

It Takes Two To Tango: A Case Study of Irrigation Management Transfer in the Philippines

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INTRODUCTION

UNDERSTANDING BOTH THE process and outcome of Irrigation Management Transfer (IMT) is not a simple matter. There is more to IMT than just the formal redistribution of tasks and responsibilities between the irrigation agency and farmers. When IMT policies are implemented, a complex and dynamic process is triggered, in which the public organization of the management of irrigation systems is restructured. It is a process in which the actual management control is restructured: new relations emerge and new actors step into the arena.

A fruitful way to study management transfer, therefore, is to analyze the emerging processes of negotiation. In an IMT process, various actors--with different interests, strategies and resources--negotiate over a wide range of issues like the kind of rules and sanctions to be implemented, the (re) distribution of irrigation-related tasks, responsibilities and formal positions in the management organizations, and perhaps the design of accompanying rehabilitation projects. These negotiations do not necessarily come to an end when the management has been formally transferred to a water users' organization. The relations of management control might be renegotiated long after the formal transfer has been established.²

In this paper I describe both the process and outcome of the transfer of management of a small canal irrigation system in Southern Luzon, the Philippines. Unfortunately, the limited research carried out in this system does not allow me to provide a careful analysis of the negotiation processes of management control. Still, the study permits us to look into some of the complexities of IMT.

It will be shown that IMT is not simply a zero-sum-game in which farmers take over the management from the irrigation agency. In the case study the National Irrigation Administration (NIA) remained involved at the local level and tried to control certain aspects of the irrigation management. Hence, the title "It Takes Two to Tango." The case study furthermore shows that IMT cannot simply be understood as the transfer of management to an undifferentiated group of farmers. Certain segments of the farmer population increased control over irrigation management, while others hardly became involved.

The case study described is a 'run-of-the-river' type of system, which covers about 1,400-1,800 hectares (ha) of rice land. It consists of 9 main intakes, and a large number of smaller agency- as well as farmer-constructed intakes. Organizationally, it is part of the jurisdiction of a system-office of NIA.

The study is based on two months of intensive field research on one of the six subsystems in 1991, in which interviews were held with NIA field staff and farmers. This article is furthermore based on a field study of the Institute of Philippine Culture of Ateneo University in Manila, which analyzed the process of management transfer of the system just after the farmers had taken over its management.

Before we look into the case study, we will first go briefly into the background of IMT policies in the Philippines.

BACKGROUND OF NIA'S POLICIES ON IRRIGATION MANAGEMENT TRANSFER

NIA's management transfer (turnover) program for the agency-managed 'national irrigation systems' started in 1981.³ The most important reason for NIA to start this program was financial. NIA, founded in 1964 as a public corporation, was required to become a financially autonomous irrigation agency for its operating budget (so, not for its capital investments) with the amendment of its charter in 1974. Unlike earlier, it was allowed to retain all its generated revenues, including irrigation fee collections. On the other hand, it was agreed that the government operating subsidies to NIA were to be phased out over the ensuing five-year period. At the end of that period, NIA's operating budget had to be completely self-financed (Svendsen 1993). Since the treasury's annual

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²See for the analysis of IMT from such an actor-oriented perspective, the studies of Van der Zaag (1992) and E. Rap (1994), who analyzed both the process and outcome of IMT of a medium-scale system in Mexico.

³The majority of irrigation systems in the Philippines are classified as National or Communal systems. National systems are relatively large (not smaller than 1,000 ha) agency-constructed and -managed systems, while the communal systems are often relatively small (up to a few thousand hectares), farmer-managed systems. Both type of systems cover around 600,000 ha.

appropriation to NIA had always largely exceeded the collections that it remitted, the 1974 amendment forced NIA to bring its operating budget into balance. IMT was expected to serve that purpose.

NIA's strategy was to organize farmers into irrigation associations (IAs) and to devolve Operation and Maintenance (O&M) responsibilities to them. This would allow for a decrease in the number of NIA's field operation personnel, and therefore the O&M costs shouldered by the agency would be reduced. NIA also anticipated that the participation of farmers in actual O&M activities would improve the management of the system and irrigation services to farmers; and hence, encourage them to pay their irrigation fees. The agency thus expected an increase in irrigation fee collection.

NIA designed three stages for IMT, all reflecting the aim of staff reduction:

In *stage 1*, an irrigation association contracts to maintain the canals in a specified water master section and to assist the water master in operations. This partnership is financially attractive to both farmers and NIA, since the payment to the association is at a rate below the comparable cost of NIA-employed ditch tenders while higher than the comparable remuneration for agricultural work (World Bank 1991).

In *stage 2*, in addition to maintenance, the association contracts to collect Irrigation Service Fees (ISF) from its members. The association is paid a percentage of the collected fees. This incentive scheme enables NIA to dismiss or transfer its billing personnel.

In *stage 3*, the association signs a contract for irrigation management transfer. Under the overall supervision of NIA, the association becomes fully responsible for all management tasks. This enables NIA not only to displace ditch tenders and billing personnel, but also gatekeepers, administrative personnel, drivers and other staff. NIA maintains an income by the requirement that farmers pay for the amortization of the system, instead of the services delivered by the agency. NIA applies this contract mostly for so called 'marginal systems,' of which the maximum potential income from ISF is lower than the operating costs. These systems usually serve a small acreage, while the O&M costs are relatively high. The financial attractiveness of this contract for farmers is that the yearly amortization dues are usually lower than the formerly levied service fees (Oorthuizen & Sloot 1993).

By 1989, 518 associations in national systems had entered stage 1 or 2, covering about 140,000 ha, while for stage 3 about 9,000 ha were turned over to 35 associations. The total of 149,000 ha under the three stages equals about one-quarter of the irrigated area under national systems (NIA 1990). Depending on the specific type of devolution, reduction in NIA's staff levels in a sample of these systems ranged from 13 to 75 percent (Svendsen; Adriano and Martin 1990).

In addition to IMT, NIA tried to solve its financial problems by putting pressure on the offices of national systems to become financially viable. This means that the operating costs of a system office in a given year need to equal at least its revenues from fee collections and other sources. The staff of these offices were encouraged to attain cost recovery through so called Viability Incentive Grants.⁴ This program provided that once a system office achieved financial viability in a given year, about 10 percent of the surplus could be divided among the unit's personnel. These incentives are significant relative to their regular salaries. In addition, financially viable offices were awarded with a 'diploma' (Jopillo and de los Reyes 1988; World Bank 1991).

The efforts of NIA's IMT program bore fruit in financial terms. Except for the occasional calamity grants from the government and a small deficit incurred in 1981, NIA was able to keep its operational budget in the black during the eighties (Svendsen 1993).

THE PROCESS OF IRRIGATION MANAGEMENT TRANSFER

The IMT process in the case study consisted of a long process of negotiations, which started in 1982 and ended in 1986.⁴ Important actors in this process were the Community Organizers. NIA fielded 6 organizers, who were attached to the system office and were under the direct supervision of the irrigation superintendent. They obtained assistance from organization specialists of the regional office and from a program supervisor of the national office who visited the region on a regular basis. The organizers had to set up viable irrigation associations, capable of taking over the management of the system. To facilitate management, the organizers set up 6 associations, each responsible for one of 6 hydrologically independent subsystems. The organizers selected a number of farmer leaders who were to become the future Board members of the associations. NIA provided them with training on leadership development, financial management and system management.

On the side of NIA it was decided to go for a complete transfer of irrigation management to the associations: stage 3. The reason for this decision was mainly financial. Although the system could not be considered a marginal system by definition, the system office experienced heavy losses in the first half of the eighties.

⁴A detailed description of these negotiations can be found in [Ilo and Jopillo, pp 148-184.]

Expenses were high because the 9 main water sources of the subsystems required a large number of operating staff, while on the average only 20 percent of the target fee collections was actually attained between 1982 and 1985, which is in sharp contrast with the nationwide average of 40-50 percent.

By early 1983, the organizers had organized 6 associations. This required many discussions and negotiations between the Board members, especially about the delineation of the boundaries of the subsystems to be served by the different associations, and the inclusion or exclusion of almost 600 ha of land in the service area of the system, which were irrigated by means of privately constructed and operated brush dams.

Stimulated by the organizers, the Board members of the association started to negotiate with NIA engineers about the major, ongoing rehabilitation of the system. This rehabilitation was part of the nationwide, World Bank-funded 'National Irrigation System Improvement Project (NISIP-II)'. In various cases the quality and/or location of already constructed works were disputed, while in other cases, farmers called for adaption of and additions to the planned works.

The negotiations intensified by the time the contracts of management transfer between NIA and the associations were to be signed. Each contract consists of a 13-page long paper, which stipulates in detail the formal, judicial obligations of both associations and NIA. The main issues negotiated were the total amount of the amortization dues and the length of the repayment periods.

By 1986 all 6 associations had signed an IMT contract and were in charge of the management of the different subsystems.

MANAGEMENT CONTROL AFTER IMT

My field research on the management control in the years after the system management was transferred to the associations was limited to one of the 6 subsystems of the system. This subsystem covers around 180 ha.

The formal organization of management of this subsystem is stated in the IMT contract. According to this contract, the association is in charge of the operation and maintenance of the subsystem. The association has to ensure proper allocation and distribution of water to all its members as well as the maintenance of the main, lateral and tertiary canal(s). Furthermore, the association is obliged to meet its amortization dues to NIA twice a year. The dues equal one sack (50 kilo) of paddy per ha per cropping season. Hence, the association has to collect these fees from its members, and submit the money to the local staff of NIA.

The association is formally organized along democratic lines. The membership consists of all landowners or tenants tilling a piece of land served by the subsystem. The daily management of the system is delegated to a board whose directors are elected for a period of two years by the general assembly of members. The board consists among others of a president, a vice president, a secretary, an auditor and a treasurer. The board has at least seven members, who are the so-called 'Rotational Area Leaders' who are responsible for the management of O&M in one of the seven rotational areas. Formally the board has a mere executive function. It meets once or twice a month. Policymaking is preserved for the general assembly, which is usually held twice a year. The Board members receive an honorarium, while a salary is paid to a gatekeeper and billing personnel. To make up for these honoraria and salaries, other O&M expenses and the amortization fee, members have to pay an annual service fee of four sacks of rice paddy per ha (200 kilo), or the equivalent in cash.

The formal obligations of NIA have been reduced to overall supervision of the management practices of the association and the provision of technical assistance.

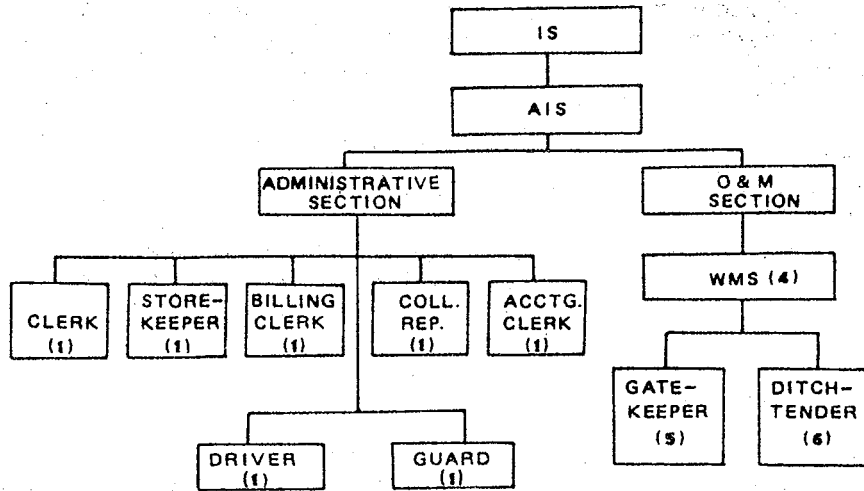
However, five years after the formal management transfer, NIA is still playing an important role in the actual management of the subsystem. Contrary to what one may expect, the subsystem (as is the case for the whole of the system) was not reclassified as a communal, farmer-managed system, but was still considered a national, agency-managed system. Hence, the system was not put under the responsibility of the provincial irrigation office, but NIA kept its management office of the system intact.

In line with the contract, NIA's involvement in the O&M of the subsystem and the system as a whole has been changed to a supportive role. The day-to-day management has been transferred to the association. This allowed NIA to phase-out the majority of the staff of the system office (Figure 1). In cases of technical difficulties, the water master and superintendent are available for advice and support. NIA's supervisory role seems to be rather limited. According to the contract, the association is obliged to submit plans of operation and cropping calendars for approval to NIA and it has to report regularly on the implementation of these plans. This, however, was not practised. The main reason for this neglect is the limited number of operational activities going on in the subsystem. Farmers claim that the sandy soils require continuous, year-round irrigation. The irrigation water is distributed proportionally up to field level, while in the larger part of the system field-to-field irrigation is practised. Hence, except for the operation of the main intake, little human interference in the flow of water is taking place.

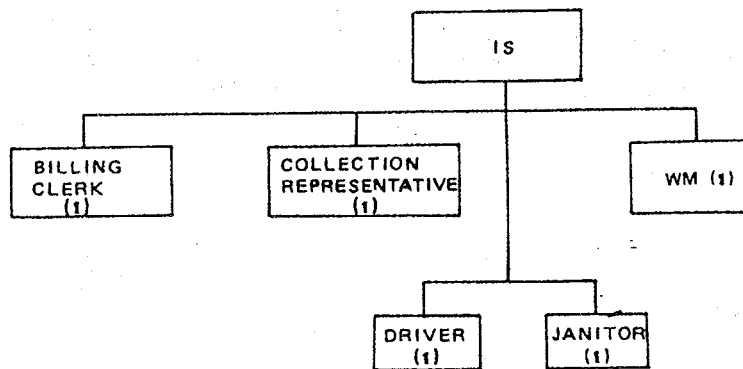
Still, the local NIA staff is strongly involved in IA-matters. The organizer and (less frequently) the superintendent visit the bimonthly meetings of the board as well as the meetings of the general assembly, in which they are actively involved in the discussions. The organizer is still working on the institutional development of the association. He does, for instance, try to stimulate active members of the association to become elected in the Board.

Figure 1. Organization Setup of NIA's System Office (Jopillo and Reyes 1988).

BEFORE SYSTEM TURNOVER IN 1982



AS OF EARLY 1987



One of the main issues of NIA involvement in IA-matters is the issue of amortization. The superintendent and the organizer continuously put pressure on the board to collect the fees from their members and to meet their amortization dues to NIA. One Board member stated 'the only thing they can talk about is money, money and money.' This pressure seems to be quite effective. Over the years, the association has developed an extensive system for ISF collection and has taken measures which have rather effectively dealt with free riders and arrears. This pressure also supports the tendency of the Board of the association to prioritize the payment of amortization (and the payment of salaries and honoraria) to the extent that no money is left to finance maintenance activities or improvement works (Table 1).⁵ Undoubtedly this pressure from the side of the local NIA staff, has to do with the earlier-mentioned programs where NIA designed to increase its income from irrigation fees of farmers.

Table 1. Cash disbursements, income, ISF collection rate and amortization payment rate of the subsystem, 1985-1990.

Year	Cash Disbursements, in % of Total ^a						Total Disbursements	Income ORIS-IA ^b	Collection Rate ^c	Amortization Rate ^d
	A	B	C	D	E	F				
1985	16	45	23	11	5	0	pesos	pesos	%	%
1986	10	48	11	19	12	0	33198	50283	40	47
1987	23	47	6	21	3	0	81398	57719	46	58
1988	13	44	5	36	2	0	30825	38784	31	38
1989	10	41	13	26	9	0	54938	42052	33	39
1990 ^e	8	56	18	16	1	1	85149	101373	81	87
							52082	80762		100

- ^a A = salary of gatekeeper
 B = amortization payments to NIA
 C = salary of billing personnel
 D = honorarium of Board members
 E = miscellaneous
 F = maintenance, repair and improvement of infrastructure
- ^b collection rate: the ratio of actual collection and maximum collectibles (based on 180 ha * 200 kg of rice paddy * 3.5 peso/kg = 126,000 P/year)
- ^c ISF collections are the only source of income of the IA.
- ^d amortization payment rate: the ratio of the actually paid system amortizations in a given year to the required amortization payments (48,000 P/year)
- ^e for the dry season of 1990 only
- ^e collected amount unknown

Source: Oorthuizen and Kloezen (1994).

Last, the NIA staff of the system office did get an intermediary role in between the 6 associations and the regional and national departments of NIA. This role has been formalized through meetings at the system office every two months, in which the presidents and secretaries of the associations meet with the superintendent, organizer and--if required--the regional director of NIA. For NIA this meeting serves the purpose of discussing the issue of amortization and of informing the IA representatives of NIA's policies and occasional programs for improvement works. On the other hand, it gives the associations the opportunity to communicate their management problems to the regional director and to ask for financial support.

Another important complexity of IMT is related to the management control within the farmer community. In the case of this subsystem, not just the farmers took over the management of the system. Unlike the formal institutional setup, planning and policymaking were done by the Board, which was controlled by only a small part of the total membership. Most members were hardly involved in their association and were hardly aware of the scope and meaning of the institutional and financial changes behind the turnover program. Many of them saw the association as an extension of NIA, rather than as their own farmers' organization. The quorum for the meetings of the general assembly was never attained.

⁵An important question is whether this pressure undermines the performance of the subsystem. This is beyond the scope of this paper, but is addressed in another article (Oorthuizen and Kloezen 1994).

From the very start of the turnover program, NIA was aware of the difficulties in establishing a democratic association. It recognized that decision-making processes in local public organizations like the association of the subsystem are usually controlled by the rural elite, and at best only indirectly influenced by the poorer strata. NIA tried to change this situation. In its bylaws for IA formation it was explicitly stated that Board members had to belong to the poorer strata, while they were not allowed to hold any other position in local public organizations. In their training and training manuals NIA stressed the need for democratic decision making. Despite the intentions, these policies did not fully become reality.

Ever since the association was established, virtually all the seats of its Board have been occupied by farmers belonging to the richer strata, while most belong to a few prominent families. In addition, several members of the Board held a position in the village council as well, while others did so in the recent past. Farmers from the poorer strata did not put themselves forward as candidates, stating that irrigation management should be organized by the richer farmers. They argued on the lack of necessary time, the inability to speak and read English and the lack of managerial capacities to deal with matters of the association. This situation is partly the result of the process, of management transfer. In this process the organizers focused their efforts mainly on the local leaders, who were also selected by the organizers to become the future Board members.

CONCLUSIONS

Irrigation management transfer should be seen as processes of negotiation over the management control of public irrigation systems. The case study shows that the often made assumption that IMT is just about farmers taking over the job of an irrigation agency does not fully grasp reality. Day-to-day O&M practices were indeed transferred to a farmer association, but the NIA remained both formally and actually involved in the system management. Local NIA staff influenced the financial management of the association, which reflects the need of the agency at the national level to reduce its operating expenses and to increase its income. Furthermore, it became clear that IMT to a farmer association does not automatically lead to democratic management. In this case, the local elite gained control over the association, while the majority of members were hardly involved in IA matters, nor aware of the changes brought about by the transfer of the irrigation management.

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