Nepal Journal of Social Science and Public Policy

Volume 5 Number 1 2019 ISSN 2565-5124

Water Security and Inclusive Water Governance in the Himalayas



- ✓ How does a social justice framing help understand local peoples' claims over natural resources?
- ✓ How do power relations shape water access and distribution between core and fringe areas in Nepali towns ?
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- ✓ How can participatory community engagement transform gender relations in agriculture and water management?
- ✓ How do agrarian structures affect groundwater access for irrigation in Nepal's Tarai Madesh?
- ✓ How can local experts contribute to inclusive water governance?

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Nepal Journal of Social Science and Public Policy

Volume 5 Number 1 2019

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WATER SECURITY AND SOCIAL INCLUSION: LOCAL GOVERNANCE WITHIN THE NEWLY ESTABLISHED RURAL MUNICIPALITIES IN NEPAL

Pamela White¹ and Juho Haapala²

ABSTRACT

In the Himalayan foothills of Nepal, water demand is increasing while many water sources are depleting. Local levels of government may play a role in tackling local water problems in a fair manner, or in failing to adapt to changing conditions. Nepal has recently undergone rapid changes in its institutional governance setting. Rural Municipalities (RMs) were established in mid-2017 as new, democratic, local tiers of governance. Their responsibilities include ensuring equitable access to water for all citizens, in line with the new Constitution. RMs must tackle decreasing water availability, increasing demands for domestic, agricultural and commercial uses, impacts of climate change, and the challenges of ensuring inclusive and participatory decision-making. At the same time, they are newly appointed finding their position and responsibilities after years of management by line ministries in Kathmandu. The study analyzes the current status of rural municipalities in remote areas of Sudurpashchim and Karnali Provinces in terms of their institutional capacity to implement inclusive water governance and water security in collaboration with a large donor project. It uses the OECD Principles on Water Governance (OECD 2011, 2015) as a framework. This research asks what

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the current water governance issues are in this setting of collaboration. The opportunities identified include the potential for more accountable policy formulation at a closer level to the community, by leaders who are more representative and accountable to their citizens and are aware of specific local water issues. On the other hand, there is a risk that policy formulation and accountability of governance could go astray. We conclude that this is a key moment to support the fledgling rural municipalities and demonstrate ways to build their capacities to secure safe water for all.

Keywords: water security, water governance, social inclusion, federal Nepal

INTRODUCTION

In the Himalayan foothills of Nepal, the relatively abundant water resources are contested (Suhardiman et al., 2018; RWSSP-WN, 2015a, and informal reports by local communities). Access to water is crucial in the region for local lives and livelihoods, especially in the rural areas. Poor governance, and the increasing demand for extraction of water increase the risks of water conflicts and deficiency. Conflicts on water are becoming more common among communities and various categories of water users, with competing demands (reports by local communities). At the same time, much of the potential of the resource remains untapped due to the undeveloped water infrastructure and institutions (Biggs et al., 2013). This is a puzzling situation, as it truly seems the case that the local water crises are largely crises of governance - or lack of it (Clement et al., 2017; Suhardiman et al., 2018).

If the water crises are crises of governance, then improved governance and management modes of the resource should hold the keys to positive changes. Water governance is fundamentally a local issue that involves a spectrum of stakeholders at various levels. Local levels of government may play a role in tackling the local water scarcity problems in a fair manner, or in failing to adapt to their new responsibilities and increasing water demands.

The study analyzes the collaboration with 27 core rural municipalities (RMs) in remote areas (hill districts) of Sudurpashchim and Karnali Provinces, Nepal, in terms of their institutional capacity to implement inclusive water governance and water security in collaboration with a large donor-funded project (the Rural Village Water Resources Management Project). This research asks what the current water governance issues are in this setting of collaboration, and what support is provided. The article considers water security, including gender equality and social inclusion. The definition of water security encompasses reliable availability of an adequate quantity and quality of water for a variety of purposes, with a bearable level of risk (Grey and Sadoff, 2007). The findings are structured with the OECD Water Governance Framework (OECD 2011, 2015) and share the lessons

learnt and ways forward in this very early stage of decentralization. The Framework was selected as it considers multi-level themes affiliated with implementation and governance situations with multiple stakeholders – very relevant to the complex water resources management setting at RM level.

CONTEXT

Case description

Nepal has recently faced rapid changes in its institutional governance setting. Municipalities were established in late 2017 as new, democratic, local tiers of governance. The first democratic elections at municipal level since 1998 were held in mid-2017, ensuring an elected representation of the residents in the local government for the first time since 2002. Rural municipalities (RMs) replaced the previous local structures of Village Development Committees (VDCs) and Districts. Voters elected a Chairperson and Deputy at RM level, and a ward chairperson plus four members (two of which should be women), representing each ward of the RM (as defined in the Constitution, 2015).

The responsibilities of the municipalities include the arrangement of water supply and sanitation, ensuring equitable access to water for all citizens (Local Government Operation Act, 2074). They also cover other related responsibilities such as local infrastructure (for instance, irrigation, micro-hydropower and other renewable energy sources); agriculture, livestock and cooperatives; health and education (Local Government Operation Act, 2074). The fundamental right to water is outlined in the new Constitution (GoN, 2015), as are many issues relating to social inclusion. The Constitution states in articles 30(1) and 35(4) that all citizens have the fundamental right to live in a healthy and clean environment and to access basic clean drinking water and sanitation services. It guarantees that women, disadvantaged castes, ethnicities and religions, and people with disabilities can equally access these rights (GoN, 2015). In addition, Nepal signed the UN Right Water in 2010 (UN, 2010), guaranteeing access to basic water and sanitation for all. When water and sanitation are recognised as human rights, people are defined as rightsholders, and governments as duty-bearers of water and sanitation service provision. This also means the new local tiers must tackle decreasing water availability, increasing demands for domestic, agricultural and commercial uses, impacts of climate change, and the challenges of ensuring inclusive and participatory decision-making. At the same time, they are only beginning to fulfil their role after years of strong central control, where virtually all issues were managed via representatives of line ministries in Kathmandu.

The research analyses 27 rural municipalities in Sudurpashchim and Karnali Provinces in Far West Nepal that are the core focus of

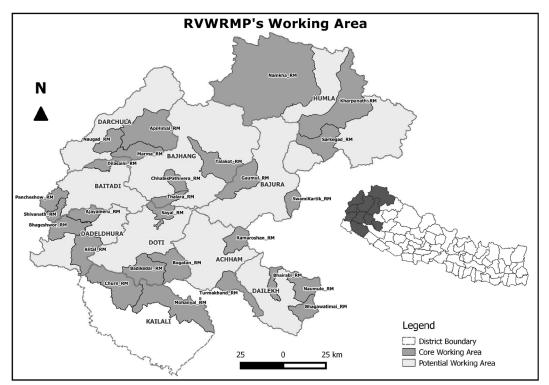


Figure 1: Study focuses on the core collaboration areas of Rural Water Resources Management Project.

the studied project (Figure 1). The analysis focuses on the experiences of donor collaboration with RMs on socially inclusive water governance and water security – specifically, the role of the Rural Village Water Resources Management Project.

The project supporting these RMs is the Rural Village Water Resources Management Project (RVWRMP; see <u>www.rvwrmp.org.</u> <u>np</u>). It is implemented with the support of the European Union and the Governments of Finland and Nepal and is embedded in the local government structures. The project works mainly at the community and RM levels after the government reform, with technical staff jointly planning and implementing with RMs the funding for water supply, sanitation, livelihoods activities and capacity building. The project works on water supply, sanitation and hygiene, irrigation, rural livelihoods development, micro hydropower, climate change adaptation and disaster risk reduction (CCA/DRR), environmental protection, and related behaviour changes and institutional capacity building. Human rights, gender equity and social inclusion are cross-cutting themes of the project. The project has operated in ten districts of West and Far West Nepal since 2006. It has served approximately 700000 water supply beneficiaries up to date. The third, final project phase (RVWRMP III) started in 2016, and the activities are to be finalised by 2022. Since the new federalisation process, Phase III of the project operates in 27 core RMs and more non-core within the original ten districts (as shown in the map above). The project is a part of continuous, nearly three-decade, Finnish bilateral water sector collaboration in Nepal, making the project a very long-term intervention with substantial institutional learning and memory (www. rvwrmp.org.np – project document, MoUs with RMs, and other guidelines).

One of the most critical tools of project collaboration with the RMs in water governance is the mutual development of Water Use Master Plans (WUMPs). This is meant to be a participatory and inclusive planning tool based on the integrated water resources management concept at micro watershed level. WUMP teams made up of Nepali technical and social staff, working closely with community members (all persons living in the catchment area) and elected representatives, assess potential and existing water sources, structures, social issues and disadvantaged groups, existing water needs for domestic and productive uses and current gaps (Rautanen and White, 2013). They use many tools developed from Participatory Rural Appraisal approaches, as well as technical measurements. The WUMP enables the municipality to develop a clear strategy for the water uses, and the

communities to prioritize the potential best uses and conservation technologies of water resources. The WUMPs provide a five-year vision and identify immediate priorities for a one-year action plan, which can then be approved by the RM, and should be followed by the project. In 2018, the WUMPs were adapted to include water use strategies and livelihood implementation plans (LIPs) at RM level (RVWRMP, 2018).

RVWRMP is one of the first organizations to have started collaboration with the local government tiers. The project can therefore be considered a pioneer at the forefront of the donor-RM cooperation. RVWRMP works currently with 27 core RMs, with a full set of project operations available to them. Potentially all other RMs (69 in total) in the ten former districts can be supported on a proposal basis. The set operations depend on the agreement and needs of the communities and the RM (based on outcomes of the WUMP planning process in the core RMs; and requests from RM staff and elected representatives in the non-core RMs). Schemes are prioritized according to set criteria by representatives of the RM in the final WUMP workshop.

The establishment of the RMs has changed the working modality of the project towards providing investment and recurrent support directly to the municipalities (instead of the earlier process of working with district authorities), with significant technical assistance and close collaboration also provided by the project. Before the decentralization, the district administrations were run by appointed staff from line ministries, often with minimal links to local communities. Budget and technical support from the Government of Nepal and project budgets were provided to the districts. Now most of the project activities are targeted to the RMs, and community trainings often occur at the RM offices with the participation of RM officers and politicians.

Water management, security and social inclusion in local water governance

For many years, Integrated Water Resource Management (IWRM) has been promoted as a logical system in Nepal. The national government prepared a Water Resources Strategy in 2002 (GoN, 2002), which recognized the competing demands and also the social aspects of water governance. However, given the large number of actors and water uses, implementation has proved problematic. Many donors argued that river basin planning, as a holistic tool for water use planning, is the most appropriate tool. However, rivers cut across administrative units and national bureaucracies, and is perhaps more likely to result in conflict than integration (Suhardiman et al., 2018). In particular, efforts to improve planning from above, without consideration of local political, social and practical needs were doomed to fail (Clement et al., 2017).

The current trends in the field of water governance emphasize the linkages of

water and security (GWP, 2000; Cook and Bakker, 2012), and especially the waterfood-energy-ecosystems nexus (Hoff, 2011; Keskinen & Varis, 2016; Keskinen et al., 2016). Although the nexus approaches hide the political nature of governance behind the technical focus, they provide perspectives to integrated natural resources governance. The question of security in relation to water focuses on whose security is at stake, and who pays the costs? Gender equity and social inclusion (GESI) are therefore important aspects to consider in relation to water security. The contribution of water security to women's empowerment can remain limited if the implementation modalities do not account for politics and social fit (Leder et al., 2017).

Social inclusion as a universal idea can be tracked back to the Universal Declaration of Human Rights of the UN, 1948. It is reflected in human rights-based approaches (HRBA) to development and is emphasized by several international organizations and processes, including the United Nations and the Organization of Economic Cooperation and Development (OECD). Gender equality and social inclusion are considered in various national guidelines, including the Constitution (2015), as noted earlier. RVWRMP has outlined the importance of rights and inclusion in project documents and guidelines (for instance the joint HRBA & GESI guidelines, prepared with RWSSP-WN, 2015).

The accountability measures in the RM governance context of the study

primarily regard the vertical and transversal accountability (UNDP-SIWI, 2015), referring to the degree to which the concerns and viewpoints of the citizens, families, and sector stakeholder organizations are accounted for in the municipal governance. As a normative idea, accountability therefore relates to the concept of good governance (OECD, 2015) through credibility and legitimacy of the government in the eyes of the residents, and the accountability power of the citizens and stakeholders. The social, political, administrative, and financial types of accountability (UNDP-SIWI, 2015) are considerable aspects for viably achieving the social responsibilities recently appointed to the local governments.

In the research context, water security is closely interlinked with multiple issues. The availability of drinking water is the most critical, as life depends on it and women and girls in particular, spend hours each day collecting potentially dirty water from far away springs and streams (RWSSP-WN, 2015). Another security concern is malnutrition and food insecurity - still evident in the remote areas of Nepal. Two of the districts where RVWRMP operates (Humla and Bajhang) had the highest prevalence of child malnutrition in 2011 (GoN, 2014). The project works with RMs to improve the food security and nutritional status by using water resources to promote irrigation, home gardens and greenhouses, introducing new plant varieties for cultivation, and supporting livelihoods activities and agro-business. The poorest and the disadvantaged groups (DAGs), such as disadvantaged castes, women, children, and elderly people, are generally the first to suffer food insecurity. As constituents, the RMs should focus their attention on the needs of these groups.

Another security concern is the adaptive capacity for climate change and disaster risk reduction, both closely related to the increasing amount of extreme weather events, like droughts, landslides, and floods, in the area (NCCKMC, 2018). The disadvantaged groups (poor households or members of disadvantaged castes) often occupy the most vulnerable land areas and household locations in this regard, furthest from water and on steep land. Variable rainfall trends have also brought security concerns in the form of source depletion and disputes among the residents and communities (Regmi and Shrestha, 2018). According to a recent study in Western Nepal, 65% of all sources were in declining condition between 2004 and 2014 (RWSSP-WN, 2015a). The study found that the reducing availability of water demands more attention to governance, balancing competing demands and prioritizing domestic use. In addition, it demonstrated the need for source protection and watershed improvements.

The RMs are linked with these issues as the Constitution confirms the fundamental right to water for all; as well as the RMs' role in water resource management, water infrastructure development and maintenance, and the institutionalization of the sector. RVWRMP works in this sector at community and RM level and provides institutional capacity building. The Step-by-Step (SBS) project process (giving guidance on technical, social and financial implementation of all schemes) accounts for climate mitigation and disaster risk concerns; for instance, through initial selection of the schemes, attention to disaster risk reduction in construction, and in the Post-Construction and Water Safety Planning (WSP) process (RVWRMP website, 2018).

The male-dominated society and local cultural traditions lead to various types of discrimination in the area. Discrimination is mainly based upon gender, caste, ethnicity and economic status. The 2014 Nepal Human Development Report highlighted that caste and religion-based social exclusion translates into limited opportunities in economic and political spheres (GoN, 2014). Women and girls suffer household drudgery, poor health status and less educational attendance and attainment. In some localities they are socially excluded and suffer significant taboos during menstruation, such as not being allowed to use taps or toilets (RWSSP-WN, 2015). These GESI issues are important when considering access to local water uses and water resources management institutions. With this in mind, RVWRMP operates through an HRBA and gender equity and social inclusion (GESI) strategy and action plan to ensure access to water for all. The project also conducts targeted GESI activities, such as gender

budgeting, promoting women as leaders, menstrual hygiene management and discriminatory traditions, and GESI-friendly planning (such as consulting all participating groups, ensuring equal representation in committees, trainings). Targets are set for equal participation of women and disadvantaged group members, though the challenge can be to ensure truly active participation.

METHODS AND MATERIALS

Analytical framework

We conducted action research - a solutionoriented, applied research perspective (Mikkelsen, 2005, p.132). We focus on problem-solving through locally-constructed knowledge and analysis. In the research setting, this translates into an initiative to develop the local governance through wellargued research.

For analyzing the local governance setting, we used the OECD Principles on Water Governance (OECD 2011, 2015) as a framework. It provides a well-argued characterization of multi-level themes affiliated with implementation and governance situations with multiple stakeholders. The defined categories of the framework assisted in identification of key issues and assisted with the analysis of the local water governance issues. It thus provides a useful framework "to identify good practices for managing interdependencies between the many stakeholders involved in water management at multiple levels" (OECD, 2011 Box in p.3).

The key coordination themes of governance consider administration, information, policies, capacity, funding, objectives, and accountability (OECD, 2011). The OECD framework and its categorization of the common governance themes is applied as an analytical framework (Table 1) to identify the relevant types of governance issues in local level water governance. This study merged three of the themes in the original OECD framework (Administrative, Policy and Objective), as their scopes were difficult to differentiate in the analysis of the findings. One governance theme was added (Implementation).

Table 1. Analytical framework: Governance themes. Adapted from OECD, 2011.

GOVERNANCE THEMES	DESCRIPTIONS OF THEMES AND GUIDING QUESTIONS
INFORMATION	Is information available to all for adequate discussion and decision-making, or are there asymmetries of information between the stakeholders?
ADMINISTRATIVE; POLICY; OBJECTIVE	Is there a good match between administrative and hydrological boundaries? Are there any problematic land tenure issues in cross-boundary water management? What is the status regarding sectoral objectives, visions, and policies? Are there RM policies regarding GESI? Do the local administration staff understand human rights issues (for instance right to water and sanitation)? Are there differences in the agendas and objectives of the stakeholders; or motivational and incentive problems?
CAPACITY	Are there sufficient personnel, expertise and resources for good water management? Has there been adequate capacity building? Is there understanding of the gender & social inclusion issues among RM and RVWRMP staff?
FUNDING	Is the funding stable and sufficient? Does funding respond to the needs of all groups? Is there follow-up and reporting of expenditures and results, in line with plans?
ACCOUNTABILITY	Is the RM transparent? Do both the elected officials and community members have sufficient commitment, concern, awareness and participation?
IMPLEMENTATION	How are policies translated to actions and practices at the grassroots, benefitting all actors? What are the barriers for implementation of water security and GESI actions?

Data collection

RM level qualitative data was collected by the authors in field visits and interviews at RM offices, with interactions with the chairperson and other elected officials, staff members and with community members. Their views were solicited, in order to understand the progress of the devolution processes.

The authors have also conducted participatory observations in almost all project activities listed in Table 4. RVWRMP project staff are mainly Nepalese, from technical and social backgrounds (only three international staff) – see further

details on staff composition and roles from Haapala and White (2018). Project level data was collected from project staff and cross-checked with project documents and implementation manuals. Seven specialist staff were consulted on the project activities in the RMs (Table 3; see Table 4 for the results). Furthermore, two key senior national expert staff were interviewed in depth regarding the role and status of RMs in water security and socially inclusive water governance. All ten District teams of the project presented progress reports with analyses of the current issues in the RM operations, contributing significant information to the analysis.

Data type/source	Place (Municipality)	Date (month/ year)	Topics in summary
Women community interactions	Alital RM, Dadeldhura Bhatakhatiya RM, Achham Marma RM, Darchula Dilashaini RM, Baitadi	11/2017 11/2017 5/2018 1/2019	On their interactions with the RM (versus the earlier institutional arrangements); the major difficulties and opportunities they face in the RM; their interactions with the project
RM staff interactions 3 women, 7 men	Alital RM, Dadeldhura Naumule RM, Dailekh Bhatakhatiya RM, Achham Marma RM, Darchula	11/2017 11/2017 11/2017 5/2018	On the challenges and opportunities of the new institutions; the major issues of water governance and GESI; practical capacity gaps and implementation issues; the interactions with the project
RM Chairs & elected representatives 4 women, 6 men at RM level 1 woman, 2 men at DCC level	Naumule RM, Dailkh Ramarosan RM, Achham Dailekh District Coordinating Committee (DCC) Marma RM, Darchula Duhu RM, Darchula Naugad RM, Darchula Darchula DCC	11/2017 11/2017 11/2017 5/2018 5/2018 5/2018 5/2018	On the challenges and opportunities of their new roles; the major issues of water governance and GESI; the interactions with the project

Table 2: RM data collection

Data type/source	Place	Date (month/ year)	Topics in summary
Specialist interviews (7)	Project Support Unit / Amargadhi, Dadeldhura	5/2018	On project activities with the RMs; water governance and GESI issues; capacity building; coordination via the joint management committees;
Key senior national expert interviews (2)	Project Support Unit / Amargadhi, Dadeldhura	5/2018	On the first year of cooperation with the RMs, strengths and weaknesses.
District Team presentations	Project Support Unit / Amargadhi, Dadeldhura	8/2018	Project activity and progress reporting with an analysis of current issues in RM cooperation

Table 3 Project data collection

The activity and event reports of the project staff (RVWRMP, 2017-2019) were used for triangulation of the findings. The project progress data and annual reports were also used to identify the level of activities conducted with the working RMs. Quantitative data from analysis of the institutional status of the RMs in late 2017 is also quoted.

SWOT analysis

SWOT analysis is a broadly employed research technique used for identifying factors that are helpful (strengths (S) and opportunities (O)) and unhelpful (weaknesses (W) and threats (T)) regarding a particular objective. In the analysis, the strengths and weaknesses may refer to the internal factors or current status, whereas the opportunities and threats may refer to the external factors or future scenarios. In this article, the analysis looks at the current status and future scenarios regarding two specified objectives: 1) GESI and 2) water security in water governance (See Annex for the analysis).

A SWOT workshop was conducted with 40 senior staff of the Project Support Unit and Districts (almost all men), representing almost all of the national technical assistance team of the project (apart from community facilitators). As the frontline team, interacting on a daily basis, the authors considered their opinions important, regarding RM experiences and potential for functionality. The workshop was facilitated to gather feedback from the staff about the experiences with the RMs during the first year of cooperation after the elections.

The staff made a SWOT analysis in small groups, focusing on either the SWOT of the water security in the RMs (two groups); or the SWOT of GESI (two groups). Groups were asked to particularly consider the changes from the earlier governance structures (VDCs and districts) and the impact or potential impact on water governance. The group works resulted in four SWOT analyses that identified several topical points for each of the sectors in the study context. The authors then analysed the results, linking the points with the OECD governance themes (see the Annex).

FINDINGS

The following findings are organised via the OECD governance categories.

Information

The WUMP-LIP and Step-by-Step (SBS) approach are both project tools that the RMs have begun to apply in their work. The WUMPs are a key element of information gathering and sharing within the RM. Earlier, WUMPs were conducted at VDC level. When the RMs were formed from mergers of VDCs, some the RM already had a WUMP, but some areas hadn't earlier had a WUMP. During 20178 RVWRMP and the RMs have worked together to supplement the information collection. Since May 2018, the RMs have financed the process themselves. The result was an RM-wide WUMP-LIP (including the Livelihoods Implementation Plan), which provides the RM decisionmakers with data, information and analysis on water uses and livelihoods, on which investment and activity plans can be based. Another element that supported information flows was the SBS approach for the planning and implementation of water, sanitation and renewable energy schemes. The SBS guided the User Committee at the scheme level through planning and implementation, including such as community mapping, public hearings and public audits, bringing the principles of good governance into action.

Interviews with women in communities (see Table 2) indicated that they are not always well informed on RM plans (Table 2, interviews with community women, 2018 and 2019). For instance, one elected female ward representative, interviewed in May 2018, commented that men in her ward committee had approached her on several occasions to sign minutes of meetings that she was not invited to attend. Another said that she hadn't applied to be a candidate but was appointed by her party without informing her. Although she still felt excluded from some issues, she now attends meetings, and she considers this access to information has empowered her. In January 2019, several female elected ward level representatives reported that they don't have the authority to check documents (particularly budgets) at the RM level, and they were concerned there was a lack of transparency regarding decisions. However, they also noted that there were more opportunities to be involved than with the earlier system.

The SWOT analysis results (see Annex) and interviews conducted with project staff

(Table 3) indicated that information flows were not a significant problem now. Earlier, information was controlled by line ministry staff, and there were no elected officials locally. Information flows were considered to have improved, as the government was closer to the grassroots. Two of the RM Chairs in Darchula commented that as a result of the Women as Decision-Makers workshops (supported by the project), they had been able to understand the specific problems facing women. They committed to incorporating some of the priority activities in the RM annual plans, and to raise these issues with other implementing organizations and government bodies in the RM. They considered that improving information flows and the closeness of the RM to the population made it easier to plan for future activities.

Administration, policy and objectives

Earlier, there was a clear mismatch between administrative and hydrological boundaries, with the one potentially watershed covering many VDCs and districts. This made water governance particularly problematic. In order to gain legal control of a water source in a neighbouring VDC, to allow construction of a water scheme, considerable effort was needed in negotiations, and legal registration of the source was controlled by the district authorities. As noted above, WUMPs have now been prepared for the RMs, covering more territory than the earlier VDC-based WUMPs. Legal authority for source registration now sits with the RM, however the system is not yet established (Local Government Operation Act, 2074). RMs are still not watershed-based entities, and the legal ownership issues are not resolved. Staff commented that conflicts remain.

RVWRMP staff believed the RMs had considerable potential in capacity enhancement and policy implementation on water security. At this stage, provincial policies are being formulated, and RMs are only now (2019) formulating their own local policies. In core RMs, local policies and strategic plans on WUMP, DRR, CCA, cooperatives and livelihoods, and GESI, were being formulated in collaboration with the project. Some RMs have formulated and implemented water security related laws and by-laws, with the assistance of project staff. For example, the Local Governance Act 2074 requires RMs to develop policies in a range of topics and RVWRMP has made a commitment to support the core RMs. Amargadhi Municipality, where the project main office is located, is not a core municipality, however they have requested technical assistance in preparing their own GESI policy – a reflection of municipalities' interest to build their capacities in this area.

The SWOT analysis results identified possible risks for the RMs in the capacity building and policy formulation processes, reflecting the risk of domination by some groups. Project staff noted the strong collaboration between RM staff and elected officials, and project staff, in water governance policy, strategy and plan development at RM level. RM Chairs who were interviewed commented on the good coordination via the joint management committee, which eased many activities and solved problems in the field (technical or social).

RVWRMP staff (Table 3) reported great potential for RMs to improve GESI aspects in the new, possibly more accountable ways of policy formulation at a closer level to the community (a key element of a human rights-based approach). On the other hand, policy formulation and accountability of governance are also considered possible risks, if the RM is dominated by male elites. The right to water and san is a key starting point of the trainings by RVWRMP, and participants are aware of the need to prioritize drinking water and sanitation when setting policy and planning for the uses of water.

Some positive aspects of policy that were raised in the SWOT analysis with regard to GESI in water governance, were the fact that the RM has the right to formulate and implement acts and policies that directly benefit their citizens, such as the WUMP and LIP. The Constitution was mentioned as providing a GESI-friendly framework for local government. The project personnel stressed that there is a clear need for RM specific GESI policies, and that the task is under work as a part of the cooperation.

Capacity

The SWOT analysis indicated that a serious problem facing the RMs is in the area of technical and physical capacity. RVWRMP conducted a survey of the staffing and working conditions in 45 RMs in the two provinces in late 2017. At that point, almost none of the RMs had an office of their own, operating from rented or temporary office; and three RMs operated from a temporary tin shack. Internet access was a rarity. Road access was mostly seasonal (24 RMs), which meant that vehicles wouldn't be able to reach the RM during the rainy season. Nine RMs did not have any kind of vehicular road access. The staffing situation was critical, with 16 RMs not having a permanent Chief Accounting Officer.

By mid-2018, the situation had improved. However, many RM Offices are still operating from their earlier district headquarters, because of banking problems (no bank services are yet available in many RMs). There is also a continuing lack of human resources, insufficient energy backup systems, and the lack of internet and telephone facilities in many of the RMs.

The project District staff reported that frequent turnover of the RM officials (Chief Administrators and accountants) have harmed account management, reporting, and budget releases, needing support from project staff (in one case there was even a strike of RM staff). 44 RM accountants had attended a training in the new government accounting system with RVWRMP and the

Activity	Events conducted by end of FY74/75	Events planned for FY75/76	Planned event frequency
Institutional / HR cap	acity building		
Women as decision-makers workshops	6	27	annual (review)
Sensitization of cooperative development	2	2	one time
Business promotion workshop	1	1	one time
Exposure visits by the RM	27	27	annual
RM Accountant orientations	48	48	annual
WASH and water use plan	ning and train	ings	
RM project orientation	27	27	one time
WUMP/LIP investment workshop	6	27	annual
WUMP Ward level planning and scheme prioritization workshops / WUMP facilitator trainings at Ward level	168	358	one time
WUMP++ formulation	2		RM initiated pilot
Menstrual pad-making training for RM women	8	27	one time
Total Sanitation and Menstrual Hygiene Management conference	7	27	annual (review)
School sanitation	24	27	annual
Municipality water quality testing kit support	5	Min. 27	RM initiated pilot
Sustainability Workshop	5	27	annual
RM orientation to CCA/ DRR/ WSP	1	27	one time
Technical training on CCA/DRR/WSP for RM Technicians	4	10	for all working RMs in the same District, one time

Table 4: Key trainings and visits with RM staff and representatives

WUMP = Water Use Master Plan; LIP = Livelihoods Implementation Plan WUMP++ = Extended WUMP

national government in late 2017, and again in January 2018. 92% of the RM accountants reported that due to the insufficient internet capacity at RM level, they had not been implementing the Government's official accounting package. Field observations and interviews indicated that the RMs are aiming to recruit staff, but those prepared to work and live in remote areas generally have limited capacity in the key water governance issues. In particular, it can be difficult to recruit qualified women for remote posts (both for RM staff and RVWRMP). One RM Chair noted in interview with the authors that he felt it important to be able to consult the project staff, as he lacks the full team of experts in his RM to date. This lack of local capacity for water governance and GESI is an important gap. Four elected women commented that women lack skills in leadership and literacy and need training to build their confidence and be able to return home and convince others.

Table 2 lists the key project-related trainings and visits related to institutional development, GESI and water governance conducted for the RM staff and elected representatives, or with a considerable RM representation, in the first fiscal year of cooperation, 7/2017-7/2018 (2074-2075 in the Nepali calendar).³ Naturally, training isn't enough-changing attitudes and behaviours (for instance with regard to consideration of opinions and needs of women and disadvantaged groups) takes long term reinforcement.

Funding

The SWOT analysis (Annex) indicated that funding is not seen to be a serious issue yet. In fact, project staff noted that RMs have more local control of their budgets. RMs have made increasing financial contributions and commitments regarding project activities, and staff considered that this reflected the increased ownership.

In November 2017, RM representatives explained that they had received general instructions from the Government on how to budget funds and that they could make discretionary decisions within the lines. However, in many cases the RM took funds from one budget and moved it to another – such as in several cases, moving agriculture funds to road construction. It is clearly visible that all RMs have prioritized road construction over other activities during the first year (RM interviews in Table 2).

A female deputy Chair commented that it is mainly men who make decisions regarding the budget, and they do not tend to think about women's needs. She said that the limited literacy of many of the elected women (including herself) also made it problematic to ensure that women have been considered. In the first budgetary decisions by her RM, the 'women's budget' (earmarked by the national government) had been diverted to road construction. When discussion had taken place this year on 'women's' issues, it had focused on possible infrastructure, such as a birthing centre, and not on spending for awarenessraising activities. The Women as Decision Makers workshops conducted to date by RVWRMP with elected women and female staff of the RMs have influenced budget

³ Disaggregated data isn't available, however, as the participants reflect the RM make-up, it can be assumed that the majority were men

spending in those RMs. For instance, women have identified leadership training for women as a key issue, and the RM has supported.

Donor and project staff had some fears at the start of the fiscal year regarding the financial management of project implementation funds, and potential risks of corruption. The change in implementation structures meant changing the fund flows, with both Nepali and international funds flowing directly to RM bank accounts (rather than via the districts, as earlier). Given the capacity problems mentioned earlier, and the difficult bank access, there was a reasonable basis for concern. However, to date the management of project accounts, at least, proceeded well, with considerable support from project staff. The audits of the RMs by the Nepali National Audit Office has not yet taken place, however, internal project audits of RM accounts have not found serious problems.

While some taxes are collected locally, the RMs are still reliant on central government for most of their budget. Consequently, the RM has limited ability to make major changes in the overall budget. In the planning process for the current financial year, the planning processes at different levels were out of synchronization. RM budgets (included those supported by RVWRMP) were set by the Ministry of Finance in May and read out in the national budget in late May, yet the RM Council meetings were only held in July. For the next financial year, the project has begun to work with the RM to prepare local budgets much earlier, and thus have some chance to influence the national plan.

Accountability

The forms and compositions of RM cooperation with community schemes are still taking shape – in one case the RM had retrospectively applied a tax to a User Committee (seemingly rent seeking). However, clear cases of corrupt behaviour have not emerged to date.

The RM executive structure is representative in principle, as it includes specific women and DAG representatives. This should make the RM accountable to its citizens and give women in particular more confidence to speak up - though as noted earlier, some elected women feel this is a barrier, and they need more training for this (interviews with elected women, 5/2018, 1/2019).

The RM and project are together applying an inclusive strategy in staff and facilitator selection (though this only applies to staff recruited for project activities), and trainings. RMs are close to their citizens, offering services within the RM (and in the near future, legal registration of water sources). The fact that the RM services at the headquarters is accessible from all parts of the RM, unlike the district headquarters earlier, means citizens have improved access to basic social services and that they can talk with representatives and make complaints if necessary. This is evident from visits to the RM offices, where there are always citizens visiting to attend to issues. Earlier, citizens had to travel further to district offices (up to several days on foot, one way), where staff were often absent from their posts, and otherwise reluctant to serve the public in the remote corners of the country.

On the other hand, RVWRMP staff considered in the SWOT analysis that the most significant issue for water security development was accountability (Annex). RVWRMP staff listed risks of bureaucratic mismanagement, influence of elites, a lack of proper planning and visioning on water uses, political bias and weak coordination among stakeholders – leading to potentially poor accountability to the citizens. An interesting issue was a potential conflict of interest, where the local government acts as a planner, an implementer and as a regulator (leading potentially to environmental risks).

Implementation

The project has supported the RM to apply HRBA and GESI approaches in implementation of scheme prioritization and selection, aiming to favour the least served and most disadvantaged areas of the RM – with positive results. In addition, the RM has constructed GESI / disabled userfriendly public or school WASH facilities with project support. However, staff reported in the SWOT analysis that men and elites still dominate in decision-making in practice, due to traditional social structures and prejudices, poor confidence and literacy of many women, and the lack of time for women to participate actively outside the home (this was confirmed in the interviews with female elected officials). There is ineffective implementation of the GESI-friendly policies - for instance, guidelines for representation of women and disadvantaged groups in committees and meetings are not always followed by the communities (with men in committees sometimes leaving women out of procurement activities or coming to decisions amongst themselves). This weakens accountability and leads to business-as-usual practices. Elite capture, corruption, disputes in water resources management, and social and political disputes were all mentioned as threats within the new structure. Implementation risks included a priority focus on hardware, and less interest in supporting policies and strategies, as well as RMs favouring some groups with economic opportunities. Menstrual and caste taboos prevent universal access to taps and toilets, as well as interfering with participation of women in meetings (reported by female elected officials, January 2019). The potential role exists for the RMs to intervene and ensure equitable water governance.

In addition, it is clear that there is inadequate understanding of the dynamics of climate change and impacts of excessive water extraction from sources. A lack of RM water policies makes it difficult to plan effectively. This has been exacerbated by haphazard or unplanned development activities, particularly damage to water schemes by road making (for instance, ripping up pipes or even bulldozing over tap stands). This is an area where improved RM governance would play an important role. RVWRMP has conducted several different policy formulation workshops for the elected RM representatives on water resources governance, climate change and disaster risk reduction, sanitation and hygiene, menstrual hygiene management and gender equity, and steering of water scheme operation and maintenance (see Table 4). As a result, the partner RMs have established formal policies and contributed budgets for implementation activities.

RVWRMP staff based at district level raised some challenges in water governance the communities and RMs are facing (Table 3). These included scheme sustainability concerns, water scarcity, and source disputes and depletion problems related to RM water governance difficulties. For instance, depleting water sources and partially related community conflicts make scheme planning challenging as the nearest suitable water sources are often located a dozen kilometres away from the service area, being owned by another community in another municipality. The evident lack of agreements between municipalities, regulations, policies, and customized ways of managing these types of issues in the new local governments do not help to govern the commons in this regard. These issues can hopefully be better addressed by the RM in the future, utilising the WUMP process, RM water policy development and capacity building activities.

On the positive side, RVWRMP staff reported better multi-stakeholder cooperation and monitoring of activities with the RMs. It was also noted that the RMs have initiated several extra activities, such as expanding WUMPs towards more general RM civic information system (initiated by two core working RMs) and developing water quality testing facilities (initiated by six core working RMs). RVWRMP is handing over the modalities (such as the SBS implementation modality, or Water Safety Planning of water schemes), and guiding materials (several guidelines and guidebooks on sustainable water resources management and livelihoods development) to the RMs, but it remains to be seen if they have the willingness or capacity to implement them alone. The RMs have taken over the implementation of the WUMPs since May 2018, including the financial burden of paying for the NGOs facilitating the process and collecting data. In some cases, RMs have taken them further by adding additional information and data points. In one of the RMs visited by the authors, the RM Chair reported that he observed the SBS process to be so functional and transparent that he has instructed staff to use it in other schemes in the RM without donor project involvement.

DISCUSSION

The critical link of water security and social inclusion

In this study we have reflected water security and social inclusion themes under the OECD governance themes, with findings collected via various methods, such as interviews, SWOT analysis, field and workshop reports (described in the Methods section). In line with this, the social accountability theme of water governance was regarded as the greatest risk for the water security in the RMs. On the other hand, much potential was seen (both by staff and RM officials) for water security in the improved policy formulation opportunities in the water sector, and capacity building at local levels from municipality officials to local people, such as leader farmers, income generation groups, cooperatives, tap groups and Scheme Maintenance Workers of the schemes, trained by the project. Respondents were optimistic that the new system held considerable opportunity.

Accountability is a central theme that links social inclusion and water security by emphasizing that security is a relevant aspect for all social groups, and that good governance as a normative concept (OECD, 2015) is a means to ensure water security for all stakeholders (UNDP-SIWI, 2015). This study demonstrated accountability is crucial for viably achieving the social responsibilities appointed to the new local governments in Nepal. The study stressed that accountability in local governance was considered to be a potential opportunity, but also as the most considerable threat for water security and social inclusion (Annex). Developments in the sphere of accountability may encompass the social, political, administrative, and financial development of the local governance (cf. UNDP-SIWI, 2015), providing a potential means for its success or failure.

The findings convey concerns that integrated natural resources governance should also be socially integrative, to be able to address governance issues in a legitimate way in the new governance system. The water and food security of women and DAGs need to be considered from a social inclusion perspective. This means paying attention to the many identities that produce added social inequalities for women - for instance, those of marginalised caste or ethnicity, the elderly or disabled (Aasland and Haug, 2008). The study replicated the concern raised by Leder et al. (2017) about empowerment of disadvantaged groups, if government modalities do not account for politics and ignore social equity and genuine inclusion. The RM policymakers have a possibility to alleviate the inequalities and injustices that lie behind the lack of access to affordable, safe, and clean water (Leder et al, 2017), through accountable policy-making. On the other hand, the risk remains of the emergence of elite-driven business-as-usual approaches with enduring inequalities in control over water (Leder et. al, 2017; Rusca and Schwartz, 2014). The SWOT analysis indicated that the accountability aspects and policy themes were evident in reference to RM water governance opportunities and threats alike.

Regarding adaptive capacity to encounter water related extreme events (such as droughts and floods), source depletion problems, and natural hazards (NCCKMC, 2018; RWSSP-WN, 2015a), the SWOT analysis revealed that policy formulation and capacity building were the most important themes that define the trajectories of the RMs in this regard. The study found considerable risks in the current human resources of the RMs, but also found many early achievements and potentials. The findings indicate that further policy formulation and capacity building at the RMs are necessary for improving the adaptive capacity and resilience.

Changed modalities of governance

The decentralization policy of the National Government has set the new framework, but the practical application of how the division of powers will occur is unclear. In theory, power is passed down to provincial and municipal authorities, however, the central government bodies are reluctant to lose control. For instance, the Ministry of Finance collects most of the revenue, and therefore the RMs are reliant on them for distribution of most of their budget. The location and lines of responsibility of technical staff, such as water engineers who previously worked from central or district level, is still undecided. The central government has a significant presence in the RMs through the provision of Accountants and Chief Administrative Officers who share lots of the executive power with the Municipal Council.

The new RMs' responsibilities include ensuring equitable access to water for all citizens. The Government of Nepal has recognized water supply and sanitation as human rights both internationally (UN, 2010) and in the Constitution. The provision of water and sanitation is therefore not a matter of charity but a legal obligation.

Institutional weaknesses remain, however, and the division of powers and finance with the central government remains unclear. All our data sources, including project reports, the SWOT analysis and interviews with staff, and the interviews with RM representatives, indicate that RMs are still trying to fill the capacity gaps (including recruitment of their full component of staff, and training of elected officials and staff). Particular gaps include technical staff that could support water resources management.

This is a key moment for the RMs to receive guidance on accountability towards their citizens. Meier et al. (2014) stressed that internationally, there is a gap between the legal requirements for water and sanitation, and practical implementation. They argue that policies must be translated into local contexts, and integrated into local practices (Meier et al., 2014). The RMs are currently struggling with weaknesses in staffing, infrastructure and institutions. In such a weak institutional environment, external technical assistance can play important facilitation and implementation support roles (Haapala and White, 2018; White and Haapala, 2018). RVWRMP provided a good example on this regard. The project supports RMs in the development of the RM water use strategy and in the formulation of RM WASH policies. The aim is to facilitate strategy and policy discussions and negotiations, in order to draft visions for water governance and use, WASH investment policies, WASH regulations, water security and environmental protection policies, and livelihoods improvement planning for the particular RM. Project staff also provide technical advice on policy formation and hands on support on issues such as climate change adaptation, disaster risk management, gender equality and social inclusion.

However, this can only be a temporary solution, and the project needs to take care not to take over. There is extensive critical literature on the risks of the power imbalances of technical assistance (though it mainly deals with international advisors) and the difficulties of policy implementation – for instance Mosse (2004). Mosse states that "the ethnographic question is not whether but how development projects work; not whether a project succeeds, but how success is produced" (Mosse, 2004, p.646). This article does not argue that the project and its staff are infallible, nor does it address the power imbalances. The focus is the work of the RMs, and the way RVWRMP is supporting them. Local government staff commented on the importance of joint planning; noting the difference within some NGO projects that operate independently of government systems. There would be risks for sustainability if the project was operating outside of RM systems (Interviews; and White and Haapala, 2018). The final decisions must be in the hands of RM elected officials and staff.

The project has supported accountable development in the RMs through the Women as Decision-Makers Workshops. The major objectives of this workshop are to empower women for decision-making processes and involve them to formulate gender responsive plans with budgets. Prior to the RM elections there was insufficient involvement of women in planning. Since the elections, women's participation in local government has at least increased on paper, due to the obligation to include at least two elected female representatives in each ward (and the RMs usually have female deputy chairpersons). However, as noted by the respondents from the RMs, more attention is needed to women's priorities. Consequently, it is important that women are empowered to raise their voices and are more actively involved in decision-making processes.

To support the technical capacity gaps, RVWRMP has recruited local level staff to work with the RMs. In each core RM, a Gaupalika Water Resources Officer is employed directly by the RM with project funds. In addition, a Technical and a Livelihood Facilitator will work as project staff within the RM. They will support the RM while they continue to recruit their own technical and administrative staff and learn the business of water and land resources management.

The study indicates that the RMs are providing basic services to users and are generally supporting improvements in water governance. RMs are broadly representative of their constituents, unlike the earlier system. Although some of the female and minority representatives had no prior experience in government, and weak literacy skills, management and confidence, they are learning rapidly on the job (project reports and interviews). Ownership and accountability have strengthened considerably. There is a risk that bad practices could emerge, such as corruption and elite control of resources (Leder et al., 2017). The analyzed threats replicated this view. We want to emphasize that these bad occurrences can best be prevented by proper facilitation on establishing rules, regulations, and customs that enhance good governance practices.

CONCLUSION

During 2017-18, there has been a dramatic change in governance in Nepal, with the federalization process. The newly formed

RMs have the responsibility for water security and good governance. They can play a role in tackling the local water scarcity problems, or risk failing to adapt to the changing conditions. This article described the experiences from their first steps from a large donor cooperation perspective.

This research asked what the current water governance issues are in this setting of collaboration. The opportunities identified include the potential for more accountable policy formulation at a closer level to the community, by leaders who are more representative and accountable to their citizens. On the other hand, the results indicated a risk that policy formulation and accountability of governance could go astray.

Overall, the first lessons from the collaboration between the local governments and the project indicate that collaboration with the RMs is possible, it is reciprocal, and is potentially fruitful for all partners. The RMs hold lots of potential and they have much to offer, as they are close to their citizens and seem to be eager to collaborate with reputable partners. The social accountability theme of water governance was regarded as one of the greatest risks for the water security in the RMs. On the other hand, much potential was seen (both by staff and RM officials) for water security in the improved policy formulation opportunities and capacity building at local levels.

The findings convey concern that integrated natural resources governance should also be socially integrative, to be able to address governance issues in a legitimate way in the new governance system. The findings indicate that further policy formulation and capacity building at the RMs (particularly in topics of water resources management, GESI, agriculture, disaster risk reduction and climate change adaptation) are necessary for improving the adaptive capacity and resilience. The RMs do not have these policies yet, as they are in their early stages, but they are under work. In the initial years, more technical back up to the RMs is needed for proper implementation. To succeed, all stakeholders collaborating with RMs should ensure front-loading of policy development, capacity building and technical support in the initial phases of collaboration with these new tiers of government. The paper discussed some good ways to do that, including a range of institutional and community capacity building and planning activities, with a strong GESI focus (Table 4). Provision of technical support in capacity building and policy formation to the fledgling municipalities is now crucial for securing safe water for all.

REFERENCES

- Aasland, A. and M. Haug., 2008. Social exclusion in Nepal stronger or weaker? Norwegian Institute for Urban and Regional Research, Working Paper, 2008:115.
- Biggs, E.M., Duncan, J.M.A., Atkinson, P.M. and Dash, J., 2013. Plenty of water, not enough strategy. How inadequate accessibility, poor governance and a volatile government can tip the balance against ensuring water security: the case of Nepal. *Environmental Science and Policy*, 33, pp.388–394, [online] Available at:< https://doi.org/10.1016/j. envsci.2013.07.004>.
- Clement, F., Suhardiman, D. and Bharati, L. 2017. IWRM discourses, institutional Holy Grail and water justice in Nepal. *Water Alternatives*, 10(3): 870-887
- Cook, C. and Bakker, K., 2012. Water security: debating an emerging paradigm. *Global Environmental Change*, 22(1), pp.94-102.
- Constitution of Nepal, 2015. Kathmandu: Nepal Law Commission.
- Government of Nepal, 2002. *Water resources strategy, Nepal*. His Majesty's Government of Nepal, Water and Energy Commission Secretariat, Nepal, January 2002.
- Government of Nepal, 2014. Nepal human development report 2014 beyond geography unlocking human potential. Government of Nepal, National Planning Commission and the United Nations Development Programme.

- Government of Nepal, 2015. *The constitution of Nepal*. Ministry of Law, Justice and Parliamentary Affairs. Date of first Publication in Nepal Gazette, 20 September 2015 (2072.6.3).
- Grey, D. and Sadoff, C., 2007. Sink or swim? Water security for growth and development. *Water Policy*, 9(6), pp.545–571.
- Haapala, J. and White, P., 2018. Development through bricoleurs: portraying local personnel's role in implementation of water resources development in rural Nepal'. *Water Alternatives*, 11(3), p.979.
- Hoff, H., 2011. *Understanding the nexus*. Background paper for the Bonn 2011 Conference: the water, energy and food security nexus. Stockholm; Stockholm Environment Institute.
- Keskinen, M. and Varis, O., 2016. Water-energy-food nexus in large Asian river basins. *Water*, 8(10), p.446.
- Keskinen, M., Guillaume, J.H., Kattelus, M., Porkka, M., Räsänen, T.A. and Varis, O., 2016. The water-energy-food nexus and the transboundary context: insights from large Asian rivers. Water, 8(5), p.193.
- Leder, S., Clement, F. and Karki, E., 2017. Reframing women's empowerment in water security programmes in western Nepal. *Gender and Development*, 25(2), pp.235-251.
- Local Government Operation Act, 2017 (2074 B.S.). Kathmandu: Nepal Law Commission.
- Meier, B.M., Kayser, G.L., Kestenbaum, J.G., Amjad, U.Q., Dalcanale, F. and Bartram, J., 2014. Translating the human right to water and sanitation into public policy reform. *Science and Engineering Ethics*, 20(4), pp.833-848.
- Mikkelsen, B., 2005. *Methods for development work and research: A new guide for practitioners.* Second Edition. Sage Knowledge.
- Mosse, D., 2004. Is good policy unimplementable? Reflections on the ethnography of aid policy and practice. *Development and Change*, 35(4), pp.639–671.
- Nepal Climate Change Knowledge Management Centre (NCCKMC), 2018. *Nepal's highly vulnerable districts to drought, flood, GLOF and landslide*, [online] Available at: https://bit.ly/2N4ON1K.
- OECD, 2011. Water governance in OECD countries: a multi-level approach, OECD studies on water, OECD Publishing, Paris, [online] Available at: https://doi.org/10.1787/9789264119284-en>.

- New Angle: Nepal Journal of Social Science and Public Policy Vol. 5 (1), 2019
- OECD, 2015. Principles on water governance. Adopted by the OECD Regional Development Policy Committee on 11 May 2015, [online] Available at: <www.oecd.org/governance/ oecd-principles-on-water-governance.htm>.
- Rautanen, S.L. and White, P.D., 2013. Using every drop experiences of good local water governance and multiple-use water services for food security in far-western Nepal. *Aquatic Procedia*, 1, pp.120 -129.
- Regmi, B.R. and Shrestha, K., 2018. *Policy gaps and institutional arrangements for water resources management in Nepal*. HI-AWARE Working Paper 16, [online] Available at: https://bit.ly/2MFn2h1>.
- Rural Village Water Resources Management Project (RVWRMP), 2018. *Project implementation guidelines*, [online] Available at: https://bit.ly/2MKWQla.
- Rural Water Supply and Sanitation Project in Western Nepal (RWSSP-WN), 2015. *Human rights-based approach and gender equality and social inclusion (HRBA & GESI) strategy and action plan*. Prepared in cooperation with DoLIDAR and RVWRMP.
- Rusca, M. and Schwartz., K., 2014. Going with the grain: accommodating local institutions in water governance. *Current Opinion in Environmental Sustainability*, 11, pp.34–38.
- RWSSP-WN, 2015a. *Analysis and mapping of climate and source yield in Tanahun District*, [online] Available at: https://bit.ly/2wJ2mdd>.
- Suhardiman, D., Bastakoti, R., Karki, E. and Bharati, L., 2018. The politics of river basin planning and State transformation processes in Nepal. *Geoforum*, 96, pp. 70-76, [online] Available at: https://doi.org/10.1016/j.geoforum.2018.07.019>.
- UNDP-SIWI Water Governance Facility & UNICEF, 2015. WASH and accountability: explaining the concept. Accountability for Sustainability Partnership: UNDP-SIWI Water Governance Facility and UNICEF. Stockholm and New York: SIWI and UNICEF.
- United Nations General Assembly, A/64/292, 2010. *The human right to water and sanitation*. 28 July 2010.
- United Nations General Assembly, General Assembly resolution 217 A. *Universal Declaration of Human Rights*. 10 December 1948.
- White, P. and Haapala, J., 2018. Technical advisors as brokers: translating gender equality and human rights policies and values into practice in the water sector in Nepal', *European Journal of Development Research*, [online] Available at: < https://rdcu.be/9WY4 DOI 10.1057/s41287-018-0173-0>.

ANNEX

The SWOT analysis scrutinized the main strengths, weaknesses, opportunities, and threats (SWOT) regarding water security and GESI in RM water governance. The analysis was based on the OECD multi-level themes of water governance, related to the principles of good water governance (OECD, 2011; 2015). Forty staff were divided into small groups, focusing on either water security in the RMs (two groups); or gender and social inclusion (two groups). Groups were asked to particularly consider the changes from the earlier governance. Participants were not given the framework in advance and were invited to give open responses. To assist with their group work they were asked to consider the following guiding questions:

- Strengths (current)
 - What makes RMs better than the old system?
 - Good experiences this far?
- Weaknesses (current)
 - What should be enhanced in comparison to the old system?
 - Bad experiences?
- Opportunities (future)
 - What is the best-case scenario for the RMs?
 - What are the untapped potentials?
- Threats (future)
 - What is the worst-case scenario for the RMs?
 - Where are the risks?

The responses were then grouped by the authors in line with the analytical framework – i.e. under each of the SWOT headings, they were grouped under the categories of Information; Administrative, Policy and Objective; Capacity; Funding; Accountability; and implementation.

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The findings of the group work under each category were analysed in a qualitative manner and the findings presented in the main report. The quantitative SWOT analysis results from the GESI and Water Security groups are presented in the matrices below. The number of issues raised under each topic are presented, as a percentage of the total. The third column summarises the number of positive and negative aspects mentioned, indicating the positive (strengths and opportunities) and negative (weaknesses and threats) shares from all responses (i.e. a weighting of the issues as mentioned).

		GESI			
Strengths		Opportunities		+	
Policy	29%	Policy	43%	Policy	33%
Accountability	25%	Accountability	21%	Accountability	24%
Capacity	18%	Capacity	14%	Capacity	16%
Implementation	14%	Implementation	14%	Implementation	14%
Information	11%	Information	7%	Information	10%
Funding	4%	Funding	0%	Funding	2%
Weaknesses		Threats		-	
Accountability	30%	Accountability	33%	Accountability	31%
Policy	24%	Policy	27%	Policy	25%
Capacity	18%	Implementation	20%	Implementation	16%
Implementation	12%	Capacity	7%	Capacity	13%
Information	12%	Information	7%	Information	9%
Funding	6%	Funding	7%	Funding	6%

Ranking of issues evident in Rural Municipality level GESI in water governance

		Water sec	urity
Strengths		Opportunities	
Capacity	32%	Capacity	35%
Policy	23%	Policy	30%
Accountability	16%	Implementation	25%
Funding	13%	Accountability	5%
Implementation	10%	Information	5%
Information	6%	Funding	0%
Weaknesses		Threats	
Accountability	26%	Accountability	50%
Policy	26%	Capacity	25%
Capacity	21%	Implementation	13%
Implementation	16%	Policy	13%
Information	5%	Information	0%
Funding	5%	Funding	0%

- - -

Ranking of issues evident in Rural Municipality level water security in water governance



SÍAS

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