

Enhancing Gender Equity in Water Resources Management in Peru



Image: Imleedh Ali, Piktochart.

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Enhancing Gender Mainstreaming in Water Resources Management: A Policy Report for Peru's National Water Authority was authored by four students in the Master of Public Policy and Global Affairs Program (MPPGA) at the University of British Columbia (UBC), to be referred to in this report as the “UBC Research Team” (UBCRT). This report was commissioned by the National Water Authority (ANA) in Peru to inform an enhanced effort to implement a gender mainstreaming (GM) approach to water management in Peru.

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A CAVEAT ON UBCRT'S POSITIONALITY

The UBCRT would like to acknowledge the positionality of its members, and subsequent influences of this on the research project. The UBCRT is comprised of English-speaking members, originating from different backgrounds and upbringings which have fostered different perspectives and understandings of life experiences (i.e. trauma, socio-cultural norms, worldviews). The UBCRT is aware of the privileges that come from living in Canada, and compared to many individuals locally, regionally, and internationally.

There is much about the Peruvian context and way of life the UBCRT has gained an appreciation for through time spent conducting fieldwork. As Canadian graduate students, the UBCRT has strived to remain aware of individual team members' positionality, relationality, and ethicality at all stages of this research project. The UBCRT has also strived to remain sensitive to the epistemological limitations of team members' points of view and knowledge. The UBCRT has strived to be ethical beyond the minimum Behavioural Research Ethics Board (BREB) standards, and acknowledge how the positionality of team members has placed limitations on this research project's findings, analysis, and recommendations. The UBCRT has endeavoured throughout this research process to consider and carefully attend to the real and perceived needs of the Peruvian people (in their context), as they relate to gender and water management.

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***Citation Note:** In adherence to privacy and confidentiality and in order to protect identities, the University of British Columbia Research Team (UBCRT) will be citing the interviewee participants anonymously. The following citation will be used to indicate information cited from field interviews:

“Interviewee. Interviewed by UBCRT. Peru, Lima. November 28th - December 11th, 2019. Google Translate.”

ACRONYMS

ANA	National Water Authority
ALA	Local Water Administration
AAA	Administrative Water Authority
ANPE	National Association of Organic Producers
BREB	Behaviour Research Ethics Board
CARE	Cooperative
CIRDI	CIRDI
CRHC	Basin Water Resources Councils
DDP	Ombudsperson's Office of Peru
FT	Forest Trends
GM	Gender Mainstreaming
GBV	Gender Based Violence
GMC	Gender Mainstreaming Commission
IWRM	Integrated Water Resources Management
IPROGA	Water Management Promotion Institute
NGO	Non-Government Organization
MIMP	Ministry of Women and Vulnerable Populations
MINAGRI	Ministry of Agriculture
MINAM	Ministry of Environment
PAP	Pre-Analysis Plan
QCB	Quilca Chili Basin
SDG	Sustainable Development Goals
WUO	Water User Organizations
WUOD	Water User Organizations Directorate
EKPA	Experience, Knowledge, Perceptions & Attitudes Survey
UBC	The University of British Columbia
UBCRT	The University of British Columbia Research Team
UN	United Nations
WUSC	World University Education Service

GLOSSARY

Gender	“Refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context”[1].
Gender-Based Violence	“Gender-based violence...is violence that is committed against someone based on their gender identity, gender expression or perceived gender...GBV is not limited to physical abuse but includes words, actions, or attempts to degrade, control, humiliate, intimidate, coerce, deprive, threaten, or harm another person”[2].
Gender Mainstreaming	“...[is]the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels”[3].
Integrated Water Resources Management	IWRM is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems” [4].
Interculturality	“an ethical-political paradigm is based on the recognition of cultural differences as one of the pillars of building a society democratic. The Intercultural Approach implies that the State values and incorporates the different cultural visions, conceptions of well-being and development of the various groups ethnic-cultural for the generation of services with cultural relevance, the promotion of intercultural citizenship based on dialogue and attention differentiated the indigenous peoples and the Afro-Peruvian population” [5].
Traditional Knowledge	“is knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity” [6].

[1] United Nations Women. “Concepts and definitions: Gender.” *The United Nations*.

[2] Status of Women Canada. “About Gender Based Violence.” *Government of Canada*. Last modified December 10, 2018.

[3] United Nations Women. “Concepts and definitions: Equality between women and men (gender equality).” *The United Nations*.

[4] Global Water Partnership. “The Need for an Integrated Approach.” *Global Water Partnership*. Last modified January 3, 2017.

[5] Ministerio de Cultura. “Política Nacional Para La Transversalización Del Enfoque Intercultural.” *Ministerio de Cultura*. Peru: 2015.

[6] WIPO. “Traditional Knowledge.” *The World Intellectual Property Organization (WIPO)*.



EXECUTIVE SUMMARY

Understandings of Gender in Peru

Peru is an extremely socially, culturally, and geographically diverse country. Even though Peru is a water-rich nation, distribution and access to water resources varies greatly depending on region, socio-economic status, culture, and gender [7]. Women face large inequities in access to water resources, as well as access to decision-making positions and the opportunity to participate in the management of water resources [8]. For example, only 8 out of 170 Water User Organizations (WUOs) are managed by women [9]. The “machismo” culture remains dominant, as does violence against women. Socio-cultural and geographical conditions in Peru exacerbate existing gender inequities in water management, which ultimately threaten sustainable socio-economic development across the country.

Gender and Water Resources Management

The ANA is the governing body of water resources in Peru. In 2019, the Ministry of Women and Vulnerable Populations (MIMP) mandated all government ministries and bodies to implement the United Nations’ gender mainstreaming (GM) approach [10]. This approach seeks to create gender equity in all areas of governance and public policy around the world. The University of British Columbia Research Team (UBCRT) from the Master of Public Policy and Global Affairs (MPPGA) program at the University of British Columbia (UBC) completed an 8-month project on how the ANA might enhance gender equity through its water resources management policies and programming. This project included a 17-day fieldwork period where the UBCRT travelled to Lima and Arequipa, Peru to distribute a survey for all of the ANA HQ’s employees, conduct interviews with government officials and non-profit representatives, and hold two focus group sessions with women at the water basin level.

Key Research Findings

1. Women are disproportionately impacted by inadequate water quality, and lack of access to required quantities of water. Climate change will worsen these challenges [11].
2. Addressing gender inequities requires a cultural shift. Peruvians often refer to this as “switching the chip” [12]. Making women’s work more visible to attribute greater societal value is crucial for facilitating a cultural shift in perceptions of gender.
3. The ANA lacks a unified understanding of the GM approach. The understanding and implementation of the GM approach differs by each ministry, and even within directorates at the ANA [13].
4. Less than 20% of women have the right to vote on Water Basin Councils (WBCs) because the right to vote is given to those on the Water Registry List, which is predominantly men because men are the primary landowners [14].

[7-9] Interviewee. Interviewed by UBCRT. Peru, Lima. November 28th - December 11th, 2019. Google Translate.

[11] Pautrat O, Lucila. “Gender Mainstreaming in the Public Policies of the Peruvian State.” *KENÉ Institute of Forestry and Environmental Studies*.

[12] Interviewee. Interviewed by UBCRT. Peru, Lima. November 28th - December 11th, 2019. Google Translate.

[13] Interviewee. Interviewed by UBCRT. Peru, Lima. November 28th - December 11th, 2019. Google Translate.

5. Only 8 out of 170 Water User Organizations (WUOs) are managed by women [14].
6. The Quilca Chili Basin voluntarily developed a gender strategy. No other WBCs or WUOs have a gender strategy [15].
7. Several opportunities exist for the ANA to address gender inequities across all levels of governance at the ANA (i.e. HQ, AAA, ALA) which will improve implementation of the GM approach at the water basin level [16].
8. Several opportunities exist for the ANA to increase women's access to water resources and water management decision-making positions [17].
9. Gender initiatives increase international funding opportunities [18].

Internal Policy Recommendations

1. Establish a non-appropriable & non-negotiable budget for GM initiatives
2. Restructure & expand the mandate of the GMC

Basin Level Policy Recommendations

1. Mandate gender strategy and implementation plan at the basin level
2. Extend the right to vote on WBC decisions

Involving women in water management is a smart business decision

Increasing women's participation in water resources management will yield benefits such as an improved talent pool, inclusion of new perspectives and innovative ideas, as well as an increase in labour participation and productivity [19]. The ANA has the opportunity to become an institutional leader for GM in Peru. Promoting and enhancing gender equity is a smart business decision. The following report will guide the ANA's efforts to enhance gender equity in water resources management through its policies and programming.

[14-18] Interviewee. Interviewed by UBCRT. Peru, Lima. November 28th - December 11th, 2019. Google Translate.

[19] Thompson, Kate, et al. "Thirsty for Change: The untapped potential of women in urban water management." *Deloitte Review*, no. 20. (2017): 154-167



CHAPTER 1: INTRODUCTION

1.0 The Peruvian Context

Peru is a growing, emergent, and resource-rich economy [20], facing complex socio-cultural challenges. It is one of the top ten water-rich countries in the world [21]. In 2018, Peru's GDP reached \$222.4 billion, and currently remains one of the fastest-growing economies in the South American region [22]. Despite its potential for economic growth, the past half-century has seen a tumultuous political history that has arguably hindered Peru's socio-economic development and management of natural resources.

When it comes to socio-cultural understandings of gender, Peru adheres largely to patriarchal heteronormative standards, or “machismo” culture, especially when compared to other democracies. However, this is changing as evidenced through feminist demonstrations (“un violador tu camino”) the UBCRT observed during fieldwork in Lima. Additional evidence also revealed that younger generations are more tolerant towards a variety of topics and viewpoints related to gender and equity [23]. This suggests a cultural shift is underway in Peru.

When it comes to water governance and water resources management, Peru is still developing its ability to provide clean, safe, drinking water to all of its citizens. One of the biggest challenges is capacity promotion around resources to enforce legislation and reach remote communities in the Andes and the Amazon. Established in 2008, the ANA, under MINAGRI, has authority over all natural water resources in Peru, and continues to develop its policies and programming for the management of water resources because it remains a relatively new institution [24]. These factors, combined with various socio-cultural challenges in Peruvian society, make equitable water management policies and programming that account for gender difficult to implement.

2.0 Client Profile

Autoridad Nacional Del Agua (ANA)

The ANA was created on March 13, 2008 [25]. The ANA's mission statement is “to administer, conserve, protect and to take advantage of hydro resources of the different locations in the nation, in a sustainable manner, while at the same time promoting good water use practices” [26]. The core values at the ANA include: respect, probity, efficiency, suitability, veracity, loyalty and obedience, justice and equity and loyalty to the Rule of Law [27]. The ANA is governed by a Board of Directors as the highest authority in the institution. Below it are the Leadership unit and the General Management unit which includes three primary offices that oversee various other units: The Management Office, Office of Planning and Budget and the Office of Legal Advice [28]. While these offices have their own sub-units to run, they technically are not in direct charge of any directorates, but hierarchically are still above them.

[20] Misachi, John. “Which Country has the Most Fresh Water?” *World Atlas*. Last modified 2020.

[21] Encyclopædia Britannica. “Resources and Power.” *Encyclopædia Britannica Inc.* Last modified 2019.

[22] The World Bank. “Peru: Overview.” *The World Bank*. Last modified 2020.

[23] Dávila, Verónica and LeBrón, Marisol. “Un Violador En Tu Camino” and the Virality of Feminist Protest.” *Nada*. December 27, 2019.

[24-28] - The ANA. Web. The Authority. Last modified ND.

Directorates

1. Water Resource Administration Directorate

- Grants water user rights, and administers economic regimes and natural water sources. Conducts actions at the national level [29].

2. Water User Organization Directorate

- Supervises water user organizations, rate regimes, and conducts capacity building and recognition. Proposes norms, guidelines, and methodologies for water users [30].

3. Directorate of Quality and Evaluation Resources

- Protects, conserves, and evaluates the quality of water resources. Supports and controls monitoring of water quality [31].

4. Water Resource Planning and Development Division

- Conducts water planning, inter-institutional coordination, and water culture at the national level. Develops, plans and supervises the implementation of operational standards [32].

5. Directorate of the National Water Resource Information System

- Manages the National Water Resource Information System sharing resources with the National Environmental Information System [33].

Gender Mainstreaming Commission (GMC)

In accordance with the National Policy on Gender Equality (Supreme Decree 008-2019-MIMP), the ANA established the GMC in 2019 [34]. This commission is responsible for implementing the GM approach at the ANA. The GMC is currently housed at the ANA HQ office in Lima, Peru [35].

Autoridades Administrativas de Agua (AAA)

The AAA is in charge of managing water resources at the regional level [36]. This includes:

- Management of water basins.
- Water studies and water use approvals.
- Water use rights and authorizations for reuse of treated wastewater.
- Monitoring of water sources to ensure compliance with the payment of economic compensation.
- Studies, inventories, and monitoring and risk management of glaciers, lagoons and groundwater sources.

Administraciones Locales de Agua (ALA)

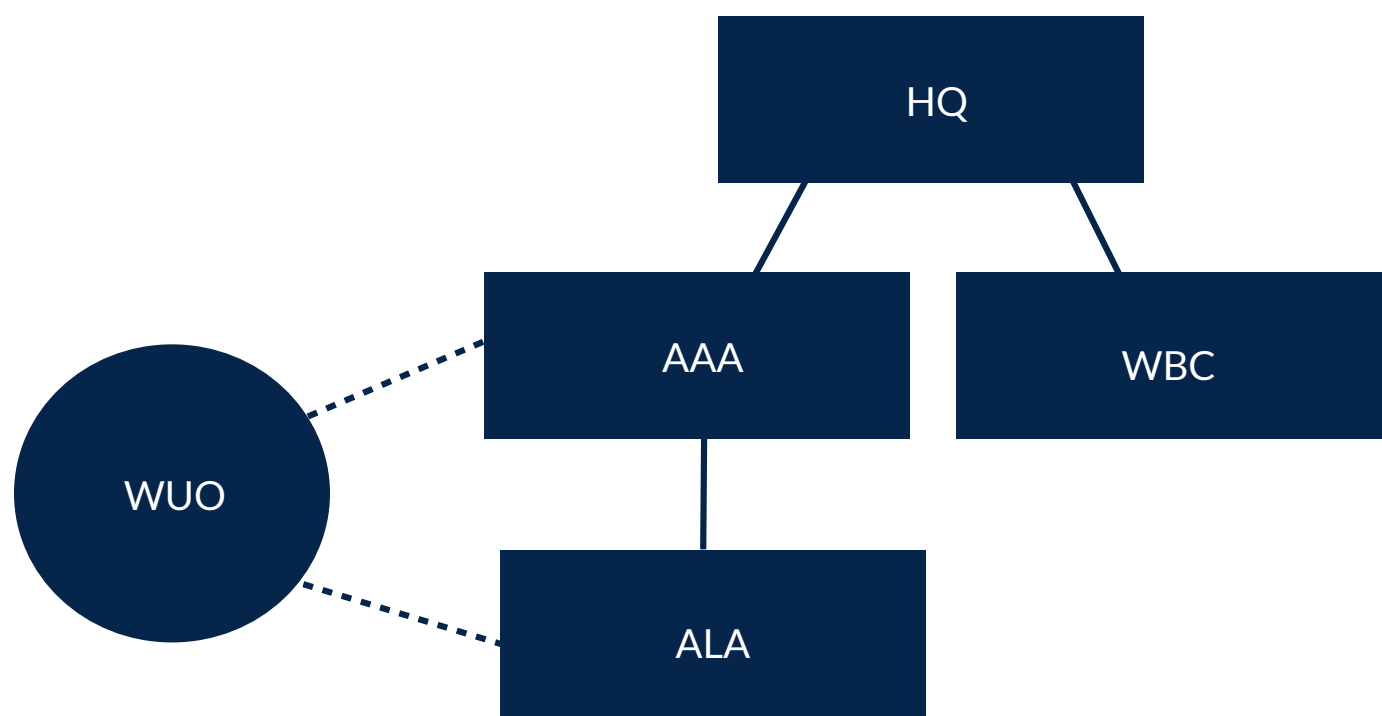
The ALA is in charge of managing water at the local level [37]. The ALAs support the AAA in their functions through the following:

- Training, education, and communication in order to promote water culture at the national level.
- Water resources are managed at their respective territorial levels.

Water User Organizations

Water User Boards or WUOs are community established boards that manage community and local level water resources [38]. These civil society organizations and local citizen-run boards are assisted by the ANA in the implementation of water use strategies, irrigation systems, and general water management, specifically by the WUOD [39]. They are typically formed in non-urban regions throughout all of Peru and their establishment is documented before the creation of the ANA [40].

Figure 1: Organizational Governance Structure of the ANA



1.1 Gender Gaps in Peru & at the ANA

Gender initiatives in Peru over the last 30 years have not been sustained long-term [41]. Deeply embedded social and cultural norms have perpetuated barriers to advancing understandings of gender and enhancing gender equity, which has led to lack of successful implementation of GM policies and programming. The National Policy on Gender Equality seeks to create a cross-sectoral GM approach to addressing gender inequities. Large questions remain about how to implement the GM approach, especially given inconsistent understandings of gender and GM throughout ANA and across various government ministries. A successful GM approach must go beyond relying on select individuals in authoritative decision-making positions within the ANA's organizational structures pushing for the pursuit of gender equity. Instead, GM initiatives must be coordinated throughout the ANA, across all levels of the institution from the ANA HQ down to the basin level.

Table 1.0 provides a brief overview of existing gender gaps in Peru, but is not exhaustive. A gender gap refers to the "disproportionate difference between men and women and boys and girls, particularly as reflected in attainment of development goals, access to resources and levels of participation. A gender gap indicates gender inequality. These gender gaps directly influence women and girls' access to water resources, as well as access to decision-making positions and opportunities to participate in water resources management" [42]. Gender gaps are exacerbated for the LGBTQ+ community and Indigenous peoples [43]. Appendix J provides an overview timeline of Gender initiatives in Peru and at the ANA.

Table 1.0: Gender Gaps in Peru & the ANA

Education	"The literacy rate is still larger among men than women, especially in rural areas and among indigenous populations" [44].
Socio-Cultural	The "machismo" culture remains dominant, as does violence against women. "49% of women in urban Lima and 69% in rural Cusco experience physical violence during their lifetime" [45]. Women are expected to adhere to traditional gender roles (i.e. cooking and cleaning) [46]. "Traditional patriarchal social norms contribute to perpetuating the existing gender gaps" [47].
Economic	"Large earning gaps persist, much above those observed in other LAC countries. Wage differences are mostly driven by informal employment (almost no gap in formal wage employment)"[48]. On average, women made 19% less than men per hour in 2015. Unpaid domestic work accounts for approximately 20% of Peru's GDP [49].
Environment	Women are disproportionately affected by water quality and quantity challenges. For example, approximately 2-3 years ago a neighbourhood in Lima was without water for 20 days [50]. During this water shortage one woman died carrying water back to her community. Climate change will compound these challenges [51].

[41] Interviewee, UBCRT Interview, 2019.

[42] United Nations. 2017. *Gender Equality Glossary of Terms and Concepts*.

[43] Interviewee, UBCRT Interview, 2019.

[44] World Bank. 2018. "Gender Gaps in Peru: An Overview." *The World Bank*.

[45] Peru Support Group. 2009. "Gender Relations and Women in Peru." *Peru Support Group*.

[46] Interviewee. Interviewed by UBCRT. Peru, Lima. November 28th - December 11th, 2019. Google Translate

[47] World Bank, "Gender Gaps," 2018.

[48] Ibid.

[49-50] Interviewee, UBCRT Interview, 2019.

Political	“Despite its steady growing trend with the establishment of a 30 percent quota, the share of women represented in Parliament is still low in Peru compared to the LAC average and relative to other Andean countries” [52].
Technological	Women are excluded from decision making because they lack access to technical knowledge (e.g. computer literacy skills to understand rainfall maps to inform allocation of quantities of water) [53]. As a result, more men participate in modern irrigation infrastructure, with women participating more in traditional and ancestral irrigation and water management practices [54].

1.2 Evidence of Economic Returns on Investment in Gender Equity

Gender Equity As Smart Economics

Women still face inequitable opportunities compared to men when it comes to accessing opportunities enabling financial independence, labour force participation, inheritance rights, ownership, and entrepreneurship [55]. Globally, half of the world’s population is not being utilized to the fullest potential for productivity, efficiency, and participation in economies. This is similar to natural resources being under-utilized (i.e. wind or solar energy) or over-utilized (i.e. fossil fuels), which can have far-ranging socio-economic and environmental repercussions. In the process of implementing a GM approach, and being more inclusive of women in economies, ‘smart economics’ practices seek to enhance economic efficiency. For instance, if UN SDG #5 was successfully achieved by more countries, there would be a global rise in economic prosperity. It is estimated by the UN that “increasing female employment rates in OECD countries to that of Sweden, could boost GDP over USD 6 trillion dollars” [56]. Yet, currently, it is estimated that the GDP of many countries suffer losses of up to 15% healthcare costs from Gender-Based Violence (GBV) [57].

An example of women being disadvantaged in the agricultural sector comes from a study conducted by Nancy Qian looking at gender composition on Chinese farmlands in the pre-reform and post-reform periods. The study found in the post- and pre-reform periods there was an “increase of girls in the tea plantation regions...but it went down in the regions that were more suitable for orchards” [58]. The reason for this gendered composition in farming was due to women being seen as more useful in “the production of tea which needs to be plucked with delicate fingers,” compared to orchards which required more labour-intensive lifting requirements [59].

In Cote D’Ivoire, economic returns on investment in gender equity are further evidenced through the different approaches men and women have to make decisions about what crops to plant. It also demonstrates men and women having different approaches to purchasing and investment, as women tend to value the future more than men.

[52] World Bank, “Gender Gaps,” 2018.

[53] Interviewee, UBCRT Interview, 2019.

[54] Ibid.

[55] Ortiz-Ospina, Esteban and Max Roser. “Economic Inequality by Gender.” *Sustainable Development Goals Tracker by Our World In Data*. (2020)

[56] UN Women. “Facts and Figures: Economic Empowerment.” *The United Nations*. Last modified July, 2018.

[57] UN Women, “Facts and Figures,” 2018.

[58] Banerjee, V. Abhijit, and Esther Duflo. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs, 2011.

[59] Banerjee & Duflo, *Poor Economics*, 2011.

Where men tend to grow cash crops such as cocoa and coffee, women tend to grow staple foods, such as bananas and vegetables. When men's crops do well, men tend to spend extra money earned on alcohol and other personal luxury items. When women's crops do well, women spend extra money earned on food for the entire household [60]. Many other global examples build evidence that women tend to be better financial "household managers" because they do not discount the future, and instead invest in the social and human capital of their children.

Economically, women are commonly undervalued and underutilized. This hurts local economies and macro-economic regional growth and prosperity. Lack of gender equity is deeply damaging not only to the livelihoods of families and children, but also to economies. Scholarly research strongly supports the notion that if countries want healthy, strong economies, both men and women need equal access to economic opportunities. Gender equity is an investment with massive and untapped returns. Gender equity is smart economics, and smart economics leads to smart business decisions.

Building the Business Case for Women in Water Resources Management

Water is essential for many economic activities. Currently, women are not equally represented in water resources management, and are disproportionately impacted by poor or inequitable water management decisions. A growing body of evidence suggests women are extremely effective at managing water resources. The following section will outline the business case for enhancing equity and integrating women in the policies and programming for water resources management.

Women in water management can increase social and economic returns, making water projects more sustainable, while advancing progress on Millennium (& Sustainable) Development Goals (MDGs) [61]. UN-Water estimates water projects are 6-7 times more effective when women are involved [62]. For example, in Pakistan, a collaboration between researchers and an all-female team led to the proposal of a new water tank for a village [63]. This plan was more cost-effective than the original developed by an all-male group, and ultimately led to better water management and quality-of-life, such as improved hygiene, for the village [64]. Four years later, the village built a new school for girls, which represented an investment in female empowerment [65]. This is one of many examples that illustrates how including women in water governance increases the likelihood of creating socially, environmentally, and economically sustainable solutions for water resources, with multiple returns on investment.

In 1992, the International Conference on Water and the Environment held in Dublin led to the development of four key principals. Principle number three states "women play a central role in the provision, management, and safeguarding of water.

[60] Ibid.

[61] Panda, Mishra Smita. "Mainstreaming Gender in Water Management: A Critical View." *Gender, Technology and Development* 11, no. 3 (October, 2017): 321-338.

[62-65]] Thompson, "Thirsty for Change", 2017.

As such, work over the past several decades highlighted the need to examine the gendered aspects of water access, uses, and conditions” [66]. More explicitly, women should have access to roles such as: financial managers, technical irrigators, operations specialists, system architects, engineers, and policymakers. Integrating women into these roles will help improve some of the gender inequities in the design, construction, and implementation of new and existing policies and programming for water resources management [67]. Increasing women’s participation in the roles listed above will also yield benefits such as an improved talent pool, inclusion of new perspectives and innovative ideas, and increased labour participation and productivity [68].

Economic productivity relies on securing water availability today and into the future [69]. Research suggests when women sign peace-making agreements, they are 35% more likely to last longer[70]. The inclusion of women in water decision-making processes could reduce the risk of water-related conflicts at the basin level. Additionally, women often hold valuable local ecological and social knowledge derived from traditionally constructed gender roles [71]. This knowledge should be incorporated and applied for both domestic and productive uses of water resources [72] to maximize efficiency and sustainability [73]. For example, the Women and Water Diplomacy in the Nile (WIN) network has been successful in bringing women water professionals together to share their experiences, and thereby enhance the collective capacity of women throughout the basin. This has helped to alleviate regional tensions, in addition to promoting effective transboundary dialogue and joint action through inclusion of women’s perspectives and ideas [74].

Evidence suggests women make far more sustainable and efficient decisions for water resources management than men because their sole focus is not on economics or finances. Typically, women have a more holistic view that incorporates multiple concerns and viewpoints (e.g. social, economic, and environmental well-being). When women are involved in water resources management, they secure water availability for the long-term in a more encompassing, efficient, and equitable manner that benefits both men and women.

Strengthening the GM approach at the ANA is a smart business decision.



It is through women’s hands that households,
communities and entire economies are sustained [42].



[66] Thompson, “Thirsty for Change,” 2017.

[67] Harris, M Leila., et al. “Intersections of Gender and Water: Comparative approaches to everyday gendered negotiations of water access in underserved areas of Accra, Ghana and Cape Town, South Africa.” British Columbia:

[68] Thompson, “Thirsty for Change,” 2017. Institute for Resources, Environment and Sustainability UBC, 2015.

[69] Thompson, “Thirsty for Change,” 2017.

[70] Ibid.

[71] Sanctuary, Mark and Hakan Tropp. “Making Water a Part of Economic Development: The Economic Benefits of Improved Water Management and Services.” *Stockholm International Water Institute*, 2007.

[72] Troell, Jessica and Elizabeth Yaari. “Tapping our Potential: Women’s Water Leadership in the Nile Basin.” *Stockholm International Water Institute*, 2019.

[73] Figueiredo, Patricia and Patricia E. Perkins. “Women and Water Management in Times of Climate Change: Participatory and Inclusive Processes.” *Journal of Cleaner Production* 60, no.1 (December, 2013):188-194.

[74] Food and Agriculture Organization (FAO). 2016. “How Can Women Control Water?: Increase Agriculture Productivity and Strengthen Resource Management.” The United Nations.

[75] Troell and Yaari. “Tapping our Potential”, 2019.

[76] Panda, “Mainstreaming Gender in Water Management,” 2017.

[77] Inter-Agency Network on Women and Gender Equality. “Gender Mainstreaming Workshops.” *The United Nations*. Last modified 2002.



CHAPTER 2: The Research Project

2.0 Policy Challenge

Promoting gender equity through the integration of the GM approach in the ANA's water resources management policies and programming.

2.1 Research Questions & Objectives

1. What processes can the ANA utilize to enhance its knowledge and understanding of women's relationship to water compared to men?

Objective: Enhance the knowledge and understandings of gender and women's relationship to water.

2. How can the ANA implement recommendations from the MIMP Regulatory and Technical Framework on Enhancing Gender Equity through its own policies and programs to mitigate gender inequity in water governance?

Objective: Integrate the MIMP gender framework and GM approach into the ANA's policies and programs.

3. What are the advantages and drawbacks of the IWRM framework in its ability to mitigate gender inequity in water resources management?

Objective: Analyze the IWRM framework for gender gaps.

4. How can the ANA incorporate the commitments from the National Gender Equality Policy and Action Plan on Gender and Climate Change into its water resources management policies and programming?

Objective: Integrate National Gender Equality Policy and the Action Plan on Gender and Climate Change into water resources management policies and programming.

2.2 Methodology

The UBCRT pursued a mixed-methods approach to project research. This approach consisted of a comprehensive literature review, interviews, focus groups, a survey of internal employees at the ANA HQ, and non-participant observations.

The UBCRT's fieldwork in Peru took place for a duration of 17 days and included:

- 21 interviews in Lima, conducted across 6 governmental organizations (MINAM, MIMP, MINAGRI, ANA, SUNASS & DDP), 5 NGOs (CARE, FT, WUSC & IPROGA, ANPE), and 2 embassies (Canada, UK).
- 2 focus groups in Arequipa with women water users.
- 1 survey designed and conducted (EKPA survey) in Lima with 15 questions over the course of 7 working days at the ANA HQ: a response rate of 23.8% or 119 respondents out of approximately 500 employees [78].

The analytical frameworks utilized by the UBCRT can be found in Appendix A and Appendix B.



Image: UBCRT with Gender 101 Workshop Attendees

Literature Review

The UBCRT started with a broad literature review of water governance, before narrowing the scope to water governance and gender in Peru. This included published materials from the ANA, and other international and governmental bodies. In total, the UBCRT collectively read over 45+ academic, NGO and government articles and reports in order to grasp a deeper understanding of water resources management in Peru, gender, and irrigation.

Interviews

All interviews conducted during the fieldwork were semi-structured. The decision to use semi-structured instead of structured interviews was influenced by the opportunity to ask more specific questions that presented themselves organically during interviews. This method worked in favour of the UBCRT, as many interview questions arose from information learned from interviewees during the interviews themselves.

[78] Interviewee, UBCRT Interview, 2019.

Focus Groups

Staff at the ANA were instrumental in assisting the UBCRT in obtaining focus group participants, as they volunteered to canvas from a Gender 101 workshop held in Arequipa.

Non-Participatory Observation

During and after UBCRT fieldwork, non-participatory observation and socio-cultural observations were applied as another primary research method. This allowed the UBCRT to gain a deeper understanding of Peruvian culture, customs, norms, and the Peruvian context as a whole.

EKPA Survey Design and Implementation

In the PAP, the UBCRT acknowledged the survey would not be mandatory for employees at the ANA HQ to complete.

The survey had a total of 15 questions. The EKPA survey and limitations of the survey can be found in Appendix B. The technical write up for statistical analysis of survey results can be found in Appendix D. The survey can be found in Appendix E. Data Visualizations for all statistics can be found in Appendix C.

Data Analysis

The analytical frameworks utilized by the UBCRT can be found in Appendix B. Please review Appendix H for Evaluation Analysis.



CHAPTER 3: FIELDWORK FINDINGS & ANALYSIS

Water is a source of life. Without water on Earth, life would not exist. This central theme was prevalent throughout academic literature review on water governance and gender, as well as interviews and focus groups conducted by the UBCRT during fieldwork in Peru.

Another recurring theme from research includes the lack of participation by women in water management. This trend occurs broadly in socio-cultural contexts and presents itself as one of the many challenges that women face in water management and agricultural work. From a theoretical perspective, the IWRM model is presented and utilized by the ANA as a way to promote the inclusion of all water users in water management. However, this has largely failed in practice to incorporate women into decision-making and participation in water management. Internationally, many governing institutions have made commitments to take action to enhance gender equity as per UN SDG #5, and Peru is no exception. The fulfilment of these international commitments has also largely failed in practice, as gender inequity persists in water management, and maintains barriers for women in accessing water, as well as decision-making positions and opportunities to participate in water resources management.

What follows in Section 3.0, Section 3.1, and Section 3.2 is a synthesis of literature review and fieldwork research findings into broader themes related to gender inequity in water resources management in Peru.

3.0 Increasing Women's Access to Decision-Making Positions And Opportunities

Women lack access to decision-making positions and opportunities to participate in water management. Incorporating the GM approach into the ANA's policies and programs will assist in enhancing gender equity at the basin level through WBCs and WUOs.

Literature Review

Women tend to be marginalized and disadvantaged in water resource management globally. In Peru, 75% of all water resources management positions in 2012 were held by men [79]. Current data from the ANA suggests a shortage of women in leadership roles throughout WBCs and WUOs in Peru [80]. Many scholars argue women need to be included in the decision-making and management of water resources, especially in relation to irrigation [81]. Water policies tend to marginalize women by not recognizing their valuable contributions to the agricultural sector or other uses of water resources (e.g. household water use) [82].

[79] De Nyse, Erwin, et al. 2013. "Empowering Women in Irrigation Management: The Sierra in Peru." Environment and Water Resources in Latin America and Caribbean Region. World Bank IBRD.

[80] "Gender Statistics" presentation at ANA Gender Workshop, November, 2019.

[81] Gianella, Cecilia, et al. "Climate Change, Agriculture, and Adaptation Options for Peru." Environment and Production Technology Division. International Food Policy Research Institute, 2019.

[82] Njie, Ndey-Isatou, and Tacko Ndiaye. "Women and Agricultural water Resource Management." The United Nations UN Chronicle, 2020.

However, the literature does not describe how the enhanced inclusion of women can take place. Some literature suggests women's participation in water resources management is inhibited by a variety of cultural, structural, and geographic challenges [83]. These challenges are faced by women in various parts of the world and are not limited to Peru [84].

Several reports reviewed suggest that the impacts of climate change on water systems will disproportionately impact women. "Most of those living under poverty are women, who rely most heavily on those natural resources susceptible to climate change" [85]. For example, women have to travel longer distances to collect water due to droughts and resource depletion [86]. Longer travel times decrease women's opportunity to attend school and increase women's vulnerability to gender-based violence [87]. Some scholars point out that women hold critical local knowledge which should be incorporated in decisions about climate change mitigation and adaptation strategies, as well as natural resources management [88]. Ensuring women's participation in water resources management decisions is critical.

Barriers to women's access to involvement in decision-making processes and opportunities to participate in water resources management in Peru include:

- Less than 25% of land in Peru is owned by women. This limits women's access to irrigation organizations because land ownership is often a requirement for participation [89].
- Men lack understanding of women's water needs [90].
- Men lack an understanding of women's role in the agricultural sector [91].
- Women lack technical irrigation knowledge and skills [92].
- Irrigation decision-making and training occurs at times and locations that are inaccessible to women [93].
- Women have low literacy levels [94].
- Language differences make communication at decision-making spaces difficult (e.g. Quechua versus Spanish) [95].

The academic literature suggests addressing these barriers will help increase women's participation in water resources management.

Key Fieldwork Findings

Lack of access to water rights

Women commonly lack the ability to access land rights [96]. This inhibits their ability to access water because water rights cannot be accessed without land rights [97]. Since men typically hold land and water rights, they are afforded greater opportunity to participate in decision-making around water resources [98]. On the ANA's Water Registry list, water right holders are given a vote in WUO/WBC decisions [99]. This means that men dominate the voting process and women do not have visible representation [100].

[48] De Nyse, "Empowering Women in Irrigation Management," 2013.

[84] Ibid.

[85] Shouraseni, Sen Roy. *Linking Gender to Climate Change Impacts in the Global South* (Miami, FL: Springer International Publishing AG, 2018).

[86] Shouraseni, *Linking Gender to Climate Change*, 2018.

[87] Ibid.

[88] Alston, Margaret and Kerri Whittenbury. *Research, Action and Policy: Addressing the Gendered Impacts of Climate Change*. (New York, New York: Springer, 2013).

[89-100] Interviewee, UBCRT Interview, 2019.

Notably, the Water Registry only includes the prefix “Mr.” [101]. Thus, without property title to land or water rights, women have limited access to decision-making processes for water management. Where women are present on the Water Registry, they are not given the option to register as a “woman” water user with the appropriate prefix, further reducing their visibility in water management organizations and processes [102].

Lack of access to leadership positions on WBCs and WUOs

Large gender inequities persist on WBCs and WUOs. Less than 20% of women have the right to vote on WBCs due to women’s inability to become registered water users [103]. Consequently, women are prevented from reaching leadership positions because men have the authority to vote, often voting for male candidates. Only 8 out of 170 WUOs are managed by women [104]. Lack of representation from women at the WBCs leaves women without any perceived allies to vote in support of their needs and ideas (e.g. water pricing decisions typically favour men’s interests more heavily than women’s interests) [105]. When women do express their ideas and opinions, they are often disregarded by men on WBCs as a result [106]. Women focus group participants suggested the ANA implement gender quotas for leadership positions at WBCs and WUOs [107]. This lack of gender parity in leadership positions adversely impacts women’s ability to attend the ANA workshops held for individuals in leadership positions on WBCs, as women do not typically hold as many of these positions as men [108]. This is also problematic because WBCs decide how water gets distributed to members of the Water Registry, and water is often prioritized for agricultural use over domestic use to meet the water needs of men and their agricultural concerns [109].

Lack of financial independence

Women and men are not paid equally for their work (e.g. some women are paid 16 soles/day and men are paid 18 soles/day for completing the same duties on a farm) [110]. In many cases, women often work for a poor salary or no salary. An example of this is the statistic of unpaid domestic work accounting for approximately 20% of Peru’s GDP [111]. Women’s ability to become financially independent remains restricted. Men typically retain ownership over family assets (including land title, which affords men the ability to profit directly from agriculture) and receive higher pay [112]. This is a barrier for women in setting up their own bank accounts, forcing them to rely on financial management decisions of their husbands [113].

Water pricing also places an additional financial burden on women (especially rural, poor, and/or elderly women) [114]. On average, women have to spend more money than men on water, this is because water purchased for domestic use is exclusively done by women [115]. The cost of this expense often comes directly from their personal savings, not from money managed by their husband. For example, in some regions, women are responsible for paying 4 soles for cooking water [116]. This water is purchased for the entire family, but it is only paid for by the women in the family, reducing the “disposable” income of women which perpetuates women’s financial reliance on their husbands [117].

Lack of access to technical knowledge

The ANA's implementation of modern water infrastructure requires technical knowledge for decision making and management. Women are excluded from the decision-making because they lack access to technical knowledge (i.e. computer literacy skills to understand rainfall maps to inform the allocation of quantities of water) [118]. As a result, more men participate and make decisions about modern irrigation infrastructure [119]. Women are limited to participating in more traditional and ancestral irrigation and water management practices [120].

Women have successfully demonstrated the ability to utilize technical knowledge when provided the opportunity to do so (i.e. when men have left rural areas to seek work in urban areas, women have been left responsible for doing “non-traditional” work) [121]. Rural women who participated in the UBCRT's focus groups expressed interest in gaining technical knowledge and skills that would enable them to be involved in decisions around modern water infrastructure, as well as climate change impacts and adaptation [122]. For example, learning how to read rainfall maps posted by the ANA to make informed decisions around the allocation of water at the basin level [123].

It was thought by women who participated in the UBCRT's focus groups that men do not want women to have access to modern irrigation because it is perceived as “taking power away” from them as land and water rights holders [124]. Women expressed a strong desire to access knowledge, information, and technical advice, which would assist them in overcoming deeply embedded cultural gendered challenges that dictate lack of involvement by women in water management - especially in modern water management infrastructure [125]. The implementation of natural infrastructure projects is achieving greater participation of women in decision making about the conservation of ecosystems and enhancing the inclusion of women's traditional and ancestral knowledge in water management [126].

Lack of ability to participate meaningfully in decision-making

Despite traditional knowledge (i.e. water gods and rituals, historical knowledge of water flow and source passed down through women generationally) held by women about water and agriculture, this knowledge is commonly disregarded when offering counsel (i.e. what seeds to plant, when to plant) to men in decision-making positions [127]. Counsel offered by women often takes a holistic view instead of a singular concern only on irrigation. This approach often considers the connections between health, socio-cultural challenges and other concerns that may adversely impact the family if it is not considered in the decision-making process [128].

In addition, WBC/WUO meetings and workshops held by the ANA are often inaccessible to populations in remote regions where adequate transportation is not readily available [129]. These meetings and workshops are also inaccessible because those interested in participating are burdened by the travel costs to and from the meetings and workshops and sometimes experience wage loss in exchange for their attendance [130]. For example, one Indigenous woman from the highlands who attended the ANA's macroregional gender workshop had to sacrifice a few days of wages [131].

This often leaves women, and even men in more remote areas, without a platform to communicate their concerns and needs regarding water resources to those in decision-making positions at the ANA [132]. The voting process for WBCs/WUOs allocates one vote per household to those that are registered on the Water Registry [133]. Unless women are widowed, husbands commonly make the voting decision on behalf of the household [134].

Lastly, both the timing of available water resources and the quantity of water resources fluctuate (i.e. water might only be available in the mornings or evenings or for 2-3 hours per day) [135]. These uncertainties disproportionately affect women. For example, approximately 2-3 years ago a neighbourhood in Lima was without water for 20 days [136]. One woman died carrying water back to her community [137]. This often leaves women, and even men in more remote areas, without a platform to communicate their concerns and needs regarding water resources to those in decision-making positions at the ANA [138]. The voting process for WBCs/WUOs allocates one vote per household to those that are registered on the Water Registry [139]. Unless women are widowed, husbands commonly make the voting decision on behalf of the household during this water shortage [140].

Some interviewees suggested that unique water quantity and quality challenges faced by communities cannot be addressed given the current governance structure applied by the ANA [141]. Instead, micro-watershed councils have been proposed to manage water resources at the community level because often WBCs represent large geographical regions [142]. Micro-watershed councils provide an opportunity for women to participate more meaningfully in water resources management within their own communities and for their communities [143].

Conclusions

- Currently, only water users that own land have access to the Water Registry. This excludes non-agricultural water users, and disproportionately excludes women from accessing water rights, especially for domestic water uses [144].
- Typically, men vote on behalf of the household on WUO/WBC decisions, effectively excluding women from the decision-making process at the WUOs/WBCs [145].
- There are no gender quotas for decision-making positions held on the boards of WUOs/WBCs. Very few women hold executive decision-making positions, limiting the influence women in these positions can have on decision-making that is dominated by men's interests and needs [146].
- WBC and WUO meeting locations are inaccessible to populations in remote regions where adequate transportation is not readily available, limiting participation by both men and women in WUO/WBC processes [147].
- Travel barriers also limit the presence of the ANA throughout water basins and communication of concerns and needs by water users at the basin level to various levels of governance within the ANA that represent them [148].

3.1 Enhancing A Consistent Understanding of Gender at the ANA

There is a lack of consistent understanding of gender, and the GM approach at the ANA. Strengthening gender education, training, and awareness of GM approach will enhance understanding of gender and GM within the ANA and at the water basin level.

Key Fieldwork Findings

Lack of consistent leadership positions

The success of implementing the GM approach remains highly dependent on individuals in authoritative decision-making positions at the ANA prioritizing the issue of gender [149]. High institutional turnover of management positions at the ANA makes it challenging to have a consistent approach to implementing GM objectives [150]. This is especially problematic when decisions about funding for gender initiatives are made, as gender initiatives often are the first to lose funding when the budget falls short for other policies and programming at the ANA [151].

Lack of baseline information on gender and progress of GM initiatives

The ANA has largely focused on quantitative indicators (e.g. the number of men workshop attendees versus women workshop attendees) to understand the theme of gender in water management [152]. This neglects consideration of the socio-cultural conditions that influence women's access to water resources and involvement in decision-making processes [153]. The ANA expressed a desire to establish more gender indicators to help measure progress on implementing the GM approach [154]. One tool for collecting baseline information about understandings of gender and GM at the ANA and water basin level would be to conduct and replicate a gender perceptions survey, similar to that conducted at the ANA HQ by the UBCRT [155].

Lack of consistent understandings and messaging about gender and the GM approach

Internal gender workshops at the ANA do not facilitate a clear and consistent understanding of gender and GM for employees [156].

As suggested HR individuals responsible for planning the gender workshops and training events do not possess a thorough understanding of gender and the GM approach, as they themselves have not received external education or training related to gender [157]. Current GM workshops lack interactive teaching and learning methods, leaving participants largely disengaged by the EKPA Survey [158] results, there is a substantial need to bolster GM education, training, and awareness of the GM approach at the ANA. Key findings included:

- 86% of respondents have had positive educational experiences from gender training at the ANA, but only 47% of respondents were unaware of gender training opportunities available [159].
- 64% of respondents have never taken an external course on gender [160].
- 52% of respondents perceive progress on the promotion of gender equity at all levels of the ANA [161].
- Almost 50% of respondents expressed a desire for more “education, training, and awareness” of the GM approach [162].

[[149-157]. Interviewee, UBCRT Interview , 2019.

[158 - 162] A full technical report on the statistical analysis can be found in Appendix D in the Appendix Package, along with the rest of the descriptive statistics in graphical form.

- 68% of respondents have claimed they have never witnessed gender discrimination at work [163].
- Some respondents indicated “gender quotas,” “equal treatment,” “more indicators and measures” and “more policies” on gender could help strengthen the GM approach at the ANA [164].

It was noticed by the UBCRT while observing a gender workshop at the ANA, that men would slowly leave throughout the presentation, or were overtly falling asleep in their seats. This suggests on one hand that machismo culture is still present at the ANA, and that while there are generally positive feelings about the progress being made on GM initiatives at the ANA, the perceived importance of these initiatives and the issue of gender is inconsistent across employees at the ANA. Low attendance for men and inconsistent participation in gender training and workshops presents a barrier to communication of consistent messaging and promotion of understanding of gender and the GM approach [165].

Quantitative analysis revealed that those who know what GM is, tend on average to be 4 times more likely to be the people who address gender differences at work [166]. Those who know what GM is tended on average to be twice as likely to value work on gender than those who do not [167]. Interestingly further analysis revealed that those who know what GM is, tend on average to have more negative experiences of gender education at the ANA [168]. Additionally, those who work on addressing gender differences at work tend on average to be more likely to know what GM is and those who have had negative educational experiences at the ANA tend to know what GM is [169].

These findings suggest that the ANA needs to continue raising basic awareness of GM through educational training with the aim of capturing 100% of all employees in such basic training. These findings also indicate that the design of gender workshops need to be more carefully considered for different audiences in order to increase lasting educational impacts. Lastly, this evidence reinforces the fact that women are still more likely than men to be disadvantaged and marginalized, and only those with more gender education are more likely to recognize gender-based discrimination compared to those with no knowledge or education on gender.

Conclusions

- There is not a consistent understanding of gender or the GM approach at the ANA, which creates barriers to implementation of the GM approach in the ANA’s policies and programs [170].
- There is an absence of gender indicators to measure the progress of GM initiatives, particularly those that encompass socio-cultural gender considerations; the EKPA survey is a first step in providing a baseline gender indicator that focuses on socio-cultural perceptions [171].
- These findings also signal the need for the ANA to consider external gender education to further complement and strengthen internal education mechanisms [172].
- The content of gender education through training and workshops by the ANA is not educational for those who are aware of GM approaches. This reinforces the notion that in order to avoid diminishing returns on educational experiences, content needs to be expanded and reviewed at the ANA [173].
- The content of gender workshops and training is not decided by individuals who have specialized training and knowledge about gender and the GM approach [174].
- There is no baseline record of understandings of gender at the ANA from which to monitor and evaluate the efficacy of gender workshops and training, and successful implementation of GM [175].

[163-165] Interviewee, UBCRT Interview, 2019.

[166] All reported findings for the inferential statistics were T-tests or OLS regressions with confidence levels of 95% or greater. Refer to Appendix D.

[167 - 175] A full technical report on the statistical analysis can be found in Appendix D in the Appendix Package, along with the rest of the descriptive statistics in graphical form.

3.2 Improving Governance Structure

The existing institutional governance structure of the ANA does not promote communication of a consistent GM approach in the ANA's policies and programming, or from the ANA HQ down to the basin level at WUOs/WBCs. The current GMC does not have control over gender training and workshops, which further impedes a clear and consistent GM approach.

Literature Review

Good governance structure is the key to successful policy and program implementation. Internationally, governing institutions are making commitments to take action to enhance gender equity as per SDG 5. According to the literature, Peru has been committed to eradicating gender discrimination since its signing of the Beijing Platform for Action in 1995, pledging to “promote the objectives of equality, development and peace for all women in the interest of all mankind” [176]. However, such broad solutions to deeply embedded cultural challenges have left the ANA without a clear, actionable path by which solutions can be implemented in practice to meet international commitments [177]. In April of 2019, MIMP's National Gender Equality Policy was approved [178]. The policy is designed to tackle the causes and effects of structural discrimination against women [179]. Notable components of the policy include guaranteeing the access of and participation by women in decision-making; guaranteeing the exercise of women's economic and social rights; and reducing the institutional barriers between men and women in public and private spheres [180]. The policy is directly in compliance with Peru's state policies as outlined in the National Agreement, the Strategic National Development Plan and the Peru Prepares for 2030 Plan [181].

IWRM's three main pillars are social equity, economic efficiency and environmental sustainability [182]. Some IWRM models are commonly practiced through basin-level management, as opposed to watershed management, using basin-level organizations to represent multiple groups and perspectives [183]. Basin organizations collect, monitor, manage and communicate water data, while educating the public about basin management [184]. They are also responsible for enforcing laws, coordinating land and water management policies, and developing and implementing plans for water management (including construction and management of water infrastructure) [185]. While the UN frames IWRM as a tool for achieving water security, the social and political aspects of basin-level management, like gender, are frequently neglected. Water security, by comparison, appears to attribute greater concern to social and political aspects of water governance [186]. Thus, incorporating the concept of water security into IWRM serves to emphasize a more context-specific approach to water management, with enhanced potential to apply a gender equity lens that accounts for different challenges faced by women and men in varying geographical and cultural contexts throughout Peru.

[176] Pautrat, “Gender Mainstreaming.”

[177-181] Interviewee, UBCRT Interview, 2019.

[182-184] Integrated Water Resource Management: Basic Concepts. The International Water Association Publishing. Webpage. Last modified 2020.

[185] Melnychuk, Natalya, et al. “Integrated water resource management and British Columbia's Okanagan Basin Water Board.” *International Journal of Water Resources Development* 3, no. 33 (August, 2016): 408-425.

[186] Gerlak, Andrea, et al. “Ways of knowing water: integrated water resources management and water security as complementary discourses.” *International Environmental Agreements: Politics, Law and Economics* 3, no. 15 (April, 2015): 257-272.

Key Fieldwork Findings

In 2019, the ANA partnered with the NGO Forest Trends to design an equal opportunity plan for men and women in WUOs, developed an action plan on gender, and established the GMC within ANA HQ [187]. The GMC is mandated to implement the GM approach at the ANA [188]. It currently faces barriers to coordinating, articulating and supervising the implementation of GM initiatives [189]. The ANA's initiatives are in accordance with the MIMP's National Gender Equality Policy, but for effective implementation the GMC requires more financial and human resources to facilitate a stronger GM approach with a structured plan and secure financial support [190].

Lack of formalized structure for the GMC

The ANA falls within the MINAGRI [191]. This relationship sets limitations for the ANA by naturally encouraging the prioritization of water used for agricultural purposes, inhibiting the ANA's ability to be an autonomous impartial governing body [192].

With regard to gender, MINAGRI has been involved with developing a gender approach in 2017, with responsibility for organizing programs and project sensitivity to include women in different activities [193]. In contrast, the GMC at the ANA HQ lacks consistent representation from all 5 Directorates at the ANA and a formalized meeting structure; and the roles and responsibilities of the GMC remain unclear. This has hindered the ANA's ability to create a unified GM approach. Representatives who currently sit on the GMC also occupy other positions throughout various Directorates at the ANA [194]. This implies the GMC is a second priority for employees who must volunteer their time to work on GM initiatives, on top of the work they are already responsible for in their current position. As a result, the GMC has not been prioritized, and remains underutilized and underdeveloped in its ability to lead the implementation of the GM approach at the ANA [195].

Currently, the ANA's Human Resources (HR) department is responsible for collecting information on gender, and for anything related to providing services and programming internal to the ANA [196]. The planning division is then responsible for monitoring the competencies of the policies in place [197]. Unfortunately, the information collected by HR and the monitoring and evaluation done by the DPD are misaligned and misinformed [198]. For example, HR is responsible for planning internal gender workshops and training events, rather than internal gender experts [199]. One interviewee felt the issue is not gender projects, but rather the makers of gender projects are not making good projects that truly consider gender impacts [200]. One major problem is that gender projects are not well designed or explained, and then become unsuccessful [201]. A key finding from the EKPA Survey was that those who know what GM is, tend to have negative experiences of gender education at the ANA [202]. If the GMC had a gender expert who was responsible for the content of gender workshops and training, in addition to a tool through which to collect information on employee understandings of gender, the DPD would have clearer indicators to measure and assess the success of GM [203]. This misalignment between HR, the GMC, and the DPD has left knowledge gaps regarding understandings of gender and the GM approach [204].

[187-189] Interviewee 010, UBCRT Interview, 2019.

[190] "Gender Statistics" presentation at ANA, *Gender Workshop*, November, 2019.

[191-204] Interviewee 010, UBCRT Interview, 2019.

Many former authoritative decision-making position holders at the ANA neglected gender [205]. Only recently was gender prioritized for inclusion within the ANAs policies and programming [206]. The success of GMC efforts to implement GM depends on the interest of authoritative decision-makers at the ANA to provide adequate resources (i.e. funding and personnel support) [207]. There is a need to strengthen the structure of the GMC by clarifying its mandate, and provide an institutionalized funding structure to support GM initiatives [208].

Lack of set and guaranteed budget for GM initiatives

The MIMP determines the GM budget provided to each government ministry, but does not determine how the ministries should spend this budget [209]. The planning department at the ANA determines how the gender budget should be allocated, but the ANA HQ has no set or guaranteed budget for GM initiatives [210]. This leaves budget allocation for gender initiatives adversely impacted by a high level of staff turnover, and impedes consistent development and implementation of GM initiatives [211]. For example, the ANA has previously partnered with Forest Trends to conduct a 6-month gender diagnostic, but had to forgo such a diagnostic in 2019 due to inadequate budget for gender initiatives [213]. It is well known within the ANA, that when faced with budgetary constraints, the first thing to be cut from the budget is gender. Several of the ANA employees stated that higher support for gender initiatives helped with the allocation of the budget [214].

Lack of consistent governance structure throughout WUOs/WBCs

The lack of structure at the ANA HQ leads to an uneven application of the GM approach across all WUOs/WBCs [215]. WBCs ultimately decide how water is distributed to Water Registry members [216]. Without a WBC GM strategy, women will continue to receive unequal access to water, management positions, and resource management decisions [217]. Interestingly, the Quilca Chili Basin (QCB) is the only WBC that has developed its own gender strategy [218]. The QCB Gender Strategy suggests gender is on the agenda of some, but not all WUOs/WBCs. This was a voluntary initiative by the QCB WBC, and is not financially supported or mandated by the ANA [219].

Lack of consistent IWRM governance approach

The application of the IWRM model does not always translate from theory into practice equitably [220]. From a theoretical perspective, the IWRM model is presented as a way for water governance models and institutions to promote the inclusion of women, and all water users, in water management. It was revealed that in practice this model of water management does appear to give more weight to the economic pillar, at the cost of the social equity and environment sustainability pillars [221]. The ANA must consider how to fix this gap through reviewing the efficacy of the IWRM model in implementation, and whether it is successfully incorporating a gender equity lens. Collection of data for monitoring and evaluation, as well as inconsistent core funding, adversely impact the ability of basin organizations to successfully execute an IWRM water management style due to incomplete or decentralized information gathering, and resources deployed to monitor programming efficacy in fulfilling IWRM objectives.

In rural regions of Peru, women are often tasked with retrieving water for domestic use [223]. Access to these water regions generally require travelling far distances, taking up to an hour to arrive at the water source [224]. IWRM usually involves the WBCs, however social indicators need to be put in place [225]. A huge barrier for successful IWRM application is that there is a lack of trust and confidence between each sector and the populations using the water [226]. Interviewees believe that this distrust stems from an “engineering culture” that is prevalent within the design of IWRM at the ANA [227]. This engineering culture tends to neglect women, reinforcing the idea that governance involvement of urban women is not seen as important. Interviewees have highlighted the fact that rural women are not included nor consulted during policy design, or included in natural infrastructure projects or resource management [228]. This not only directly contradicts the main pillars of IWRM by neglecting the social and cultural aspects, it also contributes to water insecurity for many women and Indigenous populations in rural areas [229].

Conclusions

- There is not a consistent understanding of gender or the GM approach at the ANA, which creates barriers to implementation of the GM approach in the ANA’s policies and programs [230].
- Budget allocated for gender initiatives at the ANA is always the first to be cut when funding cannot meet all of the ANA’s policy and programming needs [231].
- The GMC lacks a clear structure and mandate, which impedes its ability to develop and implement the GM approach without defined power and scope [232].
- There is a lack of a set and guaranteed budget and resources for gender initiatives by the GMC [233].
- IWRM does not currently account for socio-cultural aspects of water management in practice, including gender [234].

“

When you say 1,000 people were trained or educated, what did they really learn? How did they apply it? These are the questions we need to ask [112]. — UBCRT Interviewee

”



CHAPTER 4: PROPOSED ALTERNATIVES

This section starts with criteria and then goes into the list of potential alternatives the UBCRT devised in order to address how the ANA can enhance its GM strategy and improve good governance in the management of water resources.

Each alternative has been evaluated utilizing a 3 tiered analysis. These evaluation analyses are visualized under each alternative by a scorecard and a cost projection graphic. Highest scoring alternatives become final recommendations for implementation. The scorecard indicates each of our criteria and the coloured in water drops represent an objective achieved from each criteria. The cost projection determines the range of the cost with a small water droplet demonstrating the potential range of costs depends on various factors.

4.0 Criteria

The Criteria closely align with core values set forth by the ANA. The UBCRT has used these criteria when evaluating the proposed alternatives for the recommendation against one another, in order to determine the best and most feasible recommendations for implementation. The weight of importance for each criterion is determined by a number of objectives assigned to each. Criteria with more objectives are weighted more heavily in consideration.

Equity

Equity for all genders, populations and communities with a specific focus on access to decision-making positions and opportunities to participate in water resources management.

Objectives:

- Enhance women's access to water resources.
- Enhance women's access to workshops/training.
- Enhance the representation of women in water management.
- Create space for deliberative participation in water management for all water users.
- Increase access to decision making/authority positions for women.

Engagement

Engagement with other governmental ministries, public, private, and international organizations both vertically and horizontally, to promote institutional coordination and communication.

Objectives:

- Promote gender strategy at all institutional levels.
- Promote the inclusion of all water user perspectives in IWRM framework for water management.
- Enhance understanding of “gender” and GM of institutions and water users.
- Enhance communication between directorates and governing institutions.

Accountability

Accountability to nationally mandated gender commitments and international obligations. This includes enforcement mechanisms to promote implementation and fulfilment of obligations by the mandated institution or individual.

Objectives:

- Contribute to the fulfilment of national and international gender frameworks & mandates.
- Promote horizontal and vertical institutional communication & cooperation.
- Promote transparent information sharing within institutions and the public.

Feasibility

Feasibility with regards to financial, social, organizational, and cultural contexts.

Objectives:

- Consider the monetary, labour, and time resources of the institution.
- Acknowledge jurisdictional power and mandate of the institution.
- Build institutional and public awareness and interest in GM.

Interculturality

Interculturality and context-specific dialogue that promotes and strengthens relationships between the ANA and the diversity of water users from different cultures and geographical regions throughout Peru.

Objectives:

- Promote context-specific approaches/strategies for water management.
- Encourage knowledge exchange between communities and the institution.
- Promote the integration of traditional knowledge in modern & technical water management approaches.

Sustainability

Sustainability of policies and programming implemented, to promote long-term consideration of social, political, cultural, and environmental challenges facing women in water resources management.

Objectives:

- Resilience against institutional turnover.
- Continue development/review of understandings of “gender”.
- Contribute to new cultural understandings of gender.

4.1 Potential Alternatives for Recommendation: Projecting Outcomes and Weighing Trade-offs

Alternatives have been divided into “Internal” and “Basin Level”. Internal Alternatives address GM within the ANA and its immediate institutional structures, while Basin Level Alternatives address GM at the basin level of water management through WUOs/WBCs. In considering Alternatives, the UBCRT recognizes many alternatives are inter-related and somewhat dependent on sequential implementation to meet their intended objectives. As a result, multiple components have been grouped together into Alternatives to minimize sequential barriers to implementation.

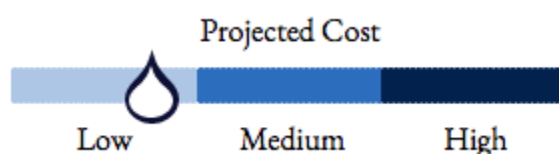
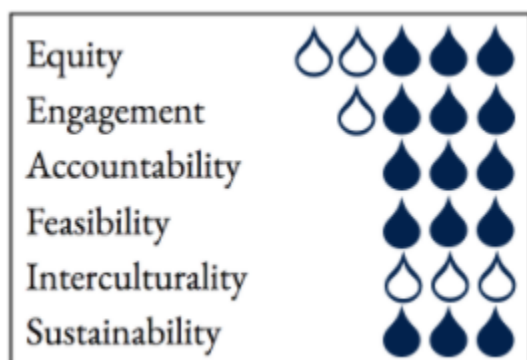
4.2 Internal Alternatives

RESTRUCTURE AND EXPAND THE MANDATE OF THE GMC

A) Restructure positions on the GMC.

Why is it being suggested?

- The GMC does not have representation from all 5 of the Directorates.
- The GMC has no formalized meeting structure.
- The GMC has low institutional visibility.
- The roles and responsibilities of the GMC are unclear.
- No coordination of the GM approach throughout ANA HQ.



Enhancing the GM approach at the ANA requires consistent messaging and coordination across various institutional structures. The GMC is an existing structure best positioned to enhance GM if given a clearer mandate and more resources to implement GM initiatives

How would this be implemented?

The expanded GMC would include 11 representatives:

- 1 GMC Director
 - Oversees the direction of GMC goals, mandates, and meetings.

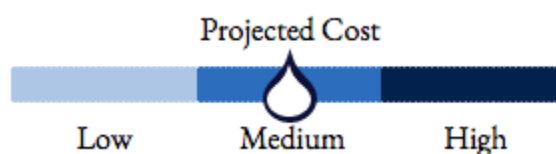
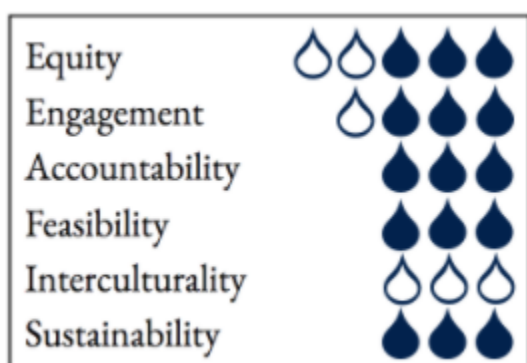
- 1 representative from each of the ANA's 5 Directorates
 - Ensure all Directorates are involved in GM at the ANA.
- 1 representative from Human Resources
 - Provide and transform GM concepts and initiatives into practice.
- 1 representative from Communications
 - Provide consistent GM messaging at the ANA.
- 1 employee from the ANA under the age of 35
 - Promote intergenerational perspectives within the ANA's GM approach.
- 1 GM trainer
 - Provide GMC representatives with GM training.
 - Develop and coordinate GM training at the ANA HQ.
- 1 external private gender consultant
 - Provide gender expertise to the GMC.

The role of the GMC would be to coordinate the ANA HQ's GM initiatives. The GMC would meet at least once a month to plan, implement, and monitor GM initiatives within the ANA's work. At all times, these 11 positions must be occupied by representatives. In the event of staff turnover, a new representative must fill that position within the fiscal quarter. The GMC should strive for gender parity.

B) One employee from each Directorate at the ANA HQ will participate in a GM training course.

Why is it being suggested?

- On average, those who know what GM tend to be twice as likely to see the level of importance of gender work higher than those who do not (Appendix D).
- On average, those who are aware of GM have negative experiences of gender education at the ANA (Appendix D).
- Currently, the ANA HQ has no specific tools to implement GM financial budgets, GM staff accountability, GM incentives, and statistical data on gender analysis.



How would this be implemented?

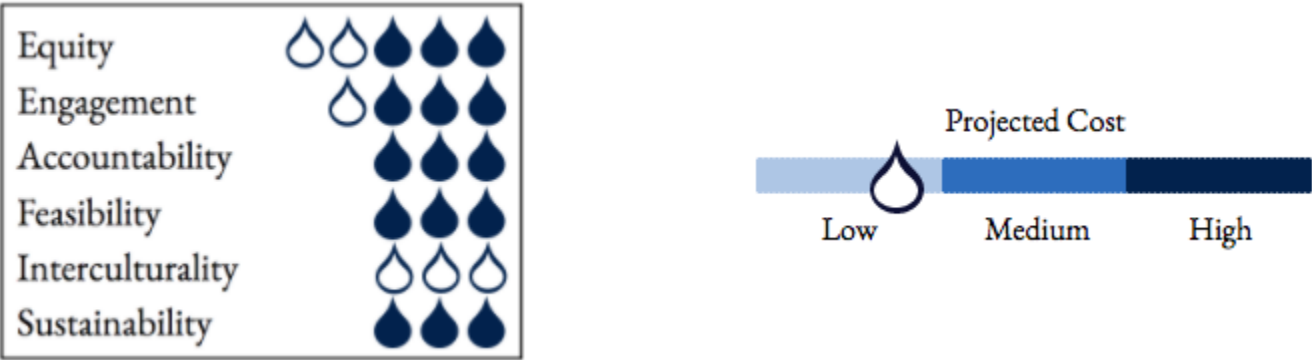
The GM trainer within the GMC will participate in an external GM training course, funded by the ANA. Upon receiving training, the trainer will identify another GMC member as their "Assistant Trainer" to shadow their training work so in the event of staff turnover there would be continuity in having a trainer on the GMC.

An example of this training is a 4-week online GM course with a 5-day face-to-face component conducted by the UN Women Training Centre.⁶⁷ Details for this course and other options are listed in Appendix G. The GM course would be funded by the budget allocated by the DPD and GMC. The GM trainer and representative from the GMC who participate in a GM training course would be required to train the GMC at the ANA HQ. These individuals would be responsible for facilitating all internal GM training events.

C) Strengthening Internal Development of Gender Workshops & Training

Why is it being suggested?

- Current internal gender workshops at the ANA do not facilitate a clear and consistent understanding of gender and GM for employees are not maximizing impactful and transformative learning experiences.
- To promote institutional culture change that aligns with GM, the current GM workshops need to be re-designed with interactive teaching and learning methods.



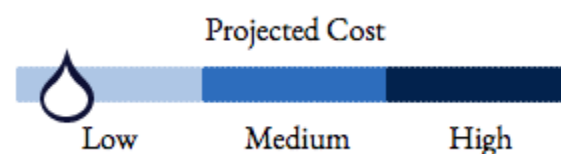
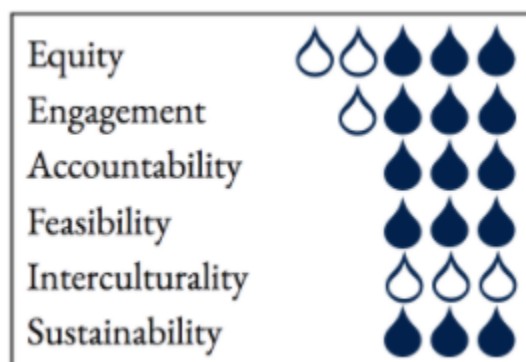
How would this be implemented?

To make internal gender workshops and training more effective, the ANA must limit the amount of time spent on lecturing to less than 50%. The other 50% of workshops and training should be composed of various interactive exercises (e.g. games, small group discussions, and in-person surveys). Specific tools proven in other institutional contexts to help develop interactive exercises include mentimeter.com, kahoot.com, and polling software. Internal workshop content would be determined by the GMC. The GM trainer would be in charge of facilitating all internal gender workshops and training events. The GM trainer would coordinate pre and post quizzes or surveys for all workshop and training attendees. More examples of educational best practices can be found in Appendix F.

D) Repeat the gender perceptions survey at the ANA HQ.

Why is it being suggested?

- Before the UBCRT’s fieldwork, the ANA HQ had no baseline indicators on employees’ understanding of the GM approach or attitudes and perceptions of gender.
- Only 53% of respondents in the UBCRT survey know what GM means.



How would this be implemented?

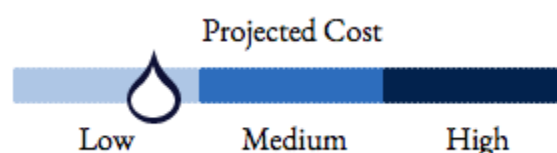
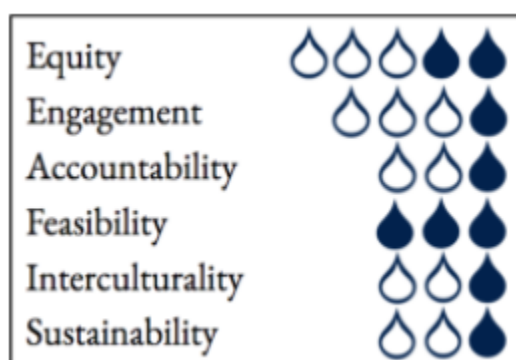
The WUOD with the help of the DPD and GMC at the ANA would revise and repeat the EKPA survey on an annual basis. Limitations and suggested revision (Appendix B) would help inform ongoing survey development. A census survey method would be utilized for distribution and be available to prospective respondents for one full working week. All responses would be kept anonymous and unidentifiable to promote a high response rate and reduce the potential for desirable response bias. The data gathered from the EKPA surveys would be managed by DPD and shared with the GMC to inform the ANA's future GM initiatives.

ESTABLISH A NON-APPROPRIABLE AND NON-NEGOTIABLE BUDGET FOR GM INITIATIVES.

A) Establish a non-appropriable and non-negotiable budget for GM initiatives

Why is it being suggested?

- Currently, the ANA HQ has no set and guaranteed budget for GM initiatives.
- Budget allocation for gender initiatives is adversely impacted by a high level of staff turnover, and the political agenda of the DPD and individuals in positions tasked with development of the budget.



How would this be implemented?

The DPD and GMC would work together to create a non-appropriable and non-negotiable budget for GM initiatives. This budget would be labelled specifically for internal and external GM initiatives at the ANA's different levels of governance (i.e. ALAs, AAAs, WBCs, WUOs). The GMC would collaborate to determine how the labelled budget is utilized. The GMC should consider whether this budget will be allowed to accrue from year to year.

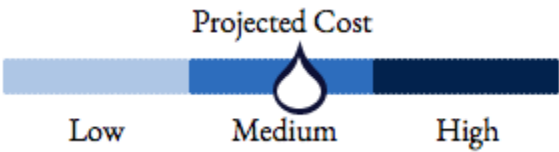
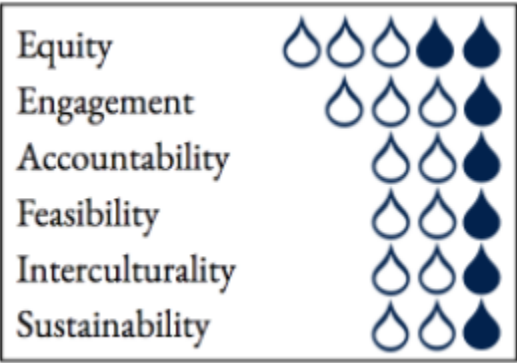
Additionally, a set of requirements could be developed by the GMC to ensure funding decisions are guided by GM goals. The WUOD would receive a larger budget of a set percentage to be allocated towards WUO/WBC meeting “accommodation costs” (i.e. child/elderly/familial care) for women elected as representatives, and town hall attendees (refer to “Enhance the accessibility of WBC & WUO meetings for elected representatives”, Extend accessibility of WBC & WUO meetings for water users in a given basin” and “Create gender quotas for WBCs & WUOs”).

EVALUATE THE ANA’s IWRM APPROACH

A) Evaluate the ANA’s IWRM approach with a gender perspective

Why is it being suggested?

- Academic and fieldwork evidence suggests that the IWRM model emphasizes economic development over social development in practice.
- Current IWRM framework does not include gender-specific considerations in how women face unique water security challenges.



How would this be implemented?

The GMC will apply MIMP’s GM mandate to the ANA’s IWRM approach to enhance women’s access to water resources. This would start by the ANA agreeing to embark upon another research project that could result in a multi-year project. This would require coordination and support from multiple levels of the ANA. This alternative, will not be recommended due to its low objectives score and high cost.

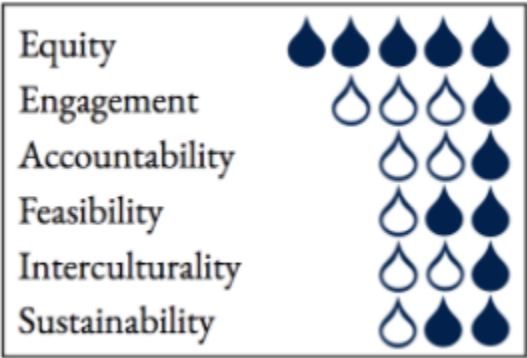
4.3 Basin Level Alternatives

EXTEND THE RIGHT TO VOTE ON WBC DECISIONS

A) Extend the right to vote on WBC decisions to all adult individuals in that household

Why is this being suggested?

- Only one vote is available per household.
- Typically, only men vote on behalf of the household and women are excluded from the electoral process at the WBCs.



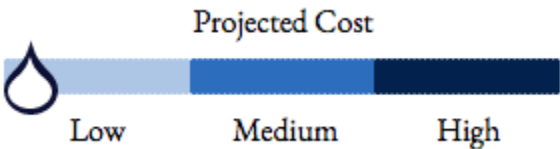
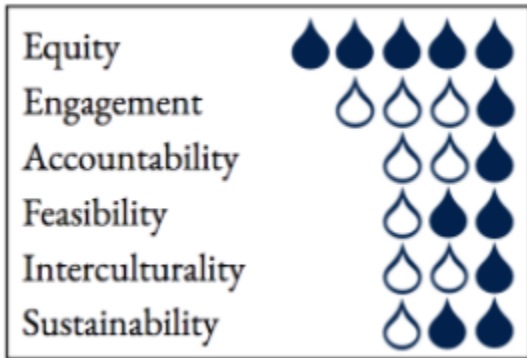
How would this be implemented?

The ANA HQ would mandate that the right to vote on WBC decisions and elections is extended to include all adults (18yrs+) within each household that already possess land rights and water rights (i.e. recognized on the Water Registry List). The WUOD would monitor women’s attendance and participation at WBCs by mandating “Meeting Minutes” and attendance be taken at all WBC meetings and elections. This information would be sent to the WUOD within one week of WBC meetings and elections. The WUOD would provide each WBC with a set of “Meeting Minutes” and attendance sheet templates. All WBC Meeting Minutes and attendance information would be stored within the WUOD and shared with the GMC.

B) Add additional prefix options for individuals registering on the Water Registry List

Why is this being suggested?

- Currently, all Water Registry forms only come with the prefix “Mr.,” regardless of the gender of the landowner



How would this be implemented?

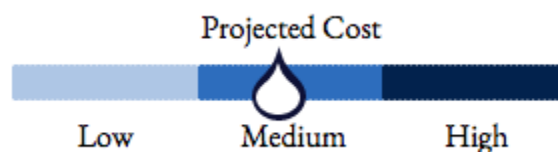
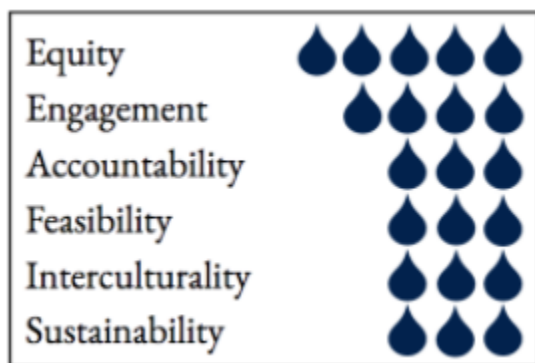
The department in charge of the Water Registry List will add new prefixes to all current and future Water Registry forms. Suggested additional prefixes include Mr., Mrs., and Mx. (Other).

MANDATE GENDER STRATEGY AND IMPLEMENTATION PLAN

A) Mandate WBCs to develop their own Gender Strategy and Implementation Plan

Why is this being suggested?

- Currently, only the Quilca Chili Basin has developed a gender strategy. No other WBCs have a gender strategy.
- The GM approach has not been applied at all WBCs.



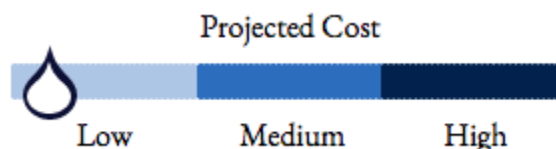
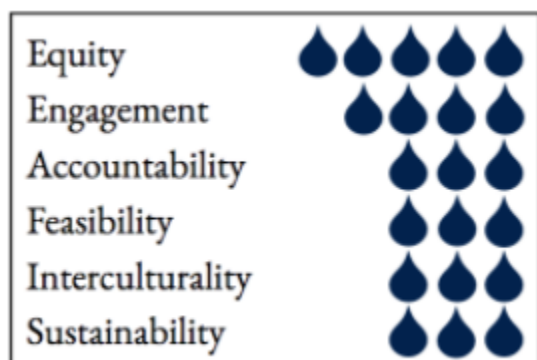
How would this be implemented?

Using the QBC as a pilot example as the first WBC to implement a Gender Strategy and Implementation Plan, all current and future WBCs would develop a basin-specific/organization-specific plan using the QBC plan as a template. The HR department at the ANA would send all WBCs a copy of the QBC gender strategy along with additional suggestions from the GMC to guide the development of gender strategies at the WBC level.

B) Create gender quotas for WBCs & WUOs

Why is this being suggested?

Currently, there are no gender quotas for executive positions held on the boards of WBCs and WUOs. At this time, there are very few women in executive positions on these boards (approximately less than 10% of women hold an executive position)



How would this be implemented?

The ANA HQ in collaboration with the GMC would determine and mandate gender quotas for executive positions held on the boards of WBCs and WUOs. The aim would be gender parity by Year 5 after initial implementation. Suggested gradual phasing in of gender quotas for WBCS and WUOs are listed below:

- Year 1 – 20%
- Year 2 – 25%
- Year 3 – 30%
- Year 4 – 40%
- Year 5 – 50%

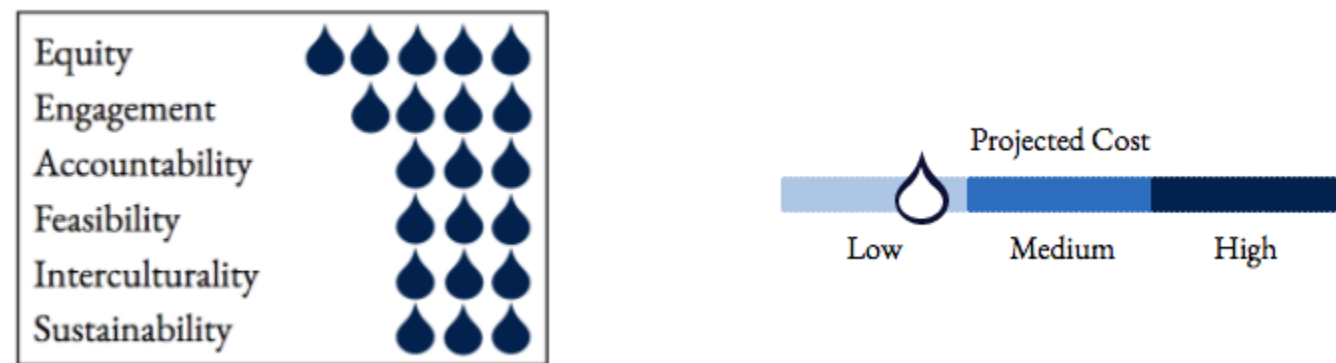
WBCs and WUOs would report to the WUOD at the ANA HQ annually to confirm that gender quotas have been met. The WUO Directorate at the ANA HQ would convey this information with the GMC at the ANA.

The WUOD and GMC would consult attendance sheets from WUOD/WUO meetings in order to monitor and evaluate the implementation of gender quotas. This alternative needs to be coupled with others, as on its own (suggested by academic literature) it can be fairly weak and still culminate in low participation for women. A portion of the WUODs gender mainstreaming budget would be allocated for “accommodation costs” (i.e. child/elderly/familial care) for meetings to mitigate against domestic obligations preventing women’s attendance.

C) Extend and conduct gender perception surveys to WBCs and WUOs.

Why is this being suggested?

- The ANA currently has no consistent baseline indicators on the understanding of GM by WBC/WUO, or organizational attitudes and perceptions of gender.
- The WUOD with the help of the DPD would mandate the revision of the EKPA survey for distribution at WBCs/WUOs. The DPD would ensure additional questions added to the survey are as unbiased as possible, in addition to assisting with the logistics of distributing the survey to other levels of governance at the ANA. Data gathered from the EKPA surveys would be managed by DPD and shared with the GMC to inform the ANA’s GM initiatives.



How would this be implemented?

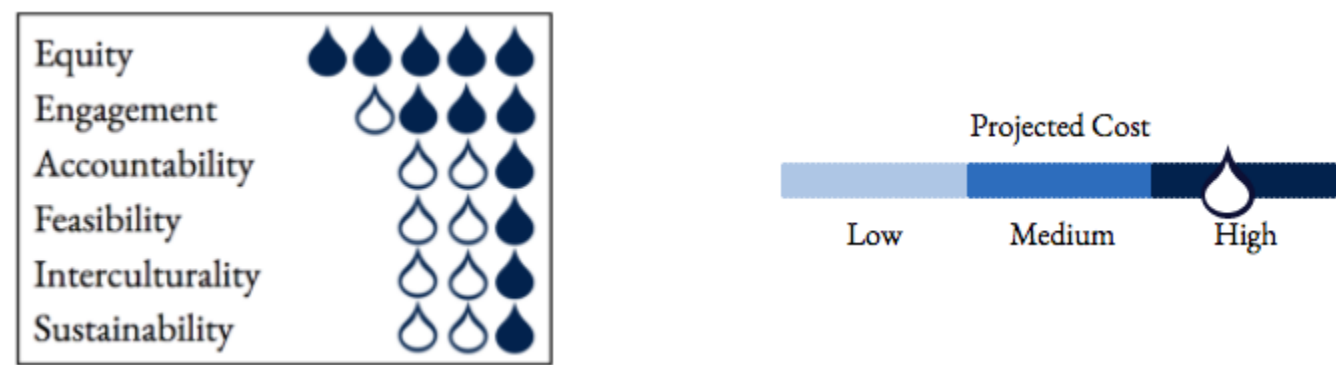
Local and Regional offices would work with ANA HQ and the DPD and WUOD to analyze the data. All data would be gathered and sent to ANA HQ for centralization. Local and Regional Offices would be expected to do descriptive statistical findings on the surveys in their regions. If they have the capacity, or with the help of the ANA HQ they could conduct their own inferential statistical analysis. All findings would end up going to the ANA HQ. Surveys would be conducted in water basins where the WBC’s are active and working well. Slowly the ANA would expand the survey from region to region, eventually attempting to get the surveys out to all the WUOs in the region.

ENHANCE ACCESSIBILITY OF WBCs & WUOs

A) Enhance the accessibility of WBC & WUO meetings for elected representatives.

Why is this being suggested?

- Currently, WBC and WUO meeting locations are inaccessible to populations in remote regions where adequate transportation is not readily available
- Not all water users are aware of water management initiatives implemented by the ANA, WBCs, or WUOs, nor have a platform to communicate concerns or needs to those who represent them.



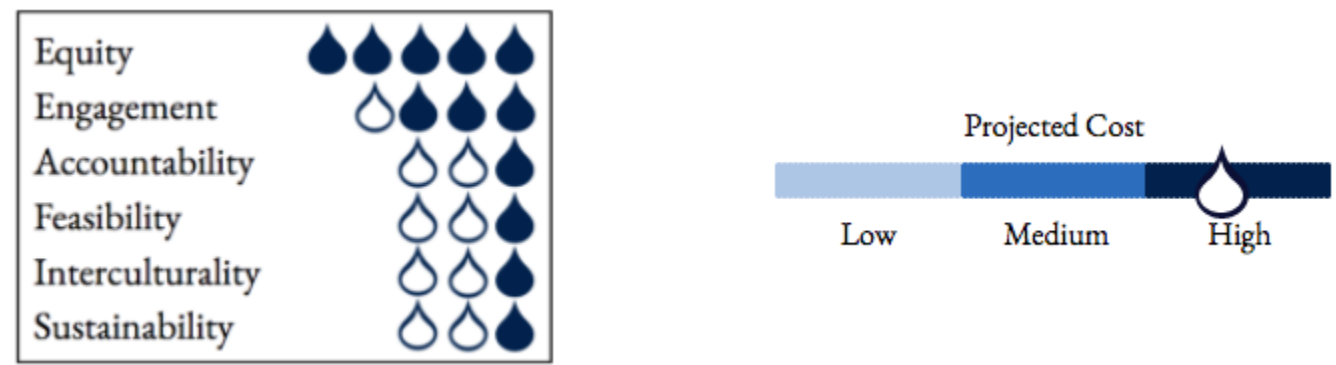
How would this be implemented?

WBC and WUO meetings locations would be rotated throughout specified basins within a fiscal year. Each WBC/WUO would be responsible for determining appropriate locations, accessible to organizational representatives and populations within the basin area. Invitations sent to prospective attendees would be extended to water users who are not formal WBC/WUO elected representatives. WBCs/WUOs would be in charge of developing a meeting schedule that would be made publicly available at each WBC/WUO, as well as on the ANA’s website. Meeting locations would aim to equitably address accessibility challenges resulting from geographical diversity within a given basin (e.g. low, middle, high). The Communications representative within the WUOD would be responsible for posting the WBC/WUO meeting schedules on the ANA’s website.

B) Extend accessibility of WBC meetings for water users in a given basin.

Why is this being suggested?

- Current WBC and WUO meetings are generally inaccessible to the public



How would this be implemented?

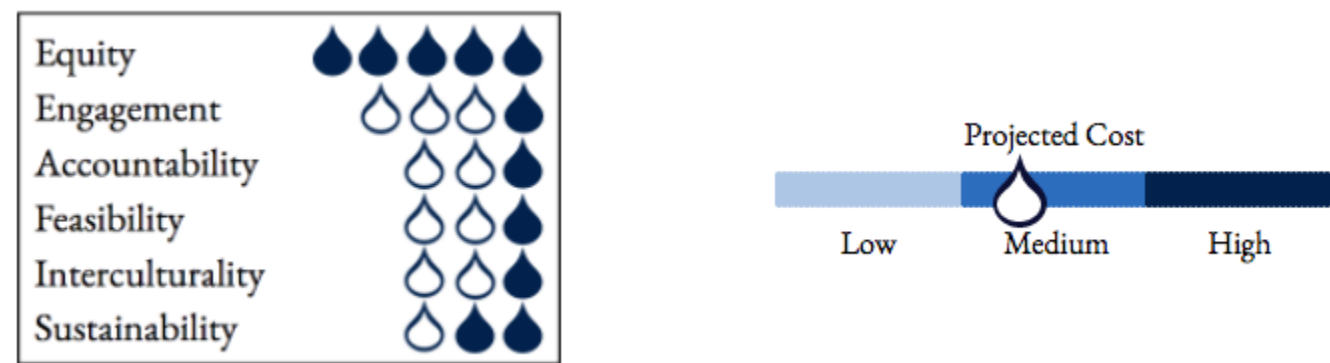
This could take the form of a “town hall” style meeting where all water users are invited to attend to learn information from the WBCs/WUOs about water management and initiatives, and be provided a platform through which to communicate their concerns and needs to those in decision-making positions who represent them. These “town hall” sessions would take place quarterly. A portion of the WUODs GM budget would be allocated for “accommodation costs” (i.e. child/elderly/familial care) for meetings to mitigate domestic obligations preventing women’s attendance.

DEVELOP A TIERED PERMITTING PROCESS

A) Develop a tiered permitting process granting all water users the ability to become registered on the Water Registry.

Why is this being suggested?

- Currently, only water users that own land have access to the water registry.
- The current system excludes non-agricultural and non-industry water users.

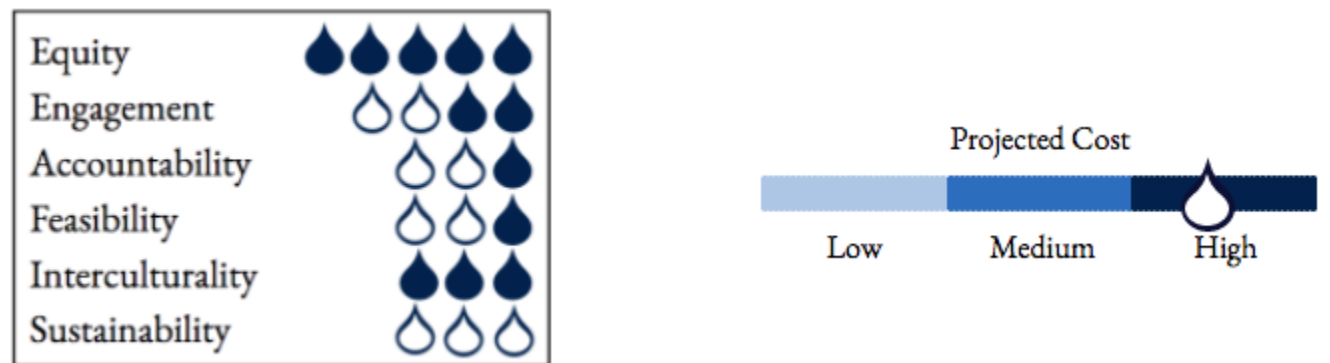


PILOT MICRO-WATERSHED COUNCILS

A) Micro-watershed Councils Pilot Program

Why is this being suggested?

- There is a lack of representation from micro watersheds(sub-regions) within the WBCs/WUOs.



How would this be implemented?

The ANA HQ would pick one water basin to implement a Micro-watershed Council Pilot Program. This pilot program should take place in a water basin that has an established WBC. The local WBC would engage water registry representatives to build out Micro-watershed Councils. Micro-watershed Councils would be required to send a minimum of one woman and one-man representative to each WBC council meeting, to advocate on behalf of their communities/Micro-watersheds. This alternative is not being recommended due to its high-cost projection and low objectives score.



CHAPTER 5: FINAL POLICY RECOMMENDATIONS

5.0 Recommendations

Recommendation 1

Establish a non-appropriable and non-negotiable budget for GM initiatives.

Rationale: Without a confirmed budget it will be much harder to implement any other recommendation. This is the primary reason why a specific budget will lead to achieving all of the objectives for each criteria, and why it is necessary to implement first to enable implementation of additional recommendations.

Recommendation 2

Restructure and Expand the Mandate of the GMC.

Rationale: In order to promote the most unified GM approach, an engaged and intergenerational approach at the ANA needs to be taken. This includes strengthening awareness, knowledge, and best processes and practices in a given GM approach, building off of established baseline indicators.

Recommendation 3

Mandate Gender Strategy and Implementation Plan at the Water Basin level.

Rationale: Creating a baseline for women’s participation and representation can help promote the election of women to WBC positions, with the aim of reaching gender parity in the near future, and continuing to follow evidence-based and gender-informed decision making.

Recommendation 4

Extend the right to vote on WBC decisions

Rationale: This will give gendered representation and voting power to women water users that may be marginalized in households, along with complimenting the aforementioned recommendations implemented.

5.1 Future Recommendations

Recommendation 5: Enhance the accessibility of WBC & WUO meetings.

Rationale: This will increase the ability, access, and inclusivity of elected representatives and authorities to attend meetings where geographic, and socio-economic barriers exist.

Recommendation 6: Development of a tiered permitting process to distinguish between different water users and grant all water users the ability to become registered on the Water Registry.

Rationale: In removing the contingencies of water rights on possession of land rights or marital status, access to water for non-agricultural purposes will become more equitable and inclusive for groups currently disadvantaged and marginalized.

5.2 Conclusion

Addressing gender inequities in water resources management is a challenge experienced by many nations around the world. At this time, women's and girl's relationship with water is not valued or supported by a large fraction of Peruvian society and all levels of government. Implementing the GM approach at the ANA will require a substantial institutional commitment of time, financial, and human resources. In order to sustain a long-term GM effort at the ANA, it is essential to reduce gender inequities both internally throughout the ANA's immediate governance structures, as well as at the water basin level through WUOs/WBCs. The ANA's programs and policies must reflect gender-specific considerations to improve water resources management across diverse geographical, social, cultural, and economic contexts within Peru.

The ANA has the unique opportunity to take actionable recommendations to enhance understandings of gender, and promote a consistent GM approach for water resources management in Peru. The recommendations outlined in this report will enhance gender equity and understanding both within the ANA and with water users at the basin level. It is imperative that these recommendations are implemented in order to build the ANA's capacity to further gender initiatives in the future. For example, without a dedicated GM budget, future GM initiatives at the ANA will be at risk to political turnover and institutional as well as national priorities. This report highlights only the beginning of the ANA's work on gender.

Additional benefits of implementing the recommendations identified in this paper include increased access to international funding, increased labour participation and productivity, and the fulfilment of the ANA's national and international commitments to reduce gender inequities in water resources management. Neglecting to address challenges women face in their access to and use of water resources will perpetuate social, cultural, economic, and environmental inequities. This will lead to further marginalization of vulnerable populations, mismanagement of water resources, and inhibit sustainable development throughout all water basins in Peru.

It is important to note that equity in water resources management moves far beyond the inclusion of women in water resources decision-making and participation opportunities.

Equitable water resources management accounts for all people regardless of creed, gender, ethnicity, culture, or socio-economic status. The ANA should strive to create inclusive policies and programs that reflect the diverse needs of men, women, LGBTQ+ and Indigenous populations throughout the entire country.

The ANA's moment to become an institutional leader in GM and water resources management is now.



TEAM PROFILE



Eliza Bethune

Obtained her *Bachelor of Arts in Environmental, Sustainability, & Society*, specializing in International Development Studies from Dalhousie University. Eliza is currently enrolled in the MPPGA program at the University of British Columbia focusing on Resources, Energy, and Sustainability policy. Eliza has experience working at an environmental consulting firm in Vancouver, BC on the Human Environment team. She has also worked as a Sustainability Scholar for Climate Smart Businesses Inc. Eliza is interested in water policy, energy policy, and Indigenous policy.



Emily Enright

Obtained her *Bachelor of Arts in Global Development*, specializing in Indigenous Studies, Decolonial Studies, Ethics and Human Rights, and Project Development. She then achieved a *Graduate Diploma in Not-for-Profit Management*, focusing on Project Management, Stakeholder Analysis, Boards and Governance. She is now enrolled in the MPPGA program, focusing on International Governance and Security, and Development and Social Change. Additionally, Emily has worked as a research assistant on Canadian nuclear disarmament policy and has provided other social initiatives such as human connection workshops.



Guillherme Rosales

Obtained his *Bachelor of Arts as a Combined Major in Political Science and Philosophy* with a Minor in English Literature specializing in Civil & Human Rights, Ethics & Morality, Epistemology, & Western Political Theory. He has worked both in the private sector and in the public sector at the municipal level and the provincial level. During his time away from university he became an active union representative engaging in labour advocacy, along with active community-engaged development in his neighbourhood to build greater social resilience. He now attends UBC and is in the MPPGA program, focusing on Development and Social Change.



Heather Park

Obtained her *Bachelor of Arts in Political Studies and History*, specializing in International Relations and Resource Governance from Queen's University. Heather is currently enrolled in the MPPGA program at the University of British Columbia focusing on Resources, Energy, and Sustainability. Heather has experience as a Research Analyst at a First Nations-led health organization in Vancouver, BC where she has been working on policies to improve access to mental health services for BC's First Nations communities. Heather is interested in water policy, marine and coastal management and planning, and ocean conservation.

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