

Policy Brief

Measuring Results in Transboundary Water Management

Transboundary Water Management and its Impacts on Development

Nearly half of the world's freshwater flows across political boundaries. International cooperation is necessary to ensure that the water resources of a transboundary river basin are equitably shared between upstream and downstream users with different, and sometimes conflicting, needs, claims and cultures. Joint management of transboundary waters can contribute to peace, prosperity and sustainable development. However, these links are often vague and their effects difficult to measure.

Cooperation in transboundary basins requires sustained support, allowing for development of collaborative structures and institutions on both national and regional levels. This process is inevitably time-consuming and most often transcends the lifetime of a single project. As bilateral aid donors increasingly focus on the actual results generated, a deeper understanding is needed of results in Transboundary Water Management (TWM), how they can be measured, and how potential benefits can be secured through enhanced risk management.

This policy brief discusses the measurability of results in TWM and provides suggestions on how reporting on results can be improved.

The findings and statements in this policy brief are based on a report conducted within the Transboundary Water Management cluster group. The report can be found at **www.swedishwaterhouse.se.**

Measuring Results in TWM – Opportunities and Challenges

The recommendations presented are based on a study on results and risks in TWM undertaken by the SWH cluster group. Fourteen reports from transboundary basins in Africa, Asia and the MENA region were selected and analysed. The wide variety of outputs, outcomes and impacts identified in the reports studied are listed in Figure 1.

Reporting on TWM has to a large extent been oriented towards project activities. However, activities are not results as such but a precondition for delivering results. Furthermore, TWM-projects report on a host of results at output level. Typically, TWM projects produce outputs such as monographs and study reports, hydro-metrological equipment, Decision-support systems and Strategic Action Plans.

With regard to outcomes, several projects report on agreements and delivery of regulatory and institutional instruments, such as protocols, Memoranda of Understanding, and Framework Agreements. Some basin institutions - like those in the Mekong and Senegal river basins – are good examples of institutional outcomes. However, in several TWM initiatives the effectiveness of the new basin institutions has not been ascertained. Another large group of outcomes relate to capacity and awareness. Although important, these results seldom relate to specific achievements or measurable performance improvements such as reduced time delays, professionalism in operations, adherence to routines and standards. A few projects report on resources mobilised for downstream investment, in itself indicating an improved investment climate.

Even though development interventions are given a long time scale, TWM projects can seldom demonstrate impact. The assessment is further complicated by the fact that the attribution of long-term impacts to a specific intervention is not a straightforward process. Nevertheless, development impacts have been reported for TWM activities. For example, in an evaluation of the Songwe basin project in Malawi and Tanzania, local farmers reported less frequent flooding as well as increased agricultural yields. Furthermore, the Nile Basin Initiative is thought to have contributed to the increased trade and improved stability seen in the region. However, the empirical foundation for demonstrating impacts is weak in most cases, and often relies on anecdotal evidence.

Overall, it is clear that capacity in monitoring and evaluating the impact of TWM projects is often low. One example being the inadequate environmental impact assessments carried out. Many projects lack a clear baseline and indicators need improvement. Furthermore, risk management is often neglected or insufficient, which is highly problematic considering the complex and geopolitically sensitive context in which many of these co-operation initiatives take place. Some particularly frequent risks are the lack of ownership by riparian governments, low institutional and financial sustainability and lack of capacity.

How to Cite

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TWM RESULTS TYPOLOGY		
REPORTED OUTPUTS (short-term)	REPORTED OUTCOMES (medium-term)	REPORTED IMPACTS (long-term)
 Offices, vehicles, ICT Hydromet/WQ equipment DSS, models, databases, GIS Study reports and maps Communication materials Manuals, guidelines Strategic plans Infrastructure Landscaping Individuals trained Organisations formed Institutional instruments 	 Improved efficency and quality in: TWM Institutions Communication Awareness and capacity building Cooperation Improved safety in: Dams Navigation Peace and stability Mobilised: Resources 	 Reduced: Water borne disease Stabilised: Hydrological regime Increase in: Agricultural yield Regional integration and trade Income levels Human Development Index Improved: Ecological status

RESULTS = the output, outcome, impact of a development intervention

OUTPUT = the products, capital goods and services which result from a development intervention OUTCOME = the likely or achieved short-term and medium-term effects of an intervention's outputs IMPACT = the long-term effects produced by a development intervention, directly or indirectly, intended or unintended.*

*definitions from OECD/DAC Glossary (2002)

Key Messages

► Get baselines in place first: Establish baseline during project preparation to relate any changes/ achievements to during and after project execution. A proper preparation of baseline data will also enable better understanding of the challenges of Monitoring and Evaluation during the project.

► Take risk management seriously: Make sure to conduct an initial risk assessment for projects, and assign clear responsibilities for managing the risks during project implementation. Adequate risk management entails careful management considerations, a variety of mitigation interventions and allocation of necessary time and resources during implementation.

► Develop a clear "result chain" all the way to impact: The medium to long-term effects may not be possible to measure and report at completion. The results chain of an intervention must therefore be feasible and realistic, clearly demonstrating how short term results (outputs) are expected to lead to long-term effects, and include the assumptions made.

► Find alternative indicators for the soft results: TWM processes are assumed to contribute to capacity development, peace, stability and regional integration but much more work is needed to define results and indicators. Perceptions and attitude surveys, as well indicators on trade, professional migration and technical exchange may be useful. Experience with indicators from other sectors need to be looked into.

► Capture TWM results in many areas: Transboundary co-operation is multi-faceted and contributes to development through a broad range of mechanisms in different result areas or sectors. Indicator frameworks must therefore be flexible enough to capture results in many results areas, and should not be confined to the traditional water sector issues.

Measuring Results in Transboundary Water Management

Swedish Water House Cluster Groups

Cluster groups are small, interdisciplinary networks that bring together experts and practitioners by focusing on a specific issue for a period of two years. The meetings become an arena for stakeholders interested in building bridges between research, development, private sector, policy and decision making. Results can be varied, ranging from a final conference or policy brief to a report or even actual guidelines. All output is aimed at highlighting Swedish recommendations, practices, expertise or knowledge sharing which could be shared with international actors.

Read more about cluster groups at: www.swedishwaterhouse.se/en/ cluster_groups

This brief was produced by the parties illustrated below. It is directed to Swedish authorities, agencies and organisations engaged in Transboundary Water Management.





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