

Women's meaningful participation in water security

Siân Herbert

GSDRC & K4D, University of Birmingham

20 May 2022

Question

What gender transformative practices have led to the meaningful participation of women in water security and what is the effectiveness of these in terms of short-, medium- and long-term impact on water security?

Contents

1. Overview
2. Water security, governance, and gender
3. Transformative practices
4. References

1. Overview

This rapid literature review explores gender transformative practices and the meaningful participation of women in water security. There is large and growing literature base on gender and water, with most of it coming from a health, or sanitation and hygiene perspective, and most focussing on access, quality, and women as vulnerable water users and or women and water in rural communities (de Silva, Veilleux & Neal, 2018). There has been a growth in focus on women's participation in water governance, and particularly a more recent focus on meaningful participation. However, as yet, the literature is much more limited in this latter area, and the practical advances in women's meaningful participation ("gender transformative processes") in water security have also been more limited than progress in other areas (Ozano, et al., 2022). This rapid review found a lot of literature focusses on a few countries including: Kenya, India, and Nepal. As de Silva, et al. (2018, p.212) explain in their work on transboundary water, there is limited evidence on "the role of women as agents of change within a decision-making, transboundary water context and almost every paper that promised to do so in some way, ended

The K4D helpdesk service provides brief summaries of current research, evidence, and lessons learned. Helpdesk reports are not rigorous or systematic reviews; they are intended to provide an introduction to the most important evidence related to a research question. They draw on a rapid desk-based review of published literature and consultation with subject specialists.

Helpdesk reports are commissioned by the UK Foreign, Commonwealth, & Development Office and other Government departments, but the views and opinions expressed do not necessarily reflect those of FCDO, the UK Government, K4D or any other contributing organisation. For further information, please contact helpdesk@k4d.info.

up focusing on specific developing countries and women as direct water users". As for the effectiveness of certain practices over others, and over different timeframes, there is little empirical information on this, yet there are a lot of critical reflections in the literature on the broad barriers to meaningful participation. And there are general recommendations for how to make progress on this agenda. This rapid review is indicative of the most commonly discussed issues in the literature, but is not inclusive of all of the many related issues.

Key points

Water security, governance, and gender

Water security is defined as “the reliable availability of an acceptable quantity and quality of water for production, livelihoods, health, and ecosystems, coupled with an acceptable level of risk from hazards including drought, flooding, pollution, and conflicts” (Ozano, et al., 2022, p.5). Women are at greater risk of food and water insecurity than men. “The water crisis is therefore a gender crisis” (Ozano, et al., 2022, p.27). This is compounded by the general “inadequate representation, participation, and involvement of women in most water institutions” (Khandker, Vasant, Gandhi & Johnson, 2020).

A framework for understanding the gendered aspects of water governance by Cleaver and Hamada (2010) proposes that analysis be expanded to: understand the ways in which societal resources are allocated; and consider how different people are able to influence the outcomes of particular governance arrangements to produce gendered outcomes. The literature highlights the need to take a gender-relational approach that “not only looks at the roles, strengths, weaknesses, expectations, challenges and inequalities women have and face, but also of those experienced by heterosexual men, boys, girls and LGBTI” (Schilling, Froese & Naujoks, 2018, pp.189-191). Gender-transformative approaches focus “on tackling institutions and structures of power, including those that construct patriarchies and enable the persistence of gender inequalities often in spite of greater women’s participation” (Ozano, et al., 2022, pp.28-29).

Transformative practices

Leveraging social capital

The collective action of women and women’s groups - is a key way that women can secure their water rights and greater participation in water governance. Global Water Partnership (GWP) (2022) highlights the successes of multi-stakeholder partnerships (MSPs) in a range of developing countries. E.g. how the Sudan Youth Parliament for Water (SYPW) (with 38% of members being women) mobilises young people participation in water governance through: inclusive community-based discussions that identify water and sanitation solutions and make women the centre of change; organising their members participation in national and international events; implementation of community educational and awareness programmes; workshops for skills and professional development; advocacy; and the participation of members in governmental policy making processes (GWP, 2022; SYPW, 2017). In Bangladesh “the Mothers Parliament” supports the development of soft skills around deliberation, evidence-based advocacy, and how to approach different stakeholders, essential for ensuring that women’s voices are heard in discussions (GWP, 2022). In Peru, the International Secretariat for Water has

helped establish new rural indigenous committees responsible for water and environmental conservation, with women play leading positions (GWP, 2022). The women provide role models for more inclusive and gender-equal institutional arrangements (GWP, 2022).

Water sharing - In Kenya, water scarcity, and gender inequalities in water security have been mediated through women drawing on their social capital networks for water sharing. These water sharing networks are often aligned along gender, and women particularly seek and receive support during times of need. Such support typically includes kin, neighbours, and friends helping to collect water for those in need; borrowing and/or lending water and/or donkeys for transportation; and the sale of water at a subsidised price, through instalments, or through in kind payments (Bukachi, et al., 2021).

Professional women's networks and events - are important mechanisms for improving women's participation in water security governance at national and transboundary levels. E.g. the Women and Water Diplomacy in the Nile (WIN) network brings together women professionals in the water sector to share their experiences and build a collective capacity. The Women in Water Diplomacy Network has influenced policies and legal frameworks in Kenya to increase gender equality in water decision-making. Ensuring networks continue to function in the medium- and long-term requires time and resources.

Challenging social norms

Water use is embedded in everyday life but also tied up with complex socio-political systems and social norms. The literature highlights a few ways that norms are shifting.

Participatory gender training - can indeed initiate transformative practice in the gender-water-agriculture nexus by: providing an open space to discuss local gender roles and norms; promoting a critical consciousness that gender norms are socially constructed and change across contexts and time; encouraging empathy and conflict resolution through a bargaining role play with switched genders; and stimulating enthusiasm and inspiration to reflect on possible change towards more equal labour division, and empathy towards those with weaker bargaining power (Leder, Shrestha & Das, 2019). A key challenge experienced was that in several situations gender norms were further reinforced rather than shifted.

Global norm diffusion – is occurring through movements like #metoo, the evolving domination of economic trends through neoliberal policies, and the evolving sustainable development agenda e.g. through the Dublin Principles.

Address gaps in legal and institutional frameworks

Addressing gaps in legal and institutional frameworks plays an important role in reducing gender-based discrimination and in creating an enabling environment for women in water decision-making. While water policies are limited in bringing about gender transformative changes in societies, they have been “crucial in ensuring women's representation in water management/governance systems” (Khatri, Neupane & Devkota, 2021), such as through quotas for gender representation; and through support to institutions by international actors.

Reflections on effectiveness in the short, medium, and long term

- Context matters – policies and programmes need to be tailored to women’s diverse needs and challenges
- Caution must be paid to local norms and to ensure that gender inequalities are not reinforced

2. Water security, governance, and gender

Water security is defined as “the reliable availability of an acceptable quantity and quality of water for production, livelihoods, health, and ecosystems, coupled with an acceptable level of risk from hazards including drought, flooding, pollution, and conflicts” (Ozano, et al., 2022, p.5). A FCDO briefing back on water governance, finance, and climate change sets out why shared water security is an essential accelerator for social and economic progress, and key issues that relate to it e.g. including: equity and inclusion; controlling the spread of COVID-19; preventing avoidable deaths; addressing the biodiversity crisis and the climate emergency; adaptation and resilience to drought and floods; reducing the 10% of global greenhouse gas emissions from the water sector; and contributing to peace and stability (Ozano, et al., 2022, p.5).

Women are at greater risk of food and water insecurity than men in over two thirds of nations (UN Women, 2018 cited in Ozano, et al., 2022, p.27), and are more likely to be put at risk through their greater responsibilities for water collection, and by being more affected by climate change impacts such as droughts, etc (Ozano, et al., 2022, p.27). Thus, Ozano, et al. (2022, p.27) emphasise that “the water crisis is therefore a gender crisis that has major implications across a range of other [Sustainable Development Goals] SDGs”. Meanwhile, there is a general “inadequate representation, participation, and involvement of women in most water institutions” (Khandker, Vasant, Gandhi & Johnson, 2020), particularly at regional, national, and transnational levels, with slightly better representation at local and community levels (de Silva, Veilleux & Neal, 2018; Troell & Yaari, 2019).

A framework for understanding the gendered aspects of water governance

In a widely cited paper, Cleaver and Hamada (2010) provide a framework to understand the gendered aspects of water governance, they argue that “a narrow focus on gender-sensitive mechanisms of water delivery (such as committees, tariffs, technologies) is insufficient to ensure gender equitable outcomes”. Instead they propose that analysis should be expanded to:

1. Understand the ways in which societal resources are allocated (through economic policies, legislation etc) and so shape mechanisms in particular ways.
2. Consider how different people are able to influence the outcomes of particular governance arrangements to produce gendered outcomes (for health and well-being, access and livelihoods, and for political voice).

They use Franks and Cleaver’s (2007 cited in Cleaver & Hamada, 2010) tool (see Figure 1) to apply a gender analysis to water interactions.

Figure 1: A framework for water governance

This Figure can not be reproduced due to copyright reasons. The full figure can be found at <https://www.tandfonline.com/doi/full/10.1080/13552071003599996?scroll=top&needAccess=true>

Source: Franks & Cleaver, 2007 cited in Cleaver & Hamada, 2010

The term “mechanisms” refers to a broad set of arrangements which affect people's access, e.g. including: formal institutions (like water user associations); social norms (that shape water use and social relations between individuals and groups); and particular technologies (e.g. hand pumps, pipes, etc) (Cleaver & Hamada, 2010).

Taking a gender-relational approach

Of increasing focus in the literature, is the need to take a gender-relational approach, rather than just focussing on women and girls. Schilling, Froese and Naujoks (2018, pp.189-191) explain that a gender-relational approach “not only looks at the roles, strengths, weaknesses, expectations, challenges and inequalities women have and face, but also of those experienced by heterosexual men, boys, girls and LGBTI”.

Gender transformative approaches

Ozano, et al. (2022, pp.28-29) explain that ‘gender-transformative approaches’ focus “on tackling institutions and structures of power, including those that construct patriarchies and enable the persistence of gender inequalities often in spite of greater women’s participation”. GWP (2022), through expert consultation, has developed a four-area approach to advancing gender equality in water governance:

- Institutional leadership and commitment;
- Gender and inclusion analysis that drives change;
- Meaningful and inclusive participation in decision-making and partnerships; and
- Equal access to and control of resources.

3. Transformative practices

Leveraging social capital

Collective action of women and women’s groups

A number of articles highlight the importance of collective action of women and women’s groups in securing their water rights and greater participation in water governance. Global Water Partnership (GWP) (2022) provides ten stories from developing countries of how multi-stakeholder partnerships (MSPs) have fostered a more inclusive, equal, and water-secure world.

MSPs are “collaborative mechanisms that bring together a variety of actors, including NGOs, governments, academia, and businesses, to work on a specific challenge or explore an opportunity together” (GWP, 2022). One of their success stories in Sudan, is based on work of the Sudan Youth Parliament for Water (SYPW) (now with 1,700 members) which mobilises young people to transform water supply and sanitation. The SYPW has achieved a women’s participation of 38%, led women-centred campaigns, and successfully organised eight International Women’s Day events. While women make up only just over one third of members, they have participated in more than 90% of the total organized activities (SYPW, 2017). Its inclusive community-based discussions contribute to identifying water and sanitation solutions and making women the centre of change. The SYPW “has implemented over 70 activities, from participation in national and international events related to the water sector, implementation of community educational and awareness programs in and around Khartoum, the capital, field projects, workshops for skills and professional development, advocacy for youth participation as stakeholders and participating in governmental policy making” (SYPW, 2017).

Another GWP (2022) success story is from Bangladesh where “the Mothers Parliament” was established in 2017 with support from a local NGO. “Members of the Mothers Parliament received support in developing soft skills around deliberation, evidence-based advocacy, and how to approach different stakeholders, essential for ensuring that women’s voices are heard in discussions of sustainable solutions for WASH and other social issues” (GWP, 2022). A key lesson is that “women’s voices can be strengthened if structures and processes that enable them to do so are in place” (GWP, 2022).

Another GWP (2022) success story is from Peru where the International Secretariat for Water has been working closely with the Cuchoquesera indigenous community and has helped establish a new rural indigenous committee responsible for water and environmental conservation in their area of the Cachi River Basin, and for drinking water and sanitation infrastructure. “To avoid duplication and ensure coordinated action, the committee worked together with the Ministry of Housing, the Regional Government, the Provincial Municipality, and the public university of the region. Women play leading positions in these new rural water and sanitation committees, and are therefore at the forefront of enhancing local environmental and water resources management” (GWP, 2022). A lesson from the project reveals the value of women leaders as role models for more inclusive and gender-equal institutional arrangements (GWP, 2022).

Das (2014, p.206) analyses community-managed water supply projects for the urban poor in Madhya Pradesh, India, to provide a better understanding of the gap between women’s motivation to participate and their ability or agency to do so. He describes how most empirical studies on women’s participation in water governance have focused on the programmatic outcomes of efficiency, effectiveness, and empowerment, linking participation with individual and household benefits. However, there is less evidence of how their participation attempts to force open spaces for change in discourses and practices through collective empowerment. A few studies on micro-credit programmes have looked at this. For instance, Sanyal (2009 cited in Das, 2014, p.206) finds that women’s participation in micro-credit programmes in West Bengal fostered their social capital and normative influence at the individual-and community-level. The level and nature of participation is important in explaining the success or failure of water projects but many case studies do not discuss, in detail, the levels of participation achieved or factors that affect particular forms of participation. (In Price, 2018)

Water sharing

A journal article by Bukachi, et al. (2021) explores how water scarcity, and gender inequalities in household and community water security, can be mediated through women drawing on social capital and water sharing in Kitui county, Kenya. This mechanism of water sharing leverages on “notions of trust, reciprocity, neighbourliness, kinship, social networks and local leadership systems”, and water-sharing, simultaneously, can help in maintaining key relationships through building reciprocal transactions within existing relationships (Bukachi, et al., 2021). These networks are often aligned along gender, and women particularly seek and receive support during times of need – such as pregnancy, sickness, or when their children are too young to help – and when in resource-limited contexts (Bukachi, et al., 2021). Such support typically includes kin, neighbours and friends helping to collect water for those in need; borrowing and/or lending water and/or donkeys for its transportation; and the sale of water at a subsidised price, through instalments, or through ‘in kind’ payments (Bukachi, et al., 2021). Bukachi, et al. (2021) explain that “reciprocity is a common phenomenon in the community: when people help without expecting an immediate return, but with a strong conviction that, in their times of need, others will not hesitate to share with them. It is particularly common during ceremonies” such as burials, graduation, and weddings as these “foster the spirit of cooperation and unity among the people in solving, among other things, water challenges” (Bukachi, et al., 2021).

Bukachi, et al. (2021) explain that water-sharing can occur along kinship relationships (bonding social capital), and along membership in groups and associations (bridging social capital), with members mainly comprised of women. In the latter, the groups have “formalised social capital” through “rules of engagement and norms that guide the daily operations, maintenance and use of the water source” – e.g. relating to who fetches water, where, when and how, how water is used (e.g. in watering livestock), and related sanctions for transgressions of the rules (Bukachi, et al., 2021).

Professional women’s networks and events

Professional women’s networks are identified as an important mechanism for improving women’s participation in water security governance at national and transboundary levels. One such network is the Women and Water Diplomacy in the Nile (WIN) network which brings together women professionals in the water sector to share their experiences and build a collective capacity of women across the Nile basin countries (Troell & Yaari, 2019). Gupta and Hue (2022) explain how the Women in Water Diplomacy Network has influenced policies and legal frameworks in Kenya to increase gender equality in water decision-making. “Not only have women stepped into men’s shoes, but they are also changing how stories are told and who gets to tell them. They rethink power and carve new ways to address challenges lived by communities. As more women water leaders have stepped in, younger women have received support through early stages of their career, creating a cycle of change” (Gupta & Hue, 2022).

Ensuring networks continue to function requires time and resources. A paper by Yaari (2022, p.9) on the Women in Water Diplomacy Network includes a quote from an event participant saying that “follow up activities are needed, and we should participate in World Water Week. That way we will meet other women from other basins, not only the Nile, and it will give us other perspectives and knowledge. The idea with water is that we think outside our box, see different perspectives”.

Challenging social norms

Water use is embedded in everyday life but also tied up with complex socio-political systems and social norms. The literature highlights a few ways that norms are shifting.

Participatory gender training

Leder, Shrestha and Das (2019, p.128) test the ability of participatory gender training to challenge gender norms in agriculture and water governance through the application of community group training in twelve villages across four districts of Nepal and India. The activities included “three activities and three discussions to reflect on gender roles in families, communities and agriculture, to discuss the gendered division of labour and changing gender relations over time and space, and to create empathy and resolve conflicts through a bargaining role play with switched genders” (Leder, et al., 2019, p.128). In a journal article reflecting on the results of the project, Leder, et al. (2019) conclude that participatory gender training can indeed initiate transformative practice in the gender-water-agriculture nexus by:

- Providing an open space to discuss local gender roles and norms, and the unequal division of labour, within households, agriculture and natural resource management.
- Promoting a critical consciousness in farmers, community mobilisers, and project staff that gender norms are socially constructed and change across contexts and time according to age, class, caste and material and structural constraints (such as limited access to water and land).
- Encouraging empathy and conflict resolution through a bargaining role play with switched genders.
- Stimulating enthusiasm and inspiration to reflect on possible change towards more equal labour division and empathy towards those with weaker bargaining power.

The approach draws on thinking from “social learning”, critical pedagogy, and transformative practice where “through deliberative interactions amongst multiple stakeholders, participants learn to work together and build relationships that allow for collective action” (Leder, et al., 2019, p.129). This draws attention to the creation of “contact zones” where different groups can reduce conflict or redress asymmetrical power relations through meeting and engaging with others through knowledge co-creation, building empathy, and shifting a sense of own subjectivities (Leder, et., al., 2019, p.128).

A key challenge experienced during the project’s implementation was that, in several situations “gender norms were further reinforced rather than critically deconstructed and shifted” (Leder, et., al., 2019, p.155). Leder, et., al. (2019) found that the training of facilitators was key to addressing this issue, also to ensure that training principles were adapted to the local contexts. A reflection from participants in the training was that many had not realised the relevance of gender in ensuring women’s *meaningful* participation in the user groups beyond women’s involvement in numbers.

Global norm diffusion, ideologies, and movements

Ozano, et al. (2022, pp.28-29) note how the more recent paradigm shift to focus on ‘gender-transformative approaches’, and meaningful participation, have been particularly bolstered by global movements such as #metoo. The #metoo movement has shined a light on the challenges that women face beyond access, when they are participating, but when their basic rights are not respected, and when accountability mechanisms for misconduct are not adequate.

Meanwhile, Cleaver and Hamada (2010) explain how dominant ideologies, policies, and trends at the global and national levels set the context for water governance arrangements and values around water. E.g. neoliberal policies such as commercialisation and privatisation, and trends such as focussing on economic rationality, efficiency, and water as an economic good, support individual titles and tariffs while neglecting ‘non-productive’ uses of water and important social factors shaping access (such as gender). Meanwhile, it was the Dublin Principles which consolidated access to clean and affordable water as a basic human right, with women’s role and empowerment central to achieving this (Das, 2014).

Address gaps in legal and institutional frameworks

Addressing gaps in legal and institutional frameworks plays an important role in reducing gender-based discrimination and in creating an enabling environment for women in water decision-making (Troell & Yaari, 2019). Drawing on two workshop discussions through the Women and Water Diplomacy in the Nile (WIN) network, Troell and Yaari (2019, pp.3, 5) recommend that this can include, e.g.:

- Ensuring national laws include gender specific provisions for the meaningful participation of women in water decision-making at all levels;
- Including gender-specific considerations in policies relating to water, land tenure, resources rights, property rights and inheritance regimes to ensure women’s equal rights to economic and water resources;
- Collecting gender disaggregated data;
- Affirmative action in women and girls’ education to encourage them to enter higher education in technical fields;
- Effective policies and regulations to prohibit workplace discrimination and to ensure adequate mechanisms for redress in such cases.

The rights and entitlements enshrined within laws are non-material resources that can “shape the ways in which women feel able to participate in particular mechanisms of water access, such as water-point committees or farmers’ organisations, how their voices are heard, and how their rights of access are shaped and asserted at the local level” (Cleaver & Hamada, 2010). Yet, significantly, as in many countries water resources are managed by local communities, national laws and policies may have limited impact at the local level where governance institutions are customary rather than democratic (Khandker, et al., 2020). Khatri, Neupane and Devkota (2021) highlight that while water policies are limited in bringing about gender transformative changes in the society, they “have been very crucial in ensuring women’s representation in water management/governance systems”.

Quotas for gender representation

Several developing countries have introduced quotas for women's representation in governance institutions (including the water sector) (e.g. Kenya), including some water user groups at the local level (e.g. Nepal) (Leder, et al., 2019).

Ifejika and Bikketi (2018) examine the extent to which the Kenyan government's water-related policies have affected the management of community water groups in the county of Laikipia, and reduced gender inequality in access to water and in water-use decision making. They find that the Kenyan government policy that limits gender representation to two-thirds in any governance arrangement (meaning a 30% minimum representation for either women or men) has indeed been institutionalised across government ministries, departments and agencies (including in the water sector) – becoming a precondition for government practice and interventions (Ifejika & Bikketi, 2018). It has also 'trickled down' to the local level, where most community water groups now also apply the quota. "By being an obligation, it is transformative in that it changes the way governance has been conducted prior to the policy change and serves as a benchmark for practice within and outside government" (Ifejika & Bikketi, 2018, p.125).

Ultimately, simply adding women to governance institutions and user groups will not, on their own, address power relations and structural inequalities ('add women and stir') (Leder, et al., 2019; Upadhyaya & Shrestha, 2021). Core to addressing gender inequality is challenging inegalitarian socio-cultural beliefs and norms (Ifejika & Bikketi, 2018). The need to focus on more than just policy reforms is also emphasised by Upadhyaya and Shrestha (2021) in their book chapter that explores the limitations women face in meaningfully participating in water management systems in the Dhulikhel municipality in Nepal. The chapter focusses on the Dhulikhel Drinking Water and Sanitation Users Committee (DDWSUC) – an autonomous body which provides water to 92% of local households (Upadhyaya & Shrestha, 2021). While women now make up half of its committee members, their effective roles are marginalised (Upadhyaya & Shrestha, 2021). Shrestha and Clement (2019 cited in Upadhyaya & Shrestha, 2021) consider the underlying cause for this limitation being due to the "masculine nature of the institutions", which has persevered through "masculine discourse, norms and culture". Leder, et al. (2019) highlight the danger that quota systems can stoke antagonistic attitudes among community members which can aggravate inequalities.

Support to institutions by international actors

The GWP network supports mandated institutions, water user groups, and communities to strengthen water governance through the application of IWRM principles. Examples of its support include (Grant, 2017, p.18):

- Ensuring participation of gender equality organisations and interest groups when facilitating multi-stakeholder engagement for development and sectoral planning processes, such as national adaptation plans, local development plans, river basin management plans, etc.
- Reviewing planned water resources management investments from a gender and water perspective on behalf of ministries of water, agriculture, economy, etc.

- Building capacity and disseminating knowledge among mandated institutions and communities on gender equality and inclusion in association with identified key responsibilities and targeted change processes

Reflections on effectiveness in the short, medium and long term

Context matters - tailor to women's diverse needs and challenges

Troell and Yaari (2019, p.1) highlight that to move forwards from broad policy statements on gender equity towards a meaningful engagement of women in transboundary water governance, "solutions must be tailored to the numerous barriers facing women currently engaged in and seeking to join water and peacebuilding professions". An intersectional approach that considers capabilities and vulnerabilities more broadly is important to this approach, as is emphasised by Ifejika and Bikketi (2018, p.125) in their study on Laikipia, Kenya, where they found that "financial capability may be a stronger factor than gender in determining men and women's access to water".

Gender inequalities can be reinforced

A common finding across the literature is that policies and projects that either mandate or encourage the inclusion of women in water governance can be at risk of having the counterproductive impact of reinforcing gender inequalities and norms (e.g. Leder, et., al., 2019, p.128). As summarised by Cleaver and Hamada (2010):

In much water policy, there is an assumption that the active participation of marginalised people (including women) in institutions for collective management will ensure equity goals. This means that great efforts are made to ensure that women are represented, and that women's voices are heard. However, exercising agency to secure equitable access to water is not as straightforward as that. Hierarchies among women, norms of proper behaviour, and conventions of marriage all limit some women's chances to exercise their voice

4. References

Bukachi, S. A., Omia, D. O., Musyoka, M. M., Wambua, F. M., Peter, M. N., & Korzenevica, M. (2021). Exploring water access in rural Kenya: Narratives of social capital, gender inequalities and household water security in Kitui county. *Water International*, 46(5), 677-696.
<https://www.tandfonline.com/doi/full/10.1080/02508060.2021.1940715>

Cleaver, F., & Hamada, K. (2010). 'Good'water governance and gender equity: a troubled relationship. *Gender & Development*, 18(1), 27-41.
<https://www.tandfonline.com/doi/full/10.1080/1352071003599996?src=recsys>

Das, P. (2014). 'Women's participation in community-level water governance in urban India: The gap between motivation and ability'. *World Development*, 64, 206-218

de Silva, L., Veilleux, J. C., & Neal, M. J. (2018). The role of women in transboundary water dispute resolution. In *Water Security Across the Gender Divide* (pp. 211-230). Springer
https://link.springer.com/chapter/10.1007/978-3-319-64046-4_11

- Global Water Partnership (GWP) (2022) How grassroots action by women is revolutionising the way water resources are being managed. GWP
<https://www.gwp.org/en/waterchangemakers/MSPs4WaterGovernance/>
- Grant, M. (2017) Gender equality and inclusion in water resources management. GWP
<https://www.gwp.org/globalassets/global/about-gwp/publications/gender/gender-action-piece.pdf>
- Gupta, R. & Hue, C. P. (2022) Across the Nile and around the table: Women with a shared dream. SIWI <https://siwi.org/latest/across-the-nile-and-around-the-table-women-with-a-shared-dream/>
- Ifejika Speranza C, Kiteme B, Wiesmann U, Jörin J (2016) Community-based water development projects, their effectiveness, and options for improvement: lessons from Laikipia, Kenya. *Afr Geogr Rev.* doi:10.1080/19376812.2016.1253485
- Ifejika Speranza, C., & Bikketi, E. (2018). Engaging with gender in water governance and practice in Kenya. In *Water security across the gender divide* (pp. 125-150). Springer.
<http://oar.icrisat.org/10394/1/Water%20Security%20Across%20The%20Gender%20Divide.pdf>
- Khandker, V., Gandhi, V. P., & Johnson, N. (2020). Gender perspective in water management: The involvement of women in participatory water institutions of Eastern India. *Water*, 12(1), 196.
<https://www.mdpi.com/2073-4441/12/1/196>
- Khatri, D., Neupane, K. R., & Devkota, K. (2021) Dhulikhel's Journey towards Water Security: Insights for Policy and Practice. Southasia Institute of Advanced Studies (SIAS) http://www.sias-southasia.org/wp-content/uploads/2021/02/01_Introductory.pdf
- Leder, S. Shrestha, G. & Das, D. (2019) Transformative engagements with gender relations in agriculture and water governance. *New Angle: Nepal Journal of Social Science and Public Policy*, 5(1):128-158. <https://cgspace.cgiar.org/bitstream/handle/10568/108361/Leder-et-al-2019.pdf?sequence=2&isAllowed=y>
- Mathenge, J. M., Luwesi, C. N., Shisanya, C. A., Mahiri, I., Akombo, R. A., & Mutiso, M. N. (2014). Water security where governmental policies conflict with local practices: the roles of community water management systems in Ngaciuma-Kinyaritha, Kenya. *International Journal of Innovative Research and Development*, 3(5), 793-804.
http://www.internationaljournalcorner.com/index.php/ijird_ojs/article/view/135155/94284
- Ozano, K.; Roby, A.; MacDonald, A.; Upton, K.; Hepworth, N.; Gorman, C.; Matthews, J.H.; Dominique, K.; Trabacchi, C.; Chijiutomi, C.; Tshabalala, Z.; Joshi, D.; Udalagama, U.; Nicol, A. and the GCRF Water Security Hub (2022) Groundwater: Making the Invisible Visible. FCDO Briefing Pack on Water Governance, Finance and Climate Change, K4D Briefing Note. Institute of Development Studies <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/17243>
- Price, R. A. (2018). Women-initiated measures to cope with environmental stresses and climate change in South Asia. K4D Helpdesk Report. Institute of Development Studies
<https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/13595>
- Schilling, J., Froese, R., & Naujoks, J. (2018). "Just Women" Is Not Enough: Towards a Gender-Relational Approach to Water and Peacebuilding. *Water Security Across the Gender Divide*, 173-196.
- Sudan Youth Parliament for Water (SYPW) (2017) Sudanese youth driven by passion and knowledge to alter water supply and sanitation situations in Sudan. GWP.
<https://www.gwp.org/en/waterchangemakers/change-stories/575979/>

Sugden, F., Agarwal, B., Leder, S., Saikia, P., Raut, M., Kumar, A., & Ray, D. (2021). Experiments in farmers' collectives in Eastern India and Nepal: Process, benefits, and challenges. *Journal of Agrarian Change*, 21(1), 90-121. <https://onlinelibrary.wiley.com/doi/10.1111/joac.12369>

Troell, J. & Yaari, E. A. (2019) Tapping our Potential: Women's Water Leadership in the Nile Basin. Stockholm International Water Institute. <https://siwi.org/publications/tapping-our-potential-womens-water-leadership-in-the-nile-basin/>

Upadhyaya, R., & Shrestha, S. (2021). Under the Glass Ceiling: Limitations of Women in Urban Water Management Systems. *Dhulikhel's Journey towards Water Security*, 83. https://www.sias-southasia.org/wp-content/uploads/2021/02/06_Upadhyaya-and-Shrestha.pdf

Yaari, E. (2022) Laying the Bedrock of Transformation. Women in Water Diplomacy Network 2013-2021 The story so far; how the Network came to be and how it has developed through the years. Women in Water Diplomacy Network 2013-2021 The story so far; how the Network came to be and how it has developed through the years <https://siwi.org/publications/laying-the-bedrock-of-transformation-women-in-water-diplomacy-network-2013-2021/>

Acknowledgements

We thank the following experts who voluntarily provided suggestions for relevant literature or other advice to the author to support the preparation of this report. The content of the report does not necessarily reflect the opinions of any of the experts consulted.

- Elizabeth Koch (Yaari) (Stockholm International Water Institute (SIWI))
- Charity Osei-Amponsah (International Water Management Institute) (IWMI))

Suggested citation

Herbert, S. (2022). Women's Meaningful Participation in Water Security. K4D Helpdesk Report. Institute of Development Studies. DOI: [10.19088/K4D.2022.063](https://doi.org/10.19088/K4D.2022.063)

About this report

This report is based on six days of desk-based research. The K4D research helpdesk provides rapid syntheses of a selection of recent relevant literature and international expert thinking in response to specific questions relating to international development. For any enquiries, contact helpdesk@k4d.info.

K4D services are provided by a consortium of leading organisations working in international development, led by the Institute of Development Studies (IDS), with the Education Development Trust, Itad, University of Leeds Nuffield Centre for International Health and Development, Liverpool School of Tropical Medicine (LSTM), University of Birmingham International Development Department (IDD) and the University of Manchester Humanitarian and Conflict Response Institute (HCRI).

This report was prepared for the UK Government's Foreign, Commonwealth & Development Office (FCDO) and its partners in support of pro-poor programmes. Except where otherwise stated, it is licensed for non-commercial purposes under the terms of the [Open Government Licence v3.0](https://www.gov.uk/government/licenses/open-government-licence). K4D cannot be held responsible for errors or any consequences arising from the use of information contained in this report. Any views and opinions expressed do not necessarily reflect those of FCDO, K4D or any other contributing organisation.



© Crown copyright 2022