

Policy Review

Women in Water: Documenting Gender Considerations in Nepal's Water Policy

November 2019

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ACKNOWLEDGEMENTS

This report contributes to the South Asia Sustainable Development Investment Portfolio and is supported by the Australian aid program. Further details on CSIRO's SDIP projects are available from <http://research.csiro.au/sdip>.

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EXECUTIVE SUMMARY

There have been significant advances in the incorporation of gender into water policies in Nepal, especially since 2010. Key learnings for policy makers are:

- Policies have increasingly sought to address entrenched disadvantages to permitting ownership of decisions by those effected by them, with an ultimate aim of reflecting the shift of women from domestic and caring roles to active members of society and the workforce.
- The 1990s were about quotas for women participation in water decision-making. These varied between 22 percent to 33 percent and were mostly limited to the position of a member in local Water Users Associations (WUA). More recently, the expectation for quotas in participation has extended to all levels, including senior level positions such as Chairperson or Vice-chairperson.
- Policies have increasingly acknowledged the limitations for active gender participation in water decision-making, and are considering interventions for empowering women to take a more active role in WUAs.
- There is strategic support for pro-women and pro-marginalized policies. This includes mapping of socially marginalized people, identification of limitations to marginalized participation and specialized assistance packages for marginalized people such as subsidies and trainings.
- There is a need to achieve balance representation of women from different strata in local water bodies to address their specific needs. Similarly, their active participation in planning, decision making, and implementing process should be ensured to achieve desired results.
- There continues to be opportunities to monitor and evaluate whether policy commitments on gender participation and mainstreaming are being implemented on the ground. Recordkeeping and online tools can support and enable such opportunities.
- Academics are investigating the role of men in society and the effect of masculinities on the implementation of policy and programs. In the medium term, e.g. 2020s it is likely that appreciation of all gender roles will likely enter the global policy arena. Given Nepal's large outmigration of male workers, this paradigm of policy analysis will hold contextual relevance for the country.

TABLE OF CONTENTS

1. INTRODUCTION.....	1
2. RATIONALE OF THE STUDY.....	1
3. METHODOLOGY.....	2
4. DISCOURSES ON GENDER APPROACHES.....	2
5. EVOLVING ROLE OF WOMEN IN NEPALS DEVELOPMENT SPACES.....	4
6. WOMEN AND WATER RESOURCES DEVELOPMENT IN NEPAL.....	5
7. CONCLUSION and WAY FORWARD.....	14
REFERENCES.....	16
ANNEX 1.....	20

1. INTRODUCTION

Water is inseparable from women. Women are the primary collectors, users and managers of household water, especially in the rural settings. In the absence of nearby water sources, women and girls around the globe spend an estimated 200 million hours a day collecting water (UNICEF, 2017). Limited access to water resources especially burdens women, as they bear the responsibility for its daily provisioning for household needs. Reduced access to water increases the drudgery of women; among others things, affecting their productivity, capabilities, and well-being (Udas, 2014). Similarly, time that could have been better invested in other economically productive work is used in collecting water, limiting their engagement on personal and household economic productivity (ADB, 2010). Also, collecting water is physically demanding and women who walk long distances to fetch water are prone to long-term physical health conditions. Girls and women are also subjected to harassments and other forms of violence while they are away from home to collect water. Moreover, absence or reduced access to water adversely impacts ability to maintain proper hygiene and sanitation, which is a vital concern for the physical and mental well-being of women (UNDESA, 2014). In addition, women's increasing involvement in agriculture sector have made them heavily dependent on water resources. However, despite this close association between women and water, across much of the developing world, including Nepal, they are not found to be actively participating in national and local water decision making processes.

Over the last two decades, scholars, activists, and practitioners have been advocating for the mainstreaming of gender in national policy and planning processes (Green and Baden, 1995). Supporting which, the United Nations conference on Women (1985); Environment and Development (1992); World Summit on Sustainable Development 2002; and UN Conference in Sustainable Development (2012) have recognized gender equality as an integral component to achieve Sustainable Development, and the UN has urged its member countries to integrated gender aspects in their respective policies, plans and programs (Udas, 2014). Following which, Nepal has also attempted to integrate gender issues in its plans and policies, including those on water resource management. As a result, there has been measurable achievements in reducing women's water burden through increasing access to drinking water in many parts of the country (Budhathoki, 2019). Likewise, women's participation in water related bodies is encouraged and secured through quotas system (Shrestha & Clement, 2019). Despite these achievements, Nepal is still unable to achieve the desired result targeted towards improving women daily water practices and securing their active participation in national and local water bodies (Goodrich et al., 2017). This indicates the need to identify and address the gaps in policies, plans and implementation of water related programs to achieve gender equality in water resource management.

2. RATIONALE OF THE STUDY

The CSIRO, WECS and JVS/PEI partnership under the Kamala Joint Initiative is undertaking a participatory basin planning study to formulate a basin development strategy for the Kamala River Basin (KRB). The scope of the study encompasses four districts in central Nepal: Dhanusha,

Sindhuli, Siraha, and Udaypur. This initiative aims to complement and support the nationwide river basin planning process being undertaken by WECS. It will support the formulation of basin development strategies that contribute to IWRM implementation by identifying and evaluating the range of possible water related development pathways through participatory and evidence-based decision making.

As part of this initiative, several field visits were conducted in the KRB. Learning from these visits indicate that, like in most of the rural communities in developing countries, women in the KRB are responsible for fetching/carrying water, and managing water for domestic use. Furthermore, learning indicated an increasing trend of “feminization of agriculture”¹ which challenges a common gender stereotype of women as housewives and mothers, and men as farmers and irrigators. With the district of Dhanusha and Siraha ranking among the top five districts for employment related outmigration from Nepal, women in these districts have taken up new roles in agriculture, including market transactions and irrigations. Yet, despite the changing role of women in water resources in the basin, their involvement in water decision making (as opposed to water use) remains limited. Likewise, the participation of women belonging to other marginal groups is even more limited. This lack of voice and weak participation of women and other marginalized communities in water decision making processes remains a major factor limiting their access to water resources for agriculture, and domestic and environmental uses, as well as building resilience to water induced hazards and climate change (JVS & PEI, 2018).

Building on the above findings from the basin, this study attempts to document and analyze the initiatives undertaken to mainstream gender in Nepal’s water decision making. It also evaluated the influence and outcomes of the changing global and national discourse on gender on water resource planning and management.

3. METHODOLOGY

This study adopted a gender lens to review and analyze historical accords of water resource management practices, and key water related plans and policies formulated in Nepal focusing on drinking water and irrigation sectors. It primarily relied on data and information available through secondary sources. Literature on water, gender and development was reviewed thoroughly. In addition, Nepal’s periodic development plans, policies and programs on water resources were reviewed to assess gender inclusivity. The policies and plans reviewed are listed in Annex 1.

4. DISCOURSES ON GENDER APPROACHES

The debate on women’s space in social, economic and political arena took shape in the west in the 1830s and soon the movement spread worldwide (Lucy, 2019). The feminist campaign for equal rights since then has been referred to as First Wave Feminist Movement (1830-1960), which has been followed by second (1960-1990), third (1990-2000), and fourth (2000 onwards)

¹ For details see Tamang, S., Paudel, K. P., & Shrestha, K. K. (2014). Feminization of agriculture and its implications for food security in rural Nepal. *Journal of Forest and Livelihood*, 12(1), 20-32.

wave movements (Johnson, 2017; Kowalska, 2018). Issues and agendas advocated by these movements draw from a variety of movements, including that on women's equal suffrage rights; reproductive rights; workplace discrimination; violence against women; and gender mainstreaming in national, political, economic, social and cultural development processes (Sheber, 2017). The response to these movements contributed to the emergence and introduction of approaches such as Women in Development (WID), Women and Development (WAD), Gender and Development (GAD), and gender mainstreaming. These approaches drew widespread legitimacy with its adoption by key multilateral and bilateral international organizations such as the UN, the WB, and the DFID. Who since, have facilitated and supported its adoption in policy and programs across the developing world.

Influenced by the American liberal feminists' philosophy in the 1970s, WAD advocated for the broader integration of women in development processes. The response to which was the adoption of a welfare approach to gender mainstreaming; served through promotion of engagements on income-generation, education, family planning, and nutrition (Reeves and Baden, 2000; Rathgeber 2005). The WAD approach however was widely criticized for having a recipient centric view on women's empowerment (Mcilwaine and Datta, 2003). Following which, proponents of WAD argued that women were not being treated as equal contributors and decision makers in the development space (Lucy, 2019). However, like WID, it did not question the unequal power relation and disparity between men and women (Mcilwaine and Datta, 2003; Rathgeber 2005) and was quickly substituted. With the introduction of the GAD approach in the 1980s, the focus shifted from women to gender. Empowerment and participation of both men and women was seen to be fundamental in addressing the base of inequalities between the two genders (Reeves and Baden, 2000, Rathgeber 2005). The approach advocated for the structural transformation of socially constructed gender roles and relations to promote and achieve gender equality. In 1989, the concept of looking gender from intersectional dimension emerged acknowledging the fact that women may experience multiple form of discrimination based on their individual identities such as age, race, ethnicity, caste, class, sexuality, disability etc. (AWID, 2004). The proponents of the intersectionality approach advocated to look at gender inequality following intersectional lenses while investigating gender inequality as well as while planning, designing, and implementing development programs (AWID, 2004; Shields, 2008). This was followed by the gender mainstreaming approach, which emerged from the Fourth World Conference on Women held in Beijing in 1995. Broadly, gender mainstreaming represents a strategy to incorporate women's and men's concerns and experiences as an integral dimension for policy and development practice so that both women and men benefit equally (UNDP, 2006). However, the idea of "gender" forward by this approach was wrongly understood as meaning only "women", and hence men were never analyzed as part of the gender equation. In more recent times, the concept of masculinities has been gaining popularity. It dissects gender inequality from the privileged perspective, that is, from perspective of men. Further, scholars also argue that the development agendas are built from the masculine understanding of world, and that the gender policies to tackle inequalities are formulated from the perspective of privileged men (Laurie, 2005; Wanner and Wadham, 2015).

These above discourses indicate that ways to analyze and address women and gender related issues in development spaces has been constantly evolving. While each approach is not without its own criticisms, they have all successfully advocated for the rights of women in the society and in development.

5. EVOLVING ROLE OF WOMEN IN NEPALS DEVELOPMENT SPACES

Despite abolishing the *Sati*² system and introducing universal adult franchise early into the country's modern history, it was not until the end of the 20th century that the issues of Nepali women received policy attention. In this regard, a 1979 study on "The Status of Women in Nepal" for the first-time documented contributions of women to the national economy. This study was instrumental in building recognition to the productive roles of women in the Nepali society, and setting the foundation for encompassing gender dimensions in mainstream development processes. Concurrent to then dominant gender paradigm, the Sixth Five Year Plan (1980-1985) included a separate chapter on WID (JICA, 1999). To operationalize this inclusion, a separate institution called the Women Development Section (WDS) was established under the Ministry of Panchayat and Local Development; later renamed as the Women Development Division in the year 1987 (Bhadra, 2001). Production Credit for Rural Women (PCRW) program was implemented nationwide. Women who worked to support the program were later inducted as Women Development Officers under District Development Committees across the country (Luitel, 2008).

During the GAD era, in 1991, Nepal ratified the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and became the only South Asian country to do so (Abeysekera, 2004). The immediate years following 1990's democratic movement in Nepal represents the era of first generation of liberal policy reforms undertaken by the GoN, including the Water Resources Act, 1992; Water Resources Regulation, 1993; Irrigation Policy, 1992; and the Rural Water Supply Policy and Guidelines, 1993 (Udas, 2014). Following which, in accordance to the country's commitment at the International Women's Conference held in Beijing in 1995, the Ministry of Women and Social Welfare was established (Bhadra, 2001) and the government adopted gender mainstreaming as a strategy towards directing resources to women (Tamang, 2009). Subsequent institutional initiatives such as the establishment of an autonomous Women's Commission and formulation of the Local Self Governance Act sought to strengthen and institutionalize role and participation of women in mainstream development processes. For example, the Local Self Governance Act of 1999 included provisions for 20 percent reservation for women in local bodies (ActionAid, 2015). Following which the National Civil Code was amended which among other things legalized abortion (conditionally) and gave women inheritance rights (Tamang, 2009). Similarly, gender responsive budgeting was introduced by the government in 2007 to fulfill international commitments. All ministries of the GoN were directed to prepare budget as per the set indicators. In addition to meeting the requirements, the Ministries and line departments working on water, energy, and environment sectors also established gender and social inclusion (GESI) unit for mainstreaming gender into their organization's activities

² A practice in which a Hindu widow sacrifices herself by sitting on the funeral pyre of her husband

(Goodrich et al., 2017; Shrestha and Clement, 2019). Lastly, in recent years, 33 percent representation of women has been guaranteed in parliamentary bodies (GoN, 2015).

All these efforts have been useful in improving women's status to a great extent. However, Nepal's patriarchal, patrilineal, and caste based social system still continues to limit women's possibilities and capabilities for effective participation in the policy and development arena (ADB, 2010; Laxaa, 2015; Udas, 2006; Udas, 2014). Policies, plan, and programs continue to maintain a view of women as homogeneous entity, overlooking the fact that some women may be more privileged than other due to their social, economic and political identities. This has hindered achieving desired results towards promoting gender equality (Shrestha & Clement, 2019). In addition, Nepal's water resource sector continues to be driven by a dominating technocratic masculine approach. Introduction of ideas around GESI and appointment of sociologists for assessing water resource development programs have been a recent attention. Hence, its effective applicability in changing the dominant paradigm is yet to be seen (Goodrich et al., 2017; Shrestha & Clement, 2019).

6. WOMEN AND WATER RESOURCES DEVELOPMENT IN NEPAL

6.1 Pre-panchayat Era (Before 1960)

Till the end of the 19th century, no serious efforts had been initiated by the Nepali on water resources development. There existed water systems for drinking and irrigation, however were traditional and self-governed and managed by local communities. In around the beginning of the 20th century, "modern" developments in the water resources development were sanctioned, including the 500 KW Pharping hydroelectric plant; 649 KW Sundarijal hydroelectric plant; Chandra Nahar (irrigation channel); and the Manusmara irrigation system. However, these initiatives were primarily designed to service then Rana oligarchs and select public elites based in Kathmandu or nearby areas (Shrestha, 2018).

Following the political changes in 1950, the country took initial strides towards building the economic foundation for growth and progress through infrastructure development. The first Five Year Plan (1956-61) was formulated and focused on among other things, expansion of public drinking water and irrigation systems in country (NPC, 1956).

Water roles of Nepali women during this era were largely defined by the still traditional state and socio-economic systems. Majority of women lacked access to education and their life continued to reel around daily household tasks and farming. Women in general did not have decision making power, neither at home, nor in the public sphere.

6.2 Panchayat Era (1960-1990)

The era marked major global shifts in discourses around development planning; water resources management; gender mainstreaming; and sustainable development. With Nepal having opened its doors to the outside world, norms and principles forwarded by these global discourses found their way in into Nepal's policy and planning exercise. Ideas around participation and inclusion were at buzz and slowly made way into sectoral planning exercise. For example, in the 1980's, approaches of participatory irrigation were tested and farmers were included in planning and

implementation of small and medium scale irrigation system (Pradhan & Belbase, 2018). However, while women constituted a significant share of agriculture labor in Nepal, these early efforts did not build recognition to their role as farmers and hence did not participate in the consultations and meetings. Policies and plans formulated on drinking water and irrigation during this period remained gender blind and did not envision women as active participants of the water decision making processes.

By this time, the rural and urban divide on the role and recognition of women in the development space was becoming visible. While girls and women in urban areas had benefitted through improved access to education and opportunities, majority of rural women were still confined to household tasks and farming activities. Very few women were in decision making positions in government as well as in other sectors.

6.3 Multi-party Democracy (1990-2006)

Nepal's new democratic socio-political order supported the growth of civil society. This enabled many women activists, INGOs and NGOs to advocate for the recognition, rights, and opportunities of women, including that on water resources (Shrestha, 2018). Dubbed as the period of Nepal's first-generation liberal policy reforms, frameworks enacted to govern and manage natural resources also sought to build compliance to the international commitments on gender and development. The following sections review the policies and periodic development plans from a gender inclusion perspective.

6.3.1 Policies and Legislations on Water Resources

Water Resources Act, 1992

Nepal's first and continuing legislation on water resources was formulated with the objective to advance development, management, and conservation of water resources in the country. Among other things, it outlined drinking, domestic use, irrigation and agriculture, and hydropower development as being the top priorities for water resources utilization. A key highlight of the legislation is the institutionalization of Water User Association (WUA) for harnessing collective benefits of water resources at local levels. These WUAs were vested with the responsibility and granted autonomy and corporate rights. As such, they have their own constitution that govern role and functioning. For instance, the constitution of most of user's association have set criteria for securing membership in WUAs – for example, the member should be household head and should have land ownership certificates (Meinzen-Dick & Zwarteveen, 1998).

Water Resources Rules, 1993

This rule was drawn to operationalize the Water Resources Act, 1992. It provides for the formation and registration of consumer's association to use water resources in an institutionalized basis. The rule also provisioned the establishment of the District Water Resources Committee; Water Resources Utilization Inquiry Committee; Service Charge Fixation Committee; and the Compensation Fixation Committee for proper regulation and development of water resources in the country (MoEWRI, 1993).

The Act and the Rules, through the WUAs, while successfully build recognition to include, engage, and empower local water users in decision making and management processes, both however

remained gender blind. While the focus was on communities at large, ideas of inclusion and representation of women within such communities were absent. This is particularly important because the first three areas of priorities forwarded by the Act - drinking water and domestic use, irrigation and agricultural use, are water uses which are directly linked with the roles and functions of women in Nepali society. For example, the Rules has no provisions for representation of women and marginalized groups, be it the formation of consumers association or any other major committees mentioned in the Rule.

Irrigation Policy, 1992 and 1997

Both policies have been formulated with the objective to increase irrigation capacity by enhancing farmer's participation in managing irrigation system. Both policies have encouraged formation of WUAs and have delegated functions, duties and power to them to manage the irrigation system. In addition, both policies have emphasized on women participation in WUAs and have allotted 20 percent of women representation in the executive committee of WUA.

Drinking water Regulation, 1998

Among other things the regulation provides for the establishment and registration of Consumer Organization or Drinking Water Users Association for the purposes of management and use of drinking water by collective groups of people. Likewise, it provisions for the formation of different committees, including that on Source Utilization; Dispute Settlement Committee; Compensation Determination Committee; and the Service Charge Determination Committee.

The Regulation was formulated after the concept of gender mainstreaming had gained popularity at the global as well as national development discourses. Hence, attempts to represent women in local processes was sought through reservation quotas – mandated that two of the nine members in the Consumer Organization had to be females. However, no such provisions were made for including women in other aforementioned committees set up for regulation and management. Similarly, the need to include members of marginalized and disadvantaged communities was not recognized. In addition, the rules are both ambiguous and biased on the assumption that everyone in the project area will equally benefit and gain access to drinking water services.

Irrigation Rules, 2000

The Irrigation Rules 2000, which was amended in 2060 has been made in exercise of the power conferred by Section 24 of the Water Resource Act 1992. The Regulation deals with the proper management and usage of water resources for irrigation. It provides for the formation of Irrigation Water User's Association and outlines the criteria for election and dissolution of the executive committee of the Irrigation Water User's Association along with delegating functions, duties and power to the WUAs formed. The rule also provisions the joint management of large-scale irrigation systems developed by the GoN with the user's association as well as the transfer of irrigation projects developed by the GoN to the User's associations or local bodies.

The rule provisions 11-member executive committee constituting 33 percent of women including two from Dalit, downtrodden and backward ethnic community during the formation of the Irrigation

WUAs. However, similar provisions are not found in other committees that shall be formed in accordance to this rule. Large scale project committee for example, mentioned in rule 31 is an important committee that will work in close coordination with the GoN to implement and monitor irrigation projects. There are no inclusionary provisions for this committee.

National Water Resources Strategy 2002/ National Water Plan, 2003

Supported by key international development partners, the National Water Resource Strategy (NWRS) and the National Water Plan adopted the principles of the IWRM to deliver a systematic holistic outlook on water resource management in Nepal (Suhardiman et al., 2015). They focus on addressing water sector needs and issues through holistic management of water sources, decentralized delivery of water services; maximum stakeholder participation; adoption of innovative technologies and practices; etc. The formulations were based on the principle of interdependence of water to socio-economic development, and hence emphasizes on the need to ensure balanced gender participation, social equity, and balanced rural-urban growth for improving health, well-being, and quality of life of the communities (WECS, 2002).

The IWRM approach embraces gender mainstreaming approach to water resource management (CAP-NET, GWA 2014). As a result, the NWRS and the National Water Plan, for the first time, drew relevance to issues of gender equality and social inclusion on long term water planning. The National Water Plan aims to improve the living standard and quality of life of the people, and forwards crucial inclusionary norms such as decentralized delivery of water services; economic efficiency and social equity; and participation and consultation of all stakeholders. The programs developed under each of the strategic outputs draw focus on GESI related issues. For example, the Rural Water Supply and Sanitation Program (RWSSP) under the Drinking Water Supply, Sanitation and Hygiene Program focused on serving socially and economically disadvantaged groups by reducing the percentage of community contribution for the project to 10 percent. It also included strategies for promoting, gender sensitization, non-formal education and income-generating activities at the grassroot level to reduce the incidence of poverty (WECS, 2002)

However, the success of IWRM has been questioned in many countries including Nepal. Nevertheless, in order to support effective implementation of IWRM practice, the GoN is recently developing River Basin Plans. It is yet to be seen how the plan and the planning process address issues of gender and inclusion.

Irrigation Policy, 2003

The Irrigation Policy 2003, adopted the principles set by NWRS. The objective of the policy was to provide year-round irrigation to suitable land; to develop institutional capacity of WUAs for sustainable management of irrigation system; and enhance skills, knowledge, and capability of people and organization working in irrigation sector.

Prior to the formulation of Irrigation Policy, the GoN had already rolled out the Local Self Governance Act (LSGA) with the objective to decentralize and institutionalize the process of development by enhancing the participation women and other socially and economically marginalized groups. In addition, the Dalit and Janajati movement for their identity and

representation in political and development discourse was on rise. As a result, Irrigation policy was instrumental in providing 33 percent of reservation to women and enhancing representation of Dalit, downtrodden, and backward ethnic communities in the executive body of WUA.

Rural Water Supply and Sanitation National Policy/Strategy, 2004

The Rural Water Supply and Sanitation National Policy/Strategy 2004 was formulated with the objective to meet the government target of providing drinking water and sanitation facility to all by 2017. Both provisions recognized women water burden and missed opportunities due to considerable time spend in fetching water. While the Rural Water and Sanitation Policy stressed on the role of women in water resource management, the strategy ensured the proportionate representation of gender, caste and disadvantage ethnic groups. It also emphasized on 30 percent representation of women in Water User's and Sanitation Committees. In addition, the strategy, also stress on conducting programs to empower women through adult education and income generating activities.

6.3.2 Development plans on water resources

The Eight (1992-1997), Ninth (1997-2002) and the Tenth (2002-2007) periodic development plans were formulated during this period. The Eight Plan recognized that drinking water and sanitation programs in rural areas cannot be successfully implemented and maintained or repaired without the participation of women. A separate section: Women in Development emphasized on compulsory participation of women in users' committees for the formulation and implementation of rural infrastructure programs like irrigation, drinking water and road construction (NPC, 1992). Similarly, the Ninth Plan emphasized on integrating women into mainstream development processes by ensuring gender equality and women's empowerment. In the irrigation sector, the plan committed for the involvement of women in WUAs and their capacity building (NPC, 1997). The Tenth Plan recognized the crucial roles that women play as collectors and managers of drinking water for households as well as noted that lack of access to drinking water can have negative impacts on education, household economy, and subsequently on gender equality. As such, it aimed at making women partners in water management through the increased role of females in the implementation of drinking water supply and sanitation programs. For this, representation of at least one female member in WUAs was made mandatory. This participation was considered important from the project sustainability point of view (NPC, 2002).

6.4 Post Monarchy (2007-2018)

Political changes leading to the formulation of a new constitution, were instrumental in building formidable rights and guarantees for women representation, including that in the parliament and at local governments. For example, the new rule mandate two of the four ward members at local bodies have to be women, one of whom must belong to the Dalit caste (GoN, 2015). In addition, the constitution also mentions that the policies of the state shall "guarantee good governance by ensuring the equal and easy access of the people to the services and facilities delivered by the State, while making public administration fair, competent, impartial, transparent, free from corruption, accountable and participatory" (GoN, 2015, pg. 32).

6.4.1 Water Resources Acts and Policies

Irrigation Policy 2070 (2013)

The Irrigation Policy was formulated to better manage the country's water resources for increased productivity of all arable land and provide year-round sustainable irrigation facility for increased food security and poverty alleviation. The policy has adopted the principles of IWRM. It delegates power and responsibility to water user associations and local level bodies for development, use, and management of irrigation systems. Similarly, it has also focused on capacity development and institutional strengthening of the local level institutions for small scale irrigation projects. It also aims to involve water users from the beginning of project development.

The policy, on paper, is more inclusive than its predecessors. It calls for the consideration of socio-economic factors in design and implementation to ensure social justice and balanced development in the irrigation management system. It has stressed on the need for gender equality, positive discrimination and social inclusion in all irrigation related activities. It provisions subsidies on irrigation services to poor and marginalized groups for them to benefit from irrigation services, as well as, supports poverty alleviation and women empowerment by identifying the need improved capabilities, technology, and opportunities for participation of women and economically disadvantaged groups. The previous irrigation policy did not include such provisions for women and backward groups.

Similarly, the policy recommends at least thirty three percent representation of women and members of disadvantaged communities in WUAs. It has called on the need for social auditing and public hearing for EIA studies and other information dissemination. Previous irrigation policies did not these provisions for effective and timely delivery of information to all strata of the population.

National Water Supply and Sanitation Policy (NWSSP) 2014 (is in draft form)

The NWSSP aims to "...reduce urban and rural poverty by ensuring equitable socio-economic development, improving health and the quality of life of the people and protection of environment through the provision of sustainable water supply and sanitation services" (GoN, 2014). The main objectives of the policy are to ensure the availability of safe and adequate drinking water and sanitation services; manage water resources for drinking; and ensure coordination and cooperation of local bodies and user associations.

The policy has set certain objectives to ensure that water and sanitation services are reachable to all sections of the population. Objectives 2 and 3 focus on "ensuring participation of the users, especially women and the poor and marginalized groups, in decision making at all levels" along with "ensuring the access of women, poor and marginalized groups, including slum and squatter dwellers and disabled, to water supply and sanitation services". To meet these objectives, it calls for the participation of women, poor, and marginalized groups of consumers in decision making processes, including during community consultations for planning, operation and management. Similarly, the focus is on making services accessible to these groups who are generally deprived of the benefit of improved water supply and sanitation facilities for one reason or another.

Along with these outlined policies, various strategies have been identified against each policy statement. To include more women and marginalized groups in decision making, the number of women members in the executive body of service providers shall be increased to one-third of the total number of executive members. In addition to that, at least one female member shall hold one of the important positions of the Chair, Vice-chair, Member Secretary or Treasurer in the WUAs. Similarly, this executive committee shall also constitute at least one member from disadvantaged and indigenous groups. The strategy to extensively consult with the identified poor and vulnerable consumers during tariff setting process helps to properly understand their needs and concerns and provide equitable delivery of services. The Policy also identifies the need for building a socio-political understanding of the service area, and recommends preparation of local social maps to identify poor communities, slums and squatters requiring special assistance to access services. Also, education and awareness programs have been recommended for the removal of taboos and discriminations against women and lower caste groups so that they can also be part of the drinking water and sanitation services. Such measures have helped to equitably distribute water services, ensured inclusion, and sustainable management of water and sanitation services.

6.4.2 Development Plans on Water Resources

During the formulation of the Eleventh Plan (2007-2010), the interim parliament also passed a bill to ensure 33 percent representation of women in all state machinery. As such, this period and the plan itself have a major focus on gender mainstreaming and social inclusion. The plan has emphasized on an appropriate representation of women and other underrepresented social groups in the formation of water users' associations, as well as the proportional representation of women in decision-making levels of such user associations to ensure their effective and powerful roles (NPC, 2007).

The Twelfth Plan (2010-2013) does not outline specific policy actions to be taken for improved access to drinking water and irrigation facilities for women. However, it provides a general focus on the need to increase access to such services to all, regardless of gender, caste, economic or other social composition (NPC, 2010). Similarly, the Thirteenth Plan (2013-2016) and the Fourteenth Plan (2016- 2019) also do not mention specific women-centric policies to increase their access or participation in drinking water. However, they strongly focus on institutional mechanisms to manage and operate drinking water schemes. It also recommends the need to build competencies of local communities so that they can own the entire process of improved drinking water services in their communities.

The Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016 – 2030) was formulated during this period. Organized in eleven themes, the Plan overall focuses on integration, inclusion, and decentralization. It emphasizes the need for purposeful engagements on GESI, and notes that in the context of Nepali society, special measures should be adopted for maximizing the involvement of women, marginalized, disadvantaged groups. The following two themes of the Plan draw attention with regards to this enquiry:

Theme 1 “Access and Utilization” has the objective to increase access to WASH services to all areas of the country. It notes that “social attitudes about caste, ethnic groups, religion and persons living with chronic illness can be factors in the exclusion of persons or communities from water sources, which are otherwise physically accessible... and that women have added responsibilities of managing water”. It proposes strategic actions such as using GPS in identifying and tracking unreached communities.

Theme 9 “Diversity and Inclusion” is solely focused on GESI. It focuses on non-discrimination, marginalization and exclusion, and cross subsidy to make the WASH sector more inclusive and service oriented. Specific actions such as capacity development; prioritizing women, poor and excluded groups; cross subsidies, equity-based tariffs; and selection and prioritization of projects that support GESI mainstreaming have been proposed with a goal to encourage active participation of all stakeholders and develop ownership of WASH services at the local level to support sustainability and optimum utilization of resources.

6.4 Synthesis and Observations

The table below synthesizes and illustrates the progression of gender dimensions in water related plans and policies formulated after 1990’s. The components illustrated in the table are used to assess gender and social inclusivity in the acts, rules, regulations, policies, and plans on water supply and irrigation formulated till date. The components illustrated in the table assess following aspects in the water related provisions:

Gender metrics: Does the policy require that the gender of participants be recorded?

Invitation: Does the policy mandate inclusion of certain percent women in the committees?

Presentation: What are the rules around quorum? Is the committee meeting valid only if the nominated percent women are available?

Participation: Are there steps to remove obstacles for participation? E.g. village meetings rather than adverts in newspaper.

Engagement: Are there steps to empower participants? E.g. education programs

Dalit/Marginalized: Are there special provisions for marginalized groups?

Levels effected: Do all the rules apply to all committee levels? E.g. are there requirements for important positions?

Support: Are there specialized programs designed to address inequalities? E.g. provision of specialized trainings, access to technologies.

Monitoring and Evaluation: Is the effectiveness of the program against gender metrics being actively monitored?

Legislation/Policy	Year	Gender Metrics	Invitation	Presentation	Engagement	Dalit/Marginalized	Levels effected	Support ⁷	Monitoring
Water Resources Act	1992								
Water Resources Rules	1993								
Irrigation Policy	1992		22%						
Irrigation Policy	1997		22%						
Drinking Water Regulation / Rules	1998	Y	22%						
Irrigation Rules/Regulation	2000	Y	33%		Y	Y			
National Water Resources Strategy	2002	Y			Y	Y			
Irrigation Policy	2003	Y	33%		Y	Y			
Rural Water Supply and Sanitation National Policy	2004	Y							
Rural Water Supply and Sanitation Strategy	2004	Y	30%		Y	Y		Y	
National Water Plan	2005	Y			Y	Y			
National Urban Water Supply and Sanitation Policy	2009	Y	33%						
Irrigation Policy	2013	Y	33%		Y	Y		Y	
National Water Supply and Sanitation Policy (draft)	2014	Y	33%		Y	Y	Y	Y	
Nepal Water Supply, Sanitation and Hygiene Sector Development Plan	2016	Y			Y	Y	Y	Y	

The table exhibits that the Irrigation Policy, 1992 was the pioneer in recognizing women's role in water resource management. It was the first to mandate 22 percent women's representation in the executive committee of the WUAs. Subsequently, other water related provisions formulated in the 1990's, the Irrigation Policy 1997 and Drinking water Rules/ Regulation that followed the same path. These provisions however were not inclusive of the Dalits and the marginalized communities. It was only after the rise in Dalit and indigenous peoples' movements in late 1990's that these groups received policy recognition. As such, all the water related provisions formulated after 1999 have mandated the inclusion of Dalits, and the marginalized communities in the executive committees of WUAs. However, beside the Irrigation Regulation of 2002, which allocated two seats for Dalits and underprivileged groups in Irrigation WUAs, none of the other policies provisioned the same.

Likewise, the National Water Resource Strategy, 2002 and its action plan- the National Water Plan, 2005 have been the inspiration for the provisions formulated after 2002. As mentioned in the earlier section, they have adopted IWRM approach, which embraces social equity principle for water resource management. Both these documents though do not explicitly specify the percentage or number of women and marginalized group participation in water user's group/committee/ association, however, encourage gender mainstreaming while managing water resources. They also emphasize on socio- economic development of all. It can also be studied that women representation in WUAs in most of the provisions formulated after 2000 have been increased to 33 percent. Further, the political debate on women's representation in Nepal's first Constituent Assembly and the federal and local elections held after 2007 also influenced water related provisions drafted afterwards. For instance, the National Water Supply and Sanitation

Policy, 2014, not only directs 33 percent of women representation in water supply and sanitation user's groups but also instructs at least one female member to hold one of the important position of chair, vice-chair, member secretary or treasurer in WUAs. It is a landmark step in securing meaningful participation of women in local water bodies.

The steps taken towards enhancing women's role in water resource management can be seen in recent provisions such as the Rural Water Supply and Sanitation Strategy (2004), Irrigation Policy 2013, National Water Supply and Sanitation Policy (draft), 2014, and Nepal Water Supply, Sanitation and Hygiene Sector Development Plan, 2016. These provisions unlike the preceding ones not only emphasize on capacity building of the water and sanitation user's groups but also stress on empowering women through special programs. Further, Nepal Water Supply, Sanitation and Hygiene Sector Development Plan, 2016 has emphasized on the active engagement of girls/women and on reducing gender inequality in water resource management through programs designed to cater their needs.

Despite efforts undertaken to increase women's representation and participation in the WUAs, there is space for further improvements. For instance, all the provisions discussed above have been forwarded with the consideration that women are homogenous entities. They largely ignore the idea and importance of intersectionality in gender. Representation of women from Dalit and marginalized communities as well as the need for specialized programs for these groups have not been specified. Moreover, none of these provisions have mandated the presence of women executive members in user's committee meetings. This means that even in the absence of nominated/elected women members, meetings and decisions taken are valid. However, user's groups/association constitution may require the presence of certain percentage of women executive members to valid user's groups/ associations meetings.

In addition, none of the water related act, rules, regulation, policies assessed above have monitoring and evaluation systems to examine the effectiveness of gender and social inclusion initiatives directed in these provisions.

7. CONCLUSION and WAY FORWARD

The assessment of water related provisions show notable changes over the period in enhancing the participation of women, Dalit, and marginalized groups in local water bodies. The water related policies formulated after 1990's adopted a participatory approach and delegated power to the user's committee to manage local water resources. While doing so, reservations for women have been secured to increase their participation in decision making bodies. The policies formulated especially after the late 1990's have also emphasized on the participation of Dalits and other marginalized communities in WUAs. These steps have contributed to gender mainstreaming and social inclusion in water policies. However, following gaps have been identified, and are essential ensuring gender mainstreaming in Nepal's water resource management:

i) **Homogenization of women as a single entity:** All the provisions have taken women as a single entity, neglecting the fact that women belonging to Dalit, and other marginalized

communities may have different experiences and are further behind. Moreover, the reservations for women have been seen to only benefit the educated, resourceful, and opiated women – usually belonging to higher class. More often, the actual needs and interests of women users, irrigators, and farmers are underrepresented (Ghimire, 2005). Hence, securing participation of women from different strata in such user's groups/ associations/ committee is crucial.

ii) **Meaningful participation of women:** Literatures suggest that positive discrimination to incorporate women and marginalized groups in WUAs has not produced the desired outcomes. Inclusion of women and lower caste groups in many of such committees and associations is seen as fulfilling a mandatory requirement rather than a prerequisite for inclusiveness (Shrestha and Clement, 2018). Hence, provisions such as compulsory participation of women representatives in meetings and programs and their capacity development should be initiated to ensure their meaningful and active participation in WUAs

iii) **Balanced participation of women:** Studies have shown that with the increasing trend in male out-migration, women have been taking up major responsibilities in household, agriculture and communal activities. As such, women's representation in WUAs should be increased from 33 to 50 percent to encourage their balanced participation.

iv) **Revisiting criteria of user group associations:** The above section illustrates that policies formulated mostly after 1990's have made provision for the formation of user group's association and committees and mandate representation of at least 33 percent women. However, the membership criteria that mandate members to own lands, be household heads etc. limit women from being members, as most of these criteria are fulfilled by men. Acquisition, inheritance, transfer and control over land is mostly of men and hence, women or tenants who do not own land are left unrepresented in the WUAs (ICIMOD, 2016; Udas, 2006; Meinzen-Dick & Zwarteveen, 1998). Further, as stated above, such criteria may also restrict participation of women belonging to migrant household. As such their water related needs are not met. Hence, such criteria should be revised.

v) **Capacity building of women, Dalits and marginalized groups:** The programs proposed in Nepal Water Supply, Sanitation and Hygiene Sector Development Plan such as capacity development programs to women, poor and excluded groups, cross subsidy mechanisms, equity-based tariffs to support women and disadvantage groups should also be replicated in other water related provisions in the future to empower women and marginalized groups.

vi) **Monitoring and evaluation mechanism:** Firstly, the monitoring and evaluation entities should be established, where not available, for the smooth implementation of the formulated policies and programs. Secondly, such units must be assigned to assess the commitments of water user's group/ committee/ association in incorporating and enhancing participation of women, dalit and marginalized groups in water resource management. For this, monitoring tools should be developed.

The study has pointed out several specific gaps in the policies that needs to be addressed to get better results in achieving gender equality in water resource management at local level. In addition, the research team would like to suggest concerned authorities to investigate the effects of masculinities on the implementation of water related policies and programs in Nepal in order to dissect the gender inequality in water resource management from the privileged perspective.

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ANNEX 1

Plans

- Drinking Water Supply and Sanitation Sector Review and Development Plan (1991-2000)
- Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016 – 2030)

Periodic Development Plans

- First Plan (1956-61)
- Second Plan (1962-1965)
- Third Plan (1965-1970)
- Fourth Plan (1970-1975)
- Fifth Plan (1975-1980)
- Sixth Plan (1980-1985)
- Seventh Plan (1985-1990)
- Eighth Plan (1992-1997)
- Ninth Plan (1997-2002)
- Tenth Plan (2002-2007)
- Eleventh Plan (2007-2010)
- Twelfth Plan (2010-2013)
- Thirteenth Plan (2013-2016)
- Fourteenth Plan (2016- 2019)

Policies, Strategies and Guidelines

- National Water Supply and Sanitation Policy (NWSSP), 2014 (draft)
- Water Resources Strategy 2002
- Drinking Water Guidelines 2069
- National Water Plan 2003
- Irrigation Policy 1992, 1997, 2003, 2013
- Rural Water Supply and Sanitation Policy/Strategy 2004

Laws

- Water Resources Act 2049 (1992)
- Water Resources Rules 2050 (1993)
- Drinking water Regulation/Rules 2055 (1998)
- Irrigation Rules 2056 (2000)
- Constitution of Nepal 2072 (2015)
- Local Self Governance Act 2055 (1999)

