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IMPROVING THE GOVERNANCE OF WATER RESOURCES IN CAMBODIA: A STAKEHOLDER ANALYSIS[1]

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KEY MESSAGES

- The development and management of irrigation systems presents serious governance challenges for many stakeholders.
- Water resources management policy in Cambodia involves a wide range of public, private and community level actors who each have a role to play in managing Cambodia's water resources, yet their roles and responsibilities are not well defined or understood.
- The introduction of Participatory Irrigation Management and Development (PIMD) and Integrated Water Resource Management (IWRM) reflects a move towards international best practice in which there is greater community participation and ownership of resources and more formal arrangements governing stakeholder relationships.
- The implementation of PIMD and IWRM in Cambodia has not completely addressed basic issues of overlapping stakeholder roles and poorly delineated responsibilities, including a lack of coordination and sharing of expertise among actors about water and irrigation management.
- PIMD has seen Farmer Water User Communities (FWUCs) assume primary responsibility and authority for managing irrigation systems, yet most FWUCs do not have a strong sense of ownership over the schemes and lack the required technical and management expertise to make informed decisions about water allocation, especially at catchment level.
- Increased technical expertise and support is required to help the FWUCs manage local irrigation issues in a catchment context.
- The establishment of a new coordinating structure at sub-national level to manage water resources and irrigation would increase the technical expertise available to FWUCs, and improve networking between FWUCs, local authorities and provincial departments.

THE PROBLEM

Cambodia's water governance landscape is still evolving. The management of the Tonle Sap and Mekong Basins crosses multiple jurisdictions and involves riparian countries and their government agencies, basin communities, civil society organisations, the private sector, funding agencies and development institutions. Figure 1 highlights the busy landscape of stakeholders in the Tonle Sap Basin at national and local levels.

IWRM requires the coordinated development and management of water, land and related resources in order to maximise economic and social welfare (Global Water Partnership 2011[5]). The principle of 'subsidiarity', a core component of IWRM, requires water management to be decentralised to its lowest appropriate and practical level.[6] PIMD reflects principles of subsidiarity and has been introduced in Cambodia to increase local community involvement in irrigation system management. However, the full implementation of IWRM and PIMD is yet to take effect.

Water resources are not governed in a holistic or effectively decentralised manner in Cambodia, notwithstanding the introduction of IWRM and PIMD. In the irrigation context, there are multiple stakeholders managing different aspects of irrigation systems. At the scheme-wide scale the reservoir and

1 This policy brief is based on a CDRI Working Paper (forthcoming) on *Improving the Governance of Water Resources in Cambodia: A Stakeholder Analysis,* by Nang Phirun, Khiev Daravy, Philip Hirsch and Isabelle Whitehead. The working paper forms part of the governance component of the Water Resources Management Research Capacity Development Programme (WRMRCDP), a five year project funded by AusAID, aimed at improving the use and governance of water resources to increase agricultural production in Cambodia.

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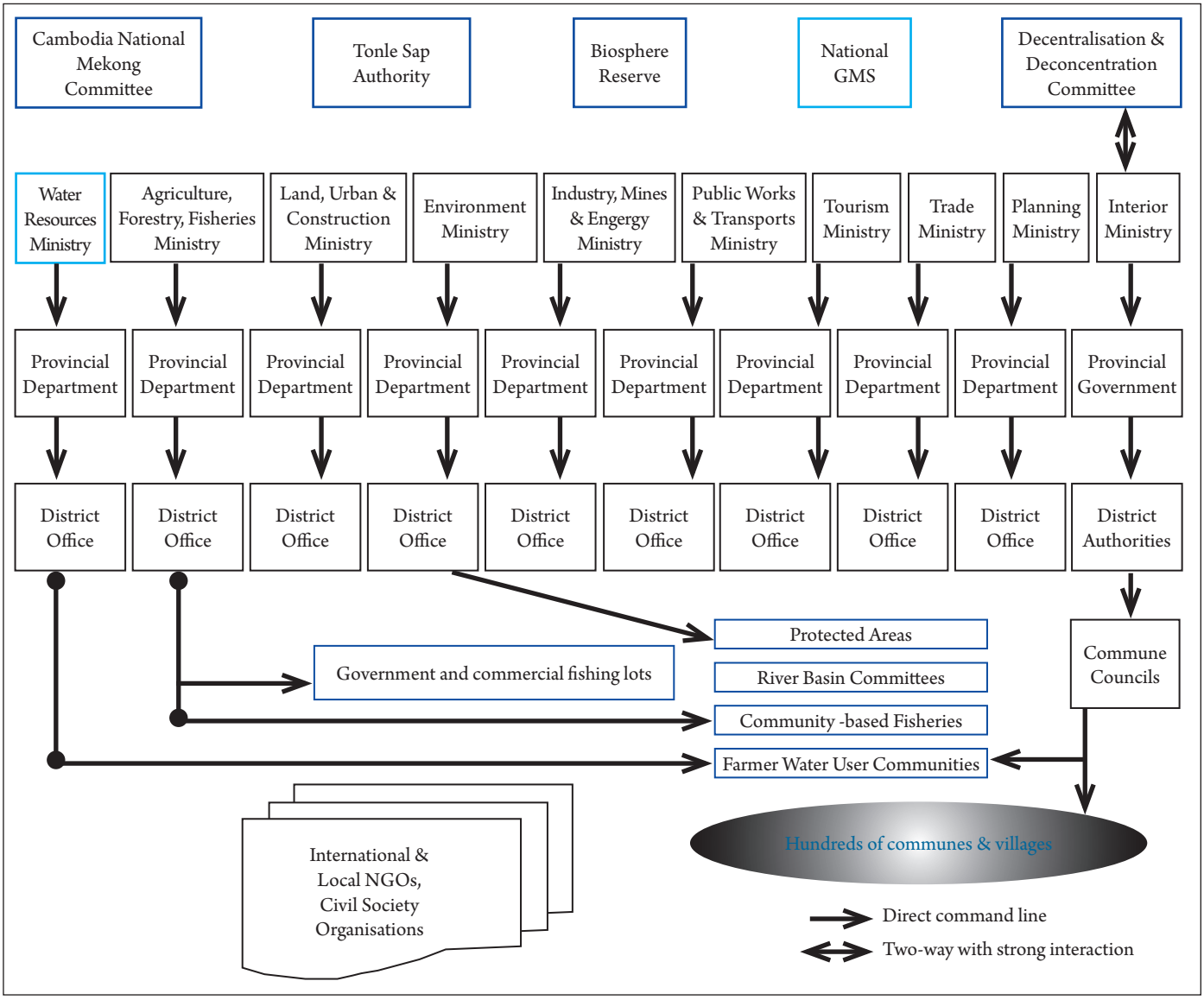
5 GWP (2011), IWRM is the coordinated development and management of water, land and related resources in order to maximise economic and social welfare without compromising the sustainability of ecosystems and the environment.

6 Garfield (1998) referred to "subsidiarity" as transferring specific functions to local community groups including delegating control to grassroots entities to plan and implement extension programmes (Garfield 1998, cited in WB 2004: 2).

Figure 1: National and Local Stakeholder Landscape



Source: Pech 2010

main canal fall under the direct responsibility of the Ministry of Water Resources and Meteorology (MOWRAM)/ Provincial Department of Water Resources and Meteorology (PDOWRAM). Farmer Water User Communities (FWUCs), established by MOWRAM as part of the PIMD strategy, manage the secondary and tertiary canal systems. FWUCs often delegate tertiary canal management to Farmer Water User Groups (FWUGs), a subset of FWUCs (MOWRAM 1999), though many FWUG members have relinquished their positions to village chiefs.

APPROACH TO STAKEHOLDER ANALYSIS

Multi-scale stakeholder analysis is an approach to understanding multiple stakeholders' roles, responsibilities, perceptions and perspectives through participatory approaches and involving actors at different levels. A multi-scale stakeholder analysis was conducted in which the substantive, structural and dynamic aspects of stakeholder relationships in the water governance sector were examined with a specific focus on irrigation and catchment management. Data was collected through key informant interviews, field observations and focus group discussions. Further to this, national, provincial and communal workshops were organised to collect, evaluate and compile data and information. The qualitative data derived has been used to assess the power, interests and influence of different groups of people involved in the water sector related to agriculture.

Field research was conducted in ten irrigation schemes across three provinces in Cambodia:

- Four schemes in Kampong Chhnang province: Trapaing Trabek, Tang Krasaing, Svay Chek and Pok Pen;
- Three schemes in Pursat province: Wat Leap, Kampang and Damnak Ampil; and
- Three schemes in Kampong Thom province: O Svay, Steung Chinith and Rolous.

KEY FINDINGS

Stakeholder concerns about existing water governance arrangements focused on the need for:

- More effective stakeholder participation in irrigation and catchment management;
- The need for greater clarity about how IWRM/PIMD policy should be implemented at local level and how these policies interact with D&D reforms;
- Improved stakeholder coordination across the catchment/ river basin;

- Clearly defined stakeholder and organisational roles and responsibilities;
- More effective communication and decision-making processes between agencies;
- Greater technical expertise to support FWUCs in decision-making about water allocation for irrigation; and
- Long term support funds and investment in infrastructure, including the maintenance and operation of schemes.

Overlapping Stakeholder Roles and Responsibilities

Stakeholders were unclear about the roles and scope of responsibility of the different ministries and committees and how their functions linked to those of other stakeholders at local, sub-national and national levels. For PIMD policy to be implemented effectively, the responsibilities of government, especially MOWRAM, PDOWRAM, donors, local authorities, FWUCs and farmers, need to be clear.

Need for Greater Technical Support

Stakeholders described the need for greater technical support and greater clarity at local levels about the role and nature of IWRM and its relationship to other policies such as the D&D reforms and PIMD. Village level findings indicate a disparity between FWUCs' formally-granted mandate and their actual effectiveness. FWUCs in many areas are without the necessary expertise or information to make decisions about water allocation at scheme level. Although FWUCs have legal and administrative responsibility over the irrigation schemes, most farmers do not feel a strong sense of ownership over the projects/schemes, and continue to seek assistance from local authorities and PDOWRAM to solve their water issues. The interviewees from the studied schemes reported that in the early stages of establishing the FWUCs and FWUGs, the role of each group member was well assigned. Yet due to difficulties in the living conditions and low levels of coordination among FWUG members and farmers, many members have given up their roles, explaining why most of the FWUGs are now run by village leaders.

Difficulty Establishing FWUC Legitimacy

The perception that irrigation schemes are not fully functional makes it difficult for the FWUCs to collect Irrigation Service Fees (ISF) necessary to maintain the scheme. The lack of community ownership over irrigation schemes is exacerbated by a perceived lack of legitimacy, caused by difficulties and delays within the FWUC registration process. Furthermore, despite being independent organisations with a mandate to coordinate and facilitate local water-related issues, FWUCs are hampered by the fact that they do not have conflict resolution powers. Thus, practically, FWUCs are dependent on local authorities, concerned government institutions and other external organisations in order to carry out their basic functions.

Improved Coordination and Communication between Stakeholders

Irrigation schemes and rural infrastructure in Cambodia are often jointly funded by the government and external donors, with in-kind contributions (such as land and labour) from project beneficiaries. The present water governance system is challenged by a lack of proper feedback mechanisms and coordination among the different levels of government and external stakeholders. There is also no effective forum for FWUCs to jointly negotiate irrigation issues at catchment level. Vertical and horizontal governance mechanisms linking the central government, provincial and local authorities and villages are needed. Improved horizontal governance mechanisms, in particular, are needed to facilitate the sharing of information and expertise between government departments, commune and village level authorities and external stakeholders, including universities.

The Technical Working Group on Agriculture and Water (TWGAW) was established to promote more efficient and effective stakeholder coordination between government agencies, especially between MOWRAM and MAFF, the two lead agencies responsible for implementing the programmes developed under The Strategy for Agriculture and Water (TWGAW 2007). TWGAW was created to coordinate line agencies, communities, donors and NGOs and offer technical assistance. TWGAW may, then, appear to be a potential forum to channel technical support to local communities, especially FWUCs.

Infrastructure

In areas where schemes are not established properly, there are difficulties achieving community participation. The irrigation systems will not be technically and financially feasible if they are not able to provide timely profits to farmers. The participation of farmers and FWUCs in irrigation management is dependent on the schemes functioning efficiently and reliably.

RECOMMENDATIONS[7]

Stakeholders were asked to propose practical solutions to address their concerns about irrigation management. These recommendations were discussed during community level consultations and refined through provincial level workshops with farmers, FWUCs and PDOWRAM representatives.

1. An Irrigation and Catchment Management Sub-committee (ICMSC)[8] should be created at the sub-national level. The ICMSCs would:

- Coordinate FWUCs, provincial departments and local authorities and provide inter-disciplinary expertise from

7 For more detailed recommendations, see CDRI Working Paper (forthcoming) *Improving the Governance of Water Resources in Cambodia: A Stakeholder Analysis,* by Nang Phirun, Khiev Daravy, Philip Hirsch and Isabelle Whitehead.

8 On the basis of stakeholders' response, ICMSC might operate as a 'service centre' to support FWUCs and other stakeholders to manage water resources sustainably in a wider social and environmental context, and it might function similarly to River Basin Organisations (RBOs) to resolve conflict and promote cooperation. The creation of such sub-committees would aim to learn from past experiences and support, rather than duplicate existing arrangements and resources.

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different provincial departments, NGOS, donors and external experts in hydrology and IWRM;
- Build a common understanding among stakeholders about IWRM and D&D policy and support the spatial integration of upstream and downstream communities;
- Promote 'bottom-up' processes for small and medium scale irrigation schemes;
- Provide a forum for funds to be raised;
- Assist in conflict-resolution and enable FWUCs to help farmers plan and coordinate their cropping and harvesting informed by hydrological and social knowledge.

Considerations
- Which agency should lead/manage the subcommittee? Should it be managed at provincial and/or catchment level?
- Should the sub-committee have a full mandate to make decisions or an advisory role only?
- It may be appropriate that the sub-committees take a different 'shape' in each location, depending on the nature of the catchment and the level of capacity of existing stakeholders.
- Further stakeholder consultation is required before the sub-committees are established.

2. Provide training to local stakeholders, especially PDOWRAM staff, commune councils, farmers and FWUC committee members on their rights and duties in relation to natural resources. The training should cover:
- Water, Forestry, Fishery, Land and Environment Law;
- D&D, IWRM and PIMD policies;
- Organic Law[9]; and
- Administrative regulations and guidelines.

3. Strengthen the capacity of FWUC committees and commune councils in:
- Leadership, facilitation and communication skills;
- Budget allocation and financial management;
- Natural resources management;
- Project development and management;
- Irrigation and farming systems.

4. Improve FWUC and local authority accountability through strong organisational coordination:
- Enhance the profits of irrigation to farmers by seeking new/suitable technology for water management and agricultural extension;
- Provide timely water and agricultural information and engage farmers to work to achieve common interests.

5. Greater coordination of the Tonle Sap Basin:
- Work towards a shared understanding of D&D and PIMD principles among stakeholders;
- Allocate operational and administrative funds to support FWUCs;
- In the event that the ICMSCs are not introduced, other mechanisms to increase coordination among local communities, CSOs, the private sector and provincial line agencies need to be established to prioritise critical and urgent irrigation issues.

6. Proposed Further Research

The case studies and the provincial workshops in the three provinces suggested that the integration of commune councils within the structure of the FWUCs (as FWUC committee members) would improve the operation of the FWUCs. Future research could be undertaken on whether commune council members should be included in FWUC committees to provide technical support and authority.

9 Law on Administrative Management of the Capital, Provinces, Municipalities, Districts and Khans (RGC 2008).

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