

# Water Science and Policy Center

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## Policy Note

### Process and Performance of River Basin Water Management Decentralization in Sub-Saharan Africa

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#### Introduction

A recent initiative by the World Bank is focused on bringing more water to Africa's Sahel region to help address food security, allow farmers to move from subsistence to commercialized farming with its indirect positive impacts on local and regional markets, as well as to protect biodiversity, improve soil fertility, and conserve the environment. This vision, while focused on the Sahel, is attractive also for other regions of Sub-Saharan Africa (SSA) but raises several challenges and concerns. These challenges include not only the hardware for moving and distributing water from water bodies to the demand sites, but also the software: the institutions that will allow such great plans to be realized. The latter challenge is the more difficult one to address, and it is the focus of this paper.

#### Decentralization of water management

In response to global water scarcity, river basins in Sub-Saharan Africa have undergone, to various extents, decentralization of water management in the past two decades. Most SSA countries established their water laws in the past 15 years and restructured their institutional and governance frameworks accordingly.

While much effort and good will was put into decentralization reforms in many basins, results have not been uniformly realized.

For example, the benefits originated from the implementation of such decentralization processes were taken for granted during the design of the South Africa National Water Act. The decentralization process addressed 19 basins in the country, indicating that it was a major effort. However, slow and uneven implementation of the decentralization process led to unrealized benefits. More than 10 years after the launch of the new national water policy, only two catchment management agencies (CMAs) have been established and are operational, while many water user associations (WUAs) do not function properly and the catchment management committees (CMCs) have not given decisional power.

In other SSA countries, the process of decentralization in the basin water management institutions could have been more or less advanced than in South Africa. Therefore, the a-priori set of basins in SSA countries provides a range of decentralization efforts and performances, and allows applying the proposed methodology to analyze the decentralization process and performance. Analytical framework

We modified and applied an analytical framework that was originally used in a previous study outside of Sub-Saharan Africa. The framework identifies and focuses primarily upon four sets of observable variables and suggests hypotheses about the

directions by which those sets of variables are associated with the possible success of decentralization of water resource management reforms.

These sets include: (1) Initial conditions and contextual factors; (2) Characteristics of the decentralization process; (3) Central government-local relationships and capacities; and (4) Resource-level institutional arrangements. All these four sets of variables jointly provide indications of factors that affect the success and the challenges of water resource management decentralization.

The collected data covered about 40 percent of the river basins in SSA that initiated decentralization. We conclude that the analytical framework of water management decentralization used is robust enough to explain the decentralization process and progress even in the presence of a limited sample. It seems that this framework, when used with a richer dataset and over a longer period of time can be informative to policy makers when designing and evaluating decentralization processes in Africa and in other parts of the world.

## Results, policy implications & conclusion

Some of the variables in our analysis have interesting implications. It appears that the success and stability of the decentralization process depends on the way the new framework distributes the *Political Cost* and compensates those who carried its burden. As for the *Method of Creation*, it seems that a grass-roots initiative, despite all the benefits it may capture in terms of legitimacy and formal implementation of pre-existing community arrangements, is insufficient if not properly supported by government transfers of skills, or know how, budget responsibilities and technical knowledge.

The similar impact of *WUAs Involvement* amplifies that conclusion. For SSA this conclusion is probably the most relevant one, with policy

implications. Training the WUAs prior to the initiation of the decentralization process is essential for high efficacy of the decentralization. Otherwise the social investment in institutional reforms in the water sector would be wasted. It should be mentioned here that the results of the variables *Method of Creation*, *Creation Bottom-Up*, and *WUAs Involvement*, in a previous study with similar analytical framework applied to regions other than SSA were the opposite, suggesting that in SSA grass-roots efforts have to still be nourished.

Interpreting the opposite signs of the coefficients of major variables that are included in estimates of decentralization process and performance equations (*Creation Bottom-Up*, *Political Cost*, *Years Decentralization*) could mean that the implementation of decentralization processes in the water sector in SSA does not guarantee success. Furthermore, factors that improve the performance of decentralization do not necessarily facilitate its implementation. For example, in-progress decentralization institutions can have better results than established RBOs suffering from untrained staff and malperformance of infrastructure, as well as being disconnected from the stakeholders.

It also appears that the best performances of decentralized basins refers to solutions for infrastructural problems (floods, and land degradation control), while the socio-economic problems, perceived before decentralization (conflicts, development), have been addressed less frequently. This result could be a consequence of the fact that hardware solutions (infrastructure, engineering) are easier to implement than software solutions (stakeholders' participation, dispute resolution forums, etc.). Another interpretation of this last observation is associated with the previously mentioned context in which infrastructure could be built by international companies, but when completed and left with local operators, may not function well due to inadequate institutions and preparedness.

This policy note is based on a paper of the same title.

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