IWRM Action Hub

IWRM TOOL - C2.05

Monitoring and Evaluation Systems

What is not measured cannot be managed. Designing and implementing an effective and efficient monitoring and evaluation (M&E) system for water policies, plans, programmes and strategies is crucial to inform decision-making and enhance progress on IWRM. This Tool describes the basic features of M&E system, discusses the need to align M&E systems to existing frameworks, and details the benefits of stakeholder engagement and clear roles and responsibilities involved in M&E systems.

Characteristics of M&E Systems

In order to understand water endowments in relation to IWRM and to use it as a means towards reaching a wider goal of water security, decisions makers need to be able to assess how the policies, strategies, and initiatives that are put in place are performing and what outcomes and impact have been achieved. To that end, a coherent system of monitoring and evaluation (M&E) should be developed.

Monitoring and evaluation involves (GWP, 2006):

- **Monitoring the process of implementation**: To ensure that the actions outlined are being taken and that resources are being allocated and used effectively;
- **Monitoring the outcomes of those actions**: In terms of investments in infrastructure and changes in policies, institutional frameworks, management instruments, and financing;
- **Evaluating the progress**: Towards the achievement of goals and objectives;
- **Using the information gained for learning**: This is used to refine a project, programme, policy, plan or strategy and to inform evidence-based decision-making at different levels—from national planning to water user behaviour.

An appropriate and comprehensive M&E system can provide insights into the efficiency of a process and its management and help to reformulate policies, programmes, strategies or plans, reallocate resources and guide processes in a more efficient and effective manner. It also supports transparency and gives civil society and governments a way to assess the performance and impact of IWRM processes if information is made openly available (Tool B1.05). Information on progress is essential to ensure accountability and generate political, public, and private sector support for investment.

Developing Indicators for IWRM M&E Systems

To monitor and evaluate policies, programmes, strategies or plans related to IWRM, it is important to know why it is implemented and how implementation will be achieved. Strategic goals, objectives, and targets should be established as an overarching vision to work towards. In water management, water security would be an example of such a vision. This must then be translated into more specific, measurable elements to answer key questions such as: where are we now, where do we want to go, are we taking the right path to get there, and, finally, are we there yet? Therefore, indicators need to be developed. It is important to strike the balance between a robust yet limited selection of relevant indicators. There is no framework of indicators that can fit all purposes to track IWRM planning and implementation, as challenges and priorities vary across levels and contexts. One potential generic guidance tool that can be a useful reference or checklist when designing indicator frameworks relevant for specific IWRM was developed by Bertule et al., (2017) (Fig. 1).

Figure 1. Comprehensive thematic indicator framework for IWRM (Adapted from Bertule et al., 2017)

Indicators can be quantitative or qualitative, and various criteria can be used to guide the design and assess the quality of indicators. One of the most common criteria are the **SMART criteria** (Specific, Measurable, Attainable, Relevant, Time-bound). Another set of criteria for assessing quality of indicators is the SPICED criteria (Subjective, Participatory, Interpreted and communicable, Cross-checked, Empowering, Diverse and disaggregated) – which is particularly useful for thinking about how project objectives and indicators can be set in a participatory and inclusive way with local communities (Lennie et al., 2011). When designing indicators, it is also important to think about indicator disaggregation, such as for instance disaggregation by gender, ethnic group, age or other relevant variables (Tool B5.02).

Alignment with Existing Monitoring Frameworks

Monitoring and reporting on indicators can range from project-level reporting to national

reporting on particular areas to tracking progress at the global level. An M&E system for IWRM should first and foremost be built to frame and understand the problem that should be addressed and should consider relevance and capacities at the level of intervention (local, basin, sub-national, national, transboundary). However, existing global, regional, and national reporting on indicators related to IWRM can influence indicator selection for monitoring and evaluation. This might include (adapted from Bertule et al., 2017):

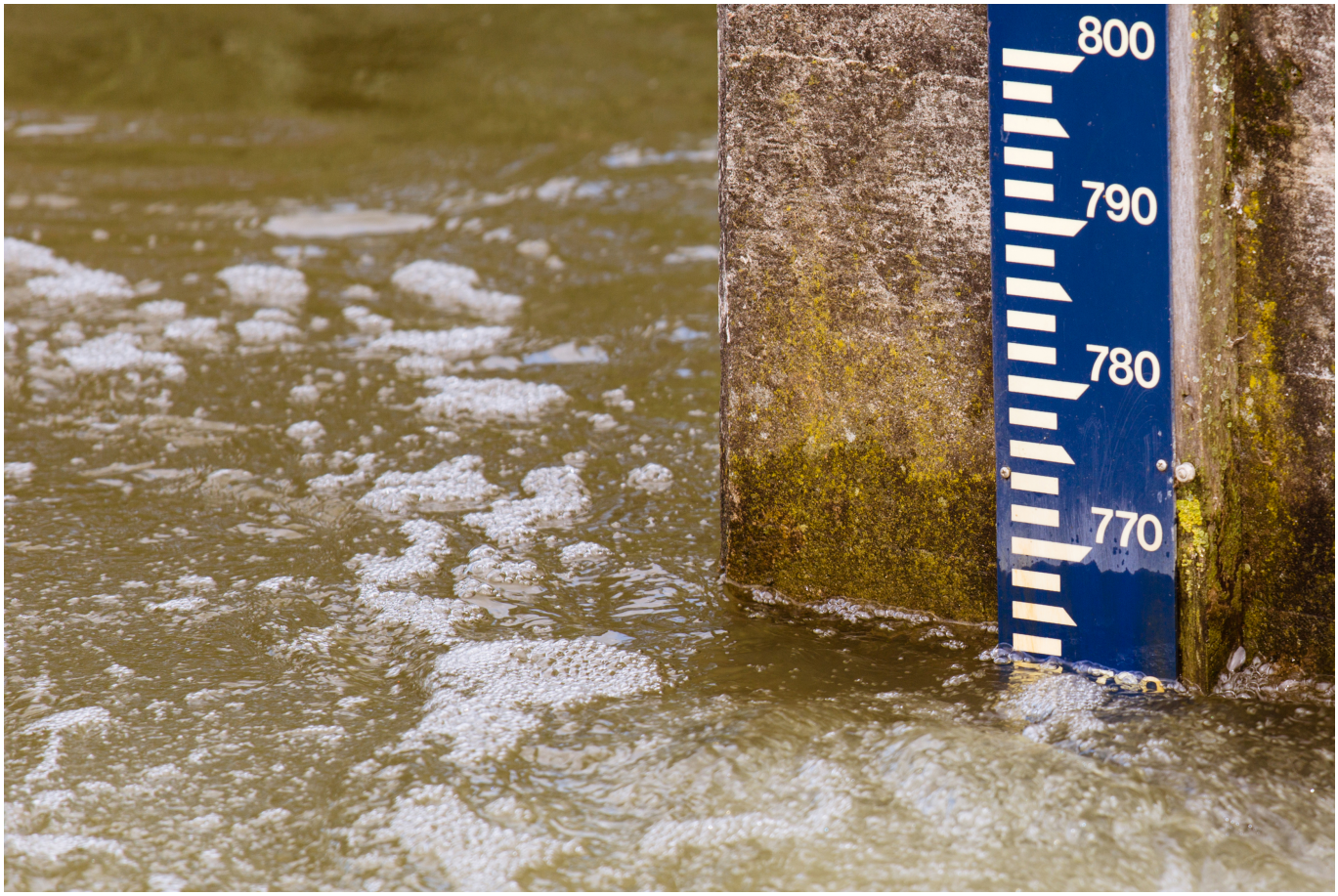
- Existing national-level and/or basin-level reporting requirements and standards;
- Regional monitoring frameworks, such as the European Union Water Framework Directive (Eurostat, 2020), African Ministers Council on Water (AMCOW) Monitoring and Evaluation Framework for the Water Sector in Africa (AMCOW, 2021), etc.;
- Global reporting mechanisms a country adheres to, such as the Sustainable Development Goals, including SDG 6 and associated indicators (UN Water, 2021) and in particular SDG indicator 6.5.1 on degree of IWRM implementation (UNEP-DHI, 2021); reporting on the Paris Agreement through nationally determined contributions (NDCs), (UNFCCC, 2021), etc.

Public Engagement, Roles and Responsibilities

Monitoring and evaluation presupposes gathering data that has to be reliable and legitimate. Typically, bodies responsible for monitoring and assessing water resources and policies are governmental entities (Tool B1.03), but stakeholder engagement in monitoring and evaluation can have considerable benefits, including: ownership and acceptance of information obtained through gathered data, data and information access, enhanced understanding of challenges and opportunities, strengthening of inter-sectoral collaboration and enhanced transparency and accountability (Bertule et al., 2017). Stakeholders can be engaged throughout the entire M&E process, from designing an M&E system and selecting indicators to participatory monitoring and data collection, validation, and communication (Tool B3.03; Tool B3.05).

For monitoring and evaluation to be effective, it should be clear in advance how the results are to be used, reacted to, and by whom. Institutional anchoring of monitoring and evaluation is important and cooperation across institutions and stakeholders is often crucial for the success of M&E systems, and roles and responsibilities should be well defined on how and by whom the results are to be collected, analysed and disseminated. Another issue to address is who pays for the monitoring and evaluation. The cost of sustained monitoring must be compared to its expected benefit. Furthermore, it is important to developing a strategy on communicating results to ensure that findings and learnings from the analysis of the collected data are taken up and used for informed decision-making.

Featured Image



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