

## 6. PARTICIPATORY DEVELOPMENT AND MANAGEMENT: A CORNERSTONE OF PHILIPPINE IRRIGATION PROGRAM\*

By  
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### SUMMARY

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. The 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, it 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 called Institutional Development Officer (IDO) deployed in the irrigation area, the IAs are trained on 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 govern-

ment allowing it to enter into contracting arrangement in the management of the operation and maintenance (O&M) of the irrigation systems. The formal organization and legal recognition of IAs have empowered the irrigation beneficiaries to become self-reliant and independent organizations. The contracting agreements, collectively called O&M contracting, is either 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 about P2,400 (US\$44) 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 cost.

An expanded version of the O&M management turnover program called Irrigation Management (IMT) was later introduced. IMT affords the 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 the 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 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 those initial gains. Among the areas needing more attention are: (a) the issue of delayed payment of IA remuneration in both the

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O & M contracting and IMT agreements as these affect the ability of IAs to finance some projects and activities; (b) pulling-out of the IDO in the service area just one year after the IA had been organized may be pre-mature as the association still need assistance including additional training and capability building during its infancy stage; and (c) the issue of redundancy of IMT- displaced NIA staff which must be remedied if acceleration of the program is seriously desired.

## INTRODUCTION

In the Philippines, the agency mandated by the government to harness and develop all available and possible water resources for irrigation is the 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 was basically characterized by the maxim "*doing-things-for-farmers*" (Bagadion,1989). It implemented all the necessary planning, design, construction and operation functions of irrigation systems according to its own pace and discretion. It delivered water to the farmers' lot on one hand while on the other hand, farmers utilized the water to irrigate their crops and then paid fixed seasonal ISF in return. The arrangement, therefore, was more of a "seller-customer" relationship.

For over a decade this had been the scenario until the mid - 70's when the so-called "Participatory Approach Program" or PAP in irrigation development and management was introduced (Siy,1989). Later on, PAP was institutionalized as a guiding principle in all NIA's irrigation program. As implied, PAP is a concept of participation or involvement of all stakeholders in the whole 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 in 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 to reduced areas served. Also, the lack of a formal organization among farmers resulted to more conflicts in water distribution and allocation most 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 association 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' Securities and Exchange Commission as non-stock, non-profit and non-sectarian organization enabling it to attain juridical personality for negotiating with the government as well as with private institutions including non-government institutions.

But while the IAs were needed to promote better irrigation service 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.

### KEYWORDS

NIA – National Irrigation Administration

PAP – Participatory Approach Program

IA – Irrigators Associations

O&M – Operation and Maintenance

IMT – Irrigation Management Transfer

## IRRIGATION SYSTEM DEVELOPMENT AND MANAGEMENT IN THE PHILIPPINES

Irrigation systems in the Philippines are categorized according to how these are developed and managed. There are three (3) 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. CIS, on the other hand, are those schemes 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 CIS were devolved or transferred from the national government to the local government units. PIS are schemes owned by private individuals or corporations, were 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 system.

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 in the service area by NIA to guide the IA from its formation stage up to about 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 development process, the IAs undergo various types of training to equip the officers with the necessary skills, knowledge and attitude in 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 on the learning 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 in 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 like clearing of debris, 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 about 2,400 Philippine Pesos (US\$44) per month upon completion of a satisfactory work by the latter. Another contract option is Type II wherein NIA transfer to an IA the responsibility of ISF collection from the farmers. Under this arrangement, the IA gets an incentive or "commission" ranging from 2 - 15 % of the collected amount for 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. Type III contract arrangement allows an IA to fully take over the management of small NIS. This contract scheme is very much similar to that of CIS with some minor modification 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 of activities.

In the late-90's, in consonance with its continuing effort to sustain its PAP concept, NIA had introduced the so-called Irrigation Management Transfer (IMT) program. 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 sharing agreement of the collected ISF the extent of which 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 IAs and decrease the role of NIA. When evaluation showed that an IA is already 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 an 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 in 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 had conducted a three-phased study to review the implementation of IMT<sup>1</sup>. The main objective of the study was to formulate recommendations for the improvement and sustainability of the existing IAs and future IMT contracts. Among the major findings of the study were: (1) participation in management by IAs resulted to strong feeling 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 who are supposed to be retired under the program. But while the IA had already assumed the responsibilities, the displaced NIA personnel remain in active duty and therefore still receiving compensation. This brings to a situation of staff redundancy and causing a financial burden to the agency.

## CONCLUSION

Participatory management and development had become a cornerstone, a foundation of irrigation program 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 non-government organizations.

Introducing the concept of formally organizing irrigation farmers into IAs and granting it with recognition as a juridical entity has empowered the association to become independent and self-reliant 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, their finances as well as the 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 have 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 to 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. But just like any program or project, it has its own share of problems but these are overshadowed by the enormous benefits derived as referred to in the World Bank study.

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<sup>1</sup> The author was part of the Phase II study as Institutional Development Specialist counterpart from NIA.

## RECOMMENDATIONS

1. The concept of participatory management may now 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 its approach to programs. Its methods should be dynamic and pro-active so as to keep pace with the changing time and environment. A 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 one-year guidance period may not be sufficient to make the IA truly strong and cohesive organization.

RECOMMENDATION: The IDO's presence should be extended a little more. For a new organization, the first 2 to 3 years is very critical to its 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 will 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 who received training and in turn train their members is an over-expectation. Training people require special skills and knowledge. Their attendance to one or two training sessions or seminar could not turned them to become "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 could be done to improve the program and make it sustainable. Notable issue 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 result can provide vital data and information that will be useful in the management and decision-making 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 in managing their irrigation systems.

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