and Maintenance, IMT-Irrigation Management Transfer

Introduction

In the Philippines, the agency mandated by the government to harness and develop all available and possible water resources for irrigation is the National Irrigation Administration (NIA). The agency was established in 1963 through Republic Act 3601 as a government owned and controlled corporation. In all the years since its creation, NIA's operation has been basically characterized by the maxim "doing-things-for-farmers" (Bagadion, 1989). NIA has implemented all necessary planning, design, construction and operation of irrigation systems according to its own pace and discretion. It has delivered water to the farmers on one hand while on the other hand, farmers utilized the water to irrigate their crops and then paid a fixed seasonal irrigation service fee (ISF) in return. The arrangement, therefore, was more of a "sellercustomer" relationship.

For over a decade this had been the scenario until the mid 70's when the so called "Participatory Approach Program" (PAP) in irrigation development and management was introduced (Siy, 1989). Later on, PAP was institutionalized as a guiding principle in all NIA irrigation programs. As implied, PAP is the concept of participation or involvement of all stakeholders in the entire process of irrigation development and management from project identification to operation and maintenance (O&M).

PAP actually drew inspirations from the results of a study of successful indigenous irrigation systems in Northern Philippines that showed organized farmers were committed to maintain their irrigation systems over time because they had earlier contributed labor and materials for its construction. The scenario was likewise triggered by the widespread observation that irrigation facilities during those days could not be properly maintained as control gates were tampered with, illegal water diversions or water stealing was rampant and planting schedules were not being followed. As an overall effect, available water was not efficiently used resulting in reduced areas being served. Also, the lack of a formal organization among farmers resulted in more conflicts over water distribution and allocation especially during months of low supply.

It therefore became apparent that farmer beneficiaries of irrigation projects have to be organized into formal groups or associations. Originally called compact farm associations, the name of irrigation water users associations evolved into what is known today as Irrigators Associations or simply identified by the acronym IA. Through their IAs, the farmers are now able to participate in the planning, construction or rehabilitation as well as in the O&M of irrigation systems. Moreover, IAs are registered by the Philippine's Securities and Exchange Commission as non-stock, non-profit and non-sectarian organizations enabling them to attain a juridical personality for negotiating with the government as well as with private institutions including non-government institutions.

But while the IAs are needed to promote better irrigation services and also to enhance the collection of ISF, the greater objective of the policy direction was the incorporation of farmers' participation in the process of irrigation development and management.

Irrigation System Development and Management in the Philippines

Irrigation systems in the Philippines are categorized according to how they are developed and managed. There are three types, namely (a) National Irrigation Systems (NIS), (b) Communal Irrigation Systems (CIS) and (c) Private Irrigation Systems (PIS). NISs normally have a service area of 1,000 hectares or more, technically owned by the government but jointly managed with IAs. CISs, on the other hand, are those areas with less than 1,000 hectares and whose construction was assisted by NIA but after project completion O&M is fully handed over to the concerned IAs. With the advent of Republic 7160 signed into law in 1991, the development and management of CISs were transferred from the national government to the local government units. PISs are schemes owned by private individuals or corporations, constructed with or without government assistance and unless the owners seek NIA assistance the systems are managed independently. The presentation of this country paper focuses on the NIS category of irrigation systems.

A basic but very important requirement in NIS operation is the formal organization of farmer

beneficiaries into IAs. At the forefront of this critical work is the Institutional Development Officer (IDO) who is deployed to the service area by NIA to guide the IA from the formation stage to approximately one year after the association's formal establishment. Normally, it takes about 6 to 9 months to organize farmers into an IA after which the association is registered. As part of the developmental process, the IAs undergo various types of training to equip the officers with the necessary skills, knowledge and attitudes for performing their tasks and responsibilities. The areas of training include basic leadership and management, financial management and irrigation system management. The trained officers are expected to pass the learning on to their members. To determine their viability as an association, an annual IA functionality survey is conducted by NIA. The results of the survey are used by the agency as a basis for planning and implementing assistance programs to strengthen the IAs. Assistance programs include establishing linkages with other government offices, private institutions and NGOs.

Once determined to be functional or viable, IAs are encouraged by NIA to enter into contracting arrangement for the O&M of the irrigation system under three (3) options. Under the so-called Type I contract, an IA takes over an irrigation canal section and performs maintenance activities such as clearing of debris and, cutting of grasses and weeds that obstruct the flow of water. This stretch of canal has a length of about 3.5 kilometers if earthen or 7.0 kilometers if lined or made of concrete. For the services rendered, NIA pays the IA approximately 1,400 Philippine Pesos (US \$26) per month upon completion of a satisfactory work by the latter. Another contract option is Type II wherein NIA transfers to an IA the responsibility of ISF collection from the farmers. Under this arrangement, the IA receives an incentive or "commission" ranging from 2-15% of the collected amount for the current account for as long as collection efficiency is at least 51%. An additional incentive of 2% of the collected amount is given to the IA for the collection of back accounts. The Type III contract arrangement allows an IA to fully take over the management of a small NIS. This contract is very similar to that of CIS with minor modifications in the amortization agreement.

In the last 15 years of implementing the NIA-IA O&M contracting, the issue of delayed payment by NIA of the IAs' incentives or commission has to a large extent affected the performance of the associations. Since the incentives are a major source of IA's various projects, late payment somehow has contributed to slowing down the activities.

In the late 90's, NIA introduced the so-called Irrigation Management Transfer (IMT) program in consonance with its continuing effort to sustain the PAP concept. Under IMT, a joint system management (JSM) contract is signed by NIA and an IA or an IA federation. O&M tasks as well as responsibilities in the repair of damaged structures and facilities are delineated between the NIA and the IAs. One salient feature of the JSM contract is the agreement to share the collected ISF to the extent that is negotiated by both parties. Usually, in most NISs, the agreed sharing ratio is 50: 50 which means that for the collected ISF, NIA and IA each get one half of the amount. The idea of IMT is to eventually increase the role of the IAs and decrease the role of NIA. When evaluation shows that an IA is capable of performing additional responsibilities, then a transfer of former NIA functions is effected and a new ISF sharing deal is negotiated. In the true essence of PAP, the social and technical dimensions of irrigation development and management are integrated in IMT to ensure program sustainability. IMT is intended to: (a) reduced O& M expenditures of the government; (b) empower users and increase their satisfaction through beneficiary participation; (c) increase water use efficiency by improving local governance; and (d) increase productivity. Considering the varied sizes of NIS, IMT has two models, namely (1) Complete Transfer in which the management of irrigation systems with less than 3,000 hectares of service area is totally transferred to the IA or IA Federation; and (2) Joint System Management, applicable for bigger systems (3,000 hectares and larger), wherein NIA continues to manage the main system (head works and main canals) while the IA or IA Federation takes over the management of the lateral head gates including the delivery of water to the turnouts. For both models, NIA retains ownership of the irrigation facilities and the responsibility for major repairs.

In the year 2003, the World Bank conducted a

three-phased study to review the implementation of IMT¹. The main objective of the study was to formulate recommendations for the improvement and sustainability of the existing IAs and future IMT contracts. The major findings of the study were: (1) participation in management by IAs resulted in strong feelings of ownership; (2) faster resolution of water-related conflicts; (3) better maintenance of canals and other facilities; (4) enhanced financial capability from the ISF share; (5) reduced burden in system operation by NIA; and (6) reduced O&M costs for NIA. The program, however, had its own share of problems/issues notable of which is personnel redundancy. Under IMT, the IA takes over the area being managed by a NIA staff member who is supposed to be retired under the program. However, while the IA has already assumed the responsibilities, the displaced NIA personnel remain in active duty and still receive compensation. This results in staff redundancy and a financial burden for the agency.

Conclusion

Participatory management and development has become a cornerstone, a foundation of irrigation programs in the Philippines. Through the NIA, the paradigm shift from non-participatory to participatory perspective has allowed the involvement of other irrigation stakeholders -- the IAs, government agencies and the private sector including nongovernment organizations.

Introducing the concept of formally organizing irrigation farmers into IAs and granting them recognition as a juridical entity has empowered the association to become an independent and selfreliant organization. The IDO's role is very essential as an IA's performance somehow reflects the way it was organized and developed. Their tenure of only one year in the area after the establishment of the IA may be short-lived as the association needs more guidance especially during its infancy stage.

Training as an organizing and development strategy is very effective in building the capacity of the IAs. Training enhances the skills, knowledge and attitude of the farmer beneficiaries to manage the affairs of their organization and their finances as well as management of the O&M of their irrigation system. However, outright relying on the officers who just recently received training to train their members may be an over expectation. It will take time before farmer leaders can become effective trainers themselves.

Assistance programs to establish linkages and provide access to available beneficial programs and projects both from the government and private sector further opened the outlook of the IA for growth and development.

O&M contracting and IMT have afforded the IA the opportunity to actively participate not only in O &M but a bright prospect for financial growth. These programs have instilled in the IA the sense of ownership thus inspiring them to strive more to improve their conditions. However, just like any program or project, it has its own share of problems but these are overshadowed by the enormous benefits derived as shown by the World Bank study.

Recommendations

1. The concept of participatory management appears to have been integrated into NIA's irrigation program and the agency may now be "resting on its laurels" so to speak. This should not be the case. Recommendation: NIA should continue to seek other ways to further improve approaches to their programs. Methods should be dynamic and proactive so as to keep pace with the changing times and environment. Continuing staff education and development should be a top priority.

2. Considering that the role of the IDO is very crucial to IA formation and development, the oneyear guidance period may not be sufficient to make the IA a truly strong and cohesive organization.

Recommendation: The IDO's presence should be extended a little. For a new organization, the first 2 to 3 years is very critical to survival and viability. Close guidance and mentoring of the IA by the IDO is therefore very necessary. The IA Functionality Survey is a reliable barometer that can indicate the association's readiness to stand on its own at which time the IDO's presence may only be sparingly required.

3. Relying on IA officers that received training to in turn train their members is an over-expectation.

¹The author was part of the Phase II study as an Institutional Development Specialist counterpart from NIA.

Training people requires special skills and knowledge. Attendance to one or two training sessions or seminars can not turn them into "instant trainers" Recommendation: Initially, the trained farmer leaders may be tapped as co-trainers or facilitators with NIA staff as lead trainer(s). It is expected that over time, the farmer leaders will become effective trainers themselves.

4. IMT may have led to some significant improvements in irrigation management in general but much more can be done to improve the program and make it sustainable. Notable issues that should be resolved, as it is holding up further progress, is NIA staff redundancy.

Recommendation: An annual evaluation of the IMT program must be conducted to thresh out related institutional, technical and financial constraints that hinder program implementation. The results can provide vital data and information that

will be useful in the management and decisionmaking processes both by the IAs and NIA. On the redundancy issue, NIA should not just rely on natural attrition (compulsory retirement) but accelerate sourcing out of funds for separation benefits of would-be-displaced staff. Likewise, the IAs should be encouraged to hire retired NIA staff (but with reduced compensation) to tap their expertise and experience to manage the irrigation systems.

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