



Ensuring sustainable development after disaster



Livelihoods and WASH Recovery Project

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MESSAGE FROM THE DIRECTOR



Dear Caritas Nepal Friends,

It gives me profound happiness to acknowledge that the community we served aftermath the 2015 Nepal earthquake have come a long way of leading sustainable life. I feel proud that the communities are taking strides towards development following our initial intervention right after the earthquake, of which we were one of the first responders to the disaster of such scale. Caritas Nepal's Livelihood and WASH Recovery project in Sindhupalchok district focused on making the communities self-reliant through livelihood interventions, WASH and DRR projects.

Caritas Nepal endeavors to build a just society in which people can live in peace and dignity, and moves towards a fundamental principle of Sustainable Development Goals. Caritas Nepal achieved significant results in DRR and humanitarian emergency, sustainable livelihoods and WASH projects, ensuring that communities were self-reliant and making progress aftermath the Nepal earthquake. While results are important to bring positive changes in the lives and livelihoods of people, we equally put emphasis on the processes and compliances in line with Core Humanitarian Standard (CHS), code of conduct and child-safeguarding. Following the completion of major earthquake response we immediately designed our programs focusing recovery and long-term development.

Caritas Nepal helped marginalized and at-risk communities with vocational training and business skills to build on their existing assets and diversify livelihood opportunities. Small farmers were supported to engage in post-production activities and to benefit through value-chain processes in their climate-friendly micro and small enterprises. Caritas Nepal built leadership capacity and economic empowerment of disadvantaged groups to participate in local governance processes as social change agent to further inclusive development, and serve their communities as local advocates for sustainable development.

The Livelihood and WASH Recovery Project has been remarkable for Caritas Nepal as we were able to make significant impact on the communities and people by providing the resources and skills for long lasting development and positive social changes.

I would like to thank the Government of Nepal, Social Welfare Council, Supporting Development Partners, Local Implementing Partners and the communities. Caritas Nepal values having staff with diverse backgrounds, skills and experiences. I highly appreciate my colleagues, interns and volunteers for their efforts and team work, as well as the preparation of this report.

A handwritten signature in black ink, which appears to read 'Lalit Tudu'. The signature is stylized and written over a light-colored background.

Fr. Lalit Tudu
Executive Director
Caritas Nepal

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Executive Summary

On 25 April and 12 May 2015, two earthquakes struck Nepal, each followed by a series of powerful aftershocks, which heavily affected the Sindhupalchok district.

As a part of the response Caritas Nepal with support from Caritas Germany had implemented LWRP project. The Local Implementing partner for the project was Janahit Gramin Sewa Samittee (JGSS), implemented the Livelihoods and WASH Recovery Project (LWRP)- covering the area of Livelihoods, WASH and DRR.

The three year plus long project (2016 -December 2019) was launched in August 2016, which was implemented in 1,2 and 3 Wards of Chautara-Sangachokgadhi Municipality and covering Simpalkavre-ward no. 1 of Indrawati Rural Municipality.

The project, which rolled out and expanded during the period, has an enormous life-changing impact on the earthquake-affected population's life. In this regard, this documentation has been done to produce evidence-based lesson learns, best practices,

and human interest stories so that it will serve the purpose of knowledge management.

The documentation's objective was to assess the relevance and appropriateness of the support provided, effectiveness, efficiency, impact, connectedness, and sustainability.

This documentation generated lessons learned and impact made on each of earthquake affected individuals. The project was able to reach remote areas and marginalized communities. Interestingly, women's active participation was dominant throughout the project activities, which show their empowerment and leadership.

Leadership from local government and ownership from the community after project completion has set an unprecedented step in recovery, which has paved the way for sustainability.

We sincerely express our gratitude to local government, community people, beneficiaries, and project staff of Caritas and its implementing partner.



Background

Two major earthquakes on 25 April 2015 and 12 May 2015 measuring 7.6 and 6.8 magnitudes respectively struck Nepal, the worst-hit the country in 80 years. Almost 10 million people- more than one-third of the population – were affected across 31 districts.

The earthquake killed 8790 people, and more than 23,300 people were injured. The disruption to essential services such as water and sanitation and health, alongside a decrease in food security, posed a severe impact on multidimensional poverty.

Earthquake Response in Sindhupalchok

- Immediately after Earthquake, Government through Local Governance and Community Development Program provided NPR 900,000 for each Village Development Committees and NPR 200,000 for each Municipalities ward.
- NPR 40,000 provided for the funeral procession of the deceased.
- NPR 100,000 provided to the deceased family.
- NPR 15, 000 provided as an immediate relief package to HHs of EQ victims.
- 84 404 House Holds have received winterization support of NPR 10,000.
- Surveying of HHs damaged by EQ done.
- In April 2016- National Reconstruction Authority's special contact office established in the district that started enrollment process for private housing grant began; NRs 300,000 cash grant was provided on three tranches.
- The recovery and reconstruction responsibility took over by elected local government following its election in 2017.

According to Post-Disaster Recovery Framework (2016-2020), at least 498,852 private houses and 2,656 government buildings were destroyed. Another 256, 697 private homes and 3,622 government buildings were partially damaged. The earthquake affected the manufacturing, production, trade, and agriculture sectors and tourism and other areas of the service sector, thereby weakening the national economy. As a result, 2.3 million Households lost livelihoods.

The government categorized 14 districts that are severely affected, and 17 communities are moderately affected.



The Situation of Sindhupalchok aftermath of Earthquake

Sindhupalchok district was the most affected due to Earthquake; 3,572 people lost their lives in this district, accounting for nearly 40 percent of the total deaths (8,790 deaths). Likewise, 1,567 people were injured. More than 95% of public and private buildings/houses were damaged; impacted a heavy toll on infrastructure. Most of the human settlements were damaged beyond repair

and parts. 547 School Buildings, 43 Government Buildings, and 80 Health Posts were collapsed.

Steep mountains and narrow roads in the Sindhupalchok District drastically slowed rescue efforts. Electricity and communication were cut off across in the district, so residents were isolated. A

- ✓ **April 2015:** Emergency Phase declared after Earthquake. Clusters (Early Recovery, WASH, Camp Coordination and Camp Management, Protection, Education, Logistics etc.) were activated in Sindhupalchok district activated in Sindhupalchok district
- ✓ **September 2015:** Emergency Phase successfully came to an end
- ✓ **October 2015:** onward Recovery and Reconstruction phase started
- ✓ Clusters transitioned to Working Groups during Recovery and Reconstruction phase
- ✓ After the local level election in 2017, the local government took leadership of recovery and reconstruction

Demographic Composition

At the time of the 2011 Nepal census, Sindhupalchok District had a population of 287,798. Of these, 53.4% spoke Nepali, 32.6% Tamang, 5.9% Newari, 2.7% Sherpa, 1.7%Hyolmo, 1.2% Danuwar and 1.1% Thami as their first language.

UH-1Y Huey helicopter delivering relief supplies crashed in Sindhupalchok District, with six US Marines and two Nepalese soldiers aboard.

Anticipated secondary hazards (such as landslides) in the earthquake-affected areas and their potential impact and monsoon flooding were essential priorities. Sindhupalchok district, which is prone to landslides during rainy seasons, the risk of it even increased after the earthquake due to the weakening of the geological structure. There were also fears that the earthquake, or aftershocks, could trigger further flooding or landslides such as in 2014 remarkably known as Jure landslide, which claimed 145 human lives and displaces hundreds of population.

After the state's restructuring, the district consists of 12 Municipalities, out of which three are urban municipalities, and nine are rural municipalities.

Various I/NGOs had a crucial role in responding to the Earthquake emergency. Of which, Caritas Nepal has a significant role in earthquake response in the district, which has a long history of experience of working in the district even before the occurrence of the Earthquake.

Objective and Interventions

The project's overall objective is to restore and empower resilience to future disasters of the people affected by Earthquake.

Following are the area of intervention of "Livelihood and WASH Earthquake Recovery Project":

I. Livelihoods-

Outcome: increased access to potable water and improved Hygiene, sanitation for most vulnerable people, Increased access to potable water and improved Hygiene, sanitation for most vulnerable people.

II. WASH

Outcome: the targeted families have restored Community WASH Infrastructure and aware of total Sanitation and Hygiene.

III. DRR

Outcome: communities can determine approaches in increasing their capacities to survive from disasters and build back better.

Documentation Objectives:

- Relevance / Appropriateness: to assess the relevance and appropriateness of the support provided to address the project areas' needs and gaps.
- Effectiveness: To evaluate the progress made towards achieving the project's outcome and results based on the log-frame, design, and monitoring data.
- Coverage: to examine who was supported by recovery activities and why
- Efficiency: to explore whether the resources (financial, human, and materials) were used efficiently and effectively for the well-being of the affected population and local villagers supported by the project.
- Impact: to assess the potential impact of the program on the targeted communities
- Connectedness and Sustainability: examine critical services and effects be sustained beyond the duration of the project
- Lessons learned: to generate lessons learned from implementing the project's activities and the outcomes achieved.

Methodology

The documentation method comprised of:

- Project document review, including M&E framework, mid-term report, monitoring reports, annual progress reports, etc.
- Interviews and focused group discussions (FGDs) with the project participants
- Key Informant Interviews (KII)s with relevant stakeholders, including project staff
- Direct observation at the project sites
- When conducting the documentation, flexibility in approaches and timelines was adapted to unexpected project context changes.

Outcome/Impact



Locals attend the animal health camp in Syaule, Sindhupalchok.

The project constructed and renovated 15 drinking water supply schemes benefitting more than 600 HHs and 15 Irrigation Schemes that benefitted more than 1500 HHs. Besides, awareness activities were carried out in schools and community, reaching nearly 2900 individuals. Through livelihoods intervention, 14 Farmer Groups were formed, and they were provided with technical know-how skills started improved agricultural practices and initiated groups' saving and credit.

Reconstruction and rehabilitation works aim to create large-scale employment opportunities at the village level. In particular, through this project, poor people and women were benefited from reconstruction and rehabilitation works. Likewise, capacity development was another central area that the project has achieved.

As a DRR mitigation measure, six gabion retention walls have been constructed to minimize the risk of potential landslides in school and community. Moreover, the project has reached more than 2500 HHs providing with Livelihoods, WASH, and DRR preparedness support.

Relevance

Consultation with the community, beneficiaries, and local government stakeholders proved that the recovery support enabled them to plug the 'recovery' in the immediate aftermath of the disaster. It helped a smoother transition from the recovery phase to long-term development.



Effectiveness and Efficiency

The project received the full support from the community and was highly valued. Implementing partners provided round the clock technical support to achieve the objectives of the project.

Degree of Change

During the recovery phase, the implemented activities have addressed the need for the earthquake-affected population and

communities, which contributed to transitioning from recovery to development.

Although the local government and community's capacity are still limited, the support through the project provided confidence to re-emerge.

Sustainability/Future direction

Currently, earthquake communities and local governments have a dependency on the



service provided by the project. Meanwhile, representatives of local government and organizations shared the view of gradually capacitating their strength to manage their needs. Local government is allocating the budget for WASH, Community Infrastructure, and Livelihoods. Local government has led the recovery to long-term interventions. The emergence of the

Users' Group of Farmers, Drinking Water Scheme, and Irrigation example of the locally-led alliance collectively contribute to livelihoods and WASH recovery initiatives. Likewise, handover of completion of these community infrastructures to community and leadership from local government has created the base for sustainability.

Recommendation

Local demand and the need for recovery and reconstruction are demanding. Therefore, the Project Team should be highly sensitive while approaching various stakeholders. Not only how the organization could mobilize its resources on strengthening the recovery activities but also increase local government capacity to take ownership and encourage linking these recovery efforts to long-term development by recourse allocation and community mobilization.



INFO GRAPHY ON PROJECT ACHIEVEMENT

324



HH have access to irrigation canal (6 canals, 2867 m) after being repaired. The water can help farmers to cultivate around 114 acre of farming lands increasing their production and minimizing the drought challenges.

290



Farmers received vegetable seed support with regular technical support on seeding, germination and pest management helping to improve their farming practices.

14

Agriculture farmer groups trained on commercial seasonal vegetable farming and are applying the techniques on improving agricultural productivity.



5

Livelihood enhancement activities: cattle shed improvement training, saving and credit orientation, agricultural trainings with input support and trainings on blanket making, blacksmith and mushroom farming have enabled 410 farmers to explore and diversify their livelihood opportunities.



348 m



Gabion wall constructed securing disaster prone communities from potential landslide.

1915

Have been oriented on hygiene promotion activities like school toilet construction, water and sanitation hygiene (WASH), menstrual hygiene management in schools and communities through day celebrations, street dramas and radio jingle.



13

Agricultural group have collected 386377 NPR and mobilized as a loan within a group for starting enterprises.



1654

People involved in Disaster Risk Reduction (DRR) activities through trainings on Vulnerability Capacity Assessment (VCA) and School Disaster Management Plan (SDMP) for strengthening communities on disaster preparedness.



11



Drinking water supply schemes (9568-meter transmission line, 11653-meter distribution line, 63 child-friendly water taps, 11 RVT (8 Ferro cement, 3 RCC) 6 collection chambers, 6 intakes) have been constructed

A woman with a red bindi on her forehead is working in a vegetable field. She is wearing a grey long-sleeved shirt and a pink shawl. She is looking upwards with a determined expression, holding onto a wooden stake that supports a plant. The background shows a wooden trellis structure and other plants in the field.

**STORIES
OF CHANGE**

THE NEW BEGINNING REALIZED BY MODERN FARMING PRACTICE

Som Maya Shrestha, from Syaule Bazar of Chautara-Sanagachokgadhi Municipality, proved herself a committed farmer to revive her life from the impact caused by the earthquake. The earthquake damaged not only her house but also her farm.

Living with her husband, two children, and four other members in a joint family, the 30 years old, Som Maya proved herself as a strong pillar to support her family by dedicating herself in farming and livestock keeping. "Life after the earthquake was tough as we lost like everything we possessed," she recalls, "but gradually, we started getting better by overcoming the loss."

Som Maya's husband is a School Teacher; however, household responsibility was on her shoulder from kitchen to farming as like for many rural women. She had the desire to continue the farming and poultry business but was wandering from where to begin. In such a dilemma, the approach of "Livelihood and WASH Earthquake Recovery Project" to support farmers became a windfall for her.

To support the earthquake-affected families to revive livelihoods, Project supported the farmers by various means by forming a group, providing agriculture inputs, machinery, and tools, including capacitating.

“ I learnt the effective modern farming techniques to increase the produce from our farm. ”

Som Maya came into contact with the Project while it made livelihood interventions in the area. "I receive four days training on various aspects of farming," Som Maya says "I learned the practical things that are useful for farming, such as soil management, proper planting, use of fertilizers, and many others."

The project has provided training and support to her on tunnel farming with drip irrigation, a new concept, and technology entire into her village. With help from the Project, Som Maya has constructed the plastic tunnel, where she grows mainly the tomatoes and some other off-season vegetables.

"I was able to sell the tomatoes that grew in my tunnels, which worth up to 30,000 Rupees in a one season, giving me hope and confidence."

“ With the knowledge in tunnel farming, Som Maya controlled the temperature of her farm to increase the productivity ”

According to her experience, farming in the tunnel can increase vegetables' productivity, even in small areas of land.

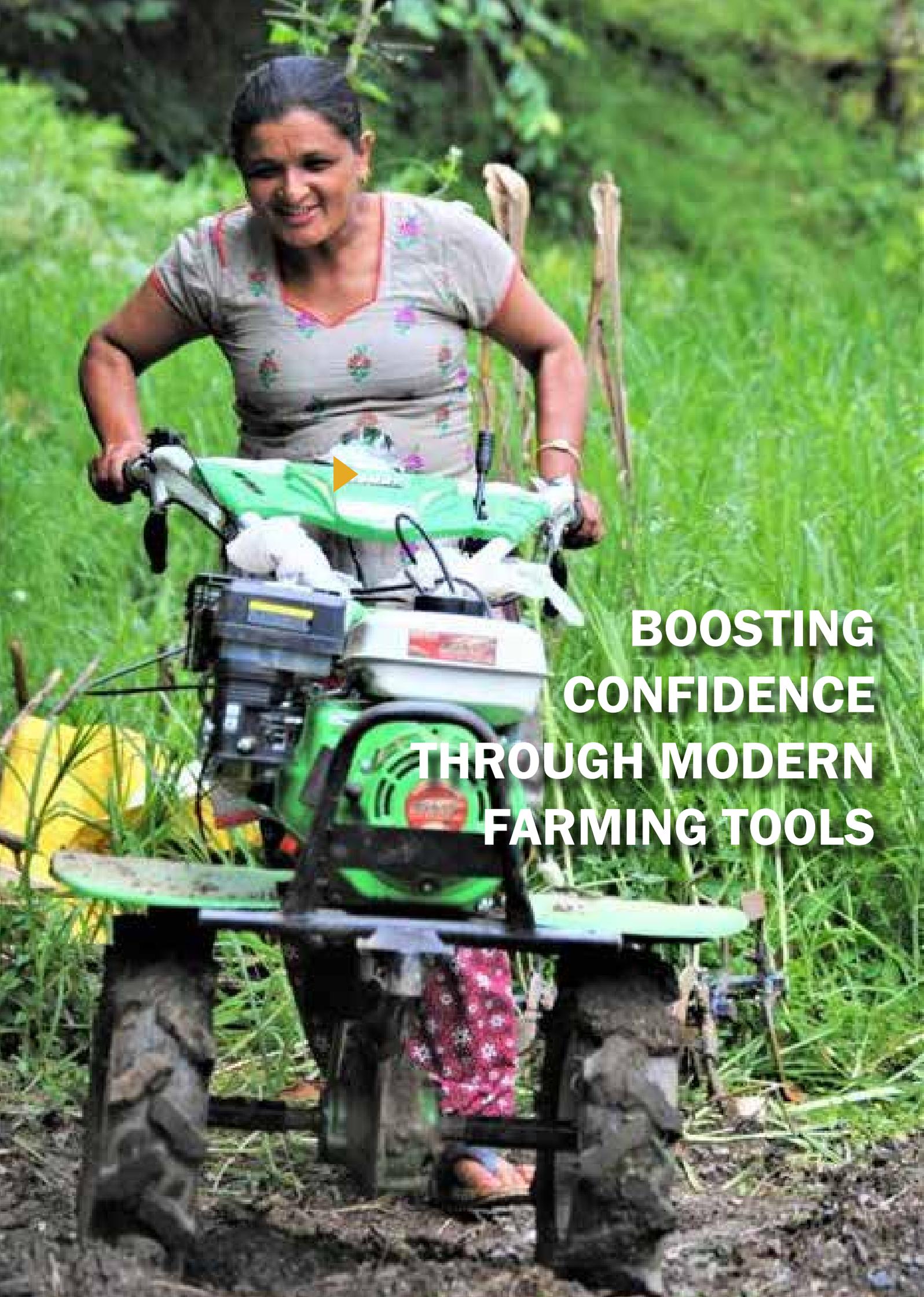
Som Maya experienced that the advantage of tunnel farming can regulate the extreme heat and cold that affects the crops and vegetables, thus preventing the sun born disease and the effect of clod and frost.

Due to capacity training provided by the Project, Som Maya knew to make compost fertilizer by using animal dung, kitchen waste, leaves, and grass. This skill supported producing organic fertilizers independently, therefore; saving the money to buy from the market. Besides, she can grow organic vegetables that are good for human health.

Som Maya is also the active member of the Sagarmatha Farmers' Group- which was reshuffled and supported by the Project, where 11 members are engaged. The Project has provided a mini tiller- a plowing machine to this Farmer's Group, which was alternate of oxen to till the land. Som Maya is also one of the users of this machine. "It is user-friendly, easy to handle, and helped us a lot," says Som Maya "we saved our time to dig the farmland and physically made our life easy."

Som Maya can diversify her farm activities and its management. Her life is getting better after experiencing a devastating disaster. She now owns Poultry Farms, Tunnel Farming, raising 20 goats and other cattle. "It has helped me support my family and education to my children," she exclaimed happily.





**BOOSTING
CONFIDENCE
THROUGH MODERN
FARMING TOOLS**



“ Basanti is the Chairman of Sagarmatha Agriculture Group, comprising of eight women and three men.”

Basanti Shrestha, 39, from Syaule Bazar of Chautara-Sangachokgadhi Municipality of Sindhupalchok district, is heading three members' family. She has 78 years old father and one sister.

Her house was damaged, and the property was lost. As her livelihoods depended on agriculture, she could not cope with the disaster for several months. Her agriculture assets, such as crops, seeds, and tools, were buried under the damaged house. She also lost chickens and goats. “It was a huge loss for us,” recalling the past, Basanti says, “We lost the confidence to restart our usual business.”

While intervening on livelihood activities under Wash and Livelihoods Recovery Project to support the earthquake-affected population in this rural area, JGSS reshuffled the existing Sagarmatha Agriculture Group to maintain cohesion and collaboration among beneficiaries.

Basanti is the Chairman of Sagarmatha Agriculture Group, leading its 11 members, of which 8 are women, and 3 are the men.

As Chairman of the Group, she is active mobilizing fellow farmers in her village to use new technology and innovation, use of improvised seeds, and so many other things. The Project has provided a mini-tiller to the group operated on a rotation basis to plow the farmland by local farmers.



Basanti received a three-day agriculture Training provided by the Project, where she learned about improved shed management for cattle, tunnel farming, improvised animal health. “This training provided me additional skills that were completely new for me,” adds Basanti “this knowledge and skills helped me do farming in an improvised way to increase the agriculture and livestock productivity.”

She is fascinated by tunnel farming and animal shed management that she learned through the training. The Project also provided financial and technical support to construct the plastic tunnel in her farmland. “In a season, I was able to grow tomatoes in the tunnels and sold it on 30,000 Rupees,” she happily says “it has given me the confidence, and I am encouraged to do much better.”

Not only that, but Project also organized an exposure visit to her to other big farms that are successfully operating in Kavre and Lalitpur districts. The training harbored skills to make an improvised animal shed, which helps create a healthy environment for both livestock and human beings. She can also produce compost fertilizers, which reduced the use of harmful pesticides saving money and health of consumers.

Basanti has gone through hard life after the earthquake to run the family, which lasted nearly for a year. After that, she was gradually able to overcome such difficulties. She said that her contact with Project was a life-changing moment. “In the past, we used to buy vegetables from the market,” Basanti says, “now I can produce and sell them; I am happy making my earnings to run my family.”



FROM LABOUR TO AGRICULTURE ENTREPRENEUR

Suntali Sharki, 36, from Batase, Ward no. 2 of Chautara-Sangachokgadhi Municipality is from Dalit community with fewer livelihood opportunities. Having 1 Ropani (476 sq.ft) of land was not sufficient to grow food that sustains her family for the whole year.

“Wild boars damage our crop regularly. I used to manage to feed the family by doing seasonal labor work,” says Sunitali.

Suntali has four children--two daughters and two sons. Her husband works in a local furniture shop. The earthquake had pushed her family further back on the vicious cycle of poverty.

“My house was fully damaged, and we lost everything that we had inside in it,” Suntali says, “the situation even worse by the earthquake, we had difficulty living and raising the children.”



She considers having her four goats, one cow, and a buffalo alive after an earthquake made her happy, giving her some relief.

In her community, there are also 14 Households of Dalit Community facing such difficult situations. The limited relief distribution often did not reach to the Dalit and marginalized communities, where many people like Suntali did not have reach.

During such difficult circumstances, Livelihoods and WASH Recovery Project introduced livelihood activities and reviving community infrastructures such as rehabilitation of irrigation canal and drinking water scheme in Suntali's village. It supported the people from the most marginalized communities to uplift their lives.

Suntali was one of the beneficiaries of livelihood intervention. The project also supported her for tunnel farming, on which she began to grow tomatoes, cucumber, and other vegetables. Vegetable production was a completely new business for her.

Suntali has not seasoned vegetable producers due to a lack of knowledge and skill. Moreover, there was an acute shortage of water, even for drinking. While she was struggling to fetch a jar of drinking water, doing vegetable farming was beyond her capacity.



Now the situation has the opposite of it for Suntali. She has engaged actively vegetable farming for her livelihoods after the project's intervention. The project equipped her with skills by providing training, farming tools, and improvised seeds. Besides, the project rehabilitated the drinking water scheme in Suntali's village.

“Our long-awaited dream came true once we had drinking water in our community,” she says, “availability of water and skills provided for vegetable farming boost up my confidence.”

Now Suntali is growing a variety of vegetables, and whatever she produces, she sells it to the local market. Suntali is selling vegetables and the earned money she spent raising her children and making a saving of it.

The project also supported to form Bramhayani Agriculture Group, in which Suntali is also the member. In the group, 23 members, of which 20 are women like Suntali who have engaged in agriculture

“ The training and resources supported by the project has made me independent, giving me hopes ”

for their livelihoods. Saving and credit is also another group activity, where farmers organized the monthly meeting and collected 100 rupees from each of the members. The collected money borrowed as a loan from and invests to increase small scale business activities. Suntali has taken the loan from this group, and she started poultry farming.

Suntali admiringly says, “things have changed positively in my life, now I can run my family and take care of my four children's education.”



LEADING BY EXAMPLE

Ram Kaji Thapa, 40, from Sakune Dada Tole of Chautara-Sangachokgadhi Municipality of Sindhupalchok district, has bitter experience of earthquakes. He lost his house and assets.

“My one calf, a buffalo and two goats, were buried under rubble,” says Ram Kaji. “I lost crops and foods stored in the house.

Being the only person for earning in his family of 6 members, Ram Kaji experienced a stressful situation after the Earthquake, which lasted longer. He has eight ropani of land (1 Ropani =476 sq.ft), which is insufficient to feed the family for a whole year. Lack of irrigation and dependency on rainwater for harvesting was not productive.

Mr. Ram Kaji gradually started coping with the odd situation. He is slowly dealing with the distressful situation. He has become a role model in his village by cultivating vegetables in an improved way after receiving training and other supports from the Livelihoods and WASH Recovery Project.

The project supported to form Farmers’ Group in Ram Kaji’s village, through which he received training on various agricultural themes. He learned to make a tunnel farm using plastic and bamboos- locally available resources at low cost for agriculture farming.

“I had a practical experience that productivity is good in tunnel farming than in open farm,” says Ram Kaji. “I can grow off-season vegetables which

With skills from modern farming techniques, Ram Kaji has increased his produce by triple fold

have high value in the market. Gradually, I have started earning to support my family and education for children.”

Ram Kaji also learned about preparing decomposing fertilizer and kitchen waste and water to grow vegetables.

“By learning these things, my vegetable production has increased,” says Ram Kaji. “I also know the technique to prepare appropriate soil texture needed for a variety of vegetables.”

The project provided a mini-tiller to Farmers’ Group until the land in which Ram Kaji is also one of the members. As of the experience of Ram Kaji, the use of mini-tiller to plow the land has saved his time and reduced his physical stresses. Ram Kaji says, “it used to take a day or more to plow the farm filed by using ox while using mini-tiller, I can plow my land within 2-3 hours.”

Not only this, but Ram Kaji is also turned his kitchen waste and water into usable, nutrient-rich soil through natural decomposition. He can prepare compost fertilizer using grass, leaves, and animal



manure. “I am turning kitchen and yard waste into usable, nutrient-rich soil through natural manures,” Ram Kaji says “this kind of manures represses plant diseases and pests, and I am saving money by reducing the need for chemical fertilizer.”

As the acute shortage of water for both drinking and farming, the knowledge gained to recycling kitchen waste and water, Ram Kaji is using it to grow vegetables to mitigate scarcity problems and reduce water pollution.



IMPLEMENTING AUTOMATION FOR PRODUCTIVITY

The 2015 Earthquake has given irreparable loss to Niru Thapa Magar, 34 years old woman from Sakune Dada Tole of Chautara-Sangachokgadhi Municipality of Sindhupalchok district. She has a heartbreak story to share, which gives her pain at every moment.

Due to the Earthquake, she lost a 10-month-old baby boy and ten years old daughter. The family built the house a year ago before the earthquake

“I cannot express in words how much I have been suffering,” Niru expresses her feeling with tearful eyes “the earthquake became life –long tragedy to my family and me.”

Loss of her beloved kids and displacement after the house’s damage, Niru had a hard time taking a long time to recover. “There was no choice other than return to normal life,” Niru counsel herself and says, “again, I pushed myself to catch my daily routine.”

After the Earthquake, her family has priority to construct a new home to stay, along with that they have to continue livelihood activities for survival.

Her family owns 7 Ropani (1 Ropani =476 sq.ft) of land through which the entire family is surviving. “It is difficult to sustain life through agriculture doing in the traditional method,” Niru says, “there is no proper irrigation system in the farm and whatever we grow was only used for our living.” According to her, due to Earthquake, even the water source that was used for drinking also declined.

In such a desperate situation, with the support of Livelihoods and WASH Recovery Project, Niru received agricultural training, through which she honed her skill to select the right type of vegetable seeds, cropping pattern, use of mechanization, and acceptable farming practices.

After the training, Niru started vegetable farming and constructed a plastic tunnel on the project’s support. The project also provided her agricultural tools, improvised seeds, and hands-on knowledge to make de-compost fertilizer.

“The training and the other support proved beneficial,” Niru states happily “I learned to do something productive.” She started doing vegetable farming both in the plastic tunnel and in open farmland. In her experience, tunnel farming is more appropriate and productive where vegetable production is high, thus has increased her income. By selling the vegetables, Niru manages the expenses of home and supports the children’s education.



Another remarkable thing that she experienced in her life after livelihoods intervention is that her confidence level increased. “Besides consuming at home, I took all vegetables in the market to sell,” Niru confidently says “before training, I was hesitant and shy; now I go to the market and deal on everything.”

Niru is also a member of the Janajagriti Agriculture Group, which was formed with the project’s support. It has 24 members, dominant by women with 21 members. Members of the group collect 100 Rupees every month and are running a savings and credit program. **“The group’s formation has given confidence that we should do something. It has given us belief in farming,”** says Niru.



ADOPTING DIVERSITY IN AGRICULTURE

As usual, 56 years old Kali Maya Tamang from Bhotep hulping of Chautara-Sangachokgadhi of Sindhupalchok district was busy on her farm cultivating the vegetables. She was busy taking care of vegetables that are grown in her tunnel farming. “There was no idea of producing vegetables entirely in our village except potatoes, some green leaves and crops like maize and millet,” Kali Maya says, “my sons used to buy vegetables from the local markets.”

Due to the lack of skill and knowledge at elevated farms, inhabitants of this area were not producing various vegetables. Also, they were unaware of the nutritional value getting from veggies. Bhotep hulping, located in

an elevated site with cold temperatures. Therefore, growing vegetables presents challenges and is harder still. This is due to the shorter growing season, cold nights, wind, and possible watering restrictions.

There are 21 Households in Kali Maya’s village, and all are from the Tamang community- and ethnically marginalized communities facing limited opportunities for survival and livelihoods. The remoteness and hardships of this hilly area have even marginalized more to this community. Though there were no human casualties, however, the earthquake made an immense impact was created and destroyed houses, loss of assets, crops, and livestock.

Livelihoods and WASH Recovery Project provided support to residents of Bhotep hulping in vegetable farming and other livelihood activities. The Project supported the forming of Laliguras Farmers' Group, which has 18 members. Interestingly, all the group members are women, of which Kali Maya is one of the active members.

“I received training on agriculture where we know many things about doing vegetable farming and its importance,” Kali Maya says “after this training, I can grow cauliflower, cabbage, tomato, and other vegetables which were never grown before due to ignorance.”

In Bhotep hulping, alcoholism and spending time unproductively by playing cards among the male population are high, which has worsened households' economic activities, including increased domestic violence.

In such a context, diversifying the growing of vegetables has brought happiness to Kali Maya. “The skill in vegetable farming has changed our food habit, and I sell unconsumed vegetables in the local market,” she says, “through which I am making earning which supported me to run the family.”

Kali Maya is a member of the Laliguras Agriculture Group that collects 100 rupees every month for saving and credit. The collected money has been used by women of the group to expand their small enterprises such as opening small shops, doing vegetable farming, raising livestock and poultry, etc. Women benefit by receiving the money as a loan to raise chicken and goats and to do other things.



“ The skill in vegetable farming has changed our food habit, and I sell unconsumed vegetables in the local market ”

The saving habit of women like Kali Maya has reduced their dependency and increased their financial access. Kali Maya believes that engaging women in livelihood activities and having access to resources have not only capacitated them; thus, domestic violence has also decreased as women became economically independent.

“We are now confident to continue our economic activities independently,” says Kali Maya



FINDING STRENGTH AMID LOSS

The earthquake entailed unsympathetic experience in Maiya Sharki, 43 years old from Rata Mata Batase of Chautara-Sangachokgadhi Municipality of Sindhupalchok district. “I lost everything by an earthquake,” Maiya says, “my father, mother, and a brother buried under the rubble of the collapsed house and left me within 24 hours of the quake.”

It was tough for Maiya to console to bear this great tragedy in her life brought by an earthquake. “It was a very traumatic experience that should not happen even to an enemy,” Maiya exclaims, “what can individuals bear the tragedy more than this in his or her life!”

But like many others, Maiya also had no choice other than coming to everyday life. It took a long time for Maiya to console herself with this tragedy.

There were other hurdles in her life after the earthquake. Her house was fully damaged, and this large scale disaster destroyed household assets. “My 12 goats were also killed burying under the rubble in the animal shed; I was not able to take out even a single piece of the crop, that was stored inside the house,” Maiya recalls “on such frightening situation I made a temporary shelter and made the decision to start a normal life.”



Maiya's family income activities are based on agriculture, where her husband provides her helping hands. Comparatively to her fellow villagers, she has 35 Ropani (1 Ropani =476 sq.ft) land but had little knowledge to do agriculture in an improvised way, restricting her to diversify on farming.

With the Livelihoods and WASH Recovery Project's support, Maiya received four days of training on agriculture, which changed her vegetable farming view. "We used to grow vegetables only to consume at household," Maiya says, "but this training became an eye-opener to increase the vegetable production by applying various methodologies."

Tunnel farming proved an outstanding achievement of earning, which was a very new concept for her. The Project provided support to Maiya to construct Plastic Tunnel for vegetable farming. "I grow various types of vegetables like cauliflower, tomato, onion, and pepper," Maiya says "before receiving this training I used to buy vegetables, now I can produce and sell, which has increased my income."

Engaging actively in the vegetable production in the tunnel has benefitted Maiya in many ways: acquired lifetime skill on tunnel farming, supported household consumption and saving money that was spent buying, more production, and selling support for income generation.



A plastic container provided to produce manure. The project has provided skill to farmers to produce manures that can be used in farm by using locally available resources.

It's been more than two years that Maiya has been involved in vegetable farming. "I found a significant change in my life through vegetable farming for which I received training and other support from the Project," Maiya says "in a one-season, I was able to sell cauliflowers and pepper, and I made nearly 5000 rupees from it."

Maiya also learned to make the soil more fertile and maintain its quality; to use improvised seeds and compost fertilizers. According to her experience, the skill she

“ We take the loan and expand the farming activities through saving and credit scheme, which ultimately support women and marginalized communities to enhance their economic activities ”

learned to make compost fertilizer reduced her dependency on using different types of chemical fertilizers and pesticides, which saved money and improved soil quality and productivity. Not only that, but such grown vegetables also have more demand and keeping human health and the environment healthy.

The Project also supported to form Farmer's Group in Maiya's village. The Pragatisheel Agriculture Group has 28 members with 22 women and six male members and has savings and credit schemes. The Saving Credit Group has supported its members like Maiya, increasing their easy access to finance. She says, **“We take the loan and expand the farming activities through saving and credit scheme, which ultimately support women and marginalized communities to enhance their economic activities.”**



SETTING AN EXAMPLE

Dawa Lama, 34, from Chhahare, Indrawati Rural Municipality of Sindhupalchok district, struggles to receive cash grant support for housing reconstruction. Besides this, her other struggles to meet the minimum daily livings are still far-fetched.

Dawa has seven daughters, the eldest one is 16 years, and the youngest are twins of one year.

Dawa owns a small plot of land, which is not enough to sustain her family, where she used to grow only maize and millet. The produced crops were unable to meet the

minimum needs to feed her family for the whole year. Her husband flew to Malaysia for foreign employment. As unskilled labor in Malaysia, her husband's financial contribution is also not sufficient to sustain.

“The earthquake damaged my house, I lost whatever we have inside,” Dawa recalls the days after the earthquake “after the earthquake, life became even worse. We ate what others gave to us. It was a tough life living with small children.” During the earthquake time, her youngest child was just six months old.



Amidst of Dawa's hard life, support from Livelihoods and WASH Recovery Project provided an opportunity for her to participate in a training to enhance skill on vegetable farming.

Dawa received two days of agriculture training, where she had the opportunity to learn about productive vegetable farming.

"I learned to prepare quality and fertile soil for vegetable plantation, use of seeds, way of putting water to plants and making of compost fertilizer," Dawa says "these things were previously unknown for me."

Dawa has the experience that these skills supported her to increase her vegetable production. "Now I can sell the vegetables that I produced," Dawa says, "it gave me confidence that I can do something to support my family."

With support from the Project, Dawa has reconstructed plastic tunnel for vegetable farming. "I have planted tomatoes that are growing well in the tunnel than in open space," Dawa says hopefully "by selling the tomatoes, I will make money that will support my living."

The Project also supported to form Farmer's Group, where Dawa is also among its 23 members. Interestingly, all are women members in her Farmers' Group. They collect 50 rupees every month from each of the members. Her total deposit in the Group has reached 300 Rupees in 6 months. This small amount of money has given immense confidence to Dawa.

The illiterate Dawa receives support from her school-going children, especially keeping account of her expenses and savings. "We take a loan from saving and credit scheme to expand our vegetable farming, such as buying seeds and other things needed for farming," Dawa says "if I grow more and more vegetables and sell it in the market, then I can make money."



RESTORING FAITH

Krishna Bahadur Sunar, 42, from Simpalkavre of Indrawati Rural Municipality, is reviving his family's traditional Blacksmith occupation, which was collapsed by the 2015 Earthquake.

“My house and working place damaged due to earthquake, the machines and tools used in my occupation were buried under the rubble,” Krishna Bahadur says, “reviving it was hard enough due to my deprived economic situation.”

There were no alternative means to support his livelihoods except three ropani (1

Ropani =476 sq.ft) of land, which is not enough sustaining his six family members by farming. Support for his five children for their education and other expenses put extra cost.

The Earthquake damaged Krishna Bahdur's house, which was constructed just a year ago of EarthquakeEarthquake. “I have spent 500,000 rupees to construct the house by borrowing the loans, which went in vain in a couple of minutes after the quake,” Krishna says, “it put me in immense pressure and economic strain.”

Krishna Bhadur is from the Dalit community, the most marginalized and economically deprived community. He has the responsibility to raise his five children, where his wife is also supporting.

“I decided to continue my family’s traditional occupation. Initially, I did not have support from anyone, which made me difficult to revive it due to economic constraints that I was facing.”

In such a situation, the support provided by Livelihoods and WASH Recovery Project proved beneficial for Krishna Bahadur. First, the Project provided five days of training to Krishna Bahadur and other blacksmiths to improvise their skills to make quality materials.

The Project also provided machinery support such as welding machine, grinder, and heating machines. Now he can make and repair things such as tongs, tools, hooks, sickles, axes, and other agricultural implements.

Krishna Bahadur’s return to his occupation has not only rehabilitated him, but it has made a broader impact in the community.

“ I decided to continue my family’s traditional occupation. Initially, I did not have support from anyone, which made me difficult to revive it due to economic constraints that I was facing. ”

He’s come back to his traditional profession brought happiness to the face of villagers as well. They were dependent on him to make or repair agriculture tools, and other household used items. These tools have a high demand in his village that is mostly used for farming.

Krishna is again back continuing his family occupation. He is now busy heating pieces of wrought iron by charcoal and shaping with hand tools. Krishna says, “I am happy to restart my traditional occupation,” Krishna said happily.



THE TALES OF THREE BLACKSMITHS



The stories of three blacksmiths show the importance of skills trainings to modernise blacksmithing techniques and improve livelihoods through increased income.

Naina Bahadur Sunar (46) of Simpalkavre

Even though Naina has to use his clutches to move around, he is way ahead of us when we come to visit his workshop in Setidevi tole, guiding us down the village's steep hill. He openly talks about his disability and the challenges he has faced over the last decade. 12 years ago he pinched his finger while working in the fields; the seemingly innocent scratch got seriously infected, resulting in 3 consecutive surgeries and eventually leading to the amputation of Naina's right leg. After the accident, his wife eloped with another man.

Naina has never remarried; ever since his wife left, he has been staying with his brother's family, relying on their support and a little money made from his own blacksmith activities. He recalls the work was not easy due to this physical limitations – he would struggle using manual equipment to sharpen knives, or produce farming tools out of locally available materials. The equipment – sold in the nearby villages – did not generate enough income to sustain a living.

When the earthquake hit, it caught Naina carrying his toddler niece in the arms. They fell on the ground as they watched the house collapse, burying a little son of Naina's

brother under the rubbles. The man points at a boy staying next to us, explaining how they managed to pull him out, seriously injured. “Right away, various organisations rushed in here with relief materials,” he recalls. “This helped us to survive.”

As the disaster took away Naina’s house, workshop and tools, he was deprived of work for a few months following the earthquake. As the time passed, he joined a blacksmiths’ collective as a part-time helper, supporting the group at easy tasks, such as collection of materials. He would also occasionally make khukuri, traditional Nepali knives. But Naina says it was the training provided by Caritas Nepal in May 2018 that truly changed his life.

The training not only enriched Naina’s command of blacksmithing fundamentals, but also equipped his reconstructed workshop with a set of new tools: a grinder, an oiling machine, a cutting wheel and a blower. This way his techniques got modernised, while the work became much more efficient.

“Now sharpening 5-6 knives in a day consume less time than sharpening 2-3 knives with traditional methods before,” explains Naina, showing us some of the farming tools he has recently hewed. “It is easy to use the new machines. It makes me produce and earn much more. At last I am not afraid of what tomorrow brings.”

Gate Bahadur Bishwakarma (41) of Dakshinkali

Bishwakarma is a Khas occupational caste belonging to blacksmiths: Gate’s family has been dealing with metal as far back as he can remember. Stories of social discrimination also come hand in hand with their long history – Bishwakarmas are widely considered “untouchable”. “What it means? For example, we are not allowed to enter a temple when there are people from upper castes inside,” explains Gate.

A father of three, he says how before the earthquake the ostracism and discrimination were just among few challenges the family had to face. Struggling with their low socioeconomic status, they found it difficult to send their children to school. Gate was selling his blacksmith products

in the neighbouring villages, but it was not enough to make ends meet. With the outdated methods and a lack of modern tools, his work would put him at a high risk of accidents. He shows us many scratches and scars left by wounds “earned” during long working hours: “I sometimes had to take metal pieces out of my eyes.”

The April 2015 earthquake made Gate’s home collapse; he recalls that looking for his children buried in debris was the worst moment of his life. As nothing was left of the household, the family had to seek temporary shelter. Gate’s workshop also got totally destroyed, stopping him from work for the following 6 months. “But in all honesty, I was just happy that my



family was alive,” he states. As we sit in his new workshop, refurbished with Caritas Nepal’s support, Gate smiles all the time, exclaiming happily: “My new workshop is just like Durbar!”

Within a year from the earthquake, social mobilisers came to the village to conduct a needs assessment survey. During that time Gate was working as a paid labour, helping to remove the rubbles and participating in reconstruction works. He says that the blacksmith training provided by Caritas has helped him to double the income and equipped him with precious knowledge about safety at work. “I learnt that I should wear a head protection and a face mask. Also, they taught us how to handle injuries at work and apply first aid.”

The project also provided Gate with 20,000 Nepalese rupees (NRs; around 180 US dollars) worth of blacksmith equipment – such as a welding machine and a cutting wheel – which he admits made his work much less time consuming than before. He now sells his products for 100 NRs per kilo, producing various farming tools. He feels the societal issues around blacksmiths are changing too: “Thanks to the public campaigns on the radio, we are able to walk the same road with other community members, without being considered a bad omen. But there is still long way to go.”



Arjun Bishwokarma (31) of Kami Danda

Kami Danda is an entirely Dalit settlement, home to 29 extended families. Arjun and his elder brother run the village's only blacksmith shop, distributing their products as far as in the Sindupalchowk's district capital, Chautara.

“My brother was out in Kathmandu. I was sitting outside the house when suddenly everything collapsed,” Arjun recalls the day of the earthquake. “Kami Danda lost 4 people that day.”

The little blacksmith supplies the brothers owned were taken away by the disaster. The house also collapsed, forcing the family to seek a temporary shelter. As there was nowhere to re-establish the blacksmith workshop, Arjun could not work for two months. The post-earthquake situation was not easy, as the family was trying to make a living by engaging in some extra agricultural activities.

Caritas Nepal equipped the brothers with a set of tools and a blacksmith training that proved to be particularly useful during the post-earthquake reconstruction efforts.

It also has improved the business side of their endeavour: they used to trade their products in a barter exchange, receiving rice or vegetables for their tools. Now they are growing a proper business.

The money helps the family purchase basic food items and pay for the children's schooling. “It is definitely more profitable as we make real money. We have cash at hand,” says Arjun. “And we now sell as much as 9-10 kg per day.”

Within a framework the Livelihood and WASH Recovery Project in Sindhupalchok, implemented as part of Caritas Nepal's post-earthquake efforts, we provided a number of blacksmiths with specialised training to further enhance their skills, modernise the blacksmithing techniques and improve their livelihoods through an increased income.

*Author : Joanna Nahorska
Picture Credit : Dipendra Lamsal*



BETTER IRRIGATION MANAGEMENT FOR GROWTH

The Jorchhnage Irrigation canal has a history of four decades, serving the local farmers of Batase in Chautara- Sangahokgadhi Municipality of Sindhupalchok district. Since located at the edge of a hilly area's sloping land, the canal was often obstructed by landslide and erosion, which has worsened its structure and functionality. However, farmers were temporarily maintaining and using to irrigate their cultivated fields.

The 2015 Earthquake further damaged the structure of this canal, which left farmers into the destitute situation. "Earthquake devastated everything that we had; inside the home and outside," Shankar Thapa, Chairman of the Users' Group Committee of the Canal, says, "we became hopeless of the earthquake's crisis. At that time, there were many priorities to address."

For three years after the earthquake, farmers were not able to rehabilitate this canal. It impacted on depletion of their

farm production. "The flow of water in the canal was fragile," Bel Bahadur Bista, another farmer, says, "on the year of the earthquake, no one could plant crops."

During the plantation picking season, farmers have to wait for days and nights to irrigate in their field. They experienced fighting over scarce water flowing through this canal, and some of them have destroyed the temporarily constructed source. Thus, three years after the earthquake were passed on in conflicting situations, which disturbed the social cohesion. There was either no production or less, ultimately affecting the livelihoods of the natives.

Farmers approached the Ward office several times, urging for financial support to reconstruct it, but they return with empty hands. "We were told that the local government does not have enough resources to reconstruct it," Thulo Kanchha Thapa says, "we could not contribute as it was too costly for us."



This year, the Livelihoods and WASH Recovery Project intervened to provide support to reconstruct this irrigation canal. Shankar Thapa says, "it was a great relief for us, and our hopes again get higher."

Financial and technical support provided by the project helped villagers to reconstruct the canal. The reconstructed canal has a cemented wall and floor to ensure its strength. The community offered free labor support.

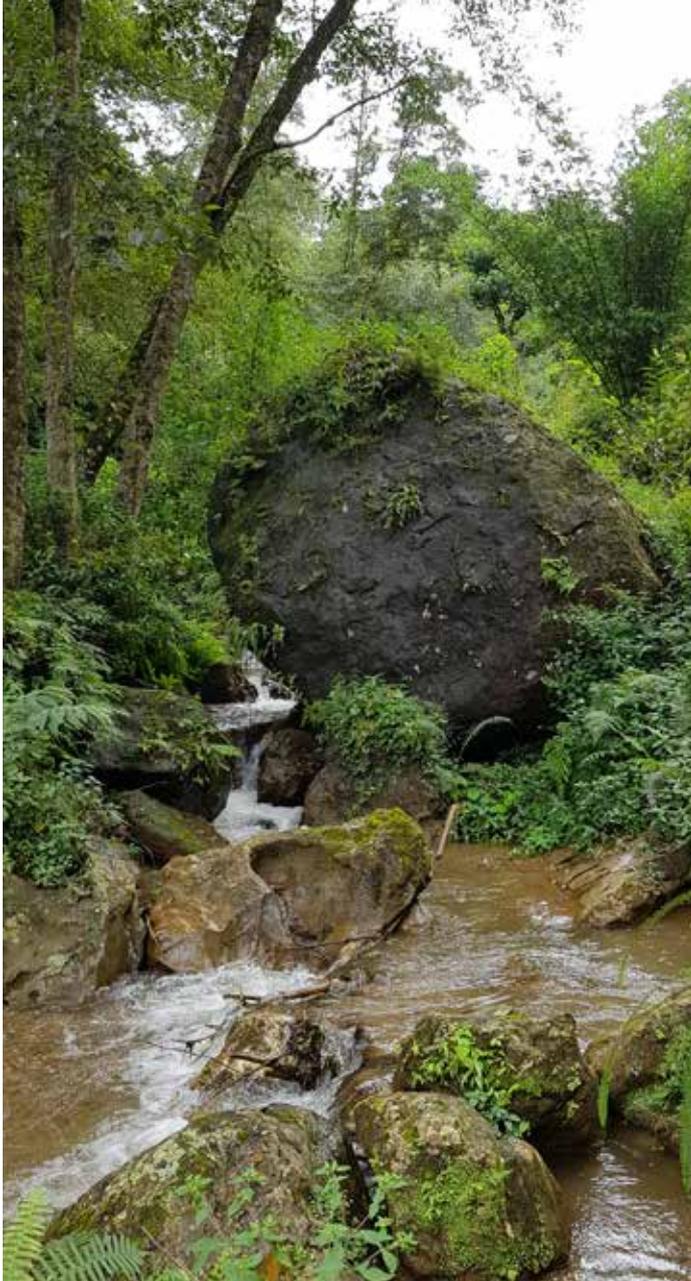
The cost of the project was approximately 11, 000, 00 rupees combining with community contribution. "It was cost-effective because there was the involvement of the community. We were involved in reviving our life-line," Shankar says, "if a contractor did this work, the cost could have been more than double." This explicit that community involved projects are cost-effective, the guarantee of ownership, durability, and sustainability.

The villagers shared their experience that the impact of this canal has been observed. Crops were grown, and growing crop production is already visible, which provided relief to farmers whose livelihoods were shattered by earthquakes.

The rehabilitated canal covers 36 Households benefitting 165 Ropani (1 Ropani =476 sq.ft) of farming land. As the channel has a regular supply of water, there is now an all-time availability of water. "Now we have all hours supply of water in our field," Shankar says "those who have the will, can cultivate crops throughout the year in all seasons."



NO MORE DEPENDENCE ON RAIN WATER



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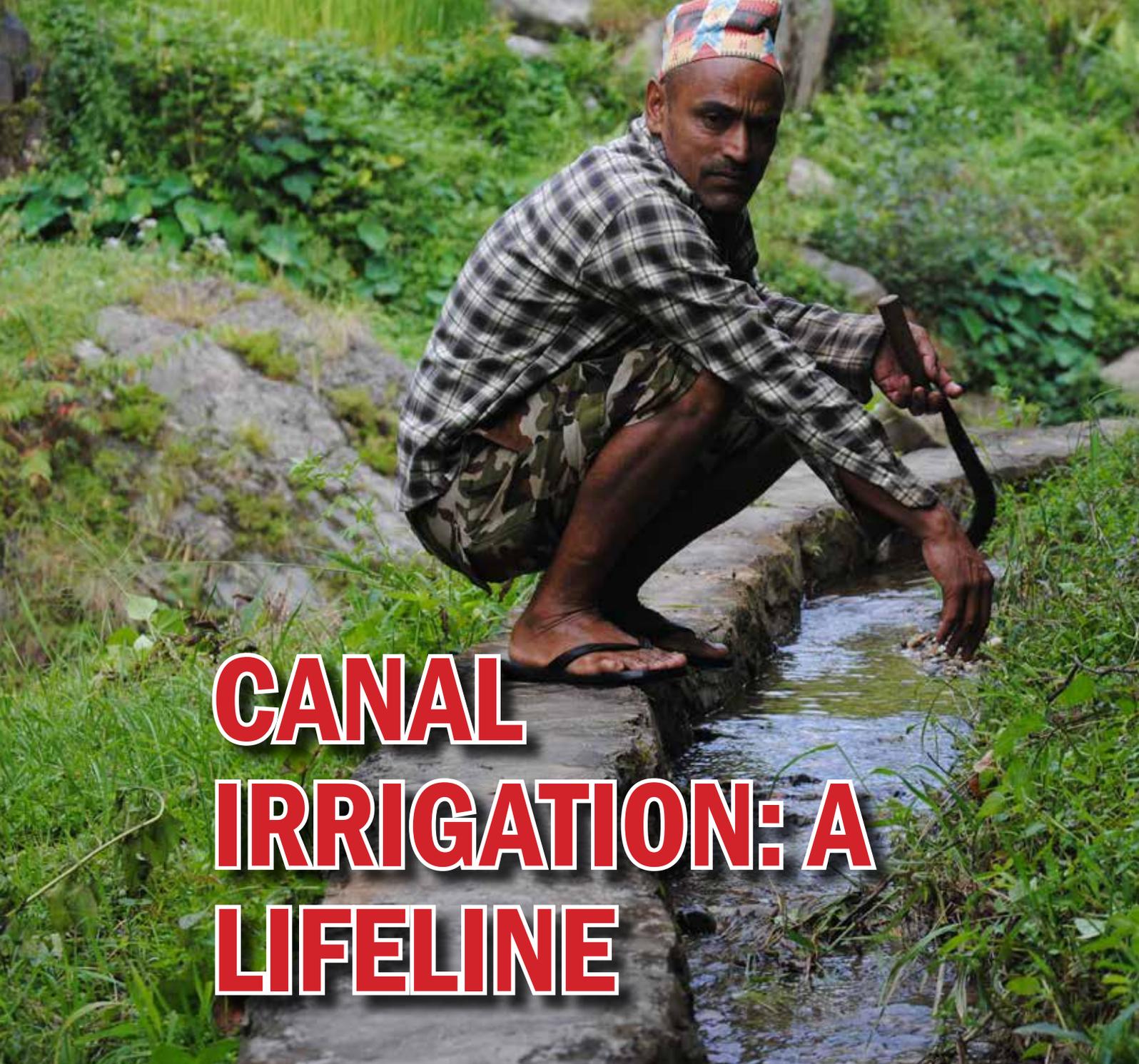
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CANAL IRRIGATION: A LIFELINE

Canal irrigation is the most important source of irrigation for the farmers of Basbote Nimote of Chautara-Sangachokgadhi of Sindhupalchok district. However, the irrigation canal used for watering more than 200 Ropani (1 Ropani =476 sq.ft) of the land of this area was not correctly running due to a lack of firm structure. The endless efforts of farmers went unproductive while maintaining this canal.

The canal's problem was affected by erosion and the landslide, which blocked the flow of water and spilled over to farmlands flooding it, resulting in the decline in crop production. The Kuvinde River feeds this inundation canal without any barrage or dam on its head. When the water flow is more significant in the rainy season, this canal overflow flooding the farm fields filled with sand particles, reducing the soil quality, affected the overall agricultural production of this area.



“ Our happiness knew no bounds after the renovation of the canal ”

Furthermore, a dry landslide that occurred in the 2015 Earthquake buried a significant portion of the canal.

"It added pain over pain;" 48 years old Raj Kumar Katuwal, Secretary of the Irrigation Canal Scheme says "devastated by the earthquake, we were not in the condition to bear all reconstructing costs this canal. We also lacked the technical knowledge to redesign so that we do not face future problems."

There was boundless happiness in this area's face when Livelihoods and WASH Recovery Project intervened to rehabilitate this canal.

The project redesigned and constructed a mixed type of structure, such as dry retention wall, cemented, and mud canal, about 2 km long. The project has contributed 511,241 rupees and community-contributed 51,124 rupees, costing 562,365 rupees to rehabilitate this irrigation scheme.

As irrigation is an essential condition for agriculture, the availability of assured resources and timely rehabilitation of this irrigation canal proved vital for this area's farmers.

This irrigation facility has enabled us to grow two or three crops in a year, which helped farmers maximize agricultural output and improve their livelihoods. Due to a consistent water supply in this canal from its source generated from the river, farmers can plant and crop in all seasons.

"Since its reconstruction, we have been using this rehabilitated irrigation canal without any disturbance," Raj Kumar says "we have noticed increased crop production which is ever the biggest accomplishment."

HEALTHY LIVESTOCKS: IMPROVED LIVELIHOOD



On 26 September 2019, Livelihoods and WASH Recovery Project organized a one-day Animal Health Camp in Ward no. 1 of Chautara-Sangachokgadhi in Syaule Bazar.

A team led by Dr. Arjun Khadka, a veterinary doctor and veterinary technicians, was busy handling the load cases of animals.

“My chickens are suffering from cough, and some of them already died,” Indra Maya Shrestha, a 50-year-old lady who came to this camp, says, “one of my goats is not eating the grass and has lost appetite.” There are five members in the Indra Maya family whose livelihoods depend on a handful of chickens, few goats, one buffalo, and small farming land. “We lost almost everything in

Earthquake--our house was fully damaged,” Indra Maya recalls, “production in our small farmland is not enough to survive. Raising chickens and livestock has been supporting us, but we are afraid to lose them when they got sick.”

Som Maya Shrestha, 30, years old woman who arrived in Health Camp carrying a goat, said that it was fallen sick for few days; she had treated in a local veterinary clinic but did not get well. Worrying with her sick goat, Soma Maya again came to this camp to seek medical support, which was diagnosed with pneumonia.

Like Indra Maya and Som Maya, the livestock owners and farmers gathered



MORE THAN 200 sick animals were treated in a day-camp

as like human beings. A common illness that livestock suffered from are parasites, diarrheal disease, poultry pox, flu, pneumonia, cattle plague, etc. The disease-related to birds' category is more seasonal. Dr. Khadka says, "ignoring this fact, and it will reduce the productivity of livestock affecting the household economy as well as consuming food products that will affect human health as well." Also, the disease outbreak among birds and animals will affect other livestock and human beings too.

on the premises of Ward Office to receive medicine and do a health check-up of some animals that they brought with them. There was a long queue of livestock keepers who gathered from morning till getting dark in the evening.

At the end of health camp, more than 200 individuals received medicines, and some of their livestock were vaccinated. Besides, a health camp team advised them to seek medical consultations regularly to ensure the animal's health safety.

Dr. Khadka told that livestock both of the birds and animal categories suffered from diseases and other medical complications

Mr. Dipendra Dangal, Veterinary Technician, was advising livestock keepers to maintain proper animal shed depending upon the weather and seeking medical consultations at regular intervals of time that will ensure the livestock's' healthy lives.

During the health camp, livestock keepers seemed happy in many ways. They were receiving the services at their doorstep. Otherwise, they had to travel a long way to a nearby town, which would cost money and their time. It was a free camp where a variety of medicines and vaccinations were provided.



“Doctor provided my sick goat to take antibiotics and medicine to improve appetite,” Indra Maya stated happily, “I am hopeful that my goat will feel good very soon.”

The Project organized such Animal Health Camp a year ago in other wards of Municipality, where it learned that it would be useful for the villagers in the rural area. Therefore, this year too, the organization decided to set up such camp in Syaule Bazar, which helped livestock keepers create awareness on seeking medical consultation for their livestock.

Mr. Rajendra Sharma, the Executive Director of the JGSS, says, “Monitoring animal health and preventing animal disease outbreaks is vital to rural economy and safety.”

Like many livestock keepers, Indra Maya was happy to receive the service in the camp conducted in her ward. She said “if the camp was not conducted here, I had to travel a long way to receive medicine for my goat, I received everything in free here,” Indra Maya says “ I saved money for my travel, food; treatment and medicine for my goat and chickens.”



PROVIDING A LIFELINE

For Dor Maya Tamang, 49 years old from Bangaba, Chautara- Sangachokgadhi Municipality of Sindhupalchok district, all her life struggled to fetch water from afar drinking, cooking and feeding to her livestock. Doing backyard farming to grow vegetables was a distant dream for her while working daily to collect water. Her farmland was cultivated only during monsoon or depends on off-season rainwater, which was not enough to feed her seven family members.

"It used to take one hour or more to get a jar of water," Dor Maya recalls, "even when we reached to collect the water, we need to wait in a long queue." In that queue, all are women and the girl child.

The life of Dudh Maya Tamang, another woman from the village who crossed 60 years, also has a similar experience. "It was a tough life for us, but no choice," she says "in our time there was no clock like these days, we had to wake up early in the morning with hen's clucking and rush to queuing for fetching water." Dudh Maya had experience quarreling with other women during that time.

Inhabited by Tamang- an ethnic community regarded as the marginalized group in this village had bitter experience not having a drinking water facility.

Govinda Lal Shrestha, who is teaching in the primary School in Bangaba for the last 16 years, stated that this village was shadowed,



overlooked, and voiceless. According to him, lack of water supply also affected the School's sanitation and hygiene. He stated that the fetched water from far distance was only enough for drinking; there was no water in School toilets.

This situation further worsened in this settlement after the 2015 earthquake. The villagers' source for water stopped dripping; however, following the monsoon of that year, reemerged, but the water level was drastically depleted compared to previous years. The villagers even faced a worse situation.

The Ward Office of the local government was also aware of this situation, but things were not moved ahead due to financial and technical constraints. Collaborating

with local government, the Livelihoods and WASH Recovery Project intervened to support the affected population to rehabilitate the drinking water scheme.

As the existent water source was insufficient for supply and lacked other sources in the area, villagers and the local government were forced to look for alternatives. An alternative for water supply was figured out with the local government's initiative. The source of water generated from Holche River was supplied to Chautara- in district headquarter of the community; the local government decided to split and distribute it in the Bangba village.

With this decision, the Project did feasibility and technical assessment. It laid down the 528-meter long pipeline from the splitting location and connected this with the reservoir tank, which has 20,000 liters. From the reservoir, 2700-meter-long channels were placed to distribute water in 10 different locations of Bangba village.

This scheme ensured 83 households with more than 400 individuals' access to drinking water. Its effect was even more significant than just using the supply of water for drinking purposes only. Villagers started backyard farming, growing vegetables, feeding livestock, and maintain sanitation. "First time, I saw running tap water near my house since I was born," 29 years old Sunkaji Tamang says, "it is a miracle for us."



A VILLAGE SETS AN EXAMPLE

The inhabitants of Sakine, Batase-2 in Chautara-Sangachokgadhi Municipality, were facing an acute shortage of drinking water and household use for years. There was no reliability of running water in pipelines.

The 2015 Earthquake even made the situation worse. "There was damage on the pipelines in several places, a little amount of water running through it was also leaking," Ramkaji Dhungana, a member of the Drinking Water User's Group, says "due to damaged pipelines the water flow reduced drastically."

According to Ramkaji, villagers have temporarily managed drinking water, reaching distance sources, and faced enormous difficulties. He says, "our attention was focused only on managing the drinking water; it was difficult to feed water to livestock and do backyard farming."

Pramila Shrestha, a 10th graded girl student, supporting her mother for household activities, stated that the running tap water location was far from her house, and she had to spend hours to fetch water. She remembers, "It was a difficult time for us, we walked a long way to get a jar of water. I need to spend more time in fetching water than focusing on my study."

The villagers approached the local government, demanding to assure a regular supply of drinking water. Due to budget limitations, things were not materialized. In the meantime, Livelihoods and WASH Recovery Project collaborating with the local government finds this area to support the drinking water scheme.

Then nine members Users' Group Committee were formed and the process of rehabilitating the drinking water scheme was kicked off. The Users' Group Committee and technical team identified



“ 28 households are directly benefiting from the scheme ”

the water source by connecting to Puranne Khola (a river). Feasibility study and other technical assessments were done to ensure sustainability and the regular flow of water.

The 6000 capacity of the reservoir tank is connected with a 500-meter long pipeline from the intake linked with the river, the source of this drinking water scheme. The scheme completed on the cost of nearly 11,000,000 rupees, of which 84,850 rupees were the community's contribution.

The project was completed within six months of inception. It brought happiness in villagers' faces, mostly the women, and girls who spent significant time in household chores. "Now we have 24 hours running water," Laxmi Thapa, one of the

beneficiaries of this drinking water scheme, happily says, "our dream became true after many years. It has reduced our burden of work."

There are 28 households (approximately 140 people) in the village who have been benefiting from this Drinking-Water Scheme rehabilitation.

The completion of the water scheme supported exclusively whiles the reconstruction of damaged houses by the earthquake. "There was no reliable source, and people were facing difficulty constructing their damaged house," Laxmi says, "completion of this scheme and starting of constructing of damaged houses started almost at the same time."

Through 4 running tap water, the scheme has covered 28 households. The tap water is available 24 hours in this village, which significantly impacted the lives of the people living here. To utilize the water, people are more engaged in agriculture activities and raising livestock, contributing to improving income generation.

"Now, there is enough water, and we are doing vegetable farming," Laxmi says, "previously, it was difficult even managing the drinking water; now we can grow vegetables and sell it."

‘ACCESS TO WATER IS A BLESSING IN DISGUISE’



Thulokhola Gairigau (village) in Batase of Chautara-Sangachokgadhi in Sindhupalchok district was dry area due to a lack of drinking water facilities. People of this village were dependent on one of the underground water sources, which was not sufficient to fulfill the entire town's demand. For alternatives, villagers have to make a long trip to the river, which was time and effort.

In such a situation, women had to bear the burden of workload, spending hours and hours carrying the water from distance sources. "We spent sleepless nights throughout our life fetching water," Ichha Devi Dhungana, a local woman says "we rushed to the river traveling more than an hour or more to get a jar of drinking water."

People were dependent on rainwater, mostly waiting for the monsoon to plant rice paddies. "It was a dream to farm vegetables other than in monsoon," Jib Nath Dhungana, Chairman of the Drinking Water User's Group, says, "it was a distressing situation to live on such condition."

The 2015 Earthquake further shattered the life of people of this village. The only available water source nearby to town also drained out. "The source of water that we were using for years also drained out making us struggle for drops of it," Jib Nath desperately says "then we wandered here and there to fetch water which was a daunting time for us."



A shortage of water hindered reconstructing houses damaged by earthquakes. Jib Nath recalls, "some people carry water from the river on their shoulders, and some others were forced to buy from the tanker to construct their damaged houses.

The entire village was desperately wandering far and wide.

Livelihoods and WASH Recovery Project intervened in this area to support for drinking water scheme. The project team consulted with the local government, and it also agreed to collaborate with the project.

Although the commitment of support from various stakeholder's problems was still existent, there were no water sources available anywhere in the public areas. Fortunately, an individual who contains the water source in his field agreed to contribute. "That was private water source located in his field," Jib Nath says "his agreement to sharing the water source for us brought hope in our life."

One and half year ago, users' Group Committee agreed with the water source owner, and the process of rehabilitation drinking water scheme started in Gairigau. Users' Group Committee was formed,

The project constructed 10,000 liter capacity of the reservoir tank, and water is distributed through 10 running taps covering 64 households

which has five male and four female members. Feasibility and assessment work was done, and JGSS began its work.

Livelihoods and WASH Recovery Project contributed 17, 000, 00 rupees; community-contributed 175,000 rupees and local government provided 100,000 rupees to complete the scheme.

The scheme of rehabilitation of drinking water was completed within six months. The project constructed 10,000 liter capacity of the reservoir tank, and water is distributed through 10 running taps covering 64 households reaching 326 individuals of this village.

"There was no limit of happiness," Jib Nath says, "tear of happiness appeared on our face when water ran into tap waters in our village."



TOILING FOR WATER HAS COME TO AN END

Sukumaya Purkoti, 55, from Jamune, Chautara-Sangachokgadhi of Sindhupalchok district has uncounted experiences struggling to fetch water from downstreams from her house. “It has been 40 years that I came to this village after my marriage, and since then, I spent hours and hours fetching water,” Sukumaya evokes “it was a tough life, but we did not have any choices either.”

Having running water close to the house was Sukumaya’s distance dream, which became a reality only a year ago by the intervention made by the Livelihoods and WASH Recovery Project.

There are 16 households in this settlement where Sukumaya is residing, and all are from Dalit Community. Being from marginalized communities, they felt that

their voices were not heard and deprived of basic needs. Similar is the case for lacking a regular supply of drinking water despite existing water sources.

The 2015 Earthquake pushed back this community into further deprivation. Having a small portion of farmland was not sufficient to sustain them through agriculture for the whole year. Therefore, male family members from this settlement migrate to nearby cities to do seasonal labor work.

Bina Purkoti, 20 years old and mother of the 10-month-old baby, carried water from tap water, which was constructed close to her house. “Life changed and became easy with this running tap water,” she says, “otherwise I have experience of spending more hours and hours to bring a Jar of water.”

Women of this settlement have to travel long distances fetching water, sometimes supported by their children, especially the girls. In rural hilly areas, the roads were not comfortable; they often dealt with risk. “Sometimes we had to move even in dark evenings to fetch water,” Sanu Maya Sarki, 48, year-old woman says, “in the past, we had an experience of not having drinking water when it is needed.”

Due to scarcity of water, they have compromised on their sanitation and hygiene. It prevented them from doing agriculture activities and raising livestock, affecting overall livelihood activities. Bina says, “some time we were forced to drink polluted water.”

The project linked this settlement with running tap water by constructing a 4000 liter capacity of the reservoir tank, linked with 429-meter prolonged intake, built at its source. The collected water in the reservoir is distributed through 3 taps

covering 16 households. With this drinking water scheme, nearly 100 individuals have access to clean drinking water.

The project provided technical and financial support. This water scheme’s total cost is 941,725, of which project contributed 872,625 rupees, and community support was 69,100 rupees.

There are now 24 hours of running water supply in this marginalized Dalit community. The change effect of the availability of water has been observed. Women are making earnings by involving vegetable farming and selling to the local market. Bina says, “cleanliness and tidiness have been maintained after water availability, which has improved health and hygiene.”

The hardships faced by Sukumaya, Bina, and Sanu Maya to fetch water have now become past reality and now has brought joy to their faces.





PERSONAL SACRIFICES FOR COMMUNITY

Chinlal Tamang, 52 years old from Bangba, Syaule of Chautara-Sangachokgadhi Municipality, is currently serving his community as Village Maintenance Worker.

Chinlal received four days of plumbing training from Livelihoods and WASH Recovery Project and acquired skill related to maintaining the whole system of water schemes. The Drinking Water Users' Group Committee of the Bangba has also tasked him as a "watchman" of reservoir tanker for

its safety and security. China is happy with this assigned role being capable of serving the community who are recently benefitted by the availability of drinking water.

There is no all-time availability of water due to scarcity; therefore, Users' Group Committee has decided to provide water for 2 hours each time in the morning and evening. This is also the duty of Chinlal to manage and distribute the water during the scheduled time. His crucial role has

been recognized, and the Users' Group Committee provides him 3500 rupees per month as allowance.

More than that Chin Lal has donated his land free to Bangba Drinking Water Users' Group Committee to construct a reservoir tank. His generous support of granting the land for building a reservoir tank has

materialized the completion of this water scheme. "Land was needed, and no one was interested," Chinlal happily says, "we suffered so much having scarcity of the drinking water; therefore, I decided to contribute." Now all villagers of Banga are happy with Chinlal's tremendous generosity.



DEDICATION AND COMMITMENT TO SERVE COMMUNITY



Ramila Tamang, 33 years old from Bangabesi, Syaule of Chautara-Sangachokgadhi Municipality is Village Maintenance Worker to provide operation and maintenance support to drinking water schemes has been recently constructed in her village with the support from the Livelihoods and WASH Recovery Project. The Project provided her 4-day long training on plumbing, where she learned drinking water maintenance and management, safety, and security.

Rashmila, by her nature, is a quick learner and interested. Having no formal education, she attended a three-month-long adult literacy class to read and write. She is also

active as a farmer and running a retailer shop, including tailoring in her village.

She felt that taking the role of Village Maintenance Worker has allowed her to serve the community and feel proud to take this responsibility proving that women can bear and share responsibility. The plumbing set provided by the Project to her includes: wrench, heating plate, stove, Teflon cover, die set with teeth, grease oil, etc., which she is capable of using. When she received a call for maintenance, she took her plumbing set and ran to fix it. “With this given role, I have become responsible to my community,” Rasmila proudly says, “I have received support from my community people.”

NARAYAN: A CONSUMMATE PROFESSIONAL



Narayan BK, 39 years old from Thulokhola Gairigau, has a traditional occupation of a blacksmith. He repairs things such as tongs, tools, hooks, sickles, axes, and other agricultural implements that have high demand in his village mostly used for farming.

Narayan has a vital role while rehabilitating Thulokhola Gairigau Drinking Water Scheme. He was one of the active members of the Users' Group Committee. Having the skill of making machinery equipment used for agriculture and household stuff, the Users' Group Committee of Drinking Water Scheme appointed him as Village Maintenance Worker.

Livelihoods and WASH Recovery Project provided training to Narayan to acquire needed skills on plumbing. It proved crucial for the smooth operation and management of the Drinking Water Scheme.

“It was fruitful training through which I learned maintenance of pipes, fitting of taps and overall safety,” Narayan says “my skill on it has helped villagers while facing problems related to water schemes.”

Narayan is also appointed as “watchkeeper” of a reservoir tank, and he has been assigned to regulate the supply of water on a definite period in the morning and evening. The committee pays him 2000 rupees per month as an allowance to him. Users' Group Committee also collects 50 rupees per month as water Tariff.

The Project also provided him with the plumbing tools, which he carry when needed in the community. Narayan says, “I am supporting people of my community to fit pipelines and taps, also when leakages occurred, I quickly rush to safeguarding it.”



DRIVING CHANGE THROUGH AWARENESS

When Livelihoods and WASH Recovery Project approached Schools to make intervention for improved WASH facilities, it received feedback from the teachers of Dakshinkali Higher Secondary School in Batase, Chautara-Sangahchokgadhi of Sindhupalchok district to support on Menstrual Hygiene Promotion and Management.

During the consultation with the project, school teachers stated that lacking proper knowledge on menstrual hygiene has affected them to deal with the girl student who has reached their menstrual age.

The project conducted an assessment in the Schools and found that girls and female teachers do not attend school during the menstruation period. In coordination with School administration, the project organized WASH and Menstrual Hygiene

Management program among female teachers and Girls above 8th grade who reached the menstrual stage.

“This became eye-opening learning for us,” says Bimal Gautam, Livelihoods and WASH Officer of JGSS “then we intervened in this area.”

The project then decided to provide Menstrual Hygiene Management training in Schools and Community in Earthquake affected areas.

Babita BK, a girl student, studying in grade 9 in Dakshinkali Higher Secondary School, says, “the training on menstrual hygiene proved very important for us. We learned to take care of our body and health.” According to Babita, they were hesitant to discuss the issue. “It was tough to attend school during



The project conducted an assessment in the Schools and found that girls and female teachers do not attend school during the menstruation period

the menstrual period, Babita recalls “we girls used to make excuses and abstain from classes during the menstrual period.”

The project conducted a day training on Menstrual Health Management in Dakshinkali Higher Secondary A school, divided into two sessions: i) sensitizing female teachers and girl students on the importance of menstrual hygiene; and ii) making sanitary pad from used cotton clothes. For this, the project also invited Female Community Health Volunteers, including female tailors from the community who even know about menstrual hygiene and support sewing the sanitary pad.

The 35 girl students from grades 8 -10 were made who have reached to the menstrual stage. Whatever they learned in School on Menstrual Hygiene promotion was also applicable in their home. Thus, they vocally spread the message to women and girls in their community as well.

The skill of making sanitary pad also became very useful for the Schoolgirls. “Knowing about menstrual hygiene and using the sanitary pad made my life easy,” Sushmita Dhungana, a grade 10 student of the school, says, “it also made our mobility comfortable.”

Management of sanitary waste is also another critical learning for the girl students to keep the environment clean. It is essential that hygienic items are disposed of properly – by burning or burial – and not allowed to pollute the environment

According to the experience of Puja Koirala, the 10th-grade student of the school that learning to make her sanitary pad from used clean cotton clothes also became both reasonably cost-effective. “I taught my mother and aunt to stitch sanitary pad, which can be re-used; saving the money to buy from shops,” Puja says, “they are feeling comfortable and happy.”



CAMPAIGNING BETTER HEALTH PRACTICES

Joshika Shrestha (14 yrs), Anju Tamang (15 yrs), and Anjali Shrestha (15 yrs) are studying in grades 8 and 9, respectively, in Seti Devi Higher School in Syaule, Chautara – Sangachokgdhi Municipality of Sindhupalchok district. These three girls are campaigners of menstrual hygiene in the school, family, and community.

There are many social and cultural taboos associated with girls and women's menstruation, which led them to face desperate situations both at home, school, and in the community. Menstruation related taboos affect them in terms of health, education, work, mobility, and

security. However, the changing mindset of these girl students and their continued effort has made a positive impact.

The support provided by the Livelihoods and WASH Recovery Project paved the way to raise awareness on Menstrual Hygiene in School. The Project conducted an assessment in the Schools and found that girls and female teachers are not attending school when menstruating. This was particularly evident in schools with inadequate WASH facilities. It was a similar situation in Seti Devi Higher Secondary School. In coordination with School administration, the Project organized WASH and Menstrual

Hygiene Management program among female teachers and Girls above 8th grade who reached to the menstrual stage.

“There were fear and anxiety before the orientation, we were hesitant to discuss on the issue,” Anju says “after orientation program, it raised awareness among teachers and students, and we are confident enough to take this issue as a natural process and positively.”

The good thing about promoting menstrual hygiene in school is the best way to spread the messages effectively. School teachers become sensitive to the issue, and the school administration would take measures to set up the facility for menstrual hygiene. Other hand, girl students gain confidence, and they orient their mothers, sisters, and other female members of the house and community.

“After the orientation, I acquired knowledge managing menstrual period,” Joshika says,

“I learned about making re-usable sanitary pad and taught my mother in the home using it.” According to Joshika, they also learned about making sanitary pad from used cotton clothes at home. Joshika says, “It helped us remain clean and tidy by using used cotton clothes as a sanitary pad that saved money that we were buying.”

For many girls and women, buying the Sanitary Pads from the shop is beyond their capacity; this is the biggest constraint for menstrual hygiene. In such conditions, both girls and women compromise with their situation, affecting their overall health.

The Project conducted a day training on Menstrual Health Management and promotion, which was divided into two sessions: i) sensitizing female teachers and girl students on the importance of menstrual hygiene, and ii) making sanitary pad from used cotton clothes. For this, the Project also invited Female Community Health Workers and Female Tailors and





girl students; all are benefited through the menstrual hygiene promotion program. The concept of asking Female Tailors was to receive their support on learning to stitch sanitary pad.

Mr. Shalik Ram Oli, Head Master of Seti Devi Higher Secondary School, is also happy with the initiative of the Menstrual Hygiene Promotion program that was organized in his school. In his experience, due to lack of menstrual hygiene promotion, girls students experiencing menstrual periods were not attending the school; however, this trend has reversed now.

“Girls number is higher in my School consisting more than 60 percent,” Shalik Ram says “such kind of activities on hygiene promotion sensitizes us so that we would be aware of making girls’ friendly WASH facilities in the School.” He proudly said that his school has girl-friendly toilets.

“ Girls number is higher in my School consisting more than 60 percent ”

With a lack of or limited waste management, non-reusable items are often disposed into the environment, adding plastic waste. Anjali says, “We also learned about our safety and to keep the environment clean by proper disposable.”

“Menstrual hygiene promotion activities made us easy to talk about,” Anjali shares her experience “the more we talk about it, the more we know to keep our life healthy.”

SAFE HYGIENE PRACTICES FROM BEHAVIORIAL CHANGE APPROACH



The Livelihoods and Recovery Project conducted an assessment in the Schools located in its area of intervention in Chautara-Sangachokgadhi and Indrawati Rural Municipality to implement WASH and Menstrual Health Management program both at schools and community.

Consultations with School Teachers, Students, and Community; the Project found harmful practices applied by women and girls during the menstrual period. In schools, girls and female teachers face the problem of not having proper WASH

facilities and are absent from class when menstruating. In coordination with School administration and community, the project organized WASH and Menstrual Hygiene Management program at school and community level by involving female teachers, schoolgirls, female tailors, and Female Community Health Workers.

The project capitalized on the crucial role that girl students can play as change agents and promoters of sanitation and hygiene in schools and their families and communities.

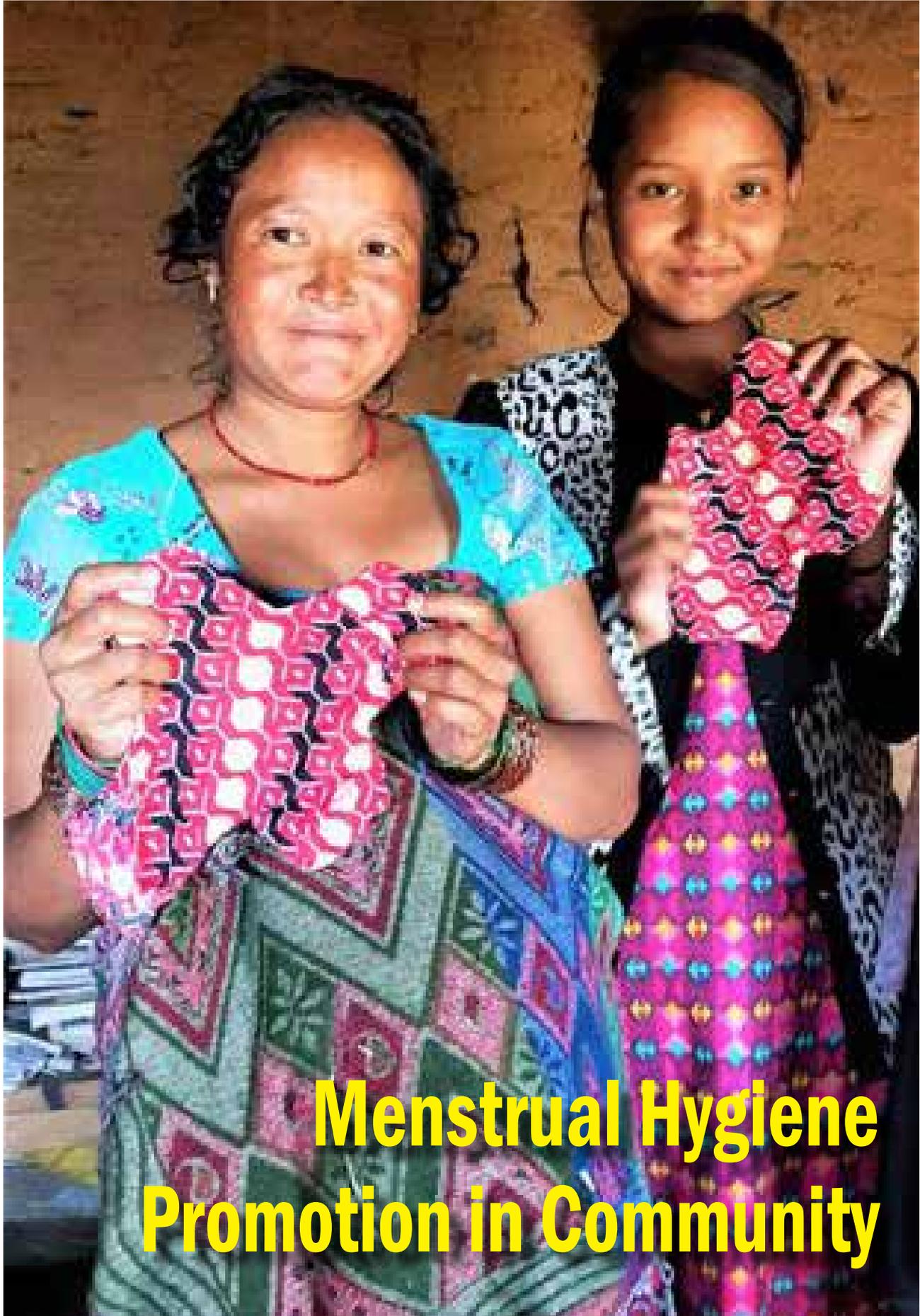


The project conducted one-day training at school, which was divided into two sessions: i) sensitizing female teachers Female Community Health Volunteers and Female Tailors and girl students on the importance of menstrual hygiene; and ii) making sanitary pad from used cotton clothes. It also provided refreshing training and made follow-up visits both in schools and communities throughout the project period.

The awareness program included always sensitizing to use clean cotton cloth or pad. Change the pad regularly at least 3-4 times a day, depending on how heavy blood flow is. Wash the hands before and after changing the pad or cloth to stop the spread of germs, which cause infection. Keep the genital area clean and dry. Wash the reusable cloths or pads cloth with soap and water and always dry the fabric under the sun. If possible, iron it and store it in a dry and clean place.

Simultaneously, the project advocated for WASH infrastructure for menstrual health to ensure essentials such as Water and Sanitation facilities at Schools and in-home so that menstruating women or girls have easy access to toilets and water. Besides, the availability of clean water and soap to maintain personal hygiene has been advocated. The schools campaigned to have menstruation-friendly toilets (lockable door, privacy, light, and ventilation); and safe, clean, and private space for changing the materials and space.

Menstrual waste management was also a critical issue that the project advocated during School and Community WASH campaign urging not to throw pads or reusable pad into the toilets. Keeping dustbin or arrange disposable areas to dispose of used sanitary materials.



Menstrual Hygiene Promotion in Community



Nirmala Tamang and Sonita Tamang are mother and daughter from Simpalkavre, Indrawati Rural Municipality of Sindhupalchok district. The mother and daughter have now become the village's role model to promote menstrual hygiene among girls and women. The duo has been recognized on their efforts of making of sanitary pad and raising awareness to use it among women and girls who are experiencing a menstrual period.

The inspiration to Nirmala is her own 16 years old daughter Sonita who is currently studying in 9th grade in Simpaleshwiri School. Sonita received training in making Sanitary Pad provided by Livelihoods and WASH Recovery Project given in her School.

The Project selected the girl student of the school from grades 7 -10 who were reached to the menstrual stage. There were altogether 30 girl students who took Menstrual Hygiene Management Training together with two female teachers.

"It was a very new idea for me, and I found it very useful," Sonita explains, "I came to the home, and I shared my mother's learning. My mother was also keen on it and requested me to teach her to make a sanitary pad."

Both mother and daughter collected the old used cotton clothes, cleaned and dried, stitched it, and finally made sanitary patches in the home. "The three hours learning to make sanitary pad proved comfortable to use during the menstrual period, which made us feel comfortable and keeping us healthy," Nirmala says, "it is easy to make and use."

Nirmala had not used a sanitary pad before she knew from her daughter. "It is not only me, but even other women in this village were also ignorant about it," Nirmala says "we used clothes that were not cleaned and using a single cloth for a whole day, which made us uncomfortable during the menstrual time."

The mother and daughter not only make sanitary pads for themselves but prepare and sometimes sell to other women who needed this. Nirmala says, "the women who cannot make sanitary pad sometimes ask us to prepare for them."

Both mother and daughter are also raising awareness among women and girls in the village on the sanitary pad's proper use. They discuss their importance and keeping women's health safe. "We have to work in house, field, carry the loads even during the menstruation time," Nirmala says, "use of sanitary pad has made us our mobility comfortable. Due to lack of knowledge, other women like me remained in discomfort for years and years."

“**The three hours learning to make sanitary pad proved comfortable to use during the menstrual period, which made us feel comfortable and keeping us healthy**”

It will take an hour to two hours to make one sanitary pad. Sharing the experience of making sanitary pad, Nirmala explained that there had been clean cotton cloth which may have been used. First, they cover the design of a sanitary pad that varies with sizes, and then they make pad using the white cotton cloth to maintain cleanliness, which will be placed inside the cover. Once used, it can be taken out from the cover, cleaned it, and makes dry by exposing it to sunlight so that harmful infectious bacteria can be killed.

Commercially produced sanitary pads are beyond reach and are expensive for many women and girls residing in this village. Even they have to buy, it's not available in the local market, and they have to travel long distances up to Chautara- a district headquarter.

Learning of making sanitary pad has made Nirmala and Sonita empowered and proved to be a life-changing event. "The three hours learning of making sanitary pad became a wonder," Sonita says, "awareness exists among girls and women to use sanitary pad during the menstrual period."

MEDIA ENGAGEMENT FOR PUBLIC OUTREACH



The Livelihoods and WASH Recovery Project have engaged with various media outlets (print and broadcast) for public and community outreach. The project applied various Community Outreach Programs such as street drama, mass awareness programs on special occasions and events, and FM Radio use.

Alongside affordable and appropriate technology, behavior and social change are an essential element of successful WASH programming. WASH promotion is based on giving communities the necessary information and helping them develop the skills and self-confidence required to make informed decisions on issues that affect their lives and their children's well-being.

The project collaborated with Sindhu Radio, a local FM Radio station, to transmit the messages to targeted beneficiaries and groups by running a fortnightly program, under the slogan of *Pariwartna ka Sworharu* (Voice of Change) a half-hour program on social behavior change on the area of WASH.

The project aimed at airing 12 episodes on FM Radio station to raise awareness on WASH. The program has been designed integrating Livelihoods and WASH Recovery Project's activities and highlighting the impact made through WASH and Total Sanitation Awareness Program.

The program was run by two Radio presenters one male and a female (Mr. Dipak

The topics covered by Radio Program have created curiosity as well as acceptance to follow health behavior at the community level

Khatri and Ashmi Syangtan). “The concept of the program was straightforward, but its impact is wider for behavior change,” Dipak says “we brought the success stories from the field and on aired through radio, which inspires large sections of an audience beyond the coverage of the project.” That means the radio program reached targeted groups or beneficiaries, whereas non-targeted audiences also listen, benefitting from our radio program.

According to Ashmi, they reached the field where the project has intervened, interacted with the beneficiaries, and brought the voices of their changes made on their behavior and include that in the radio program. She says, “We aimed to dig out on impact made by the project and showcase the successful case studies on behavior change to inspire a wider audience so that everyone can be benefited.”

The contents of the Radio program mainly included discussion about the current sanitation status/behaviors, the achievement of the implemented program, and perception beliefs and behavior of local people.

The Radio program has covered different aspects of sanitation. The topics covered are menstrual hygiene management, personal hygiene, environmental sanitation, hand-washing practice, and proper use and maintenance of toilet, household sanitation, water purification, and kitchen wastewater management, wastewater management, solid waste management, etc.

“The topics covered by Radio Program have created curiosity as well as acceptance to follow health behavior at the community level,” Bimal Gautam, WASH and Livelihoods Officer of JGSS says “community and beneficiary also felt proud that their activities on changed behavior are also getting attention, which encouraged them to practice healthy behaviors.”

SIMPAL VILLAGE: AN EXAMPLE OF COMMUNITY LED SANITATION





Simpal village in Indrawati Rural Municipality is the example of implementing Community lead total sanitation program. The community members take an active part in the change process and use their capacities to attain their complete sanitation objectives in their village. Their role is implementing improved sanitation through enhancement of personal, household, and environmental hygiene behavior. Also, this community has taken ownership of hygiene and sanitation activities.

Collaborating with the USAID's local government and SUHARA project, the Livelihoods and WASH Recovery Project aimed to enhance community-led total sanitation initiatives in Simpall village.

The Project adopted the concept of "Total Sanitation" introduced by the Department of Water Supply and Sewerage (DWSS) / WHO since 2011 as the continuation of the ODF

movement with a comprehensive sanitation package including other aspects of those were often overlooked during the ODF campaign. That includes five-plus one (5+1) indicators of sanitation. Five indicators are household-centered, which includes: i) Use of toilet, ii) Use of safe water iii) Use of safe food; iv) Practice of handwashing with soap, v) Practice of cleaning house and surroundings; and vi) Keeping a clean environment.

WHO defines a healthy village as a community with low rates of infectious diseases, access to basic healthcare services and a stable, peaceful social environment proved by the resident of Simpall village.

Mr. Bimal Gautam, WASH and Livelihoods Officer of JGSS, explains that the Total Sanitation Program includes appropriate use of the toilet, handwashing with water and soap, drinking water purification, menstrual and personal



hygiene, home, and environmental sanitation. In the process, the community was sensitized by the consequences of poor sanitary practices. This helps in creating an environment to adopt improved practices to gain personal hygiene.

The Project provided 2-day training to enable the community to practice total sanitation behaviors by ensuring participation from every household.

The Project campaigned for community-led total sanitation, which is based on the principle of generating collective behavior change. In this approach, communities are facilitated to take collective action to adopt safe and hygienic sanitation behavior and ensure that all households have access to secure sanitation facilities. This approach helps communities to understand and realize the adverse effects of poor sanitation.

Respiratory infections and related diseases have a significant burden due to indoor air pollution. To address the issue of indoor air pollution, JGSS

advocated using improvised cooking stoves.

Likewise, the campaign has been made one filter to have access to clean drinking water in one every house. Every household in Simpal is using a water filter. The community also learned about solar water disinfection (SODIS) - a type of portable water purification that uses solar energy to make biologically-contaminated (e.g., bacteria, viruses, protozoa, and worms) water safe to drink; which can be observed practice by the community in Simpal village.

"Things have improved far better compared to previous days," Chinimaya Tamang, a woman from the community, shared her experience "we have observed reduction of diarrheal and other kinds of infectious diseases in our community." Chini Maya further explains that the community learned to manage the waste and water generated from the kitchen. She says, "we do not see garbage in the road and trails of this village."

IMPLEMENTING PLANS FOR SUSTAINABLE DEVELOPMENT



While rehabilitating the Drinking Water Schemes damaged by the earthquake, it was essential to ensure access and coverage and the adoption of the Water Safety Plan while rehabilitating Drinking Water Schemes.

The Livelihoods and Recovery Project was determined to find the cause of inadequate water supply in its intervention area due to remoteness, social exclusion, or the small number of households, high cost, and technical difficulties. Based on the assessment, the Project decided to intervene in the scheme

both un-served and as well as to provide quality, access, reliability, and quantity.

The Project followed the Step-By-Step Approach to ensure a sustainable water supply.

During the preparatory phase, it applied planning tools to ensure that the schemes are both technically and socially acceptable, responding to the needs of all categories of beneficiaries such as disable and child friendly.



The Project followed the Step-By-Step Approach to ensure a sustainable water supply

During the implementation phase, the Project developed the capacity" Group Committee provided training and organized monitoring visits.

In each of the rehabilitated schemes by Livelihoods and WASH Recovery Project, WASH planning was adopted, including activities for CCA and DRR concerning the key risks (i.e., floods, landslides, and water source depletion) were identified in coordination and cooperation with relevant stakeholders. WASH planning mapped water resources and land-use to identify immediate and long term actions to mitigate the risks. Some of the interventions were designed and implemented through the construction phase to alleviate erosion by constructing gabion wall or bio-engineering activities.

In the post-construction phase, the Project prepared the Water Safety Plan of each Drinking Water Schemes that it rehabilitated to guide Users' Group Committee in sustainable scheme operation and maintenance.

Water Safety Plan was made effective to ensure both water quality and quantity, and associated present and future risks

The Project supported to create standby Village Maintenance Workers (VMW) in each Drinking Water Schemes by providing training and necessary tools and equipment. Through VMWs, the Users' Group Committee can collect monthly water tariffs and monitor scheme operation, water quality, sanitation, and hygiene behavior.

The Project supported establishing a Maintenance Fund of worth 50,000 Rupees contributed equally by organization and Users' Group Committee. Likewise, it prepared and trained Village Mansion Worker (VMW) for water scheme maintenance.

Water Safety Plan was made effective to ensure both water quality and quantity, and associated present and future risks. Practical activities can be related to the scheme structures, use of water, and watershed management, including such as designing transmission pipeline for higher discharge, bigger reservoir capacity for more water storage, waste/excess water re-use in kitchen/home garden, and animal drinking trench.

Another critical success of drinking water scheme rehabilitation was leadership from local government and ownership taken from the community, which has promoted the bottom-up approach of development. It was a fully participatory, inclusive process taking into account the rights of the people. There was overwhelming community participation and made contributions while rehabilitating the drinking water schemes—an excellent example of social mobilization. Community provided a kind contribution, site clearance, foundation digging for all structures, and pipeline trench digging. They also provided support on the collection and transportation of all other local materials.

Finally, capacity enhancement at the local level and awareness of WASH at the community level were the key aspects of this water scheme's whole process.



MITIGATING LANDSLIDES

Even after the 2015 earthquake, the risk of disaster did not leave to chase the life of 40 years old Dhan Kumari Shrestha, a woman from Sera, Batase of Chautara-Sangachokgadhi of Sindhupalchok district. “It was the evening time while we all were together and is having dinner. We heard terrifying noise,” Dhan Kumari says, “while coming out of our homes we saw landslide was flowing towards our settlement, and then we left the house immediately to save our lives.”

This incident happened two years after the earthquake with the start of monsoon that year. “We could not take out our assets, crops, and livestock when the incident happened,” Dhan Kumari remembers “we

were displaced within hours of the incident. Fortunately, landslide did not damage my house; the next day, we took out our assets and released the cattle; however, the fear has remained forever.”

This landslide damaged the farmland of two households covered by stone, sand, and mud, and other cultivating farms were also affected. A total of 17 homes in this area remained at the risk of landslide. “The sorrow by the earthquake have not been gone from the mind; on top of it this landslide added more pain to us,” Khadka Bahadur Thapa, resident of the settlement, says, “our fertile land turned into unproductive, and its quality degraded.”



After the landslide, the whole population of this settlement was displaced until the monsoon was over. Many of them were forced to sell or leave their cattle despite not having a place to keep them. “We returned home after four months when monsoon was over,” Dhan Kumari says, “while returning there was no support to meet our basic needs, and still we live in fear and anxiety.”

The villagers of this settlement were experiencing landslide on a small scale for a long time, but the problem was not acute. Damage to the settlement did not occur despite the potential risk. When the moderate landslide used to happen in

the past, villagers could clear the landslide residual immediately.

The problem arose when the road construction through the hill started, situated atop of this settlement. According to villagers, unplanned digging and drilling of the mountain without a feasibility study and lack of implementing mitigation measures have increased the risk of landslide, putting the lives in the settlement at danger.

Residents of the village are residing in these settlements with fear; however, they are waiting for a permanent solution to mitigate the landslide risk. “Despite the

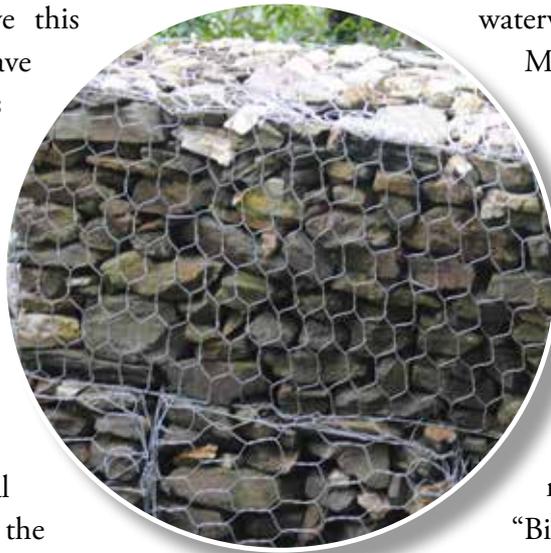


Gabion wall construction to control landslide in Sera, Batase, Chautara-Sangachokgadhi Municipality.

fear, we cannot leave this place because we have our land and house is here through which we are sustaining.”

With this existing situation, the settlement residents frequently approached to ward office of local government; however, the solution was not materialized due to lack of financial resources and technical knowledge. With growing demand from the locals, on the request of Ward Office, the Livelihoods and WASH Recovery Project decided to provide support mitigating the risk of flood for disaster risk reduction.

The landslide has been temporarily controlled through constructing a gabion wall- a cylindrical metal container filled with earth and stones, and rerouted of



waterways for flood control.

More than 140 gabion wires filled with gravel have been put in the flood risk areas to control the flow of flood. The engineer of the Project advised the local government and residents to find long-term risk mitigation measures.

“Bioengineering would be one of the solutions to mitigate the risk of flood posed by this hill,” says Bhim Nepal, Engineer of the Project “we have been advocating for planting such as bamboos in a flood-prone area of this hill to provide support to keep soil intact.”



IMPROVING LIVES THROUGH LOCAL PARTICIPATION

The residents of Simpalkavre faced difficulty reaching to the office of Indrawati Rural Municipality and nearby located market; which proved far away than going to Chautara- District Headquarter, until the reconstruction of the causeway (land bridge constructed by a rod, cement, and concrete) that exist in a deep gorge of Singpango Khola, a river.

There was a dirt road connecting to Simpalkavre with other locations; however, lack of cross over a bridge or the causeway has hindered the whole population by putting them off for easy travel through this route. Vehicles (Jeeps and Buses) were prevented from running due to deep gorge existed in the river. People have to walk and carry the loads on their back and shoulder.



"While other villages have linked with the road and seeing the vehicular movement at their place, we felt that our life was pushed backward," Gyalbo Tamang, member of Ward Office of the Indrawati Rural Municipality says "villagers have to carry their sick family members on their back to take them to clinics and health post."

After the earthquake, there was a high demand for construction material, especially reconstructing the private homes. Everyone's houses were damaged in this

village. Villagers were forced to carry construction materials by themselves or through labors while there was no cross overland bridge on that section of the road. It created a burden to locals as well as the increased cost of construction materials. The need for construction material was on the rise because earthquakes also have damaged other infrastructures everywhere.

This situation led villagers to construct the land bridge across that river. Until the gabion wall would not be built on the deep



gorge, the dirt road had risk to be washed away quickly by the strong wave of this river that is falling from the steep hill. Lack of technical as well as financial support was really in great need.

In such a situation, the intervention made by Livelihoods and WASH Recovery Project proved to be rewarding for the residents of Simpalkavre. The Project made feasibility and technical assessment, and decided to construct a gabion wall- a wickerwork basket filled with rocks, used as a fortification. Completion of the gabion wall would reduce the risk of landslide to ensure people's mobility in this remote hilly area.

Indrawati Rural Municipality also collaborated with the Project while reconstructing this road. The sixty gabion wires with stones were used to fill the gorge's deep, which can restrain the flow of water that is running from a steep hill. When constructing the gabion wall completed, the local government built causeway- a cemented floor through which water is flowing, made it tougher to sustain

a continuous flow of water without damage.

Thus, with both the community and local government's efforts, it was possible to make the operation of the road.

The vehicle started moving from this road connecting the Simpalkavre with other destinations, serving a population of 880 households. Through this road, the Indrawati Municipality connectivity is also established with Chautara town where district headquarter is located.

Once this dirt road came into the function, the economic activities have been observed increase in the village. It accelerated the rate of reconstructing damaged private houses, including school and other community infrastructures. "Construction of the causeway secured through gabion wall has increased the mobility of the people," Gyalbo says "villagers have easily connected with the market, and they can sell home grown products and are buying needed things which are making their life easy."

RESILIENCE CULTIVATED THROUGH EDUCATION



Shree Nawakanya Basic School in Sompalkavre of Indrawati Rural Municipality is the example of adopting the Comprehensive School Safety Minimum Package (CSSMP) and introducing of School Disaster Risk Reduction Plan. To accomplish this achievement, the Livelihoods and WASH Recovery Project provided essential technical support to achieve the Disaster Risk Reduction Plan into public school.

Believing that disaster risk reduction education has to start from the school level, the Project introduced this school to make children acquire knowledge from their basic foundation, which will develop their life skills for disaster response.

The Project provided support to this school to meet three essential prerequisites to ensure School DRR, as stated below:

Safe and facility enhanced school-appropriate facilities

1. for differently-abled and children
2. School Disaster Management – acquire pre, during and post-disaster plan

Disaster Resilience Education- teach the students

1. about disaster according to their level

The school has developed the calendar listing all kinds of disasters occurring throughout

The school building was constructed after two years of the earthquake but was lacking Toilet facilities.

the year, which created awareness among children and school teachers.

According to the working procedure developed by the school, it has identified possible risks, threats, and vulnerabilities that will affect school, students, teachers, and other staff.

“We strongly felt the need of awareness that has to be provided to students and teachers regularly to sensitize us to be proactive for disaster response,” Saraswoti Adhikari, Head Master of School says “these are important skills which we realized its importance even more after experiencing the devastating earthquake.”

Saraswoti Adhikari, the School Headmaster of this School, also has received three days long DRR and Vulnerability Capacity Assessment (VCA) Teachers Training provided by the Project. “The training was beneficial to me. First, it devolved my capacity and made me capable to do vulnerability assessment,” Saraswoti says, “then I took the lead to prepare School DRR plan to mitigate disaster risks for school safety.”

The Nawakanya Basic School was established 14 years ago. The 2015 Earthquake collapsed its building, and for two years, classes were conducted in temporary shelter. It has a grade from playgroup up to grade three, where currently 45 students are studying. Located in the remote hilly area, all students are from ethnic communities such as Tamang, Lama, and Sherpa.

The school building was constructed after two years of the earthquake but was lacking Toilet facilities. Thus, the Project also supported constructing the Toilet Facility to ensure access to WASH and clean water. There are two rooms in the toilet connected with the water tank and running taps for handwashing, including child-friendly tap water. “It was a great support to school children, teachers, and school staff,” Basanti Tamang, a school support staff, says, “the school environment also has remained clean.”

EMPOWERING COMMUNITIES BY DEVELOPING TECHNICAL SKILLS



Dal Bahadur Basnet, a mobile mason, offered his socio-technical assistance to reconstruct the homes in Dalit Community- one of the most disadvantaged groups settled in Arukhark- Ward no. 3 in Chautara- Sangachokgadhi Municipality of Sindhupalchok district.

He assisted earthquake-affected families in rebuilding their homes following the Government's reconstruction guidelines and procedures. Realizing the need for socio-technical assistance in rural areas of the district after the 2015 Earthquake, the

Livelihoods and WASH Recovery Project trained local masons. They mobilized them to assist the earthquake-affected population.

Dal Bahadur served in this Dalit settlement- where it has 14 households. Most of the families are poor and marginalized. The male population is migrated to cities to do seasonal labor work for earning. Very few households depend upon agriculture even though that is not enough to sustain their livelihoods for the whole year. According to Dal Bahadur, alcohol is another problem that existed in the community.

“While I came to this settlement, I found people have little knowledge and awareness on reconstructing home as per government regulation,” Dal Bahadur shares his experience “my goal was to ensure to reconstruct seismic resistance houses where I have given full efforts.”

Get Bahadur Nepali, 56 years old single male is one of the beneficiaries who received Dal Bahadur. His earning is based on labor work. Having limited financial resource, Get Bahdur using the locally available resources, provided socio-technical assistance to him to reconstruct his two-room house. By following the building code and other regulations, Get Bahadur received the housing reconstruction grant without any hurdles, which was significant support to him.

Dal Bahadur proved to be a reliable mason in this Dalit settlement whose efforts proved the most helpful support on the most needed time to the most vulnerable population. His assistance to all 14 Households of Dalit community- most of them have constructed two rooms- could receive housing reconstruction grant on time. “It makes me happy when I became the part of providing my expertise to support the most vulnerable and economically deprived community,” Dal Bahadur says “that is my greatest satisfaction that ever I earned.”

Like Dal Bahadur, other trained masons by the Project are mobilized and motivating earthquake-affected people by providing technical skills to rebuild their seismic resistance houses.





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