Irrigation Management Transfer in the Philippines

Lessons from the Participatory Irrigation Development Project (PIDP)

Irrigation in the Philippines

- Total potential irrigable land: 3.02 million ha;
- Total developed irrigated area: 1.73 million ha (2016; 57 percent of potential);
- Main aim of irrigation investments: self-sufficiency in rice production;
- National Irrigation Systems (NIS): 766,000 ha, government-owned;
- Communal Irrigation Systems (CIS): 586,000 ha, constructed with support from government, owned by farmers through cooperatives or community associations.

National Irrigation Administration (NIA)

- NIA was established in 1963;
- Main mandate is to construct, rehabilitate, and manage NIS;
- Central Office (CO);
- 14 Regional Offices (RO);
- Numerous Irrigation Management Offices (IMO);
- Irrigators Associations (IA);
- IMOs depend mainly on income from irrigation service fees (ISF).

Irrigation Management Transfer (IMT)

- Philippines has a long history with IMT, starting in the 1970s;
- IAs take responsibility for operation and maintenance (O&M) of part of or whole NIS and pay ISF;
- Philippines has an interesting way of calculating ISF;
- X kg rice * rice support price. X is 150 kg and 100 kg during the dry and wet season, respectively. In 2016, the rice support price was PhP17/kg. The ISF was thus PhP2,550 (US$49.50) and PhP1,700 (US$33.00) per ha during the 2016 dry and wet season, respectively.

Irrigation Management Transfer (cont’d)

- Mixed results with IMT over the years;
- Unwillingness and unpreparedness to take over O&M;
- Poor condition of irrigation and drainage infrastructure;
- Low collection rate for ISF (around 60%) – no clear-cut penalty system;
- ISF blend rate sufficient for some NIS, insufficient for other NIS;
- Low revenue for NIA and reduced capacity to maintain schemes;
- Further deterioration of schemes and service (vicious circle);
- Reduced irrigation area and cropping intensities.
Participatory Irrigation Development Project (PIDP)

- World Bank funded PIDP (2009-2018) designed to address these structural and institutional issues;
- Focus on irrigation infrastructure improvements;
- Focus on capacity building of 904 IAs (about 125,000 ha) and support to NIA to provide effective support to IAs, from leadership to members;
- NIA has dedicated institutional support units at the three levels;
- Four IMT model contracts, with gradual transition, increasing the level of responsibility of IAs for O&M of NIS.

IMT Model Contracts

- Model 1: NIA manages NIS, but IAs perform certain tasks, e.g. maintenance of lateral (basically cheap labor), distribution of ISF bills;
- Model 2: NIA manages main canal system up to laterals (secondaries), with IA managing the laterals, sub-laterals, etc.;
- Model 3: NIA manages headworks and main canal up to first lateral canal offtake, with IA managing the rest of the main canal, laterals, etc.;
- Model 4: NIA transfers management of entire system to IA.

IMT Model Contracts (cont’d)

- Model 1: payment for labor provided for canal maintenance;
- Models 2 and 3: share of ISF to return to IAs varies (ISF moves through RO), but increasing from model 2 to 3, based on negotiations between NIA and IAs and formalized in IMT contract;
- Model 4: all or most of the ISF to return to IAs.
- For each model, NIA provided regular training and support;
- Training focuses on many aspects, especially planning and implementation of O&M, budgeting and fund management, organizational aspects, and M&E.

IMT Model Contracts - Level

- IAs to decide on contract level, based on capacity and readiness to assume O&M responsibilities;
- This was key – no forcing to assume responsibilities that were not matched with IA skills and experience;
- Most IAs opted to start with model 1, and move gradually to higher level when comfortable with that, based on training and other support received by NIA;
- At the end of 2016, most of the 904 project IAs where either model 2 or 3.

IMO Financial Viability

- Some IMO’s reluctant to allow IAs to transfer to higher model;
- IMOs fully dependent on share of ISF for payment of staff salaries and upkeep of office and schemes;
- With transfer to higher model, funds received by IMOs reduced;
- Always difficult to let staff go;
- Some IMOs would not have enough funds to operate functionally.
Free Irrigation Service Law

- Free Irrigation Service Law (2016) abolished ISF;
- Irrigation delivery service changed from a semi-commercial operation to a purely government subsidized public service;
- NIA lost a major source of O&M revenue, but government started providing O&M subsidy in similar amount as the average annual ISF amount collected during 2014-2016;
- IAs had to sign a modified IMT contract that stipulated the part of the canal system to be maintained and the subsidy to be received.

Free Irrigation Service Law (cont’d)

- Subsidy had two elements: a fixed rate of PhP400 (US$7.75) per ha under irrigation in a particular season and PhP1,750 (US$34.00) for regularly maintaining 7 km of concrete lined canal or 3.5 km of earthen canal;
- For many IAs, especially the ones with the higher models, these subsidies were insufficient;
- Mature IAs have awareness among members that adequate funds should be available for proper and timely O&M;
- Many IAs started collecting contributions (not called ISF, but sustainability fund or O&M assistance fund) to augment their resources for O&M and organizational development activities.

Impact of PIDP Interventions

- Clear contract clauses led to 71% of IAs receiving their share of ISF within one month after collection. Before the project only 10 percent did;
- Cropping intensity in the project NIS increased from 150 (of 72,000 ha) to 171 percent (of 125,000 ha);
- The average paddy rice yield in the project-covered NIS increased from the baseline of 4.27 tons/ha and 4.48 tons/ha during the wet and dry seasons in 2009, respectively, to 5.00 tons/ha and 5.26 tons/ha or about 17 percent higher, during the wet and dry seasons in 2017, respectively.
- The increased scheme performance was due to IA/farmer institutional strengthening and technology transfer, including better water governance, adoption of water savings technology, and improved availability of water gave many farmers confidence to use high quality hybrid seeds.

Conclusions and Main Lessons Learned

- IMT supported by a comprehensive training program to IAs results in better system management, but transition needs to be carefully scheduled, which was done through the Model Contract system;
- The proper sequencing of activities for IA strengthening is important to support IAs through a progressive capacity development process, not only at the leadership level, but all the way down to irrigation services turn-out groups to build understanding and commitment to effective O&M across all members;
- It is important to have qualified IA support staff at scheme level in the IMOs;
- IMT has to go hand-in-hand with physical system improvement, to be designed with full participation of IAs, and
- Although the abolishing of ISF collection was a set-back for many IAs, mature IAs were able to convince their members to find alternative ways to collect sufficient funds for O&M.