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TECHNICAL BRIEF

Water resource management

Towards water governance decentralisation in Africa

A completed study published by the Water Research Commission (WRC) investigated the factors influencing performance of water management and governance decentralisation reforms in Africa.

Background

Historically, water resources have been managed in a centralised manner where delivery of the full range of water resource management (WRC) activities was usually provided by national governments. Many problems have been associated with the centralised management approach.

Inequality in access to water, limited financial and technical capacity at national and basin levels, poor infrastructure and service delivery, declining quality of river basin natural resources, limited stakeholders involvement in decision-making institutional fragmentation, uncoordinated sector policies, and increasing number of conflicts among stakeholders are examples of such problems.

Inequality remains a huge challenge in water resource management in Africa (Pierre Holtz/UNICEF)

Decentralisation of water management and governance through integrated water resource management (IWRM) approaches has been proposed as the appropriate framework to deal with such problems. IWRM has witnessed worldwide adoption and many African countries have introduced various reforms in their water laws, policies and related regulations and institutions to facilitate implementation of key elements of IWRM.

SADC countries, for example, have adopted comprehensive institutional reforms in the water sector towards decentralisation of water management. However, the impact of these reforms on the river basin decentralisation process and its performance is still largely unknown.

Very different stages of advancement has been observed in various African river basins, indicating the difficulty of implementing decentralisation in practice. It therefore seems necessary to understand why some water agencies have succeeded more than others, what are the variables involved in such reform process, which variables have a positive or negative impact on the implementation of the decentralisation processes in the African water sector, and which variables could be affected by policy interventions and how.

Objectives of this study

This study made an attempt to address the above questions using an analytical framework that captures important political, institutional, hydrological, cultural and historical as well as socio-economic factors likely to influence performance of water management and governance decentralisation reforms in Africa.

The main purpose of the study was to enable water sector decision-makers to identify and properly address hurdles hampering a transfer of water management actions to the lowest appropriate level within river basins.

Methodology

The selected analytical framework was implemented in two phases. In the first phase, a case study approach was applied to a sample of basin organisations across SADC, representing various physical, economic and political situations. Decentralisation reforms attempted in one river basin in South Africa (Inkomati), one river basin in Mozambique (Ara Sul) and one river basin in Zimbabwe (Umzingwane) were evaluated in this phase of the study.

These catchments were chosen as they have all been exposed to a certain degree of institutional decentralisation (establishment of catchment management agencies or CMAs, creation of basin authorities, water user associations etc.). However, the case study analyses only highlight the direction in decentralisation but do not allow systematic quantitative analysis of generic reasons and forces behind the decentralisation process and its performance.

A quantitate analysis of decentralisation of basins across Africa was planned to take place in the second phase of the study.

Results and discussion

The regional case study analyses showed that attempts to decentralise management of the Inkomati, Mzingwane and Limpopo river basins have been supported by ratifications of water laws leading to creation of river basin level institutions to manage basin resources. Examples of local level organisations included the Inkomati CMA in South Africa, the Zimbabwe National Water Authority and the Limpopo River Basin Management Unit in Mozambique.

Establishment of systems for information sharing among stakeholders, commonly performed using basin meetings, is one example of mechanisms which facilitate the management of river basin management. However, none of the studied river basins can be considered fully decentralised and the decentralisation process varied among the three case study basins.

The Inkomati in SA was found to be more decentralised compared to Mzingwane in Zimbabwe and Limpopo basin in Mozambique where process appears lagging behind. Variations in key institutional factors seem to be the reason behind these differences.

The positive outcomes of the Inkomati river basin decentralisation process are linked to the type of devolution (mutually desired process) followed, which resulted in larger involvement of local stakeholders, compared to the weak involvement of river basin stakeholders in Mzingwane and Limpopo due to the top down devolution approach followed.

Similar to the decentralisation process, results of the evaluation of performance of the decentralisation initiatives in the three river basins are mixed. Although river basin organisations in the three countries do not have financial management autonomy, the Inkomati shows the best performance, followed by Mzingwane.

Participation of stakeholders in the management of river basin resources has been a crucial factor determining these differences. While governments (e.g. policies and laws) of the studied river basins have shown high willingness and commitment to decentralised river basin management, concentration of power seems to be the key factor that negatively impacted the performance of the studied river basins.

It is also important to highlight the fact that decentralisation reforms require sufficient time to evolve successfully and therefore governments should be prepared to sustain their commitment to decentralisation reforms for many years to come to achieve successful decentralisation of water resource management.

A number of shortcomings, however, limit the robustness of the results of this study. First, the analysis is based on only three data points representing the composite responses of interviewed key informants in the three case study river basins. This did not allow implementation of the proposed empirical model, which requires estimation of a much larger number of parameters, which will be achieved by a continental study to follow, that will survey sufficient number of river basins in Africa.

Second, testing of the original questionnaire designed for implementing the proposed institutional economics analytical framework suggested few necessary modifications to be made before conducting the bigger continental study.

It was therefore decided to extend the regional analysis of Phase I of the project to address its current shortcomings. The main objective of the expanded study was to conduct further analysis investigating progress and performance of decentralisation of water management reforms in the region, applying an adapted version of the above-tested institutional economics analytical approach, methodology and questionnaire suited for the SADC regional and national contexts and experiences in implementing IWRM.

The survey was consequently rerun with the adapted questionnaire in the three countries sharing the Inkomati river basin, namely South Africa, Swaziland and Mozambique. This river basin was selected because it has international, national and local dimensions of water resource management; institutions have been established within the various states sharing the river basin; and there is a broad policy alignment in terms of intent toward implementing IWRM.

In addition to transboundary structures, each of the three countries also has specific water laws that guide water governance and management at a country level. These laws follow an IWRM approach and are aligned to the SADC regional water policy, the SADC Protocol on the management of transboundary water resources and other regional and international laws developed to coordinate systematic development and management of water resources.

Within each country these water laws guide the decentralisation process and give effect to the establishment of institutions to facilitate IWRM. While progress has been made to establish these water management institutions, preliminary research indicated that this process continues to face several challenges.

These include:

- Weak political support and appetite for change.
- Major financial constraints.
- Complexities associated with joint planning, coordination and monitoring, including information management and reporting on the state of the water resources.
- Institutional arrangements and duplication of roles between the new institutions and the departments that have been responsible for the implementation of water resource management in the basin.
- Human resource capacity constraints.
- Transboundary management aspects, especially conflicting priorities among states.
- Stakeholder engagement and communication.

The most important challenge is the slow pace of the decentralisation process in the three basin states, despite clearly defined water laws. There is certainly a need for more research work to verify and confirm the above identified preliminary challenges and propose options to improve the situation.

The study further revealed that the IWRM enabling environment is largely in place in all three countries in the basin, which represents a significant development as the policy and legislative environment is the most crucial for successful implementation. At present, the financial enabling environment is the only weakness, with the mechanisms to ensure water management institutions becoming self-sustaining still being developed or only partially implemented.

The study further showed that decentralisation has included river basin organisations in the South African and Mozambican portions of the river basin, but not all the authority and power for decision-making has been transferred to lower level organisations, such as water user associations.

The central government is still playing a significant role in providing financial resources to sustain lower level institutions. It was further reported that some of the decisions made by these institutions are being delayed by central government.

For decentralisation to succeed and become sustainable, water management institutions in the basin need to achieve stronger state of independence. Results of this analysis suggest that Mozambique has started to demonstrate the first success in this respect.

Conclusions

Change areas within the IWRM institutional framework criteria demonstrate varied levels of success. Institutional structures, roles and responsibility have successfully been articulated in policy and legislation in the basin.

Implementation of these policy and legislative IWRM imperatives, however, remains a challenge. Only some of the decentralised water institutions have been established and are functioning at various levels of success. Stakeholder participation does seem to be one key factor behind successes of the institutional framework in the Inkomati river basin. Greater attention will need to be paid to capacity building in future.

The IWRM management instruments are perhaps the least developed change areas of the Inkomati river basin case study. This is to be expected as management instruments are effectively the implementation tools for IWRM.

With the implementation of IWRM and decentralisation of water management still relatively new in the Inkomati river basin, one would expect that these management instruments will develop as the IWRM process progresses. However, the current conflict resolution mechanisms should be noted, as should the initial regulatory instruments.

Much work is still ahead, however, particularly within these criteria for IWRM.

Further reading:
To order the report, *Water governance decentralisation in Africa: A framework for reform process and performance analysis* (**Report No. 1969/1/14**) contact Publications at Tel: (012) 330-0340,
Email: orders@wrc.org.za or Visit: www.wrc.org.za
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