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# USAID'S TAYAR NEPAL

Improved Disaster Risk  
Management Project

PROJECT SUMMARY

## About USAID's Tayar Nepal

Nepal is one of the most disaster-prone countries in the world. Tayar—which means “prepare”—Nepal is the U.S. Agency for International Development (USAID)’s flagship disaster preparedness and response program for Nepal, designed to strengthen the country’s disaster risk reduction and management (DRRM) capacity at both national and local levels through an inclusive and practical approach from 2019-2024.

At the national level, Tayar Nepal worked with national government and DRRM entities, including the Ministry of Home Affairs (MOHA), National Disaster Risk Reduction and Management Authority (NDRRMA), and Ministry of Federal Affairs and General Administration (MOFAGA), to improve how national systems and institutions respond to all types of natural disasters. At the local level, the project worked with eight partner municipalities to enhance their local capacity to identify risks and implement successful initiatives to mitigate and manage those risks, consistent with national-level policies and guidelines.



All Photos: Tayar Nepal for USAID

Cover Page Photo: Gully protection work at Maryang Khola, Bhimeshwor  
Back Page Photo: An embankment built along Babai River, Kachila, Tulsipur

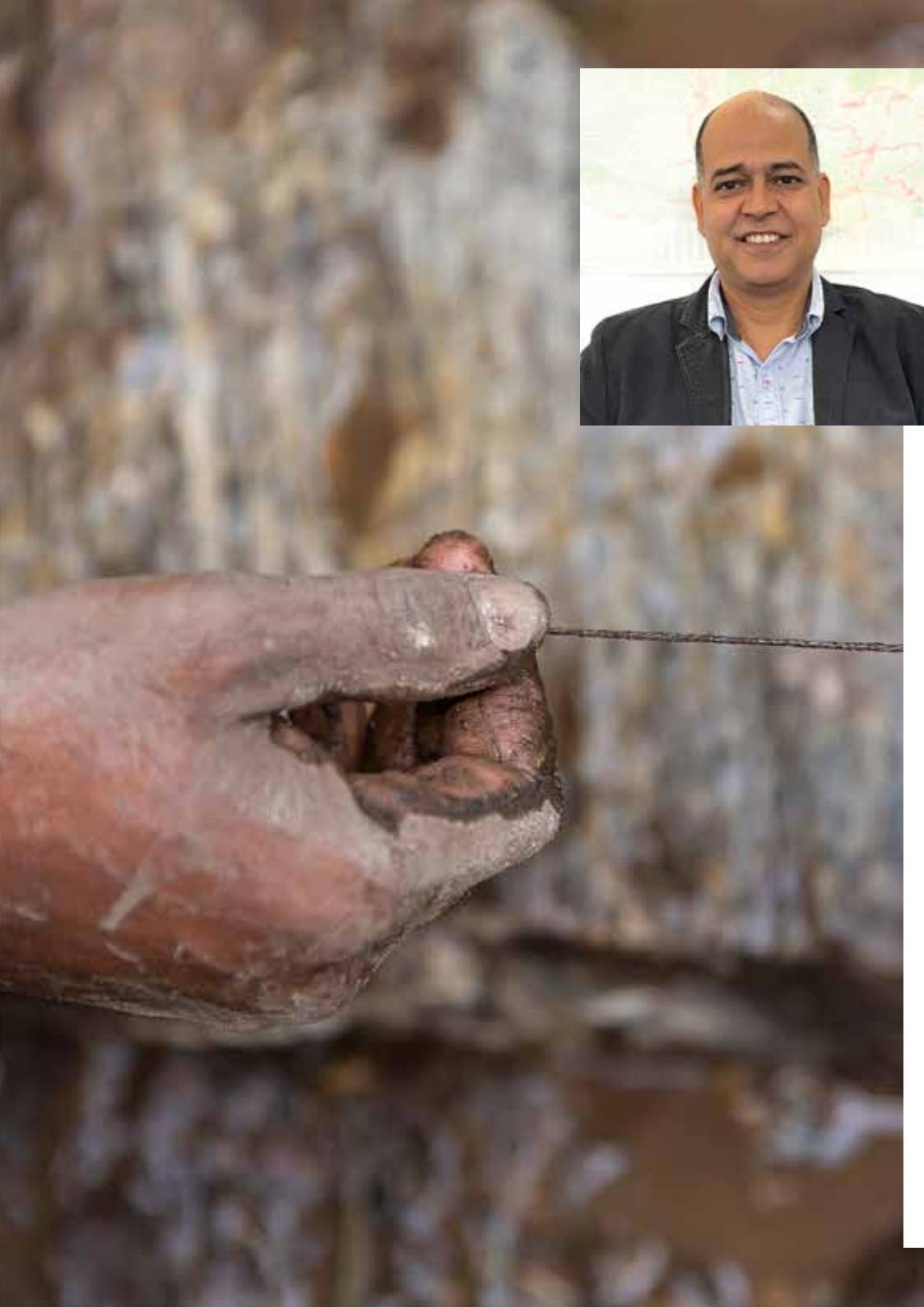
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An embankment at Khutiya River, Godawari,  
was constructed with bioengineering



Dear Friends,

I am profoundly grateful for the collective efforts that generated the knowledge and learning, which is reflected in this product. As the Chief of Party for USAID's Tayar Nepal, I feel proud to have witnessed firsthand the dedication, hard work, and passion that each team member has invested into building Nepal's disaster resilience over these past five years—leaving a legacy of a more prepared country, ready with the skills, tools, and policies to handle future disasters.

To our team members, your unmatched commitment to documenting and sharing valuable insights over the past five years of implementation has been exemplary. Your expertise and meticulous attention to detail have ensured that our national and local-level partners and communities have the resources and tools they need in the field of disaster management.

I would like to extend my gratitude to our partners and stakeholders—especially USAID, the Ministry of Home Affairs (MOHA), National Disaster Risk Reduction and Management Authority (NDRRMA), and Ministry of Federal Affairs and General Administration (MOFAGA) and our partner municipalities—Bhimeshwor, Neelakantha, Tulsipur, Dullu, Birendranagar, Rajapur, Lamkichuha, and Godawari. Your support, whether through funding, resources, or encouragement, has been instrumental in making this project a success. Your belief in the importance of this work has been a constant source of inspiration.

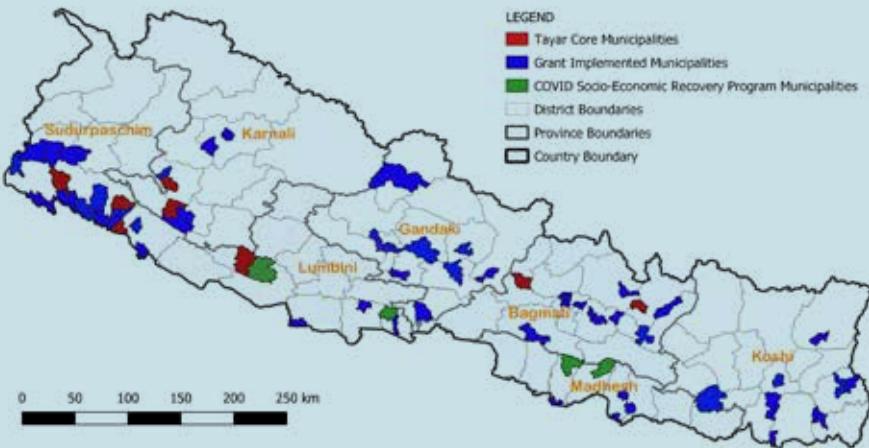
To the communities we serve, your resilience and willingness to share your experiences have enriched our understanding and driven us to strive for excellence. We can't thank you enough for your support and ownership of the project activities.

This book stands as a testament to our collective efforts and shared vision. It is more than just a publication; it is a beacon of knowledge and hope for all those committed to improving disaster preparedness and response in Nepal.

Thank you all for your unwavering dedication and support.

Sincerely,  
Tirtha Raj Joshi  
Chief of Party  
USAID's Tayar Nepal – Improved Disaster Risk Management Project

# PROJECT ACHIEVEMENTS



Disclaimer: The boundaries and names used on this map do not imply official endorsement or acceptance by the US Government or USAID.

**COVID-19 Socio-economic Recovery**  
**2,529**  
people benefited from  
'Cash for Work'



**105**  
Legal instruments developed  
including 65 designed  
to promote GESI



**30**  
Institutions with  
improved capacity  
to assess or address  
climate change risk



**10**  
Multi-hazard Risk Assessments  
Conducted and Risk-sensitive  
Land Use Plan Prepared



**\$1.49M+**  
Private & public  
sector resources  
mobilized



**11,134**

People trained on  
various DRRM themes

Male **5,741**

Female **5,391**

Other **2**



**4,082**

Persons trained to  
advance outcomes  
consistent with GESI

Male **1,657**

Female **2,423**

Other **2**

**56**

Innovations  
supported



**33**

Constructions activities  
at 8 municipalities  
to reduce risk &  
vulnerabilities



**716K+**  
People benefitted  
(directly/indirectly) from  
DRRM interventions

Enhancing food security  
for vulnerable communities  
during crisis ~USD 165  
provided to

**3,800**

Households

**5**

Insurance products  
developed that  
address market  
demand

**7.5M+**

People reached with  
DRRM messages

As of September 15, 2024

**16**

Municipalities  
increase in DRRM  
self-assessment scores

**4300+**

People enrolled  
in disaster risk  
insurance schemes

# KEY ACTIVIES

## 2019

- Project Kickoff
- Formation of Project Advisory Committee
- Initiation of DRRM Grants

## 2020

- Memorandum of Understanding (MOU) signed with Municipality
- Baseline Survey Conducted & Municipal DRRM Index Self-assessment introduced
- Initiated support to strengthen Local Disaster Management Committees and Ward Disaster Management Committee
- Initiation of Grant Activities
- Supported Local Governments and Communities on COVID-19 response and recovery

## 2021

- Small-Scale Mitigation Work Initiated
- Assisted Municipalities in DRRM Policies, Plans, and Acts
- Support Provided for Local Emergency Operations Center (LEOC) Establishment
- Training of Trainers (TOT) Conducted for Tabletop Simulation Exercise (TTX)
- Strengthen BIPAD Portal (Disaster Management Information System)
- Municipal Multi-hazard Risk Assessment (MHRA) and Preparation of Risk-sensitive Land Use Plans (RSLUPs) initiated
- COVID-19 Response Project Continued

## 2022

- Continuation of Mitigation Projects
- Ramped Up Private Sector Engagement Activities
- Supported National-Level DRRM Networks (MUAN and DPNet-Nepal)

## 2023

- Endorsement and Implementation of Risk-Sensitive Land Use Plans (RSLUP) in the Majority of Municipalities
- Construction of Mitigation Projects
- Strengthen Quantum Geographic Information System (QGIS) capacity
- Initiation of Climate Change Adaptation Interventions: Manage wetlands and promote greenery through road plantation
- Facilitate Enrollment in Making Cities Resilient (MCR) global campaign 2030
- Continuation of Private Sector Engagement: Focus on DRF-Insurance, green businesses, and agriculture (MSME) promotion
- Initiation of Climate Smart Agriculture
- Support Food Security Enhancement: Provide cash transfers, low-cost storage, and transportation solutions

## 2024

- Climate Smart Agriculture continued
- NBC training manual endorsed and implementation (TOT)
- Construction of 13 mitigation projects in 8 municipalities
- Support Jajarkot Earthquake Recovery
- Early Warning Systems Piloted to enhance governance mechanisms
- Sensitized on Strategies to Reduce the Urban Heat Island Effect



Preparatory Work for Construction at Khutiya Khola, Godawari

# STRONGER SYSTEMS

Tayar Nepal helped develop a foundation of policies, plans, guidelines, and frameworks for the federal government to strengthen DRRM nationwide. The most notable policy contributions include the Socio-economic Recovery Guideline, Disability Inclusive DRR Manual, draft of National Risk Sensitive Land Use Plans (RSLUPs) Framework, Model Framework on Disaster Risk Informed Budgeting and Investment, and Local Level Disaster Impact Assessment Tool.



Tayar Nepal contributed to the Sustainable Development Goals 2030 and Nepal's commitment to the Paris Agreement on Climate Change and Sendai Framework for Disaster Risk Reduction (DRR). The project successfully conducted Multi-Hazard Risk Assessments (MHRAs) and completed Risk-sensitive Land Use Plan (RSLUP) in 10 municipalities (with many proposed interventions already taken up and replicated elsewhere), supported eight municipal DRR Strategic Plans of Action, built the DRRM capacity of 9,275 people, and implemented 33 Gender, Equity, and Social Inclusion (GESI)-sensitive disaster risk mitigation projects making cities inclusive, safe, and resilient.

The project helped the MOHA prepare the Mid-term Review Report of the Sendai Framework, set targets for 2030, and complete the Nepal Disaster Report 2024.

Tayar Nepal trained a total of 385 municipal leaders (98 female) from eight municipalities, enabling local governments to carry out local disaster and climate change adaptation (CCA) activities, equipping leaders with skills in disaster risk management and sustainable practices.

Tayar Nepal helped establish, activate, equip, and link Emergency Operation Centers (EOCs) at all levels (national, provincial, district, and local), including in its eight partner municipalities, and provided them with equipment support, IT Trainings,



## TRAINED FIREFIGHTERS HELP SAVE BRIDGE

Bhim Bhajgain, a firefighter trained by Tayar Nepal, recalls receiving an emergency phone call from the Chief of the Disaster Management Section in Lamkichuha around 4:30pm on March 11, 2024, informing him of a major truck fire at the Karnali River bridge. Within 15 minutes, he and his fellow trained firefighter, Pati Ram Chaudhary, reached the scene and quickly extinguished the fire, which had destroyed an enflamed truck carrying gas cylinders and damaged a dozen ropes on the bridge, putting lives in immediate danger.

Bhim recalled the initial scene of the disaster. “When we arrived at the site, we saw that the truck was burning, and the bridge was engulfed in flames. For us firefighters, our first priority is to put the fire out and reduce the increased risk of loss of properties and human casualties.”

simulations, and overall strengthening to better respond to real disasters. The project’s material support and training reached more than 200 people nationwide. Tayar Nepal linked EOCs at the national and local levels through trainings and learning workshops, and municipalities proactively organized Municipal Level DRR Platform (MPDRR) meetings to better coordinate disaster responses with humanitarian agencies and other stakeholders. In addition, the project strengthened local and ward Disaster Management Committees (LDMC/WDMC) and developed Local Disaster Management Funds and Fund Mobilization Guidelines to guide local budgets for DRRM.

To address Nepal’s biggest disaster risk—fires—Tayar Nepal successfully conducted practical fire risk management training for 605 fire brigade staff and community members in 12 municipalities, as well as refresher training to 124 participants and fire management training for 30 community forest users in Neelakantha.

The project developed the DRRM Index, an innovative tool covering 65 indicators, designed to measure municipal-level DRRM systems and capacities to guide targeted growth. The project launched a DRRM Index self-assessment tool to help municipalities self-monitor their own DRRM strengths, weaknesses, gaps, and progress. The Index was implemented in all eight partner municipalities and their twin municipalities<sup>1</sup>. All 16 municipalities demonstrated increased Index scores and continue to monitor and improve their DRRM capacity beyond the project. The DRRM Index was endorsed by the Government of Nepal (MOFAGA) as the long-term owner who will take the lead to replicate it throughout more municipalities in Nepal.



Some municipalities earned high-level national recognition for their exceptional DRRM growth. During the Municipal Association of Nepal’s 30th anniversary celebration in March 2023, Nepal’s Honorable Prime Minister, Pushpa Kamal Dahal, presented the ‘Municipal Excellence Award’ to Birendranagar Municipality for its exceptional work on forestry, environment, CCA, and resilience. Meanwhile, Neelakantha won the award for best performance in year 2022.

<sup>1</sup> Twin municipality - Krishnapur, Tikapur, Madhuban, Ghorahi Chamunda, Bindrasayani, Gurvakot, Gorkha, Jiri



## GESI SPOTLIGHT



Through grantee, Atulya Foundation, Tayar Nepal developed the Disability Inclusive DRR Informational Handbook (DI-DRR Handbook)—a groundbreaking tool that offers disaster preparedness and response guidance tailored to the needs of persons with disabilities. The handbook provides information on staying safe from five common hazards in Nepal and provides solutions to access emergency-related products and services. The resource book was implemented and adopted by the GON (MOHA and MOFAGA) and was also used by different agencies and some local governments, like Melamchi Municipality, who further adapted and shared it to reach more Nepalis in need. The resource is translated into English and ready for wider use in the global DRR forum.

In total, the project led more than 69 training events reaching about 6,000 participants on various aspects of DRR and preparedness, including DRRM localization, fire risk management, and early warning systems. The project also organized 80+ trainings for more than 3,000 participants on business management, gender equity and social inclusion, and climate-resilient agriculture.

To strengthen Nepal's emergency preparedness and response systems, Tayar Nepal supported MOHA and local governments to conduct nine Tabletop Simulation Exercise (TTXs)— eight in partner municipalities and one at the national level—reaching a combined total of 2100 participants.

Tayar Nepal promoted the use of DRR data in decision-making for government leaders by upgrading and localizing the nationwide Building Information Platform Against Disaster (BIPAD) disaster data portal from the national level to 29 municipalities across Nepal. The portal provides local governments with useful DRR data to guide municipal planning and decision-making. The project also developed VisRisk model tools to guide local risk management and decision-making for two cities, which now use the tool to prepare DRRM plans and policies.

To further share DRR knowledge across the country, the project supported Disaster Preparedness Network-Nepal (DPNet-Nepal) to develop a free, user-friendly online hub for DRR information and resources in Nepal called the Online Resource Center (ORC), which launched in 2021. The ORC houses more than 1,750 DRR-related

resources including legal documents, research papers, and reports published by different organizations at the national and international levels. These documents are searchable by keyword, category, or author, making it a valuable tool for researchers, students, planners, and practitioners in Nepal. The ORC is inclusive, user-friendly, and includes a GESI section and accessibility feature for users with visual impairments.

The project supported Municipal Association of Nepal (MuAN) to develop an integrated Knowledge Management Portal (KMP), accessible to all 293 municipalities and the public, which serves as a centralized hub for a wide range of local resources, including manuals, plans, and policies related to DRRM and GESI mainstreaming.

At the national level, Tayar Nepal helped establish, staff, and operationalize Nepal's leading disaster authority, the National DRRM Authority (NDRRMA) and supported to draft Standard Operating Procedures, conduct several studies, and draft its communications strategy. The project helped NDRRMA place strategic technical experts to fill immediate gaps and provided essential IT equipment.

Through Tayar Nepal's support, NDRRMA now has a thriving social media presence that reaches more 2 million people with hazard-related videos, and social media content with disaster prevention messaging. The project supported NDRRMA to develop a first-of-its-kind resource and supported NDRRMA with disaster messaging through DRR Daily Bulletins.



## INNOVATION SPOTLIGHT



Tayar Nepal developed innovative mobile apps and games for DRR information sharing: *Ma Ta Chhu Tayar*, a first-of-its kind DRRM mobile app that engaged 129 women entrepreneurs from marginalized and socially excluded groups. The app has had more than 2,000 downloads to date. *Pahiro Alert* is a mobile app that alerts community members on potential landslide risks and provides resources, like a preparedness plan and emergency contacts.

The *Udhayami Utthan* Online Shop showcases DRR-related products made by women entrepreneurs and home-based producers.

*Bachyo* card game, developed together with Kazi Studios, incorporates DRRM concepts in a fun-filled and interactive way that appeals to youth.

Tayar Nepal utilized Unmanned Aerial Vehicles (UAVs)/drones to capture advanced, high-resolution images for landslide vulnerability assessments. Tayar Nepal developed VisRisk<sup>2</sup>, a tool within the existing BIPAD portal, which was rolled out in Neelakantha and Tulsipur.

<sup>2</sup>VisRisk is a simple yet creative way of visualizing disaster-related information through text, charts, infographics, and maps using story telling format. Source: <https://bipadportal.gov.np/vis-risk/>



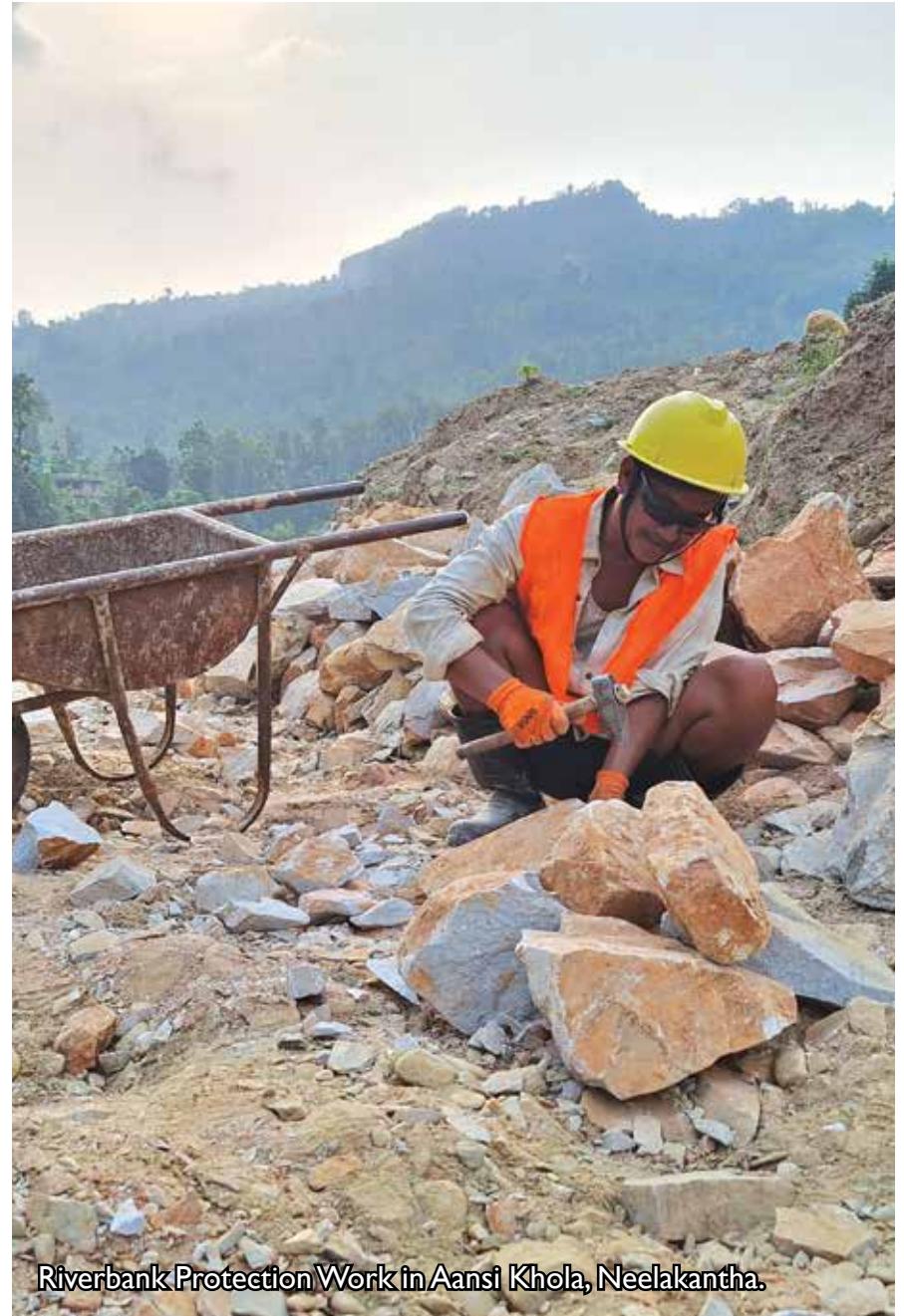
Bachyo game orientation to school teachers in Rajapur

# CHAMPION



*“Working on Tayar Nepal projects, I witnessed firsthand how young people can be powerful agents of change. The fellowship gave me the chance to grow and mentor passionate youth who are committed to sustainable development. The DRR and climate fellowships build technical skills and encourage innovative solutions for climate challenges and disaster risk reduction. Leading these initiatives has strengthened my dedication to creating a greener, more resilient world, one innovative idea at a time.”*

Goma Karki, a fellow from Youth Innovation Lab (YIL) supported to engage three cohorts of skilled and motivated ‘Youth Fellows’ to work closely with 29 local governments across Nepal, increasing their capacity to manage and use DRR datasets for policymaking, planning, and implementation.



Riverbank Protection Work in Aansi Khola, Neelakantha.



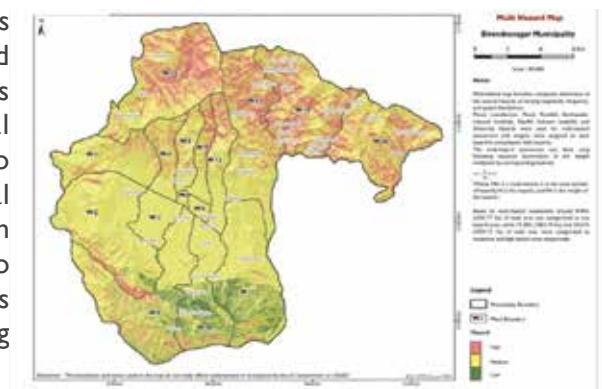
An embankment built at Chori Khola, Lamkichuha

# SAFER SETTLEMENTS

Tayar Nepal built safer settlements throughout the country in several ways. The project strengthened municipal capacity to better understand and use disaster and risk data to make informed decisions; it promoted safer construction through enhanced understanding and use of Nepal's National Building Code (NBC), including through a revised NBC Training Manual for nationwide use; supported in multi-hazard risk assessment risk-sensitive land use plans; it constructed replicable disaster mitigation projects in high-risk areas; it piloted and installed landslide and flood early warning systems (EWS); and it raised public awareness about disaster prevention measures.



The project conducted MHRAs and then developed tailored RSLUPs in 10 municipalities and supported the national government (via MOFAGA) to draft the first-ever National Framework on RSLUP, which will eventually be rolled out to all 753 local-level governments to standardize land use planning throughout Nepal.



The project helped its partner municipalities construct disaster mitigation projects based on recommendations from their project supported RSLUPs and municipal priorities. Projects included landslide mitigation, gully protection, riverbank protection, and small-scale retrofitting to reduce earthquake risk. In total, the 33 projects reached 212,279 project participants in high-risk areas.

Tayar Nepal completed a landslide mitigation project in Dullu using a combination of civil and bioengineering structures using bamboo to reduce landslide susceptibility, benefitting 185 locals. The successful technology was soon replicated nearby by

## Rupantar Nepal and the Local Infrastructure Support Programme (LISP) beyond Tayar Nepal support.

Tayar Nepal trained more than 300 local engineers, masons, and contractors on the Nepal's NBC, covering retrofitting design and earthquake-resistant building construction management.

Tayar Nepal set up Housing Construction Support Service Centers (HCSSCs), or 'Help Desks,' in five municipalities to offer technical guidance for safer housing construction. Engineers at each Help Desk assisted with building permits and coordinated between local authorities, trained masons, and other stakeholders. These 'Help Desks' benefited 596 individuals and were handed over to local municipalities to sustain beyond Tayar Nepal.

To boost knowledge and skills of local masons and construction workers proper implementation of the NBC, the project partnered with National Society for Earthquake Technology (NSET)-Nepal to train 200 masons and 24 engineers on seismic vulnerability assessments, retrofitting, and building construction procedures. The project also trained 44 youth on how to construct flood, fire, and earthquake resilient houses, and oriented 131 school management committee members on reducing earthquake risk.

Tayar Nepal helped enhance the capacity of engineers from local governments across Jajarkot district on earthquake-resistant building construction. This initiative helped build the disaster resilience of vulnerable communities and to be better prepared before the next big earthquake strikes.

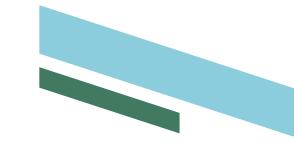
The project designed earthquake, flood, and fire resilient demonstration houses in four municipalities, which were handed over to local authorities and demonstrated to the public to raise awareness.



Early Warning System installed at Neelakantha

Tayar Nepal supported Birendranagar—one of the most rapidly urbanizing cities in Nepal—to conduct a study on land pooling, including the design of housing plots, open spaces, drains, and other amenities. The project facilitated a learning visit of the Land Pooling Users Committee to other places in Nepal with successful land pooling interventions.

The project improved flood and EWS in Nepal by partnering with the Department of Hydrology and Meteorology (DHM) to upgrade flood systems in five municipalities with new telemetric stations and alarms, and to train 173 stakeholders on how to use them. For landslide EWS, or LEWS, the project piloted soil moisture monitoring in Arunkhola, and a real-



Tayar Nepal's public awareness campaign on hazards reached more than 7.5 million people through diverse channels, including radio PSAs, social media, YouTube videos, influencers, and localized posters.

time rainfall dashboard in Neelakantha, enhancing risk prediction and mitigation.

Tayar Nepal piloted another successful LEWS in Bhimeshwor that developed thresholds and warning triggers, installed LEWS instrumentation, established a Community Based Landslide Monitoring Mechanism, and held a National Level Learning Sharing Workshop on EWS reaching 120 disaster stakeholders.

Tayar Nepal's public awareness campaign on hazards reached more than 7.5 million people through diverse channels, including radio Public Service Announcements, (PSAs) social media, YouTube videos, influencers, and localized posters.



Emergency Operation Center at  
Rajapur Municipality

## RAJAPUR MUNICIPALITY MITIGATING THE RISK OF MONSOON-INDUCED DISASTERS ON ITS OWN

Floods and landslides triggered by incessant rainfall claim many lives and damage millions of dollars' worth of property across the country, and Rajapur Municipality is no exception. Every year, the Karnali River and its branch rivulets devastate thousands of households in its path.

This year, the situation was different in Rajapur because the municipal-level Disaster Management Committee and local EOC were both on high alert and fully prepared for monsoon flooding.

The municipality regularly disseminated disaster-related messages about the monsoon through municipal social media channels and bulk SMS to reach the public, and they engaged the city-level volunteer task force ahead of any shocks.

The municipality practiced its mock flood procedures, purchased search and rescue equipment for wards and communities, prepared a Monsoon Preparedness and Response Plan, updated its Disaster Preparedness and Response Plan, and organized local meetings for its Disaster Response and Municipal Platform for DRR to improve coordination before the monsoon started.

The mayor of Rajapur Municipality, Dipesh Tharu, played a vital role raising community awareness by visiting vulnerable areas and observing the Karnali River's water level regularly with other local EOC team members, who regularly conveyed this information to wards and flood-prone communities to update them about real-time conditions. The municipality has made complete use of all equipment and materials for search and rescue that were supported by Tayar Nepal.



## GESI SPOTLIGHT

The women of Sonapur have formed a Community Disaster Management Committee to combat disasters. Tayar Nepal has provided capacity-building training and organized meetings. The committee has 11 members who meet monthly, collecting Rs. 10 for rescue materials and first aid. They have a database for pregnant women, newborn mothers, disabled persons, children, and senior citizens. A Pre-alert Task Force gathers information on river flow, risk assessments, and weather forecasts, ensuring that community is not only prepared but also resilient in the face of adversity.



Members of the Community Disaster Management Committee at Sonapur, Lamjung



## INNOVATION SPOTLIGHT



### Developed and piloted innovative index insurance schemes to mitigate flood risks.

Disasters, like floods are inevitable, but innovative insurance products can help mitigate these risks for the most vulnerable people by overcoming typical insurance barriers. With Stonestep Pvt Ltd., Practical Action Nepal, and Shikhar Insurance, the project developed an index-based flood insurance (IBFI) tailored for flood-prone areas in Godawari. This digitized coverage provides targeted support to vulnerable households, addressing DRF needs in climate-sensitive regions. This product triggers claims based on data from telemetric stations that monitor flood conditions, automatically paying out claims to affected groups rather than requiring individual claims and assessments. The product was approved by the Nepal Insurance Authority (NIA) and in 2022, a total of 231 households in Godawari received a total payout of USD2,867 during a real flood event.



Through Consortium for Land Research and Policy Dialogue (COLARP), Tayar Nepal piloted parametric flood insurance (PFI) in Bhajani Rural Municipality, which was soon replicated municipal-wide enrolling 1,153 farmers in total, who paid a total premium of about USD900 between 2022 and 2023.



*"The flood destroyed harvested crops, resulting in a shortage of food grains. The Index-based Flood Insurance activity, introduced by Tayar Nepal, has assisted vulnerable communities in providing the insured amount through the local cooperative with no administrative hassles, making life easier for many farmers. If the IBFI system is implemented in other river systems, the government and non-governmental organizations will not need to spend much money in response."*

Rani Devi Rana, Murkati, Godawari - 9, showing the pay-out message on her phone.

# CHAMPION



*“Even though I have worked as a mason before, this time it was different. I had the opportunity to work for a noble cause, and even wearing safety gears, such as helmets, boots, and gloves was a new experience for me. I felt a deep sense of satisfaction, especially because it directly benefitted my family and community. I still vividly remember the devastating flood in August 2014, which severely affected my house and the entire community. The whole community had to seek refuge in a nearby school for several days without access to food. Still, monsoon floods continue to pose a threat to Birendranagar each year. I am now reassured that this monsoon season, we will not have to endure severe consequences, as the riverbank protection work in our community in Itram Khola has been completed.”*

Laxmi B.K., Construction site worker and direct project participant of riverbank protection work in Itram Khola, Birendranagar



Gabion box preparation for a riverbank protection work in Rajapur



Women in a rice field, represent the resilience of local agriculture amidst environmental challenges.

# CLIMATE AND ECONOMIC RESILIENCE

Nepal faces severe environmental challenges, including frequent natural disasters and climate-induced weather shifts, impacting both the economy and local livelihoods. To address these issues, Tayar Nepal implemented innovative climate change adaptation (CCA) and resilience strategies. The project focused on restoring wetlands, promoting sustainable water management, advancing eco-friendly infrastructure, road-side plantation, climate smart agriculture, green businesses, and supporting agroforestry. By engaging the public sector and integrating these approaches, Tayar Nepal aimed to mitigate disaster impacts, enhance community resilience, and promote sustainable development for a more secure future.



## **Successful CCA interventions with livelihood and/or climate benefits.**

Tayar Nepal focused on building resilience through improved systems at national and local levels and promoting safer settlements. Key efforts included advancing climate change adaptation with wetland management and addressing economic resilience, agricultural insurance, disaster risk financing, and food security technologies. In Rajapur, Tayar Nepal helped develop a detailed project report (DPR) for Arnahawa Lake, a 2-hectare wetland in Ward 8. This lake, rich in avian, aquatic life, and plant species, is set to be promoted for ecotourism based on the DPR.

Dullu Municipality together with the Tayar Nepal Team, initiated the design and construction work to conserve the Krishnakot area with an aim to aid ground water recharge. The intervention comprises of increasing water retention in two gullies to increase time available for ground water infiltration by constructing gabion check dams. The intervention also includes plantation in 0.4 hectares of land, which will slowly help percolate ground water through the roots. In the long run, this intervention is expected to replenish nearby groundwater reserves and wells.

In Gagretal, Birendranagar Municipality, Tayar Nepal constructed gabion check dams in the upstream portion to trap sediment and reduce erosion. The intervention helped rehabilitating existing check dams upstream to recharge ground water by controlling debris and sediments during the monsoon flow.

Tayar Nepal completed the construction of two foot-trails covering a total length of 2.52 km from Rang Rang Thali, ward 1 to the market center in ward 6. The trail route is laid in local stones with handrails at critical sections, a picnic spot with disabled-friendly gender-neutral toilet facility, drinking water, and handwashing facilities. This will help promote domestic tourism for hiking and sightseeing and will help benefit 6,830 individuals, including from the indigenous Thami community.

To sustainably address waste management, Tayar Nepal and grantee Blue Waste to Value helped Tulsipur Sub-Metropolitan City (SMC), Neelakantha, and Godawari produce organic manure from their degradable waste. With the project's support, the partner municipalities were able to produce more than 8.5 tons of the high-grade fertilizer till date. The project trained 56 community members including women and from socially excluded groups to upcycle and recycle the non-biodegradable waste to produce sellable items as well.

To promote climate-resilient ecosystem through riverbed farming and help flood-affected, vulnerable communities reap benefits, Tayar Nepal trained 401 people in Godawari, Lamkichuha, and Rajapur municipalities in riverbed farming through climate-resilient varieties of fruits and vegetables, efficient water use practice, mulching, plantation in trenches and pits, among others. The activity helped the project participants produce seasonal fruits and vegetables in the barren riverbeds—which helped claim 21.2 ha of floodplains as well sold 14.6 Mt—and earn NPR 518k (~USD3,865).



Entrance of foot trail at Bhimeshwor Municipality

Tayar Nepal initiated model agroforestry integrating agriculture, livestock farming, and forestry activities on the same unit of land, supporting in reduction of adverse impacts on climate change. Tayar Nepal supported four partner municipalities—Godawari, Lamkichuha, Dullu, and Tulsipur—to establish model agroforestry sites through multi-layered forestry approaches. Together with support to prepare business plans to promote developed agroforestry model and capacitate indigenous people and local communities, the project engaged private sectors in commercialization of agroforestry products and enhance local economy. Covering total of 7.6 Ha and 4905 number of plants spreading out to 111 project participants Households.

Tayar Nepal enhanced urban environments by promoting tree planting and using eco-friendly bamboo tree guards instead of iron. The project supported Rajapur, Birendranagar, and Tulsipur in western Nepal,

focusing on roadside plantations to improve air quality and mitigate climate change. Total number of trees planted approximately 7500 trees in community forests and parks. These efforts aim to transform these areas into greener, more sustainable cities and improve urban resilience, with municipalities now actively maintaining these green spaces for community benefit.

Tayar Nepal, in partnership with Panchashakti Seed Company Pvt. Ltd. and municipal agriculture unit in Godawari, improved food security and farmer income while enhancing resilience to climate-induced risks. The project trained 616 farmers on crop insurance, climate-smart practices, pest management, and hybrid seed production. It provided crop insurance support to 150 farmers, mobilized NPR 700,990.08 (~USD5,231), and reached 88,503 community members through radio jingles and information dissemination.

eSewa Help Desk

eSewa Help Desk



Esewa Help desk for digitized bundled Property insurance product

eSewa, in collaboration with Digi Front and Shikhar insurance developed and secured approval from the Nepal Insurance Authority (NIA) for digitized bundled insurance products, including home and business coverage. The initiative aimed to streamline the insurance process for users through digital platforms and was piloted in Birendranagar and Tulsipur. With more than 600 enrollments achieved out of a target of 1,000 in Birendranagar and Tulsipur, the project emphasized technological innovation and aimed for expanded outreach. Local leaders, including mayors, actively promoted the insurance to boost adoption.

The Asal Mahila Cooperatives, consisting of 950 women, adopted climate-smart seed varieties and homemade bio-pesticides to combat climate change impacts on rice and wheat. They also utilized plastic house nursery technology for vegetable seed production. The cooperative's membership includes 65% Janajati, 23% Brahmin-Chhetri, and 12% Dalit, with leadership from the Dalit community. Last season, they produced 36,000 kg of paddy seeds on 10.53 hectares, selling 24,000 kg and earning NPR 648,000. (~USD4,835) They continue to farm wheat on 52 bigaha (35.2 ha).

Tayar Nepal advanced climate-friendly green businesses through various initiatives. This included the activities in Godawari, Rajapur, and Lamkichuha, with interventions under Integrated Fish Farming (IFF) and under Climate-Smart Vegetable Farming (CSVF). The project also supported 15 households in Bhimeshwor with floriculture and 30 households in Bhimeshwor and Rajapur with homestay operations.

Nature-based Solutions (NbS) offer an effective, feasible and cost-effective approach to reducing the intensity of landslides. NbS is the technique of using vegetation for slope protection. Considering the nature of the landslide technical team decided to use multiple interventions for NbS techniques such as 1) Construction of Roadside drainage, 2) Bamboo Crib Wall, 3) Brush-Layering, 4) Stone Rip-Rap, 5) Vetiver plantation, and 6) Amriso (broom grass) Plantation. This activity protected 8.86 Ha of land in Neelakantha.



Roadside plantation at Rajapur Municipality

Tayar Nepal helped create a culture of business resilience in Nepal and raised awareness among business sector on DRRM and the importance of Business Continuity Management (BCM) and Business Continuity Plans (BCPs), which many businesses have since embraced, adopted, and integrated. The project also helped incubate DRR-specific enterprises and facilitated direct investments from the private sector into DRR.

Throughout five years, Tayar Nepal made significant progress engaging private sector businesses in DRRM activities, raising awareness, and building resilience—as evidenced by the improved resilience of many businesses it supported.

Hotel Sarathi, in Dhulikhel, was the first to adopt BCP after joining a Tayar Nepal training. Hotel Sarathi received approval from the District Disaster Reduction Committee and invested USD65,909 in safety and IT upgrades, which set a precedent for BCP practices among ten other hotels, improving disaster resilience and meeting government standards.

In partnership with grantee, Nepal Business Initiative (NBI), Tayar Nepal facilitated Nepal's leading business houses during a Business Resilience Award event for their commitment to resilience and disaster preparedness following BCM training.

The project also led training programs and launched initiatives that put Nepal's business community and local governments in the driver's seat of DRR efforts. For example, Tayar Nepal organized BCM training for micro, small, and medium

enterprises (MSMEs) in collaboration with Municipal Industry Promotion Sections and respective Municipal Business Federations to build local capacity of MSMEs to establish a disaster resilient business culture.

Tayar Nepal collaborated with the well-known Chaudhary Group (CG) to enhance business resilience through DRRM and Private Sector Engagement (PSE) training to six Business Unit Heads and a staff orientation at their head office. This partnership resulted in a localized BCM training program and signed Letter of Engagement, after which CG invested about USD45,454 to promote DRRM awareness through WAI WAI noodle packaging.

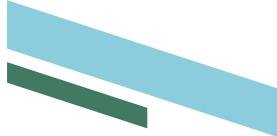
Tayar Nepal collaborated with Kathmandu University's School of Management (KUSOM), Tribhuvan University, Apex College, and Ace Institute of Management to integrate BCM courses into their curricula to raise awareness among youth.

The project's hugely successful 'Private Sector Innovation Challenge' (PSIC), led in partnership with Antarprerana, effectively advanced DRR and resilience by involving eight municipalities and local business groups to raise awareness and establish business incubation centers in five municipalities to boost local entrepreneurship development.

Building on insights gained from PSIC bootcamp and through SIC funds, two young sisters in Birendranagar expanded their biofertilizer business using a vermicompost and organic pesticides and promoted an organic vegetable market. They established AG Ventures Pvt. Ltd., which created an 'Agriculture School' advocating climate-smart farming.



Private sector engagement (PSE) in DRR and business resilience



Total contribution of Private sector **USD375,204** and of Public Sector **USD1,116,077** Public Sector funds mobilized for DRRM.

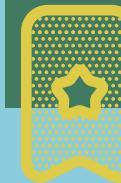
Ganesh Dhakal, a PSIC winner, runs a successful dragon fruit production enterprise, which he expanded with project support. Tayar Nepal helped him identify areas for growth to achieve business sustainability, like municipal support to access loans, which he is now addressing. He aims to transform his municipality into an agro-tourism hub to support ongoing farmer engagement.

Tayar Nepal partnered with Federation of Woman Entrepreneurs' Associations of Nepal (FWEAN) and Thulo.com to support women-led enterprises during COVID-19 by digitizing their operations and expanding online platforms. This resulted in increased vendor participation, higher online traffic and sales, improved financial inclusion, and the creation of FWEAN's e-commerce platform, winbiz.com. np. FWEAN also trained women in homestay and floriculture management and facilitated connections with stakeholders in Bhimeshwor and Rajapur.



*"From the training, I learned more about the homestay business, including key elements of the homestay operation process, legal regulations, and policies, more importantly, the quality of food, the safety, and security of guests, and the development of a business continuity management plan. After completing the first phase of training, I renovated my homestay and added two more bedrooms to accommodate more guests. We also developed community guidelines for operating a homestay business."*

Indra Devi Tharu (Chaudhary), Sohana community, Murgahawa Village, Rajapur Municipality



## GESI SPOTLIGHT

Tayar Nepal incorporated inclusion into disaster and climate mitigation projects, such as foot trail construction, by hiring and engaging women and members of marginalized communities while ensuring equal pay. The project prioritized climate-resilient farming practices for hard-to-reach, indigenous, and vulnerable communities, with a focus on reaching and supporting women. The project also facilitated the inclusion of landless people in its index-based insurance scheme to ensure marginalized individuals had access to coverage.

To support women entrepreneurs, Tayar Nepal's initiatives included Compressed Stabilized Earthen Bricks (CSEB), where a female worker evolved into a leader who then hired other women, demonstrating a positive domino effect. Grants from FWEAN also inspired many women entrepreneurs.

Tayar Nepal assisted Tulsipur SMC in mitigating climate change impacts through solid waste management, including composting biodegradable waste, promoting upcycling enterprises with local women and socially excluded groups, and by supporting green and resilient businesses.





## INNOVATION SPOTLIGHT



- Establish a business continuity management culture in the Business Community by developing and implementing 224 business continuity plan.
- Through Private Sector Engagement, developed Business Continuity Management Training Manual and conducted 13 training engaging 174 participants.



“

*“I, along with other farmers, was not very excited about the concept of riverbed farming in the first place, but after participating in the training, our concept changed drastically and positively, and we were more than excited to implement this in the riverbank of Mohana. Besides extensive training in nursery management, Tayar Nepal also provided us with training on biopesticide preparation, irrigation management, and climate-friendly technologies. Our group received seeds, fertilizer, watering cans, spray tanks, and building drip irrigation, which enhanced our journey toward riverbed farming. Practicing riverbed farming has now helped me generate income.”*

Riverbed Farming: Sundar Lal Chaudhary, a lead farmer of the Ojhariya farmers' group in Godawari Municipality-10, Damaura

# CHAMPION



*“Over the years, Chure Range degradation resulted in a variety of disasters in Godawari Municipality. Due to our limited budget, the municipality is unable to complete large construction projects. So, the construction/mitigation project carried out by Tayar Nepal is of great assistance to us, particularly the vulnerable and marginalized communities living along the riverbanks. My experience with Tayar Nepal showed me that the project’s quality was never compromised, and all activities were completed on time. Compared to construction projects carried out by the provincial and federal governments, the project’s mitigation project modality is sustainable, eco-friendly, and long-lasting.”*

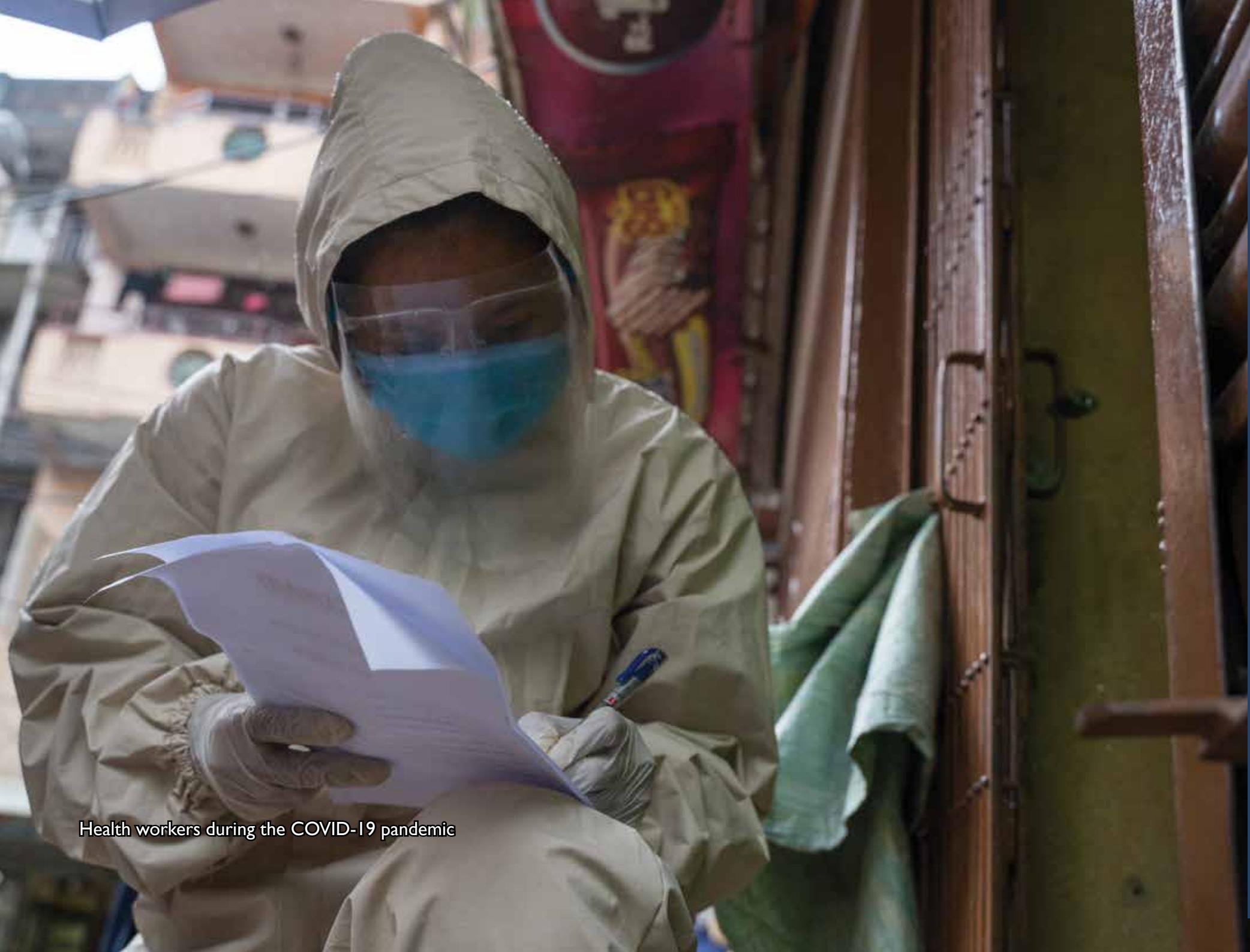
Birendra Bhatta, Mayor, Godawari Municipality



Mushroom farming for economic resilience, Tulsipur



Enhancing community economic resilience.



Health workers during the COVID-19 pandemic

# DISASTER RESPONSE & RECOVERY

Tayar Nepal included a rapid response mechanism that could be activated in the event of a disaster. While originally conceptualized for use during a natural disaster, like a major earthquake or flood, in July 2020, USAID activated this component to enable Tayar Nepal to address second-order economic impacts of the devastating COVID-19 pandemic. Following the Russian invasion of Ukraine and ongoing COVID-19 disruptions, global prices for food, fuel, and fertilizer surged, exacerbating Nepal's food crisis and impacting employment and Gross Domestic Product (GDP). The project provided significant support to address food insecurity and improve agricultural practices.



Tayar Nepal developed social and economic vulnerability assessments and recovery plans for 12 municipalities, including 8 partner municipalities and Chandrapur, Lalbandi, Ghorahi, and Sunwal, to address COVID-19 impacts. The initiative focused on the most vulnerable populations, integrating both formal and informal sectors into recovery efforts. Emergency support teams were mobilized to enhance local planning and response capabilities, including establishing 'Help Desks' and conducting training workshops on crisis planning at municipal and ward levels.

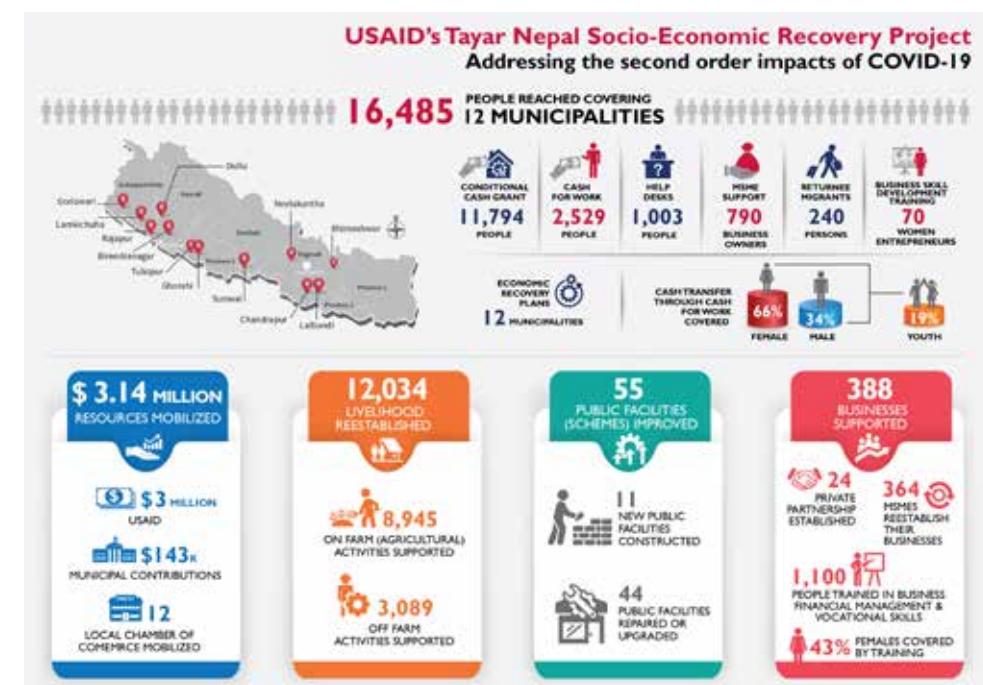
Tayar Nepal piloted livelihood and economic support activities in 12 municipalities, focusing on conditional cash transfers to aid poor and vulnerable populations. The initiative aimed to ensure food security, reduce asset sales, create immediate employment, and build job skills. Key activities included conditional cash transfers and cash-for-work programs to rehabilitate and build community assets. The program leveraged \$143,000 in municipal contributions and provided temporary employment to over 2,400 low-income individuals, offering significant relief and support for municipal resilience-building.

Tayar Nepal collaborated with local governments, the private sector, and civil society to mobilize financial resources for key sectors in 12 municipalities. This included small grants and loan programs aimed at supporting MSMEs and aiding their recovery. Implementing grantees delivered 24 skills training courses to over 200 returnee migrants and provided in-kind kits for business setup, with Practical Action Consulting (PAC) supporting more than 600 MSMEs to boost recovery and growth.

Cash for Work initiatives were promoted in municipalities to support community development and skill enhancement for larger-scale projects, including construction, drinking water supply systems, rural road building, and irrigation canals. The program included small construction projects and a cash transfer program aimed at revitalizing the economy, supporting small businesses, and providing income-generation activities and skill-based training for returnee migrants, such as in beauty salons. The initiative also included FWEAN support for women entrepreneurs and the establishment of COVID Help Desks, with effective volunteer mobilization during the second wave.

Following the Russian invasion of Ukraine and ongoing COVID-19 disruptions, the project distributed cash grants of NPR 21,500 (~USD 164.5) to 3,800 food-insecure households across four municipalities. Additionally, it enhanced storage and transportation for farmers by supplying 200 metal bins, 4,800 hermetic bags, and 3,000 plastic crates to 2,429 farmers and two cooperatives. The program also supported various agricultural improvements, including post-harvest center maintenance, equipment for turmeric and seed producers, cold chambers, and rustic potato seed storage to reduce food waste and loss.

In response to rising food, fuel, and fertilizer prices due to post-Covid instability and the Russian invasion of Ukraine, USAID's Tayar Nepal supported 3,800 food-insecure households, 63% of which were led by women, with cash transfers of approximately USD 164.5 each. Additionally, Tayar Nepal provided 200 metal bins, 4,800 hermetic bags, and 3,000 plastic crates to 2,429 farmers (63% female) and two cooperatives to improve storage and transportation. These measures aimed to reduce food loss and empower women to better combat food insecurity.



#### RAPID ASSESSMENT

**4** partner municipalities covered  
Neelkantha Lamjung  
Birendranagar Dullu

**112** cooperatives and farmers' groups assessed

**CASH TRANSFER**  
**3,800** households (HHs) benefited in 4 municipalities  
680 HHs  
920 HHs  
1045 HHs  
1145 HHs  
■ Neelkantha ■ Birendranagar  
■ Lamjung ■ Dullu

Gender disaggregation of benefited  
**3,800** households heads

Cash Transfer mode to benefited  
**3,800** households heads  
Bank account transfer  
Cash out through Remit

**LOW-COST STORAGE SOLUTIONS**  
**2,431** farmers benefitted in 4 municipalities  
200 Metal bins (100kg and 200kg capacity)  
3,000 Plastic crates  
4,800 Hermetic bags

#### FOOD SECURITY TASK ORDER

#### LOW-COST STORAGE SOLUTIONS

**2,431** farmers benefitted in 4 municipalities  
200 Metal bins (100kg and 200kg capacity)  
3,000 Plastic crates  
4,800 Hermetic bags

#### Repair and maintenance support

- Construction of drying floor
- Replacement of windows

#### Equipment supports to cooperatives and farmers groups

- 2 units of moisture measure meter – Neelkantha and Lamjung
- 1 unit each of grinding and packaging machine to turmeric producing farmers' cooperative – Lamjung
- Humidifier and air curtain machine installation – Birendranagar
- Establishment of cold chamber – Birendranagar

#### Construction of rustic stores for seed potato storage

- 2 rustic stores; one each in Birendranagar and Dullu



“

### Story of Shobha BK, a successful woman entrepreneur

30-year-old Shobha B.K., living in Tulsipur, far-western Nepal, and a member of the highly marginalized Dalit community, relied solely on her husband to support her household. Shobha is the first woman entrepreneur in her district to run an interlocking brick factory—a technology she learned about from Tayar Nepal. She has been leading her enterprise and created employment opportunities for women and men labors. The technology—compressed stabilized earthen bricks (CSEB)—has many benefits. It is easy to produce, generates less waste than other bricks, facilitates speedy construction, and best of all, it is more disaster-resilient than traditional bricks. This makes it an easy, eco-friendly, and sustainable product that is contributing to a more resilient Nepal.



## GESI SPOTLIGHT

### PROJECT PARTICIPANT SELECTION CRITERIA

Tayar Nepal established project participant selection criteria for its unconditional cash transfer program in collaboration with local municipalities and grantees. The criteria prioritize households facing food insecurity and include preferences for:

- Households headed by single women
- Families with pregnant or lactating women or young children
- Households with persons with disabilities or elderly individuals without income
- Households dependent on daily labor
- Households led by individuals under 18
- Households affected by recent disasters or crop damage
- Households with exclusionary factors such as caste or displacement
- Households that have not received other support for food security

Tayar Nepal focuses on selecting households that meet multiple criteria, emphasizing assistance for the most vulnerable groups.



COVID-19 response team

# DRR CHAMPION IN THE FRONTLINES



“Tayar Nepal played a crucial role in supporting us through various phases, from policy-making and capacity building, to providing essential equipment. They also assisted us with COVID-19 management and disaster mitigation construction projects. This partnership offers valuable lessons for future collaborations between local governments and development agencies, highlighting the importance of integrated and multifaceted support.”

Mohan Maya Dhakal (Bhandari), Mayor of Birendranagar Municipality



“With the support from Tayar Nepal, Hotel Sarathi has been able to come up with several BCPs for the hotel that include renovation of old buildings with a fire hydrant system and providing fire management training to all 40 staff. Hotel Sarathi is also committed to conduct monthly meetings to discuss the implementation of BCP.”

Prabhakar Pyakurel, Managing Director, Hotel Sarathi



*“Educational materials for deaf students in Nepal are scarce. The National Federation of the Deaf Nepal, supported by Tayar Nepal, has distributed ICT equipment and accessible teaching materials—like digital learning boards, laptops, and visual aids—to schools in Neelakantha, Bhimeshwor, and Tulisipur. This initiative aims to enhance learning and bridge the significant gap caused by a shortage of qualified teachers—only about 300 for 7,000 to 10,000 students with hearing impairments across 24 specialized schools and 174 resource classes. In the future, we aim to address this gap by developing and expanding educational materials for deaf students in Nepal.”*

Sitaram Ojha, General Secretary, The National Federation of the Deaf Nepal (NDFN)



*“We never thought GESI could be integrated in a technical intervention like ours. Moreover, we had not thought having an inclusive team could impact the confidence of women at the field level. A female engineer (which is rare, as most of the municipal engineers are male) in Tulsipur shared seeing women trainers (engineers) as part of NSET team, boosted her confidence to work confidently among fellow male counterparts. Now, we are aiming for better integration of GESI in our grants.”*

Nisha Shrestha, GESI Focal Person, NSET-Nepal



*“The Tayar Nepal Project has been instrumental in enhancing private sector engagement in disaster risk reduction and management in Nepal. Through initiatives like the Business Resilience Award and BCM training, NBI has successfully encouraged businesses to invest in resilience building and preparedness, leading to a more resilient business community in the country. Most importantly, the Tayar Nepal Project has proven to be a catalyst for change, providing NBI with the opportunity to instill a culture of preparedness within the business community. As we move forward, we remain committed to providing ongoing training and support to businesses, helping them view disaster preparedness and business continuity management as an investment for their sustainability.”*

Kush Kumar Joshi, President of Nepal Business Initiative



*“Disaster risk insurance is more than just a financial safety net—it’s a proactive strategy that harnesses technology and data to ensure swift response and recovery. By investing in these pre-arranged mechanisms, we not only protect lives and livelihoods from climate-related disasters, but we also drive improvements in preparedness and resilience for a more secure future.”*

Sanjay Yadav - Country Manager, Stonestep TFD Pvt. Ltd



*“With the establishment of our women-led Community Disaster Management Committee, we’ve created a safety net where there was none, building check dams, embankments, and even a shelter for those in need. We feel safer and empowered now. We learned about actions during a disaster, taking preparedness measures, and saving one’s life and of the family. In a time when many men are away working, it’s the women who are truly saving our village. We are more organized during disasters now than ever before.”*

Sita Chaudhary, Secretary, Community Disaster Management Committee, Sonapur, Lamkichuha Municipality



*“IBFI is a very new and innovative insurance product that provides mutual benefits to both cooperatives and farmers. We learned a lot from it, particularly in how it can help increase the number of cooperative members and provide farmers with the opportunity to insure their property, especially paddy crops, in flood-prone areas and vulnerable communities. This product is also beneficial for insurance companies. The Nepal Insurance Authority should standardize this product and provide subsidies to vulnerable and marginalized farmers in flood prone communities.”*

Surat Bahadur Bogati, Chairperson of Ekata Pragatishil Saving and Credit Cooperative Ltd. Godawari Municipality



*“After receiving an orientation from Tayar Nepal, I first transferred my knowledge and learning to teachers at my school. This was then transferred to students in grades 9-12, who learned about various aspects of disasters and prevention measures. Bachyo, a card-based game that combines DRRM perspectives, is an innovative way to raise awareness and improve users’ understanding of DRRM. The game has been introduced to 350 students thus far. We also learned that these students are teaching and sharing their knowledge and learning on disasters with their peers from other schools.”*

Dipak Bahadur, principal of Shree Janta Secondary School, Lamkichuha, on Bachyo game



*“For the past five years, Rajapur Municipality has had a continuous partnership with Tayar Nepal. Through various activities, we saved many vulnerable and disadvantaged communities in Rajapur Municipality. Mitigation efforts saved many settlements located near rivers. With Tayar Nepal’s technical and financial assistance, we drafted various policies, working procedures, acts, and directives that are required to address disaster-related issues. The project helped strengthen our EOC by providing necessary equipment. The project’s various capacity-building training for vulnerable groups also helped support their economies, resulting in greater quality of life for them.”*

ManaKala Kumari Chaudhary, Deputy Mayor of Rajapur Municipality



*“Tayar Nepal provided us with fire risk management refresher training, which included hands-on technical knowledge and practical drills for safer and more efficient fire rescue and response. Following the training, I gained the confidence to participate in fire risk reduction in Lamkichuha. Tayar Nepal provided us with Personal Protective Equipment (PPE) sets and other essential equipment, which made our jobs easier. I am pleased to be able to apply the technical knowledge and practical skills I gained through Tayar Nepal training to serve my community.”*

Arati Chaudhary, Tayar Nepal-trained firefighter in Lamkichuha Municipality



*“We are all aware that Nepal is highly vulnerable and prone to various disasters. We greatly appreciate Tayar Nepal’s support, which has been invaluable from the initial phase onward. Their assistance in providing quality assets and equipment has significantly enhanced our efficiency. Additionally, their support in risk communication—through customized videos and studies—has been instrumental in improving our understanding. The localization of the BIPAD portal has also created opportunities for youth fellowships, contributing to the development of future leaders.”*

Dr. Bhishmakumar Bhusal, Joint Secretary, Ministry of Home Affairs (MOHA)



Workers with safety gear at construction work

# LEGACY AND SUSTAINABILITY

**Disability Inclusive DRR (DI-DRR):** Disability Inclusive Disaster Risk Reduction Resource the resource book, represents a comprehensive guide address critical issues and support the implementation of DIDRR initiatives across Nepal's 753 municipalities. The resource book was implemented and adopted by the GON (MOHA and MOFAGA) and was also used by different agencies and some local governments, like Melamchi Municipality, who further adapted and shared it to reach more Nepalis in need. The resource is translated into English and ready for wider use in the global DRR forum.

**Index-based parameter insurance:** Index-based parameter insurance represents a groundbreaking approach to managing agricultural risk, leveraging hydrometeorological data from the Department of Hydrology and Meteorology (DHM). By linking insurance companies, farmers, cooperatives, and the private sector, this model provides a tailored safety net that responds to specific environmental indicators rather than traditional loss assessments. Encouraged by these outcomes, project partner municipalities are dedicated to sustaining and expanding this innovative insurance model, aiming to enhance its reach and impact in fostering agricultural resilience and financial stability.

**Digitized bundled insurance products/ eSewa:** eSewa supported digitizing process to streamline for users. Tayar Nepal has promoted home insurance and business insurances in a bundled package through a digitized process to make uptake more convenient for clients. Digitizing the insurance products has made it easier for insurers



to digitally access the insurance policy. eSewa initially, started from Birendranagar and Tulsipur Municipalities, later expanded to other Municipalities of Nepal and successfully insured more than 1,000 households under property insurance (house insurance).

**Civilian-led simulation exercises, including TTX:** Civilian-led simulation exercises, such as Tabletop Exercises (TTX), have gained prominence as a strategic approach for enhancing community preparedness and response capabilities. Tayar Nepal has significantly contributed to this field by establishing a comprehensive national resource, including a detailed manual and a network of trained experts. This resource has facilitated the replication of simulation exercises across various projects and municipalities beyond Tayar's direct influence. The successful adoption of Tayar's TTX Manual by non-Tayar municipalities and other initiatives underscores the effectiveness of this approach in fostering resilience and improving response strategies on a broader scale.

**BIPAD portal:** The BIPAD portal has undergone successful localization and integration, significantly enhancing its utility and accessibility. With its adaptation to local contexts, the portal is now scaling effectively, having been rolled out and localized across 29 municipalities. This expansion marks a substantial increase in its reach and impact, enabling more communities to benefit from its advanced features and resources. The portal's growing presence underscores its role as a vital tool in improving disaster management and response at the municipal level.

**DRR Index and Self-assessment:** The DRR Index and self-assessment tool has been a pivotal development in evaluating municipal DRR capacities. This tool provides a comprehensive framework for assessing and enhancing the effectiveness of DRR measures at the municipal level. Since its introduction, municipalities have demonstrated improved performance, with increased scores across various assessment criteria. This positive trend reflects the tool's impact in fostering greater preparedness and resilience, driving continuous improvements in DRR practices and policies.

**RSLUP & National Framework:** RSLUP and the accompanying National Framework have been instrumental in enhancing municipal decision-making capabilities. By actively promoting and expanding the use of multi-hazard and RSLUP data and findings and have successfully built municipal capacity to make informed, data-driven decisions. This has led to tangible examples of uptake, with municipalities already implementing projects identified in their RSLUPs and prioritizing activities using their own budgets. The anticipated approval of the National Framework promises to further amplify these efforts, facilitating nationwide adoption and ensuring the sustainability of RSLUP-driven initiatives. This broad implementation will help municipalities effectively address spatial and land use challenges while leveraging local resources and priorities.

**National Building Code & Training Manual:** The NBC and its Training Manual have been pivotal in advancing safer construction practices across Nepal. By promoting the code and building awareness, the project is laying the groundwork for improved construction standards nationwide. This training was designed to enhance their facilitation skills and deepen their understanding of the NBC, enabling them to effectively cascade

this knowledge to local levels. Ministry of Urban Development (MOUD) has approved the revised NBC training manual, and Department of Urban Development and Construction (DUDBC) plans to disseminate the manual to all 753 local governments and its divisional offices. The expanded capacity and expertise gained through this initiative are crucial for ensuring that safer construction practices are adopted and implemented across the country.

**UAV/drones for Landslide Vulnerability Assessment:** UAV also known as Drone was used as an innovative technology to map the selected catchment in Neelkantha. The UAV mapping created high resolution Orthophoto and Digital Terrain Model (DTM) of the catchment, useful to derive the topographic attributes which is generally not available in commonly available open-source data. UAV captured aerial images of the landscape can be processed to develop Orthophoto, in which different natural and artificial attributes can be delineated. This is a useful tool for landslide prone municipalities across Nepal.

**Flood Early Warning System (FEWS):** Tayar Nepal successfully operationalized existing EWS in five municipalities by integrating data from DHM telemetric stations with local data management systems. This synchronization has enabled more accurate and timely flood risk information, which is crucial for risk-informed planning. The implementation of comprehensive flood governance systems through the EWS has been further supported by our collaboration with Practical Action Consulting. These efforts collectively enhance community preparedness and response, ensuring more resilient flood management practices.

**Landslide Early Warning System (LEWS):** The Project Piloted LEWS in two municipalities. Focused on rainfall/flood triggered landslides and established

systems at sub watershed basins. Provided training to the community on LEWS operations and linked the system with existing Municipal Emergency Operations Centers (MEOCs) prepared Standard Operating Procedures (SOPs) for landslide early warning and handed them over for localized use. Utilized UAV/drones for landslide vulnerability assessment, enhancing risk assessment and response planning.

**Private Sector Engagement, BCM/BCP:** A culture of business resilience has been fostered through the integration of BCM and DRR into academic curricula, as well as through public-private partnerships. Tayar Nepal has enhanced the disaster resilience of women-led businesses by providing homestay and floriculture training in Bhimeshwor and Rajapur, in collaboration with the Federation of Women Entrepreneurs' Associations of Nepal (FWEAN). This effort trained 46 women, with eight scaling up their floriculture businesses and planting marigold saplings, demonstrating significant progress and growth.

**MCR 2030:** Partner municipalities were linked to the "Making Cities Resilient 2030" (MCR 2030) global campaign through a municipal learning and sharing event organized by Tayar Nepal. Leaders from all eight partner municipalities were oriented on MCR 2030, resulting in their enrollment in the campaign. The subsequent MCR 2030 survey revealed that these municipalities not only have a heightened awareness of DRR and resilience but have also improved their risk information, strategies, and plans. They are committed to implementing and mainstreaming DRR and resilience across all sectors. Further, partner municipalities can continue resilience building in their municipalities utilizing resources and guidance from MCR2030 platform.



Roadside plantation at Rajapur Municipality



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