Institutional Framework to Support Management Transfer

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INTRODUCTION

Irrigation management transfer is occurring worldwide. It is now recognized that important to the long-term success of transferred irrigation systems are viable institutional arrangements for supporting management transfer. For example, a system of administering water rights or the provision of extension services may be key elements of successful transfer.

Nepal is in an interesting position in that it has supported viable farmer managed irrigation systems for years. In essence, transferred systems will take a similar status as farmer managed irrigation systems. Certainly, some support services, either from government or private sectors, are available.

The objective of this paper is to investigate and analyze existing governmental legislation and institutional support arrangements to facilitate effective transfer and functioning of turnover irrigation systems in the country.

IRRIGATION TURNOVER IN NEPAL

HMG/N pursues a policy of gradual hand over of agency managed irrigation systems to farmers through their organizations. In pursuant to HMG/N broad policy, management transfer efforts have been initiated at different levels by projects under DOI. The concept of irrigation management turnover is very recent in Nepal. The strategy of joint management and turnover of irrigation projects was drafted in early 90s. The actual implementation of the concept began in 1993 by forming WUAs in five irrigation projects. The actual implementation involves, besides others, the rehabilitation of the systems, deferred and regular maintenance, capability building of WUAs and so forth.

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WATER SERVICE ORGANIZATIONS

Various ministries, departments, corporations have been created under the broad administrative framework of HMG/N to carryout different functions related to water use in the country. Various legislative bodies are also formed at different levels of the government hierarchy, from central to local level, to regulate the functions related to irrigation and water supplies. Many I/NGOs are also involved, as partner of HMG/N or by themselves, in water resource development.

The National Planning Commission, Water and Energy Commission Secretariat, Ministry of Water Resource, Ministry of Population and Environment, Ministry of Agriculture, Department of Agriculture, National Agriculture Coordination Committee and different INGOs function at national level.

Department of Irrigation is the major government department involved in irrigation development of the country. The DOI is the central organization with five regional, seventy-five districts, and nearly two dozen project offices.

At regional and local levels, Regional Irrigation and Agricultural Directorates, DWRC, Water Resources Utilization Inquiry Committee, District Agriculture Coordination Committee (DACC), Chief District Office, Local Development Office Municipality/Village Development Committee operate.

EFFECTIVENESS OF ORGANIZATIONS

Institutional Framework: It is indicative that there are various agencies created at different levels that cater to the issues of water resource utilization, however, a converging institutional framework formed on the basis of organizational consensus in irrigation development is lacking. More precisely put, policies and institutions exist, but overall framework and strategy are not properly developed. It is also indicative of the fact that the essence of irrigation in general, and irrigation management transfer in particular, is yet to be properly incorporated in the policies and followed in actions. There is a need to develop a common understanding regarding the attainment of ultimate objective of improving agriculture production. The Agriculture Perspective Plan mentions key institutions and their roles to provide coordinated services to the farmers.

Coordination: Although there are various institutions created under the HMG/N to operate in water resource sector at different levels, there does not exist a coordination plan to provide effective supports to the farmers for the utilization of irrigation projects. The National Agriculture Coordination Committee, which is supposed to coordinate planning, implementation, monitoring and evaluation of agricultural development activities in the country, is inactive. The coordination problems are more critical at the districts and at field levels. This is evident from the fact that the necessary inputs, technology, extension are hard to reach to the farmers as one package, at time, quantity and quality. The District Agriculture Coordination Committees are also defunct.

DWRC Operation: The role of DWRC is limited more to issuing license to the water users in the districts. There exist ample opportunity and need to make these committees active with greater responsibility to regulate the provisions given in various acts and legislation.

Water Service Needs: Future water requirements are expected to rise consistently in the all irrigation projects in general. Urbanization and industrial activities are increasingly influencing many projects, which, in turn, have complicated the demand-supply situation of water for all purposes. Given increasing competition, more attention is needed to address water service needs.

Drainage Use: In general, the drainage systems are poor in many irrigation projects of Nepal. Despite the potentiality to use the drainage as supplementary source of irrigation water, particularly in the Terai, the efforts are apparently lacking.

Flood Warning System: There is no full-fledged government agency to look after the problem of flood and its management. Also, there is no early flood warning system developed in the projects leaving the systems vulnerable to floods.

Water Quality Maintenance: No government authority has been made responsible to look after and maintain water quality in the area. The environmental action plan of 1992 and environmental guideline published in 1996 are more or less silent about the quality of water in irrigation canals. However, the national code of conduct (1963), WRA (1992), Solid Waste Management and Resource Mobilization Act, 1987 and WRR (1993) have laid down a few definite guidelines for water quality maintenance.

River Basin Management: Environmental Action Plan (1994) has provisioned some definite policies for integrated river basin wide management. The issue has remained in constant discussion among the water resources sector policy makers. But no detailed plans have been made yet about river basin management.

TURNOVER STATUS: IMTP EXPERIENCE

The IMTP Phase-1 appears to be successful in terms of project design, planning and implementation for successful transfer of irrigation management. In two years of the project, most of the activities have been completed according to the established schedule leaving no major pending and backlogs.

In all sub-projects in IMTP Phase-I, fully evolved and experienced WUAs have been set-up and are involved in the management of the system. These WUAs are registered, and bear full legal authority for O&M of their respective systems remaining within the legal framework provided by the WRA, WRR and IP.

A district level federation has been formed of about 3 dozen WUAs functioning in Chitwan district. The federation was formed about a month ago and is functioning satisfactorily. The two sub-projects under transfer, KHIS and PIS are members of this federation. Such federation does not exist in WGIS area.

The information on ISF collection was available for the last few years, but not in a uniform pattern for all sites. Moreover, the ISF collected in all systems fall short if they are compared with the O&M requirements on per hectare basis. This strongly implies to the fact that either the ISF should be increased or the O&M cost should be decreased or further improvements are attained in both.

ISF collection system is gradually being refined and evolved based on the experience and knowledge gained by the WUAs. In WGIS, the WUA collected ISF by hiring a staff in the first and second year. The achievement in ISF collection was far from satisfactory as the ISF collected was much less than assessed. From the next year, the WUA entrusted the responsibility of ISF collection to the branch committees of WUA.

Besides ISF, the WUAs are soliciting other potential sources of income to meet their O&M cost. In case of WGIS, other sources include mainly, the cash support from the government for the initial three years after turnover, internal tax collection from the vehicles using canal service road, *Haat* bazaar (periodic market in the area) tax, fine and penalty, etc. Such taxes have already been raised in WGIS last year, which amounted to a total of Rs 134,000.

WUAs are trained to prepare their annual budget and financial statements. The major item of income constitutes the ISF collection in all sub-projects, whereas their expenses consist of wages and salaries to the hired staff, stationery, fuels, repair and maintenance, etc. There is still a need to refine the process of budget preparation and maintain updated income and expenditure statements.

The WUAs audit their accounts and financial records by the local registered and licensed auditors. So far, the accounts are small in terms of volume of financial dealings and transactions in all sites.

Improvement in water service quality could be assessed in terms of increased water flow in the canals, water adequacy, increased irrigated areas and crop cultivation in different season. However, based on the quality of the available data, it is inconclusive whether the systems are improving on these characteristics or not.

The available documents show a growth in the irrigated area from 7,623 to 9,825 ha in the summer of 1995/96 in WGIS. The corresponding growth is recorded at 600 from 450 ha in PIS. The dry season figures on irrigated area for 1995/96 are 2200 in WGIS, 400 in KHIS and 200 hectares in PIS. The corresponding figures for 1996/7 are reported at 9,800, 1,600 and 600 hectares, respectively.

Evidently, the cropped areas must increase over the period because of better irrigation management. However, the cumulative data available for comparison are not in conformity to an increasing trend. In KHIS, the total cropped area increased by 15.67 % between 1992 and 1994, however, it declined by six-percentage point in 1996/7 (ICON: 1993, ERC: 1993, RTDB/DOI: 1995, SAPR-3 and 4, IMD: 1997). This could be due to inconsistency in data and shift in the cropping pattern by the farmers to perennial crops such as sugarcane. Similar trends have been observed in WGIS and PIS.

The available data for the productivity of major crops do not provide any clear picture. It is too early and also impossible to draw any conclusion, whether or not the management transfer has any positive bearing on crop yields. It is reported that the yields have increased between 1992 to 1995, however, the available data shows a drastic decline in the wheat yield in 1996/97. As wheat is winter season crop, it can be contended that either the water service in the winter of 1996/97 was not satisfactory or the area is experiencing a major shift in cropping pattern that has made wheat an unimportant crop to the farmers.

Although a major indicator of system improvement is reflected from the canal discharges, it has not been compared in the report due to lack of adequate cross-sectional and temporal data.

Both the government and farmers have gained valuable experience through the implementation of the project and have reached at the stage of turning over the responsibility as envisaged in the transfer policy. The government has agreed to provide certain supports to the WUAs as part of turnover obligation before the full transfer of management responsibility.

The farmers are positive about the ongoing development regarding irrigation management transfer. The farmers have been fully cooperative in the operation, management and maintenance of their respective systems. Their positive attitude and inclination toward the program are evident through an increasing participation in resource generation, ISF collection, membership in WUAs, etc. However, as the program is very new, it is not possible to assess the attitude in real sense. Also, the farmers' were not capable to note the kind of institutional support they would require after assuming the ownership of the systems.

It is, although, very early to note but the DOI seems to have no problems in internalizing the activities of IMTP into its regular working modalities. The hidden remarks, cajolery and flattery, however, are part of such a new intervention, which require the agency staff to forego some of their prerogatives. However, other line-agencies that are directly associated with the program implementation have not shown any enthusiasm toward the program. This is in irony that DOI has not made the needed efforts in coordinating and establishing linkages with other line-agencies for combined efforts in meeting the program objectives. There is also a need that the DOI's role after the system is transferred is properly studied.

The turnover program is one of the major stated objectives of the government. There does not seem any major problem occurred either due to political reasons or policy measures to undermine or dissipate the efforts of DOI.

The recent reports have given evidences that there are some environmental problems emerging in the catchment areas of KHIS and PIS in Chitwan. The government has implemented a large-scale resettlement program for the people of Padampur VDC, who had earlier settled inside the Royal Chitwan National Park. As a result of this settlement (Sagun Tole) the water users of KHIS and PIS are apprehensive that this will have a long-term environmental impact leading to shortage of water in the irrigation systems.

The study attempted to assess deviations in different aspects of turnover, including farmers' contribution share in rehabilitation, training, support Services, physical system condition, deferred maintenance, etc. In its two years of operation, IMTP has not experienced any major backlogs in institutional development and research study and strengthening of WUAs, including training.

FUTURE INSTITUTIONAL RESPONSIBILITIES

It must not be expected that a complete inverse relationship exists between the roles of DOI and the farmers' in the transferred systems. Although DOI is prepared to provide certain level of supports to facilitate the transfer program for the first three years (in case of WGIS), it is yet to be seen to what extent these supports would be adequate. In fact, DOI's role in providing future long-term supports will be inevitable and its liabilities may further increase in some areas. The supports would be required basically to provide backstopping in technical, legal (water rights, riparian issues, etc.) and organizational issues and problems, in addition to key monitoring and research. The monitoring need would be critical particularly to assess the conditions of major transferred facilities, structures and their timely maintenance as well as system performance.

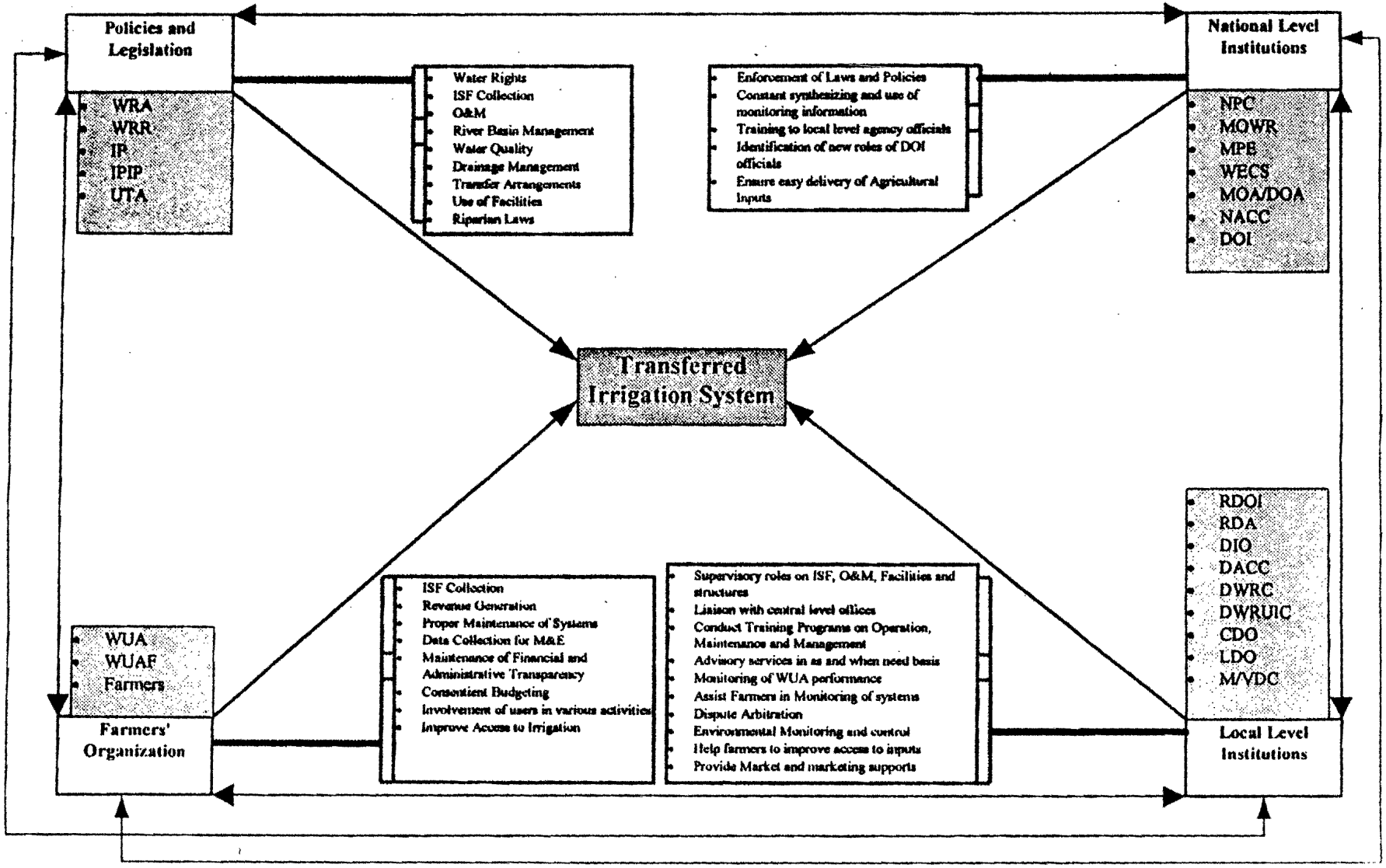
There is an urgency to rethink on certain additional restructuring of the DOI's organization to look after the transferred systems. This restructuring must be able to address major issues relating to effective monitoring, major technical, legal and organizational backstopping. Representation of WUAs and their federations is warranted at the policy-making bodies within the set-up of DOI, probably within the Irrigation Management Division.

It is not that how effectively the systems (IMTP and others) are transferred, but the underlying question is how these systems perform after they have been transferred to the farmers. This paper adequately proves that turnover program is a well-conceived attempt of the government, which is responded positively by both the DOI officials and farmers. Seemingly, so far the program does not have any political interference.

Based on these findings, the researchers assert that the exigency of defining roles and responsibilities of national and local level institutions as well as the farmers' organization in the context of transferred irrigation systems is escalating. There is also a need to provide continuity and contextual updating of various water sector wide policies, legislation and acts to support the transferred systems.

There is a need, therefore, to derive an alternate avenue that could define the new roles of farmers' organization, local and national-level institutions. The following conceptual diagram provides the possible roles and responsibilities and interrelationship among entities that are fundamental to the transferred systems to realize the ultimate objective of increased agriculture performance. The diagram also provides the needed policy, act and legislative support that should be continued and updated based on the performance of the transferred systems.

Expected Policy Supports and Institutional Responsibilities



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