

Summary of RVWRMP Studies

RVWRMP conducted several studies in the third phase, including substantial research projects in 2022, and several other smaller studies. The resulting reports have been published along with the Completion Report of RVWRMP, as well as on the Project website, and disseminated on other relevant platforms. In short, the studies have provided more in-depth analysis and information on the impacts and transformative changes than the regular reporting could do.

Six impact-oriented studies for project completion:

1. RVWRMP cooperation with RMs: Best Practices, experiences and lessons learnt

(Haapala, Junkov, White, Wagle, and Badu, 2022)

This report elaborates the reasons and rationale for the successful cooperation, as well describes the experiences from both RM and project sides. The project started close cooperation with Rural Municipalities (RMs) as soon as the new local level governments were truly established in 2017. The project considers itself as a pioneer of RM cooperation, being one of the first, if not the first, significant partner in the whole country. After five years of cooperation, RVWRMP can rightfully declare that the collaboration has been successful. The project has witnessed and cultivated a huge potential in the RMs regarding local development especially in WASH and livelihoods sectors, giving hope to the citizens and power to democratically administrate local issues and resources. RMs are now the foremost implementation partners and beneficiaries of the project.

The report elaborates the existing project modalities and collaborative practices with RMs. The project recommends the utilisation of the best practices introduced in the report. The project recommends all implementing actors to focus on developing RM capacity in WASH as the work with the RMs has significantly improved the sustainability of RM WASH sector and livelihood interventions overall. RMs have also adopted several project modalities including the Step-by-Step guideline for water supply scheme implementation, procurement guideline, and public auditing. These modalities have provided the RMs with the means to manage WASH schemes in practical terms and several of the RMs have expressed that they also apply these guidelines to other sectors of the RM than the WASH sector.

Both RM and project staff reported that the main challenge in the RM is the lack of human resources and capacity of the RM staff. Project staff furthermore saw political influence as a major challenge. Collaboration with the provincial level was also alarmingly poor: the provinces do not involve the RMs in the activities they implement in the municipality, and there is a lack of coordination and communication between the government levels. A much better coordination, communication, mutual planning, and implementation as per RM priorities are needed to overcome the problems.

2. Gender Equality and Social Inclusion Impact Study

(Salminen, Tirwa, Bhatta, Haapala, and White, 2022)

This study assessed local trajectories and transformative change related to Gender Equality and Social Inclusion (GESI) in project area between 2009 and 2021. The idea of the study stems from 2009, when RVWRMP commissioned a “Gender and Social Discrimination Study” to investigate the GESI status of the provinces. The new study is based on the following key question: What has the transformation been in the selected indicators, and how has the transformation happened? The interview questionnaire was formulated based on the 2009 study, to be able to clearly compare results and assess progress.

Overall, RVWRMP’s impact has been substantial in empowering women and minorities to gain community representation, and reducing the workload of women. The GESI situation in the communities has improved, while some challenges remain. The economic situation of households and number of women and minorities in community and RM level decision-making has greatly improved. Workload distribution is like what it was 12 years ago, but improved water access has provided time

for women to partake in income generation activities and community representation. Menstruation-related taboos have decreased dramatically, and the maternal health situation has improved thanks to nearby birthing centres and government incentives. Caste discrimination has decreased. Key challenges include the further need for economic empowerment, continuation of work to eradicate remaining gender- and caste-based discrimination and the need to institutionalise women's and minority representation in decision-making.

3. 'RVWRMP University': Project as a training and occupation provider

(Haapala, Nepal, and Bhattarai, 2022)

Although the project is often considered an infrastructure development project, with a focus on hardware, in reality most of the work and efforts go to capacity building, institutional development, and behaviour change support – in other words the main focus is on software. Only changed behaviours, established institutions and local capacities make the intervention and development in general sustainable. The project has employed directly and indirectly hundreds of staff annually. In the peak years of the third phase, the project simultaneously employed as many as around 500 staffers, most of them being local people. The number of international staff has remained one to three persons, or less than 1% of the total staff. We can rightfully say that this structure has enabled building of the local capacities, as well as service delivery from Nepali people to Nepali people.

All these aspects, including all the external and internal trainings and all the capacity building actions have resulted in playful consideration of the project as the 'RV university' among project staff. The report simply gathers the trainings given by the project over the years, to an extent possible from the project records. For instance, numerically the type of event with greatest participation is clearly the 'UC level Step-by-Step related trainings', with almost 100 000 participants over the three phases (around 3100 events), home garden management trainings with 26 000 participants (around 900 events), and the WASH orientations to UC/community with 17 000 participants (around 900 events). Altogether, the project has provided recorded 6000 trainings with 190 000 beneficiaries. The main figures of the study are presented in section NN, 'RVWRMP I-III as a training and occupation provider'.

4. Cost Benefit Analysis of Water Supply Systems: Multiple Use Water Systems, Private Taps and Public Taps (Pandey, Haapala, and Pokharel, 2022)

The study identified some differences between private tap, public tap, and MUS scheme types. Overall, the study support the view that MUS and private taps convey more benefits than public taps do, while the costs are only insignificantly higher in these schemes. The private tap system improved sanitation and reduced water fetching time even more effectively than the public tap system. All types of RVWRMP schemes provided capabilities and means of living and healthy life. The users get safe and sufficient drinking water. The livelihoods benefits included the possibility for home gardening and the related significant dietary benefits, income generation, reduced need to buy vegetables, and less work in water fetching and animal watering. The reported sanitation benefits included ease of household works, better personal hygiene, separated human waste from daily life, as well as improved hygienic behaviours. Time saved from water fetching is used for all types of regular activities, including household work, labour work, taking care of children and the elderly, sanitation and hygiene, livelihood activities, socializing, voluntary work and resting.

Dignified menstrual management and sanitation can be managed better with private connections that allow families to manage their household water independent and regardless of community taboos. Women have gained improved possibilities to save individually and to get access to income and decision-making power in the family. Regarding menstruation, there is a clear change in perception about menstruation hygiene management (MHM) due to the project interventions; menstruating women can socialize and interact with others better than before, and the impact of menstrual taboos is decreased in women's lives. The related participatory activities produce a setting that empowers women and the other disadvantaged groups.

5. Income Generation Impact Study (Malla, Haapala, and Bogati, 2022)

This study assessed the impact of income-generating activities supported by RVWRMP in Aalital Rural Municipality of Dadeldhura. The result from this study showed that the trainings and material support by the project has changed the farming habits, improved local diets, and led to significant increase of annual income locally. Two thirds of the families earned additional income by selling vegetables ranging from several dozens of thousands to several hundreds of thousands of rupees per year. The cultivated land area for vegetables increased by two thirds, of which one tenth was under poly-house development. Both production of fresh vegetables and sales to local markets more than doubled, and the number of farmers selling vegetables increased by more than 50%. This has naturally enabled more savings and investments, a better standard of living for families, and increased the status and self-esteem of the household within their community. The additional income was invested well: Children's education, housing and land, better food, clothing, and health care. As much as one third of the income was saved in cooperatives or banks.

The study found that women handle money for daily household expenditures while often their husbands are working elsewhere. Instead of waiting for remittances from their husbands, they can use the money they have earned at home. This improved economic independence of women is crucial for their status and role in the family, their children's opportunities, as well as women's capability to live a life they appreciate. More effort should be hence focused on empowering women by providing them independent means for income generation. In the studied case, almost every second family had before a seasonal migrating worker, typically the husband. Project's support to local income generation and farming has resulted in almost half of the migrating workers return to the community for income generation.

6. Irrigation Scheme and MUS Business Plan Impact Study (Suwarnakar, Haapala, 2022)

Irrigation and MUS Business Plan impact study provides information on whether irrigation schemes and MUS Business Plan implemented by the project have been helpful to change the living standard of local people. Irrigation impact study found that the UC committees were well-organized. The beneficiaries were using the irrigation facilities for commercial farming of vegetable and cash crops. The average area of the irrigated land increased significantly as a result of irrigation schemes. The number of harvests per annum typically increased from 2 to 3, production and productivity increased around 50%, the farmers increased their incomes and their economic status improved, and the time used for managing the water distribution was reduced and used for other farming works. Furthermore, the environmental situation improved due to protection of the area around the spring including erosion protection, and an increased number of greeneries and vegetation close by irrigated areas.

MUS Business Plan impact study found that the development of MUS business plans increased the proportion of farmers involved in commercial farming activities compared to areas without a plan. They also earned more, and were more familiar with market trends thus they could produce market oriented commodities. Overall the farmers with irrigation schemes and implementing the MUS Business Plan were much more aware of both management aspects and the socio-economic aspects of agribusinesses. In conclusion, projects working with the farmers at the grassroots level to develop farming infrastructure and build the capacity of locals, such as RVWRMP, are effective towards bringing change in the living standard and livelihoods of the target beneficiaries.

Six earlier studies

Apart from the recent research projects targeted towards impact and serving the completion report, there are several other studies conducted during Phase III that broaden understanding about the respective topics and annexed to the Completion Report. The completed and reported studies in Phase III (available online: rvwrmp.org.np) are as follows:

1. Water Tariff Analysis in Private Tap Systems of Water Supply Schemes (Pandey, Haapala, Salminen, 2022)

This study investigate water tariff collection patterns and related management practices in private tap schemes. A water tariff is the money collected from water supply scheme users to cover the Operation and Maintenance (O&M), and possibly other costs of the scheme. The water tariff is important for ensuring finance for continuous scheme maintenance throughout the scheme design period of 15-20 years, and hopefully beyond. Equitable tariff collection encourages the stakeholders to pay their share and it enables good scheme management. The running costs should cover the running Water Users Committee (UC) and Village Maintenance Worker (VMW) costs. VMW is typically the responsible person for conducting scheme monitoring and maintenance works.

The survey indicates that the water tariff is collected regularly in those schemes where the VMW is responsible for collecting it and the community together decides the rate. Most of the running costs were related to VMW salary, fittings for repair maintenance, and office expenses. We recommend special emphasis should be placed on the establishment of active UC and O&M processes for all schemes. Water tariff setting and collection is an indication of active scheme management, and a regularly collected tariff also enables sustainable UC operation and scheme maintenance. Cooperatives have typically been able to provide an interest rate for savings that exceeds the inflation, while the banks not, and hence we recommend the UCs to carefully consider where to save the water tariff.

2. Women as Municipality Vice Chairs (Bhatta, Haapala, Salminen, and White, 2021)

This report considers the backgrounds, experiences, and viewpoints of elected women Vice Chairpersons (or Vice Chairs) of Rural Municipalities (RMs) in Sudurpaschim and Karnali Provinces. The focus is on the role of elected women politicians in the RM, and their gendered problems and possible solutions. The study also considers the role of RVWRMP activities in capacity development and empowering women.

All Vice Chairs possessed significant political roles. Lack of familiarity with laws and policies, male dominance, gender discrimination, and a lack of knowledge on legal and judicial processes were seen as the biggest problems. Vice Chairs are seen as the leaders of the elected women in the community, representing all women. The elected women have a strong gender identity among the politicians, and gender-related agenda. Economic independence was seen as the foremost solution to gendered problems. RVWRMP was seen to be more sustainable, beneficial, and apolitical than the activities organized by the RM or other organisations. Importantly, the trainings seem to provide very much needed skills for the elected women. More generally, the Vice Chairs link RVWRMP with certain appreciated values, such as transparency, gender equity and social inclusion, sustainability, trust, and ownership.

3. Observed trends in hand hygiene caused by project intervention (Pandey, Salminen, and Haapala 2021)

This brief study summarizes hand-washing data collected through household visits in nine project districts. Generally the results show that hand washing pattern have improved from moderate to excellent hygiene maintenance practices at household level via the project's TS work in the field. The

study showcases how project intervention in improving safe water supply and sanitation for all has significant impact on local behaviours. The improvement of the accessibility, availability, reliability, and quality of water supply service, along with sanitation behaviour change promotion results in significant changes within a relatively short period of a year or less.

Sanitation related behaviour change interventions are a very effective way of achieving improved health and internalised behaviour changes at community level. This enables transformative changes in people's lives through capacitating people for managing personal health and sanitation. In this regard, both infrastructure development that enables easier access to safe water, and a concrete behaviour change promotion component are necessary for successful and sustainable change.

4. Improved Cooking Stoves Impact Study (Haapala, 2020)

This study scrutinized the impacts of the implementation of RVWRMP's ICSs on people's lives and behaviours. The three themes regarding the ICS covered by the survey are: 1. Impact on people's health, behavior, work, and living conditions 2. Impact on the environment and on carbon emissions 3. Status of maintenance and sustainability. Replacing traditional cooking devices by Improved Cooking Stoves (ICSs) may significantly reduce greenhouse gas emissions, use of forests for firewood, women's work in firewood collection, cause falling indoor air pollution, improve cooking and heating the house, and have positive effects on health.

The three different types of ICSs (Mud, Metal, Rocket), as well as other characteristics (altitude, ICS age, respondent gender and ethnicity) were compared. Metal ICS is especially recommended for high-altitude areas, but both Mud and Metal stoves can be recommended to all areas. Rocket ICS is not recommended. All types of ICSs are more efficient than traditional stoves: The average reduction in firewood consumption was approximately 33-40%, based on user estimations. The demand for the ICS technology was higher in remote mountain areas, and the focus of the support should be primarily directed to those areas.

5. Improved Water Mills Impact Study (Haapala, 2019)

IWMs This study scrutinised IWM uses, management patterns, and impacts on people's lives and behaviours evident in relatively remote to very remote rural areas in Nepal. A special focus is placed on gender, IWM usage patterns, and IWM operation and maintenance arrangements.

The study indicates that IWMs have a very significant impact on time saving. The overall time use reduction occurs expressively through reduced walking times. The other time-saving mechanism is the trice or twice faster grinding, commonly saving around an hour per a sack of grains. The main reported health impacts were related to reduced time and hard manual grinding work, whereas the main production impacts involved improved quality of the flour, and reduced wastage of grains. The survey conveys that the management is effective, and that the IWMs have remained well functional in their first years of operation. The rather simple setup of the IWMs may support the sustainability of the operation.

6. Sanitary Pads in Action – Menstrual Hygiene Management Training, Reusable Pad Making and Use (White & Bhatta, 2018)

This is a survey of participants from MHM and reusable sanitary pad production workshops, and sanitation supply chain workshops. The aim was to establish whether commercial or reusable pads are used widely, who is producing them (and in what quantity) and whether any problems have emerged. In general, women and girls are enthusiastic to learn about options for MHM, as well as how to sew reusable cotton pads. Many reported sewing other pads after the training. Increased use of both commercial and reusable pads has been reported, making the lives of rural women easier and giving them more confidence to travel or attend work or school. Some problems remain. These include the absorptive capacity of standard cotton used in reusable pads, and how to improve the designs (potentially better absorption) and marketing. Even more importantly there is a need to develop

appropriate means of disposal or destruction of soiled commercial pads.

RVWRMP has worked with municipalities and secondary schools to purchase and install sanitary pad dispensing machines, supplying commercial but potentially also reusable pads. In combination with awareness-raising in the school, this has had a very positive impact on school attendance by girls during their menstruation, as well as decreased feeling of shame and increased confidence. It is vital that there are functional disposal methods at the school – for instance incinerators or a system of burning the use pads.