The Local Governance of Common Pool Resources: The Case of Irrigation Water in Cambodia*

Introduction

Common pool resources are those resources such as forests, fish, water, and pasture land that do not have to be produced and are the main sources of daily food supplies and income for the rural poor. These resources are often seen as under the management of the unseen state, which, as identified in key international and national literature, has, throughout history, been an abstract body that has either not governed the resources well or not having governed them at all (Berkes 1989). Two common cases arise from this situation. First, everyone seems to be able to access and take benefits from these resources freely and without any regulations (Ostrom 1990, 1992, 1999). Second, the rich and powerful can capture these resources for their own benefit and not allow the poor to extract further benefits (Carlson 2003; Shaw-Lefevre 1894). Either case often leads to resource crunch or even resource extinction (Hardin 1968).

As a country with abundant natural resources trying to upgrade its economy and more specifically its people's livelihoods, Cambodia is badly in need of a good policy to govern this type of resources for sustainability and efficiency of use. Recognising this need, CDRI's governance unit decided to look at this aspect, seeking out the factors that enable or constrain good governance of common pool resources in Cambodia, choosing to look particularly at the case of irrigation water, which is a focal point of agricultural development at present.

The project explored particularly the dynamics of two approaches in the irrigation water governance. One is the community-based natural resources management (CBNRM), and the other is decentralisation in natural resource management (DNRM). The two interact here with two Cambodian national policies, namely water policy and decentralization. Within the water policy, the community approach hands management responsibilities of a specific irrigation system to a farmer water user community (FWUC), represented by an elected association, while decentralization gives the newly-autonomous elected commune council the right to manage the natural resources, including water, within its territory. The study aimed to discover the situation in the local community where these two overlapping policies or transfers of function take place. The research questions are how each of the approaches independently affects local irrigation water governance and how their interaction, if any, contributes to the whole of this governance.

There are two main objectives: exploring the phenomenon so as to form policy implications and recommendations; and contributing to the literature on common pool resource governance.

Methodology

With the study objectives in mind, the researchers investigated the international and national literature to select variables to examine in the field. After that, they compared the study framework attained from the literature and the empirical data from the field. One irrigation-dependent dry-season-rice-farming community in *Kampong Chhnang* province was selected as a case study of local irrigation water governance since the fall of the Khmer Rouge regime.

Key Findings

The case study suggests that the DNRM approach was practiced in Cambodia from the late 1980s and early 1990s when Cambodia was still a centralized state. Whether by accident or by design, the management of irrigation was the responsibility of the commune chief, who, with technical support and occasional development resources from the province, was in charge of gathering

* By Chea Chou, a research associate, CDRI. The article provides a summary of key findings from a research project in the Kechhnay Program of the CDRI Governance Unit on the Local Governance of the Common Pool Resources: The Case of Irrigation Water in Cambodia. A full working paper on the topic will be available on our website soon.

local people to build the water infrastructure and overseeing the construction and management. It was observed in the case study that some of the most important local state actors in irrigation governance during this period were the commune chief, village chiefs, and the law enforcement agencies. Although the management of this time showed the decentralised characteristics of the state, the commune failed to manage the resource effectively because it didn't possess its own resources and was busy with other more important political tasks such as collecting people to serve in the K5 programme.

The 1990s saw a shift from DNRM to CBNRM in the irrigation, with a formal FWUC defined and a representing local association set up by either the state or the non-governmental organizations in response to the influence of the donor community who has held the development cash. This top-down CBNRM approach has been introduced nationwide since the late 1990s, when the national Participatory Irrigation Management and Development policy was adopted.

Since early 2002, local governance of irrigation water has seen the coexistence of CBNRM and DNRM approaches, both of which have been formalised into the national policies of governance in the sector.

Contributions of the CBNRM

Two characteristics of good governance within this approach were identified. First, the FWUC association is more responsive to the local community's development needs than the state, as evidenced by the FWUC expanding the scheme by building a bridge and road to the water gate to solve the decade-long rice transportation problem, something the local state had not done. Second, the FWUC can also detect problems quickly and come up with timely solutions, as observed in the way the local group dealt with the building of a road that ran through several plots of land belonging to local farmers. The community was quick to notice the problem of the farmers refusing to give up their land for free. The FWUC then proposed to the commune to exchange some commune land with the farmers to allow construction of the road, which would solve the rice transport problem for the whole community. Although the community's initiative did not produce a quick solution to the deadlock, it showed that the FWUC had a large amount of understanding and knowledge of the local context.

Contributions of the DNRM

Since the introduction of CBNRM, the role of the local state has been reduced to interventions upon the requests of the FWUC (e.g., at time of crisis such as the water shortages of early 2006 and early 2007). This holds true even after decentralisation policy in 2002 gave the rights of an independent local state to the commune council. Although the commune is generally regarded as a fairly powerful local body that could command compliance from the local people, the governance of irrigation water is in the hands of the FWUC, with sporadic support in the form of interventions from the commune authority.

The Constraining and Enabling Factors of the Current Local Governance of the Commons

Three key factors are found to affect the general local governance of irrigation water: community participation, community ownership, and community power or control.

Participation of the local people in the community work, one key mechanism in driving the success of the CBNRM process, is limited in the study area. This element, though occasionally functioning in the community, is still constrained by several factors. First, the top-down CBNRM process is incomplete in its community organization and empowerment tasks. This state-initiated approach in the beginning stressed the formation of the association through a one-time-solve-all election[1] to represent the community and the training of a few leaders in the association about the CBNRM approach and how to run the association. Such practices ignored the importance of empowering the community members who are the heart of the process to understand their rights and power to participate in rule-making, rule-implementing, and rule-enforcing within their defined community, making the process highly susceptible to the problems of downward accountability of the representing association. The traditional meaning of participation as understood by community farmers is still prevalent; that is, they only thought of participation as attending

1 There observed to be only one election in the community in 2000 and the association has never renewed its legal three-year term since then.

the meetings and paying the irrigation service fee and not to voice their concerns and demand for solutions.

Second, lack of community empowerment resulted in the non-existence of formal mechanisms for complaints to be heard, increasing the misunderstandings between the farmers and the representing association. Farmers in the study oftentimes used rumours and indirect words to complain about the association leaders and their personality flaws, which were perceived to be irritating from the association point of view and further blurring the relationship between the two-supposed-to-be-close parties. Quite a high level of distrust and a low community spirit were observed in the community. The local people regarded the appointment of most of members of the water user groups as nepotism practiced by the association leaders to involve their relatives and close friends in the association circle so as to take benefit from it.

Finally, the success or failure of such a poor institutionalized community in the case study has become strongly dependent on the leadership style of the key association leader, especially when the local state and the line department alike are more detached from the work of the association to check its legitimacy and work efficiency. In the study, the patron-like leadership style of the association leader who was not willing to share the tasks; did not make decision based on consensus but more of implementing his own pre-defined plan, using the meetings with other serving members as a floor to have his ideas supported and carried out; and kept all the revenue and decided on all the expenditures he thought to be beneficial for the community, was a worrying trend, which posed questions of legitimacy and sustainability of the present CBNRM in the community.

Ownership, another crucial factor in driving CBNRM, is also not completely functioning. Two types of ownership were observed in the case study: the feeling of owning the resource and that of owning the FWUC association. That ownership of the resource is felt in the community was seen in the way that farmers would pay respects and gratitude to Sand Mount, a symbol of holiness of the reservoir, built near to the bridge using the community money. However, the people do not feel they own the FWUC association but see it as another layer of authority and bad governance. The election in 2000 did not involve all the concerned farmers in the community, and many more farmers have entered into the community since then and have not had a chance to vote for its leaders. The problem of the working style of the association, or of the leader, who does not involve people in planning the association's work, reduces the feeling of ownership, which in turn threatens local participation. Without feeling ownership of the association, the farmers do not view it as a legitimate body to manage the irrigation system. From their point of view, irrigation water is public property and should not be under the management of any particular association; or to put it another way, no association can claim ownership of the irrigation system and decide the access and service fees for this resource. To them, management of resources is the responsibility of state agents, and enforcement is the duty of the state agencies such as the police and the military. Even the resource communities of two adjacent water scheme of a single catchment do not seem to recognise the existence, let alone the roles, of each other; even simple activities such as water negotiation between the two are expected to be done through the local governance structure (i.e., in this case, through the commune chiefs).

The last driving factor of community power or control is also challenged. In the case study, there seemed to be an orientation to allow the FWUC association [not the community] control the resource by itself with little or no support or follow-up by state institutions. The association has so far proved unable to control the resource (i.e., to control access). Even with its mandate to control access, the association's ability to do it is very weak. Ostrom (1999) suggests that effective management of the commons has to be able to control access because it is directly linked not only to its well-being and sustainability but also to the effectiveness of management. This was not a case in the study. The command area of the irrigation scheme expanded dramatically beyond its capacity as reported by the line department, but nothing was done to solve this problem. The association's mandates are not fully understood by the association members or the farmers. The problem is made worse by the fact that the present FWUC has extended beyond its legitimate term and the farmers keep questioning its legitimacy, although many are still paying the irrigation service fees. The inability to

control access has resulted in a mismatch between the resource and the appropriation level, and this has huge implications for the long-term livelihood development of the community and the resource's future availability. Water shortages in the middle or toward the end of the cultivation season have not been uncommon, and in times of scarcity the already weak community rules and regulations are simply ignored and verbal exchanges between farmers competing for water resources disturb community relationships. Also, there are upstream schemes whose activities can have distorting impacts on the CBNRM in the studied community. The solution might lie in the creation of a mechanism that allows all water communities sharing a catchment to share information so that they know each other's activities. But this possibility is far from reality due to a lack of awareness for the need for it, the lack of resources, and the lack of an institutional mandate, as suggested by Kim and Ojendal (2007).

Conclusion

Current local irrigation water governance, as seen in the case study, is a CBNRM approach in the context of DNRM. Since the end of the Khmer Rouge period, the local state has often been able to appeal to a higher level for financial support to make a one-time investment in infrastructure, but after construction is completed, the state, both local and higher levels, tends to move out, leaving the structure with no possibility of sustainable operation. CBNRM as practised now can fill in these gaps because it is more responsive to local needs and quicker in tackling problems and providing cost-effective and context-dependent solutions. However, this is still very limited in scope because the three enabling mechanisms—participation, ownership, and control—have not been fully functioning. Carlson (2003) proposed that three things must be done to wield the power of the three mechanisms. First, legislation should empower the community by defining its rights over the community property. The second component is to ensure that there is some optimal external support (i.e., financial, capacity, and technical) to the association and the community. The third is to build trust in the community and between the community and the government. These three elements were lacking in the practice of the FWUC association and the community in the case study. These are a few things that need to be addressed to improve local governance of irrigation water.

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