

Considering social and gender aspects in transboundary groundwater cooperation



Woman with a cabbage plucked from her farm in Southern Africa.

Key messages

- Transboundary arrangements regarding shared aquifers can influence livelihoods and well-being at the local level, with particular impacts on women and youth; examining law and policy in a way that considers gender on all levels can provide a basis for advancing gender concerns in transboundary water cooperation.
- There is a gap between ambitious international aspirations on gender and policy commitments by governments, on the one hand, and international water law and actual programs and practices at the local level, on the other. Indicators at multiple levels can guide the implementation of gender aims and harmonize approaches across the local, national and transboundary levels.

Background

Cooperation is important in transboundary groundwater management, because transboundary groundwater is a hidden resource that crosses political (such as national) borders. Actions in the utilization of aquifers on one side of the border can have impacts on a neighboring state's overall access to groundwater, and consequently their ability to address social equity impacts, particularly on women and youth. In turn, cooperation on shared groundwater can mitigate conflict potential and enhance joint benefits of the aquifers. International instruments increasingly emphasize gender and social factors, but transboundary arrangements and practices regarding shared aquifers currently fail to address these issues. This may jeopardize water security and livelihood options for small communities in the border regions, enhancing risks to social cohesions, livelihoods and well-being.

South Africa and Botswana: Gender and social aspects in law and policy

Since 1992, numerous international instruments have considered gender as being important in environmental and natural resource management. Moreover, multiple global compacts acknowledge that gender issues should be addressed at all levels, including the transboundary level (1992 Dublin Principles, 1995 Beijing Platform for Action, 1996 Habitat Agenda, 2016 Sustainable Development Goals). In the governance of shared water resources between South Africa and Botswana, the governments of both countries acknowledge gender as being important in national law and policy. Yet, transboundary agreements and institutions, such as the Revised Protocol on Shared Watercourses in the Southern African Development Community (SADC) of 2000, leave the issue unaddressed.

Local level

Gender-sensitive tools and guidelines for assessments and actions are available to apply. These include the Women's Empowerment in Agriculture Index (WEAI), the Food and Agriculture Organization of the United Nations (FAO) Socio-economic and Gender Analysis (SEAGA) approach, and the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Water Assessment Programme (WWAP), among others, which promote women's participation in decision making, control over resources, as well as increased capacity, empowerment, and leadership within communities. However, these approaches have not

been incorporated into frameworks for transboundary water use and allocation.

National level

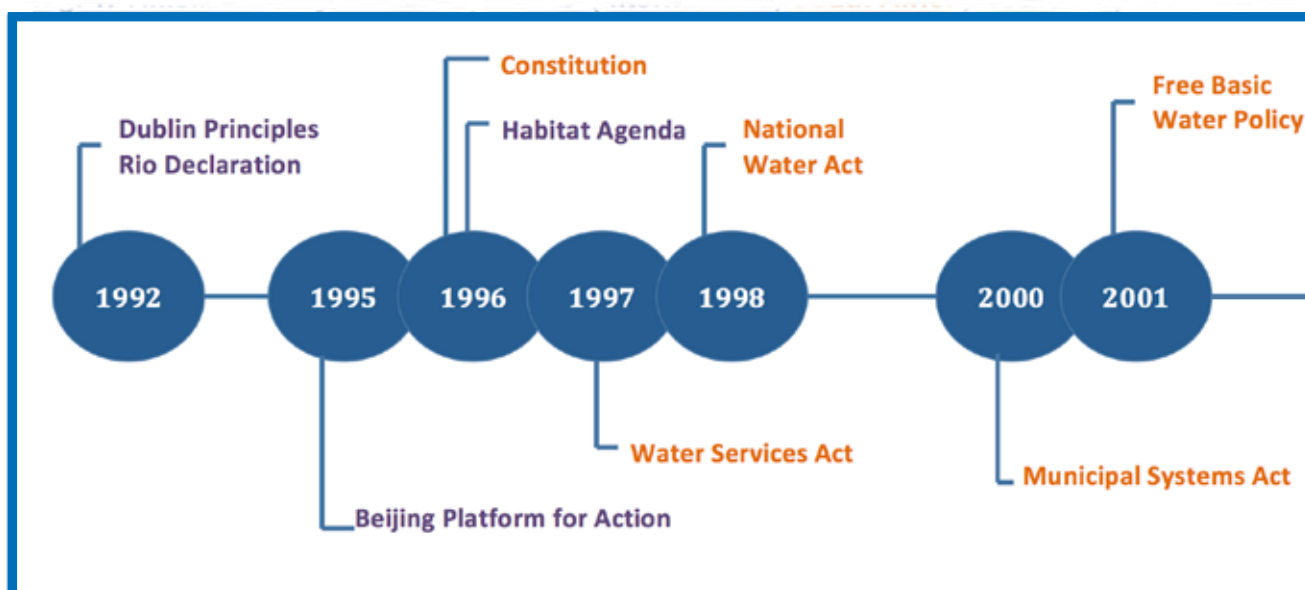
The timeline of key water laws and policies is shown in Figure 1. South Africa promotes the principle of non-discrimination, as well as gender-representative institutions and the redress of past gender inequities. Similarly, Botswana promotes institutionalized gender sensitivity, as well as emphasizing the importance of participation, the recognition and rights of women, and measuring performance through monitoring and evaluation.

The institutional frameworks show that both countries emphasize the consideration of gender in decision making. However, while both countries place importance on equal rights, they give limited attention to goal-oriented approaches and related actions, such as equal access and control over resources, as well as capacity development and empowerment.

Transboundary level

The gender-oriented values of South Africa and Botswana are not reflected at the transboundary level. Gender considerations are absent from both the SADC and LIMCOM agreements.¹ However, current provisions that require states to consider social needs within the territory of other states, through the harmonization of state policies, and the requirement to undertake transboundary social impact assessments, could be expanded and operationalized to integrate gender.

Figure 1. Timeline of key water laws and policies (International, South Africa and Botswana).



Notes: ¹ 2000 Revised Protocol on Shared Watercourses in the Southern African Development Community (SADC agreement); 2003 Agreement on the Establishment of the Limpopo Watercourse Commission (LIMCOM agreement).

Linking the transboundary level to the local level in practice

Linking the transboundary level to the local level in practice can be achieved by (i) applying the principles of international, national and local water management to the transboundary aquifer arrangements; (ii) taking steps for integrating gender considerations into the planning and management of transboundary aquifer resources at multiple governance levels. This should be accompanied by specific actions that increase and ensure local equity in benefits from the transboundary resource – within both countries as well as across the border; and (iii) monitoring gender responsiveness with indicators at multiple levels. Potential indicators for the success in achieving social inclusiveness and gender responsiveness at

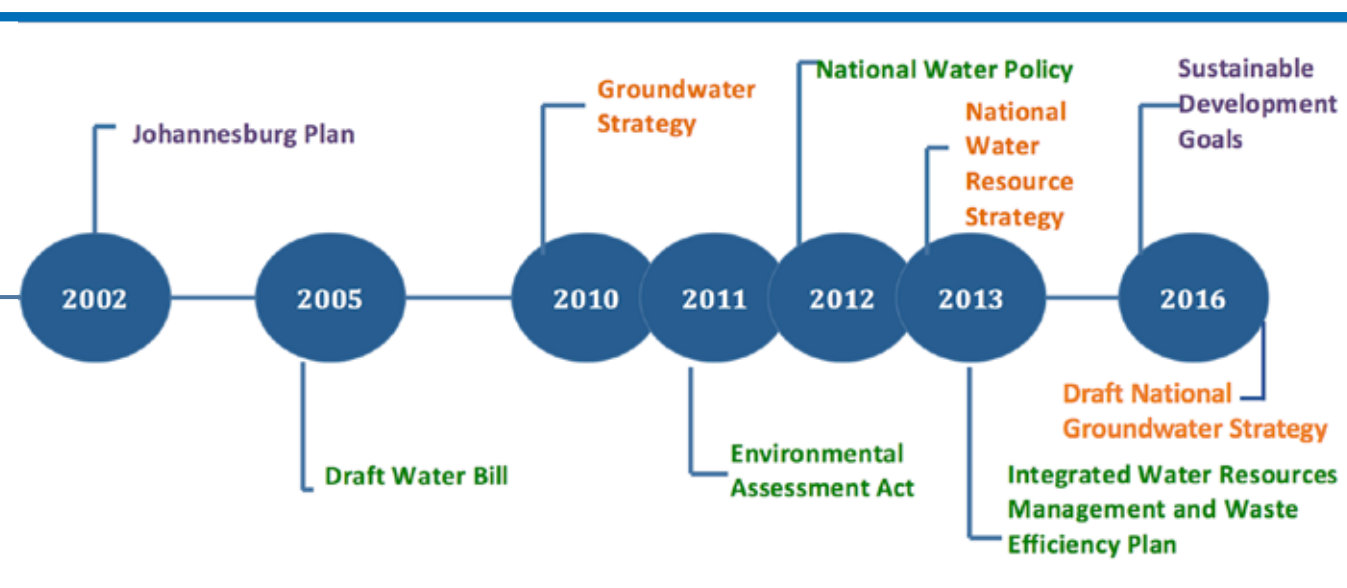
the local, national and transboundary levels are suggested in Table 1. These should be decided jointly by the states.

Potential actions

Actions that South Africa and Botswana could take toward integrating social and gender aspects into transboundary assessments and cooperation include: (i) entering into a dialogue to improve cooperation on achieving gender-equitable benefits from groundwater resources; (ii) developing and agreeing upon harmonized local-to-transboundary indicators (Table 1); (iii) the creation of modalities for monitoring performance and improving learning; (iv) capacity development on gender-sensitive infrastructure planning and project design; and (v) integration of gender provisions into future transboundary agreements.

Table 1. Potential indicators for monitoring social inclusiveness and gender responsiveness in the management of transboundary aquifer resources at the local, national and transboundary levels.

Local	<ol style="list-style-type: none"> 1. Gender equality in access to groundwater for multiple uses. 2. Gender-representative engagement in productive activities with groundwater. 3. Gender-representative institutions at sub-basin and catchment levels.
National	<ol style="list-style-type: none"> 1. Gender-representative institutions at national level. 2. Capacity strengthened in gender-representative institutions to enhance gender sensitivity. 3. Gender-sensitive infrastructure, and technical and access point design.
Transboundary	<ol style="list-style-type: none"> 1. Harmonized national gender policies in transboundary arrangements. 2. Enabling environment for transboundary institutions providing for gender-sensitive groundwater management. 3. Requirement for transboundary environmental and social impact assessment.



Gender and groundwater in transboundary sustainable development

In 2015, 193 Member States of the United Nations deliberated and produced 17 aspirational 'Global Goals' for Sustainable Development – the Sustainable Development Goals (SDGs). Included were goals for gender equality, clean water and sanitation, and the realization of peace, justice and strong institutions. When read together, the interdependent nature of these goals is revealed: **gender equality** necessitates 'equal rights to economic resources... access to ownership and control over land and ... natural resources' to be achieved through 'enforceable legislation'; **clean water and sanitation** requires access to be 'universal and equitable', 'paying special attention to the needs of women and girls', and integrated water resources management must be implemented 'at all levels, including through transboundary cooperation'; and finally, **access to justice for all** through the national and international rule of law requires 'effective', 'accountable' and 'transparent' institutions, which are 'inclusive', 'participatory', and 'non-discriminatory'.



Resilience in the Limpopo Basin: The potential of the Transboundary Ramotswa Aquifer (RAMOTSWA)

This brief serves as an output of 'The potential of the Transboundary Ramotswa Aquifer (RAMOTSWA)' project, within the Resilience in the Limpopo River Basin (RESILIM) Program.

The overall focus of the project is to support a long-term, joined vision and cooperation on the shared groundwater resources of the Upper Limpopo Region, where South Africa and Botswana potentially share significant and valuable freshwater underground resources as well as space for enhanced water storage. The project facilitates joint management and better groundwater governance focused on coordination, scientific knowledge, social redress and social sustainability, in order to reduce poverty and inequalities, increase prosperity, and improve livelihoods and food security in the face of climate variability.

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The International Water Management Institute (IWMI) is a non-profit, scientific research organization focusing on the sustainable use of water and land resources in developing countries. IWMI works in partnership with governments, civil society and the private sector to develop scalable agricultural water management solutions that have a real impact on poverty reduction, food security and ecosystem health. Headquartered in Colombo, Sri Lanka, with regional offices across Asia and Africa, IWMI is a CGIAR Research Center and leads the CGIAR Research Program on Water, Land and Ecosystems (WLE).