United Nations Development Programme

Reducing Disaster Risk and Enhancing Emergency Response Capacities in Multi-hazard Risk Prone Urban areas of Nepal

CDRMP/UNDP

Final Evaluation Report

Evaluation timeframe: November-December 2021

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Project information

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For any lapse or error in this evaluation report, the responsibility rests solely with me.

Thank you all.

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List of acronyms

BIPAD	Building Information Platform Against Disaster
CADRE	Community actions for disaster response
CCA	Climate change adaptation
CDRMP	Comprehensive Disaster Risk Management Programme
CDW	Community Development Worker
CERT	Community emergency response teams
DIA	Disaster impact assessment
DIMS	Disaster information management system
DM	Disaster management
DRR	Disaster risk reduction
DRRM	Disaster risk reduction and management
EIA	Environmental impact assessment
EPRP	Emergency preparedness and response plan
EWS	Early warning system
FA	First aid
FGD	Focused group discussion
GoN	Government of Nepal
HI	Humanity and Inclusion
HRBA	Human right based approach
IEE	Initial environment examination
IMO	Information Management Officer
IRA	Initial Rapid Assessment
KAP	Knowledge attitude and practice
KII	Key informant's interviews
LDCRP	Local disaster and climate resilient plan
LDMC	Local disaster management committee
LEOC	Local emergency operation center
MoFAGA	Ministry of Federal Affairs and General Administration
MTO	Municipal Technical Officer
NBC	National Building Code
NDRRMA	National Disaster Risk Reduction and Management Authority
NRCS	Nepal Red Cross Society
PEOC	Provincial EOC
PPE	Personal protective equipment
PSA	Public service announcement
PSO	Project Support Officer
PTA	Parent teacher association
PwDs	Persons with disabilities
RSLUP	Risk sensitive land use plan
RVA	Rapid vulnerability assessment
SAR	Search and rescue
SMC	School management committee
SOP	Standard operating procedure
SSA	Social security allowance
TLO	Tole land organization
ToR	Terms of reference
UC	User committee
WDMC	Ward disaster management committee

Executive summary

1. Context: The principal objective of the project was to enhance urban resilience through strengthened emergency response capacity of the local authorities and communities to the future disaster risks, with institutionalization of risk informed, inclusive and participatory processes. The major interventions of the project include (i) awareness raising, (ii) capacity building and policy support, and (iii) small scale risk mitigation schemes. As the project comes to an end on 31 December 2021, UNDP has commissioned a final evaluation to identify and document achievements of project outputs, challenges, lessons learned and best practices. The key learning and results from this project will be used to design the similar projects in the future. The primary audience or users of the evaluation are UNDP, funding agencies, the relevant government agencies viz. Ministry of Home Affairs (MoHA), Ministry of Federal Affairs and General Administration (MoFAGA), humanitarian agencies, international NGOs and civil society organizations. This project, which ran for 31 months from June 2019 to December 2021 in two wards each of Bharatpur, Lalitpur and Bhimeshwor municipalities, created a good understanding of urban disaster risks and evolved mechanisms and measures that aided communities, municipal governments, and the private sector to address those risks and effectively respond to emergencies with a specific focus on vulnerable populations, as it aimed to do.

2. Evaluation methods: The evaluation used the mixed method of information analysis: both qualitative and quantitative data were used to analyze the findings and draw conclusions. Qualitative information was collected using participatory tools and techniques like focus group discussions (FGDs), key informant interviews (KIIs), most significant change, observation, case studies, and site visits. Secondary information related to project was collected using a 'desk review template' to identify relevant issues and initial findings before the field mission. The evaluator covered 23 schemes and collected data through 43 key informant interviews (out of which 24 were women) and 12 focused group discussions (namely member of TLOs and women groups; most at risk populations: men and women, Dalit, persons with disabilities and excluded groups such as LGBT, Muslim community, and people residing in urban slums). He used a results-based management approach and the "most significant change" method to identify the major impacts that the project had had on people's lives and overall wellbeing. Quantitative information was analyzed by developing and filling tables and verified with the support of project staff. Baseline and end-line data were also used to measure impact-level indicators. The evaluator used a five-point scale against the DAC evaluation criteria to assess performance.

3. Evaluation findings

a. Relevance: The project was relevant in terms of its overall design and approaches. Responding to evaluation questions among 42 key informants, 37 (88%) respondents said that the project was highly relevant to the context. The risk of earthquake and fires in the three selected municipalities is many folds more than the risk of other hazards. Landslide and flood are the major hazards in Bhimeshwor and Bharatpur municipalities respectively. Selecting just two core urban wards within each of the three municipalities was also relevant given the limited tenure and resources available. The project's three key results are also relevant in the context of the federal and local governments as they reinforced each other. Despite the COVID-19 pandemic, the project was able to address the crucial needs and priorities of the target groups and communities. It adapted to suit the needs of the different target groups and to create an enabling environment for drawing up and carrying out inclusive preparedness policies and actions focused on the vulnerable. The project's decision to involve the Muslim and LGBT communities in Bharatpur, the Thami in Bhimeshwor and urban dwellers and squatters in Lalitpur and Bharatpur was highly relevant as they are the most at-risk communities. Project's approach of involving senior citizens, women, and PwDs through different project's activities was also relevant.

b. Coherence: The project's key interventions were suitable despite the new context introduced by the COVID-19 pandemic. It has re-allocated EURO 39,400 for pandemic- and monsoon

preparedness-based activities without hampering the project's overall goal or purpose. The project dovetailed with national development priorities (national DRR policy and strategic action plan), third CPD outcomes and output 3.4. Its interventions were aligned with the priority areas of the three municipalities and created synergies and interlinkages with relevant stakeholders and other actors' interventions. The three partner NGOs were suitably selected as their long-term goals and strategies were congruent with the project's overall goals and strategies.

c. Efficiency: The project utilized its human, material and financial resources to achieve results in a timely fashion despite the impacts of the pandemic. Project's records revealed that around 20% of project activities were completed significantly before the planned date, almost 50% by the planned date and 30% activities during the seven months' extension period. Expenditure ranged between 97% to 100%. The project management structure was appropriate for and efficient in generating the anticipated results. Nearly 93% of informants said that activities were fully aligned with the expected results and 7% said partially aligned. Similarly, in terms of the efficiency of resource use, 88% rated this project as highly efficient and 12% said efficient. The project saved NPR 3.0 to 3.5million by using internal staff to carry out studies and produce guidelines and strategies. Community contributions ranged from 14% to 17%, and the project leveraged NPR 49,38,806 as co-funding from the government and private sectors while imparting training, organizing drills and carrying out mitigation work.

d. Effectiveness: Though the project faced several challenges, it was able to deliver the majority of its activities on time without compromising quality. Out of the total key respondents, 93% said that the project was highly effective whereas 7% opined that its activities are effective. Despite COVID-19, very few project activities were readjusted. It was possible as the project consulted project's stakeholders in small groups, adhered health protocols, and organized majority of the meetings in online mode. The project reached 61547 beneficiaries (2756 were women). 543 of the total beneficiaries were single women, 301 were PwDs and 160 were members of the LGBTQ+ community. The project also included other minorities like 178 Muslim households in Bharatpur and 34 Thami households in Bhimeshwor. The project's fund-flow mechanism contributed to the effectiveness of the project. Small scale risk mitigation activities helped to reduce the disaster risk. It was estimated that the project reached 48,500 households (75% of the total population) through flipcharts, posters, and maps and by mobilizing more than 60 volunteers to conduct door-to-door campaigns to impart information on urban DRR preparedness and emergency response. The project's M&E approach and mechanisms were instrumental in its achieving good results. For instance, indicator tracking sheets were used to track activities and an online database system was developed to track the number of beneficiaries without duplication. Monitoring visits from ECHO and UNDP helped the project to understand the progress it had made in achieving urban preparedness and response and to craft a plan to reduce the gaps and lapses.

e. Sustainability: Sustainability was ensured by using thorough capacity-building measures to equip institutions with the skills and knowledge. they need to continue to carry out risk reduction initiatives. Of the total key informants interviewed during this evaluation process, 69% said that project's constructed structures will be fully maintained and 71% expressed that project's outcomes will be sustained even after the project's end. Sustainability was further assured as (i) policy instruments are being executed, (ii) knowledge products are in place for policy advocacy, trainings, drills, simulation, tabletop exercises, and pre- and post-simulation exercises, (iii) local emergency operation centers (LEOCs) are being institutionalized and (iv) locally based partner NGOs can leverage resources from local governments. Trainings to TLOs and women groups on fire preparedness, SAR and first aid are now started to roll out at the community level. LEOC's are operated very smoothly. All municipalities have developed plans for or approaches to continuing the project's good practices with their own budgets. Project interventions are reflected in DM plan with budget from municipalities. The project effectively facilitated municipalities and wards in replicating its initiatives. As a result, the project's good practices are being replicated in new areas without project resources (please refer section 5.4, box-1 for examples).

f. Impacts: Disaster Risk Reduction and Management (DRRM)-related policies helped to reduce the amount of *beruju* (unauthorized expenses) municipalities spent. By helping municipalities prepare and cope with shocks and stresses, the project helped to reduce future risks. It also generated short-term employment (NPR 27,49,750) for more than 95% poor and marginalized families who had lost jobs due to the pandemic earn a livelihood and meet multiple needs. Synergy for and ownership of risk reduction activities increased. The project contributed to reducing urban disaster risks and preparing for emergency response through non-structural and structural components which improved the culture and feeling of safety. Urban DRRM-related issues are now being covered in local and national media; indeed, there were more than 1.2 million views in multiple platforms. Trained women successfully demonstrated the project's lifesaving initiatives by responding to fires. The project's series of capacity-building measures was successful in changing the mindsets and acts of stakeholders. 'Last mile' communication with vulnerable families, populations and communities helped the project to identify and mitigate their risks using a participatory approach. DRRM was mainstreamed in sectoral plans and programs.

Despite these positive developments, there were some missed opportunities. More could have been done in terms of earthquake preparedness through policy advocacy and capacity-building. More collaboration could have been done with federal-level stakeholders, including government officials, to build synergy. Though the project was successful in leveraging government budget, it was not able to access much funding from the private sector and its interventions with District Disaster Management Committees and other district stakeholders were very limited. The engagement of the private sector could have been increased by involving them in fire and earthquake preparedness and response, and if the project had been able to reform and strengthen the LEOCs in Bharatpur and Bhimeshwor at the outset of its work, they could have generated additional results. Building Information Platform Against Disaster (BIPAD) data could have been better systematized if an DRR focal person and the city police had been mobilized at the outset and then operationalized as per the standard operating procedures (SOPs).

The project performance was scored/assessed by using 'a five-point scale' against the DAC evaluation criteria. The overall performance of the programme rated 'highly satisfactory'. A summary of findings from the evaluation of each criterion is presented below.

Evaluation criteria	Score	Description of performance
Relevance	1	The project's is highly relevant to the overall design and approaches. It addressed the needs and priorities of the target groups and communities and contributed to the preparedness efforts of NDRRMA and MoFAGA.
Coherence	1	Very strong coherence as interventions suited the (i) changed context of the COVID-19 pandemic, and (ii) government policies, and exhibited internal coherence with their synergies and interlinkages as well as external coherence with other actor's interventions.
Effectiveness	1	The delivery of projects' activities was good in terms of quality, quantity and timing. Its monitoring and review arrangements was effective and it incorporated lessons and feedback in the project's design and implementation.
Efficiency	1	The project is highly efficient in terms project's achievement of its results on time, appropriate project management structure for generating results. It is cost effective and allocation of resources are appropriate to achieve outcomes and outputs.
Impact	1	DRRM is mainstreamed in sectoral plans and program. It generated short-term employment for the poor and marginalized, helped to saving lives and properties as well as improved the culture of safety and the feeling of being safe.
Sustainability	2	The project is sustainable as it has plans or approaches already mainstreamed in local government's plans and approach and some project's initiatives are already replicated at the local level. Despite strong local ownership, operation and management systems need additional time to mature, largely impacted by the COVID-19.
Overall	**1**	Highly satisfactorily

4. Recommendations
a) Design at least a one-month "preparatory phase" to share project details among the stakeholders and beneficiaries, orientation on contributions required and formation of sustainability and exit plans, sharing standard criteria for selecting small scale risk mitigation

schemes, forming or reforming and then registering committees, and imparting major trainings as part of sensitization.

b) Carry out as intensive work on earthquakes as was done for fires to eliminate the misconception that implementing National Building Code (NBC) is very expensive. Organize periodic mass education campaigns on safe building construction for house owners. Educate people about and enforce the provisions of fire building codes and a minimum level of mandatory safety measures to be put in place in all buildings based on their type and capacity. Advocate for the mainstreaming of fire code-related provisions in building bylaws and the DRRM-related policy landscape of the national, provincial and local governments. In addition, sensitize community and municipal authorities and train technical persons, contractors, designers, engineers, and masons in earthquake-resilient technologies.

c) Start policy support from the outset of a project, working in collaboration with senior municipal authorities and technicians using tools such as 'vulnerability and capacity assessment', 'rapid vulnerability assessment', risk sensitization and lobbying. Establish linkages with other municipal departments to roll out and enforce policy provisions.

d) Establish and use resilience funds to leverage resources for preparedness actions, particularly small-scale risk mitigation works. Establish and strengthen O&M fund mechanisms by provisioning at least 1% of the total budget of each scheme to this end. Engage in a few strategic activities such as (i) support policy initiatives from the beginning, (ii) craft standard training curricula and impart ToTs, (iii) design few but model small scale risk mitigation activities and (iv) document learning and disseminate among the relevant stakeholders well rather than in many activities superficially.

e) Support the consolidate of risk transfer guidelines and other associated legal instruments under the leadership of each concerned municipality, (ii) develop MoUs or other cooperation agreement with private insurance companies, municipalities, and media, and (iii) carry out continuous policy advocacy and sensitization by involving different categories of stakeholders and beneficiaries. Develop disaster financing strategy in the local context to operationalize its provisions into action.

f) Link most-at-risk urban communities with vocational skills and markets. Support them to draft business plans, register enterprises with relevant agencies, and develop ideas for market linkages to ensure entrepreneurial sustainability. Organize life skills and vocational training for men and women so they can generate income and thereby increase their resilience.

g) To develop the capacity of fire stations and their firefighters, prepare a standard training module and curricular along with a standard step-wise guideline for drills. Draft a training-curricula for electrical and industrial fires and carry out safety audits of electrical lines in small- and medium-scale enterprises. Draft a training curriculum on handling electrical and industrial fires and carry out safety audits of electrical lines in small- and medium-scale enterprises.

h) Mainstream GESI in the programmatic cycle i.e., collecting baseline data, designing, implementing and monitoring the project in order to distribute the projects benefits to all people irrespective of gender and caste/ethnicity.

i) Develop a 'disaster impact assessment (DIA)' tool to identify major project activities developed by the risk sensitive land use plan. Update current tools such as 'initial environment examination (IEE)' and 'environmental impact assessment (EIA)' by incorporating DRR indicators. Carry out disaster audits at the completion of a project to ensure that the resilience capacities of actors and beneficiaries have increased enough for them to cope with upcoming disaster events without external supports.

j) Continue to replicate the project's good practices in the designs of future projects. Document and mainstream the project's good practices and lessons learned utilizing UNDP's internal budget as many innovations are already in place and could be replicated in new areas. Develop a mechanism to replicate the learning of project wards in non-project wards through periodic review-and-reflection sessions involving ward disaster management committee members.

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1. Introduction

This report presents the findings from the final evaluation of the 'Reducing Disaster Risk and Enhancing Emergency Response Capacities in Multi-Hazard Risk Prone Urban areas of Nepal' which was implemented in three fast growing urban municipalities of Nepal viz. Bharatpur, Lalitpur and Bhimeshwor. The purpose of the evaluation is to include specific recommendations for future programming/interventions. As the project was ended on 31st December 2021, UNDP has commissioned the final evaluation to assess the results achieved and lesson learnt by the project. The evaluation has covered the achievements of the programme from the beginning in June 2019 to the end of Dec 2021. The findings of the evaluation will provide guidance for the way forward for future course of action. Thus, this evaluation report has included specific recommendations for future programming/interventions.

The primary audience or users of the evaluation are UNDP, funding agencies, the relevant government agencies viz. Ministry of Home Affairs (MoHA), Ministry of Federal Affairs and General Administration (MoFAGA), humanitarian agencies, international NGOs and civil society organizations. The key learning and results from this project will be used to design the similar projects in the future. Thus, they are particularly interested to learn lessons for future improvements, or to replicate good practices in future projects of similar kinds or for the extension of the existing programme as per the need. Hence, it is expected that the audiences will welcome critical findings and specific recommendations for future course of actions. The key areas of intervention of the evaluation are awareness raising, capacity building, and small-scale risk mitigation schemes.

This report is organized into seven chapters. The first chapter covers brief introduction of the evaluation with rationale. The second chapter describes the intervention to be evaluated and the third chapter describes the purpose and scope of the evaluation. The evaluation approaches and methods including data collection methods, data analysis is described in chapter four. Detail findings are provided in chapter five. The chapter six and seven draws the conclusion of the findings and provide the specific recommendations for future course of actions. Good practices and lessons learned are captured in chapter eight. Finally, the report has an Annex section at the end.

2. Description of the interventions

2.1 Background and rationale

Since its inception, the Project has been able to contribute towards enhanced understanding of disaster risks through various consultation meetings at community, ward and local levels. With the realization of risk among the communities and elected representatives, the Project has been able to identify risks and vulnerabilities in the project wards and support for the preparation of ward level preparedness and response plans. Further, IEC materials were developed based on the findings of Knowledge, Attitude and Practice (KAP) survey together with the National Disaster Risk Reduction and Management Authority (NDRRMA) and the Ministry of Federal Affairs and General Administration (MoFAGA) which has supported to enhance awareness of people on urban related disaster risks and vulnerabilities. The preparation of ward level plans has also supported to prioritize the activities on DRRM for annual planning of wards and local governments.

Project has also supported in preparation of various plans, policies and guidelines as a steppingstone for preparing local level elected representatives and staff along with communities to prepare and timely respond to disasters through coordinated efforts. With the learnings from past disasters, such as the 2015 earthquakes and 2017 floods, and understanding the risk in urban areas, the Project has also supported in identification and training of community emergency response team in first aid, search and rescue, fire preparedness and domestic fire prevention. Many of the trained volunteers have already demonstrated the skills in preventing fire events at the local level and some of the volunteers have been able to use their skills on search and rescue and firefighting. With identification

of risks and vulnerabilities, the Project has been able to bring in private sector actors and vulnerable populations in various preparedness initiatives.

With enhanced understanding of risks, local governments have also been able to increase the budget allocations for disaster preparedness in annual planning, and the Project has been able to leverage the local government funding. Further, Municipal Emergency Operation Centers (MEOC) have been operationalized and working as hubs for coordination in disaster preparedness and response related activities through allocation of staff. With multiple activities on risk assessment, disaster risk governance, increased investment in disaster preparedness

The Project commenced in June 2019 with an end date of February 2021. However, the Project implementation was directly impacted by the lockdown and travel restrictions imposed by the government to contain the spread of COVID-19. Hence, the project was granted a no-cost extension, with some modifications, until 31 October 2021. Thus, the total duration of the project is 29 months, between June 2019 - October 2021. The total approved budget for the project is USD 1,188,824.42.

As the project comes to an end on 31 October 2021, UNDP is planning to commission a final evaluation to identify and document achievements of project outputs, challenges, lessons learned and best practices. The findings of the final evaluation will provide guidance for the way forward for future course of action. Thus, the final evaluation report is expected to include specific recommendations for future interventions.

In light of the COVID-19 related risks, the Project utilized alternative strategies of engaging local level and communities through virtual means for meeting and information collection required for risk assessments, and preparation of plans and guidelines to meet the specific objectives. However, close contact trainings, like first aid, search and rescue, and fire safety trainings were kept on hold. Small focus group discussions (FGDs) and key informant interviews (KIIs) were also promoted as an alternative means to collect information ensuring engagement of local authorities and communities.

As project implementation was going on full-fledged after the ease in restrictions from the first lockdown, it was again affected by the second wave of COVID-19 which began in Nepal in April 2021, resulting in a prohibitor order in place till date. The Project, with consent from local level and district authorities, has conducted the planned trainings adhering to all safety protocols and limiting participants by doing trainings in two sessions. Along with that, virtual means of communication is also used.

2.2 Programme context

Nepal is one of the ten least urbanized countries in the world. However, it is also one of the top ten fastest urbanizing countries. Urbanization in Nepal is dominated by a few large and medium-sized cities with excessive population concentration in the Kathmandu Valley. High urban growth is occurring in the Kathmandu Valley, the Inner Terai valleys, and in market and border towns located on highway junctures between the east-west highway and the five main north-south corridors. Studies link the changing urban pattern - where once dense residential city core areas are evolving as economic hubs, with changing use of the buildings, densification due to influx of rental population, unauthorized vertical increment of buildings without upgradation of infrastructure - with the concentration of risks. This is largely due to severe deficit of basic infrastructure and services such as water supply, vehicular access, drainage systems, and electrical supplies, leading to severe negative impacts during any crisis. As witnessed in the 2015 earthquakes in Nepal, densely populated areas in the Kathmandu Valley and old settlements with irregular and narrow streets, congestion and fragile buildings amplify challenges in emergency response and evacuation, thus aggravating the impact of hazards like earthquakes and fires.

Urbanization patterns vary based on ecological regions, where the urban areas of the hilly belt, with high concentration of urban population, are mostly situated on the ridge tops. The flat plains, with a high number of urban municipalities, are developed along the highways and valley areas and have urbanized with dense, clustered building stock. The prevalent seismic risk aggravated by non-compliant and rampant construction in densifying urban core areas have increased risks to lives and challenges to effective disaster response. Similarly, in hilly areas, development of high-rise structures, without structural assessments, in steep slopes could lead to major impacts during landslides/earthquakes, while the urban sprawl in flood prone areas in flat lands have resulted in loss of lives, property and livelihoods.

In addition, in urban areas, fire incidence is high, compounded by high sensitivity of structures and activities to fire, and inadequate response capacities. The communities as first responders and local fire-fighting systems lack adequate knowledge and capacity on possible response options, which is evident from frequent fire incidents and fatalities not just in hinterlands but also in highly urbanized areas, including the Kathmandu valley. Fire risks, as a consequence, need to be prioritized. With a growing number of urban municipalities recognizing the urban risk and vulnerabilities, UNDP with support from the European Union (EU) is implementing the "Reducing disaster risks and enhancing emergency response capacities in multi hazard-risk prone urban areas of Nepal" project (hereafter 'Project') for enhancing urban disaster preparedness and strengthening the disaster risk governance in selected municipalities. The project has been implemented under the EU/ECHO Humanitarian Implementation Plan (HIP) 2019-2021.

2.3 The Programme

Since June 2019, "Reducing Disaster Risk and Enhancing Emergency Response Capacities in Multi-hazard Risk Prone Urban areas of Nepal", here-in-after called "the project" was implemented in core urban areas of three at-risk cities namely Bharatpur Metropolitan City, Bhimeshwor Municipality, Lalitpur Metropolitan City of Bagmati Province. These three municipalities are three geographically and climatically diverse urban centers and each of the municipality represent high hills to mid hills to flat plains with differing vulnerability to hazards. It took a total of 6 wards (two wards from each municipality). The project took ward 3 and 6 in Bhimeshwor, ward 16 and 19 in Lalitpur and wards 2 and 10 in Bharatpur. However, the entire municipalities were benefitted by the interventions through development of plans, policies, frameworks and guidelines.

The total duration of the project was 29 months (June 2019 to October 2021, with 8 months non-cost extension. Project's interventions were designed in such a way that entire municipalities are benefitted through development of plans, policies, frameworks and guidelines. FORWARD Nepal, HURADEC Nepal and FSCN are the partner NGOs in these municipalities respectively. Total budget of the project was USD 13,43,003.9 (USD 2,01,451.39 contributed from UNDP and USD 11,41,552.51 from ECHO). European Commission Directorate-General for European Civil Protection and Humanitarian Aid Operations (EU Humanitarian Aid) funded this project.

The principal objective of the project was to enhance urban resilience through strengthened emergency response capacity of the local authorities and communities to the future disaster risks, with institutionalization of risk informed, inclusive and participatory processes. Its specific objectives are to enhance understanding of the communities and local authorities of at-risk urban areas about underlying multi-hazard risks and vulnerabilities to undertake system strengthening, structural and non-structural interventions for effective and coordinated emergency response and risk reduction.

The aim of the project was to create a shared understanding on urban disaster risks and evolve mechanisms and measures that aids the communities, municipal governments, and private sector to address the risks and effectively respond to emergencies, with specific focus on vulnerable populations. The project was designed to achieve the following three results:

- Enhanced understanding of disaster risks at community and municipal levels in selected high-risk urban areas *(Result 1)*.
- Systems strengthened/established at all levels for effective emergency response and management *(Result 2)*.
- Enhanced disaster preparedness at community and municipal level for effective emergency response and risk reduction *(Result 3)*.

The project is expected to contribute UNDAF/CPD Outcome 3 which says "*by 2022, environmental management, sustainable recovery and reconstruction, and resilience to climate change and natural disaster are strengthen at all levels*" and CPD Output 3.4 says "*capacities of sub-national governments and communities strengthened for disaster preparedness and response, environmental management and climate change adaptation/disaster risk reduction (CCA/DRR)' improved capacities of communities and government for resilient recovery and reconstruction*".

This evaluation planned to assess the relevance, coherence, effectiveness, efficiency, sustainability and impact of the project intervention. In addition, the evaluation will indicate if the produced results are in the right direction towards facilitating and enhancing urban disaster preparedness and management in the project areas. As per the ToR, the evaluation will cover following areas:

- *Relevance of the project:* review the progress against its purpose, objectives, outcomes, outputs and indicators, as per the project document and as defined in the project's Theory of Change, as well as ascertain whether assumptions and risks remain valid. Identify any other intended or unintended, positive or negative results.
- *Effectiveness and efficiency of implementation approaches:* review project's technical as well as operational approaches and deliverables, quality of results and their impact, alignment with national priorities and responding to the needs of the stakeholders covering the results achieved, the partnerships established, as well as issues of capacity enhancement and utilization. Review the project's approaches, in general and with regards to mainstreaming of gender equality and social inclusion, with particular focus on women and excluded groups, including persons with disability. Review external factors beyond the control of the project that have affected its implementation positively or negatively.
- *Sustainability:* Review and assess the sustainability of the results achieved, risks and opportunities (in terms of resource mobilization, synergies and areas of interventions) related to future interventions.
- *Assess planning, management, monitoring, reporting:* Review planning, management, monitoring, reporting and quality assurance mechanisms for the delivery of the project interventions.
- *Assess coordination and communication mechanisms:* Review coordination and communication processes and mechanisms with the key Project stakeholders.
- *Impact of COVID-19 in project's interventions:* Review how the implementation of project interventions may have been impacted by COVID-19 and if/how the reprogramming for immediate response was effective and appropriate.

This evaluation will assess how and to what extent gender equality and social inclusion (GESI), partnership, and human rights (as cross-cutting themes) are integrated into the project's design, participation mechanisms, benefit-sharing, and monitoring & evaluation. The evaluation questions will assess the extent to which the project was effective in promoting GESI, partnership and human rights to most at risk populations including persons with disabilities in urban disaster risk and emergency response. The evaluation will also assess the project's performance against the existing policy provisions of the UNDP and the GoN on GESI, partnership and human rights. In the evaluation process data will be disaggregated by gender, ethnicity and the disability status of beneficiaries, as much as possible.

3. Evaluation scope and objectives

3.1 Evaluation scope

The evaluation assessed the relevance, effectiveness, coherence, efficiency, impact and sustainability of the project interventions in three municipalities (Bharatpur, Lalitpur and Bhimeshwor) between June 2019 and December 2021. The evaluation also assessed whether the project results were in the right direction towards contributing its overall goal and purpose. In addition, the evaluation has also accessed the relevancy and effectiveness of the immediate response to COVID-19. The evaluation has assessed how and to what extent gender equality and social inclusion (GESI), partnership, and human rights (as cross-cutting themes) are integrated into the project's design, participation mechanisms, benefit-sharing, and monitoring & evaluation.

3.2 Evaluation objectives

The overall purpose of this final evaluation is to assess the results achieved and lesson learnt by the project. Its specific objectives as per the terms of reference (ToR) are to:

- ascertain the achievements of the project and its relevancy, effectiveness, efficiency, sustainability and impact, including synergies with other UNDP support efforts,
- assess the effectiveness and usefulness of the various DRR strategies implemented with support from the project to enhance the understanding of disaster risks by the elected representatives and other local stakeholders including most vulnerable people for early preparedness and mitigation measures,
- review and assess the risks and opportunities (in terms of resource mobilization, synergy and areas of interventions) directly linked to the project,
- assess engagement of the municipal and ward stakeholders in the project, and their understanding, including financial and other commitment for sustainability of activities beyond the scope of the project,
- assess the effectiveness and relevancy of the capacity enhancement trainings, such as fire fighter, search and rescue (SAR), first aid (FA), etc.
- assess the effectiveness of Local Emergency Operation Centers (LEOCs) supported by the project in emergency response and management,
- assess the formulation process and effectiveness of the disaster risk reduction and management (DRRM) plans, guidelines and enhancement of community capacity to respond to future disasters,
- assess the potential for replication of project approaches and results beyond the project, including by government and other stakeholders, and
- assess effectiveness of COVID-19 response support activities with the local governments that were woven into the project in response to the first wave of COVID-19 in Nepal.

As the ToR call for, this evaluation has assessed the relevance, effectiveness, coherence, efficiency, impact and sustainability of the project on the basis of key evaluation questions in the ToR (Annex 1).

3.3 Evaluation criteria and evaluation questions

Evaluator followed the OECD-DAC's revised evaluation criteria viz. relevance, effectiveness, coherence, efficiency, impact and sustainability along with cross-cutting criteria viz. partnership, GESI and human rights (refer annex 2). The guiding questions are outlined in annex-3.

4. Evaluation methods and approach

The evaluation was conducted in accordance with the UNDP Evaluation Guidelines 2019. Evaluator adopted a mixed approach by integrating qualitative and quantitative tools and techniques for the

data collection and analysis. The evaluation stages included (i) desk review, (ii) prepare inception report, (iv) field visits to project's municipalities, (v) data analysis and interpretation, and (vi) evaluation report writing and finalization. In order to cover the scope and spirit of the ToR, the evaluator integrated both qualitative and quantitative tools and techniques for the data collection. The focus, however, was on qualitative assessment to enrich the raw data collected and develop more insight into the project's accomplishments and lessons learned.

4.1 Data collection procedures and instruments

4.1.1 Secondary data collection

i. Kick-off meeting: A kick off meeting, organized with CDRMP/UNDP team, helped to discuss on data collection plan, expectations, and tools and techniques to be adhered for collection of primary information. This meeting further helped to clarify details on describing the evaluator's understanding and how the evaluation questions are addressed.

ii. Desk mining: As part of this evaluation, following documents (refer annex-4) were reviewed:
- Project document/proposals
- Consolidated quarterly and annual reports
- Minutes of project board meetings
- Project modification document
- Knowledge products
- Communication and Visibility reports
- IEC Materials
- Emergency Preparedness and Response plan (EPRP), relief Guidelines, Ward level EPRP, Volunteer mobilization guideline
- MEOCs Standard Operating Procedures
- Simulation guidelines
- Fire incidences documentation

iii. Sampling design and methods: Sample size was defined for the (i) selection of the projects to be inquired, (ii) selection of the communities within the project area, (iii) selection of the beneficiaries for the focus group discussions (FGDs), and (iv) selection of the respondents for the key informant interviews (KIIs). The sites to be visited along with numbers were finalized in consultation with CDRMP team and is included in this inception report. Number of communities were selected based on random sampling methods within purposive sampling framework so that diversity of communities in terms of of class, age, gender, caste, ethnicity, well-being, and socio-economic background could be selected.

Evaluator utilized a "desk review template" to identify initial findings. This data were triangulated with the data collected through consultations and interviews, which have allowed him to see information gaps and adjust in evaluation of checklist and guide questions accordingly by use of suitable data collection tools. The list of KIs is given in annex-5.

4.1.2 Primary data collection

a. Qualitative information

i. Key informant interview (KII): The Evaluatior used KII tool with following stakeholholder based on agreed checklist and guide questions realted to relevance, coherence, effectiveness, efficiency, impact and sustainability:
- Relevant officials of National Disaster Risk Reduction and Management Authority (NDRRMA) and Ministry of Federal Affairs and General Administration (MoFAGA) at federal level

- Chairpersons of DMCs (ward level) and LDMC (municipality level)
- DDMC members in three districts
- Relevant staff at Municipal Emergency Operation Centers (MEOCs)
- Staff of Fire stations and municipal police
- Staff of Petrol stations and petroleum dealer association members
- Relevant officials at few hospitals, schools and hotels
- Relevant staff at implementing partners: FORWARD Nepal, HURADEC Nepal and FSCN
- Project team
  - At Kathmandu (Project Coordinator, Senior Communication Assistant and Admin/Finance Assistant)
  - At Municipal teams (Municipal Technical Officer, Information Management Officer, and Technical Engineer.
- Municipal teams
  - Community Development Workers, Project Support Officer, Project Focal Point (Executive Director) and Admin and Finance Officer.
- UNDP senior management
  - UNDP Policy Advisor, DRR and Resilience Portfolio
  - UNDP Portfolio Manager, DRR and Resilience Portfolio
  - UNDP GESI Advisor
  - Programme Officer, European Commission, Directorate-General for European Civil Protection and Humanitarian Aid Operations-Nepal
  - CDRMP Project Manager

ii. Focused group discussions (FGDs): FGD tool was used to gauze project's progress from empirical questions (e.g. what happened, and why) to more subjective questions (e.g. what mattered most, to whom, and why). FGDs were conducted with the following category of beneficiries:
- Most at risk populations: men and women, Dalit, persons with disabilities and other excluded groups (at least one FGD with women only)
- Member of TLOs and women Groups
- People receiving Social Security Fund (SSF)
- LGBTIQ, Muslim community, and people residing in urban slums.

iii. Case studies: Using thematic case studies, evaluator assessed the impact of the project on the beneficiaries, particularly the benefits they accrued from the project and the visible changes in their lives, and overall well-being. The types and number of cases were decided in consultation with UNDP. Stories of change tool was explored through "most significant change[1]" method and kept in the report to substantiate the qualitative findings. The views of direct beneficiaries and stakeholders were recorded and presented as 'direct quotes.

iv. Approach to collect lessons learnt: Throughout the consultation process with various stakeholders listed above, learning were collected in using the four steps viz. (i) introduction, (ii) assessment of the overall project approach, (iii) identify the "success factors" or "struggle factors", and (iv) collect recommendations for future activities.

b. Quantitative information
The evaluator relied on project-generated secondary data as its quantitative information. During the desk review, the evaluator analysed quantitative information by developing and filling empty tables and verified those with the support of project's staff. The baseline vs end line data were also used to measure the impacts level indicators. A method of data collection and analysis was designed in such a way that it integrated gender, used disaggregated data and reached out to diverse stakeholders.

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[1] Rick Davies and Jess Dart. The Most Significant Change (MSC) Technique: A Guide to Its Use. 2004. (available at www.mande.co.uk/docs/MSC Guide.htm)

In summary, following table shows project's specific objective vs. data collection tools/approach.

Key evaluation issues		Methods and tools
1.	To ascertain the achievements of the project and its relevancy, effectiveness, efficiency, sustainability and impact, including synergies with other UNDP support efforts.	Desk review, FGDs, KIIs Most significant change Case studies
2.	To assess the effectiveness and usefulness of the various DRR strategies implemented with support from the Project to enhance the understanding of disaster risks by the elected representatives and other local stakeholders including most vulnerable people for early preparedness and mitigation measures.	Desk review, FGDs, KIIs Most significant change, case studies, media reports
3.	To review and assess the risks and opportunities (in terms of resource mobilization, synergy and areas of interventions) directly linked to the Project.	Desk review, FGDs, KIIs
4.	To assess engagement of the municipal and ward stakeholders in the project, and their understanding, including financial and other commitment for sustainability of activities beyond the scope of the Project.	Desk review, KIIs, case studies, media reports
5.	To assess the effectiveness and relevancy of the capacity enhancement trainings, such as fire fighter, Search and Rescue, first aid, etc. To assess the effectiveness of Municipal Emergency Operation Centers (MEOCs) supported by the Project in emergency response and management.	Desk review, KIIs,
6.	To assess the formulation process and effectiveness of the DRM plans, guidelines and enhancement of community capacity to respond to future disasters.	Desk review, KIIs
7.	To assess the extent of the engagement of vulnerable populations including women and excluded groups for enhancement of disaster preparedness.	Desk review, FGDs, KIIs Case studies
8.	To assess effectiveness of COVID-19 response support activities with the local governments that were woven into the project in response to the first wave of COVID-19 in Nepal.	Desk review, FGDs, KIIs Case studies

4.2 Data analysis and development of evaluation report

All the process and methods discussed in the above sections helped evaluator to gather plenty of evidence about the outcomes generated by the project. For qualitative analysis, the evaluator triangulated project's results and outcomes using a thematic approach and the content analysis[2] tool. It classified the responses and grouped similar responses together to identify the key issues and themes of concern to respondents. Quantitative data were analyzed using simple Excel tools. The primary, secondary, qualitative and quantitative data collected using the different tools and techniques were then tabulated, synthesized, and analyzed to identify conclusions. Based on the overall conclusions, a few strategic recommendations were provided for use in designing similar programs in the future.

4.3 Performance standards

The evaluator used a five-point scale against the DAC evaluation criteria to assess the performance of the project.
- Highly satisfactory (1): Project performed well overall against each of the evaluation questions.
- Satisfactory (2): Project performed well overall against the majority of the evaluation questions but there was some room for improvement.
- Moderately satisfactory (3): Project performed moderately against almost half of the evaluation questions but there was considerable room for improvement.
- Somewhat satisfactory (4): Project performed poorly overall against the majority of the evaluation questions but there were immediate and considerable steps that should have been taken for improvement.
- Not satisfactory (5): Project performed poorly in almost all the evaluation questions and there were immediate and major steps that should have been taken for improvement.

4.4 Stakeholder participation

Relevant stakeholders were participated in this evaluation during data and information collection. They were treated as key informants. Communications were made throughout the evaluation process for their quality time, and their inputs.

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[2]This is the technique usually used to analyze qualitative data.

4.5 Ethical consideration

The evaluation was carried out with serious consideration that none of the caste, creed, religion and social class was intentionally pointed. It has ensured strict adherence to human subject research ethics related to anonymity, confidentiality, and informed consent during the evaluation. Evaluator adhered the UNEG Code of Conduct throughout the evaluation implementation.

4.6 Background information on evaluators

Independent evaluator- Dr Dhruba Gautam completed this evaluation. Dr. Gautam is from Disaster Risk Reduction background (who lead this evaluation). The evaluator holds over two decade long national and international experiences in evaluation, and knowledge management. Combination of DRR and emergency preparedness and response expertise with extensive experiences on project/programme evaluation of different scale and scope was a unique opportunity to accomplish this task. The evaluator was well acquainted of the project locations and the stakeholders which was an additional advantage to complete the task even in the difficult situation of COVID-19 pandemic.

4.7 Major limitations

Though there was risk associated with the collection of primary data from the project's real beneficiaries due to COVID-19, but evaluator followed the safety protocols and standards of the Nepali government and collected empirical data through systematic fieldwork.

5. Evaluation findings

5.1 Relevance

Responding to evaluation questions among 42 key informants, 37 (88%) respondents said that the project was highly relevant to the context (Table 1). Relevance was assessed based on following points.

a. Relevant to the overall design and approaches: The evaluator's review of the documents and consultations with project stakeholders revealed that project was relevant in terms of its

Table 1: Key informant's response on project's relevance

To what extent the project was relevant in the present context'? (N=42)				
Highly relevant	Relevant	Partially relevant	Not relevant	Don' t Know
N=37 (88%)	N=4 (12%)	N=0 (0%)	N=0 (0%)	N=0 (0%)
Source: KIIs, 2021				

overall design and approaches. As all three project municipalities are rapidly urbanizing and developing as economic hubs, their selection was also relevant. The risk of earthquake and fire in these municipalities is many folds more than the risk of other hazards (refer Annex 6, Table 1). The selection of two core urban wards within each of the three municipalities was also relevant given the project's tenure and resources available. The project not only helped people reduce the disaster risk but also addressed the crucial needs of deprived and vulnerable communities, especially informal urban settlements (slums), populations accessing social security allowances (SSAs), people living in pockets of poverty, persons with disabilities (PwDs), urban squatters and dwellers, single women, senior citizen, and children, members of the LGBT community, and marginalized populations like Muslims and Dalits, through project interventions, thereby addressing their needs and priorities. The project's three key results are also relevant in the context of the federal and local governments as they were structured so that each reinforced the other two. FGDs and KIIs revealed that the project's activities, such as contingency planning, the engagement of private-sector entities/service providers and the identification of both the most vulnerable of households as well as most at risk structures were also relevant.

The project's focus on both fires and earthquakes was relevant, but its design and implementation were less focused on earthquakes than on fires. These hazards were indeed the major risks in the urban areas that the project identified during the needs assessment phase using vulnerability and capacity analysis (VCA). Urban stakeholders admired the project's decision to recognize fire as a crucial issue in urban and peri-urban areas. Fire risk assessment is one national priority identified by National Disaster Risk Reduction and Management Authority (NDRRMA). The VCA identified schools and hospitals as two of the most at-risk types of community infrastructures when it comes to fires and earthquakes. Stakeholders had a very limited understanding of the risk to schools and hospitals. Working with schools and hospitals helped a lot in identifying the exposure, vulnerabilities and risks realization of these infrastructures and safeguarding school and hospital families through preparedness and risk-reduction plans and policies. Most schools and hospitals constructed in urban areas do not uphold building codes or invest in even minimal fire and earthquake preparedness measures. Thus, they pose a disaster risk.

b. Addressed the needs and priorities of the target groups and communities: Despite the COVID-19 pandemic, the project was able to address the crucial needs and priorities of the target groups and communities. The project was relevant in that it was able to adapt to the needs of the different target groups and to create enabling environments for drawing up and carrying out preparedness policies and actions that were inclusive and focused on vulnerable populations. The findings of a knowledge attitude and practice (KAP) survey and baseline simulation exercises helped stakeholders to internalize the risks and vulnerabilities associated with fires and earthquakes. As the project used the poverty-mapping tool developed by UNHABITAT, it was able to identify the most vulnerable of households within the selected core urban wards. It was difficult to address needs of the urban poor as these needs are unlimited and time and resources both had constraints. In Bharatpur, a total of 89 individuals (34 were women) from private hospital associations, the chamber of commerce, and hotels associations were involved to increase their awareness about risks and vulnerabilities and the impact of disasters on their businesses and enterprises. More than 927 people (516 were women), including members of slum dwellers' associations, were oriented to fire preparedness and safety. The project's decision to involve Muslim and LGBT communities from Bharatpur, the Thami from Bhimeshwor and urban dwellers and squatters from Lalitpur and Bharatpur was highly relevant as they are the most at-risk communities in normal times and they bear twice the risk during disasters. In Bharatpur, Muslims were involved in fire preparedness because they organized a lot of *dawat* (feasts) and women spend long periods of time in sub-standard kitchens that pose a high risk of fire. In Bhimeshwor, the Thami were selected to reduce their risk of landslides (actually migrated here from other locations following the earthquake of 2015). The project's decision to focus on PwDs and senior citizen was relevant as these two categories of people are the hardest hit during any type of disasters. In Lalitpur, the project worked intensively on the issues of PwDs in coordination with the "Disability Forum" and "Lalitpur Hearing Impairment Union" by involving them in discussions, review-and-reflection sessions, orientation, and training related to the risks of fires and earthquakes. In Bhimeshwor, in collaboration with municipality and hospital, the project also conducted hearing screening of more than 200 senior citizen and PwDs. With the project's support, Lalitpur-19 installed a siren system with three bulbs and one switch in the hostel of PwDs with hearing and speaking impairments and provided hearing aids to eight people. The project also integrated the voices of PwDs in the planning processes of wards and municipalities and involved them in fire response training. In all three municipalities, the project also worked with senior citizens to improve their hearing capacities. In Bhimeshwor, stakeholders admired the fact that 15 daily wage laborers from the Thami community were involved in planning meetings, which were conducted by maintaining social distancing during COVID-19, and were paid travel allowance so they could address their emerging needs.

c. Contributed to the preparedness efforts of NDRRMA and MoFAGA: Collaboration and interlinkages with NDRRMA and Ministry of Federal Affairs and General Administration (MoFAGA) at federal and local level helped the project achieve results. Project activities were in line with the priorities outlined by municipalities for DRRM. NDRRMA provided inputs on urban fire risk

assessments. NDRRMA and MoFAGA were also involved in the development of various IEC and knowledge products designed to communicate risk in order to avoid duplication, the implementation of studies and the formulation of policies and guidelines for urban disaster preparedness and emergency response. The project also engaged with MoFAGA to discuss and roll out of a risk-transfer guideline [3] across all local governments. The project's risk transfer guideline was not translated into action partly because the project had limited time due pandemic and partly because it was hard to sensitize people as the approach was very new in Nepal's context and municipalities have no legal support to expedite the process.

The project helped to create an enabling environment that included the public and private sectors, media, and civil society to coordinate at the community, local, provincial and federal levels to manage and reduce disaster- and climate-related risks. In doing so, it was instrumental in strengthening disaster-risk governance at the local level and contributing towards effective urban preparedness.

5.2 Coherence

a. Interventions suited the context of the COVID-19 pandemic: Stakeholders claimed that project's key interventions were appropriate despite the new context introduced by the COVID-19 pandemic. To ensure the smooth operation of its activities, the project developed a COVID-19 contingency plan for use during project implementation. It also re-allocated EURO 39,400 (savings accrued by running many capacity-building initiatives, meetings and consultations online) for pandemic- and monsoon preparedness-based activities without hampering the project's overall goal and purpose.

b. Interventions cohered with government policies: Project interventions are aligned with the priority areas of the three municipalities. The project was also in line with the National DRR Policy (2018) and the National Strategic Action Plan (2018-2030). Its design was based on all four priorities of SFDRR. Within the federal context, all municipalities have the authority and mandate to design and lead DRRM activities by mobilizing their own resources and external resources from DRR actors. Accelerated risk assessment, risk reduction, emergency preparedness and emergency response--the four key components of the project were congruent with the local government's key DRRM mandates. There was good coherence with the government's urban DRRM policy instruments, too. The objectives of the project were coherent with its inputs, activities, outputs and indicators as well as with the theory of change. Its design was based on the third outcome and the outputs of the Country Program Document, and with the SDGs, and the UNDP Strategic Plan.

c. Interventions exhibited internal coherence with their synergies and interlinkages: The data and evidence collected during the evaluation consultations revealed that, together, project interventions have created synergies and interlinkages among relevant stakeholders. It was said that coordination with UNRCO helped to sensitize municipal DRR teams to the operational mechanisms of humanitarian clusters during emergencies. UNDP Funding Window's DRRM project helped to enhance local and sub-national capacities for risk-informed planning and implementation. Earlier work with the MoHA's initiative to develop a disaster information management system (DIMS) supported by UNDP, particularly one which collected information on risks, conducted capacity mapping, collected baseline data, ran early warning systems (EWSs), and supported a damage-and-loss database, also added value to this project. The previous operations of ECHO Action in two other wards of Bhimeshwor helped the project to understand the rural disaster risk landscape and potential risk reduction options.

d. Interventions exhibited external coherence with other actors' interventions: UNDP has been coordinating with Government of Nepal (GoN) line ministries, National Planning Commission, NRA and relevant stakeholders on the development of a DRRM policy landscape, namely the DRRM Act,

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[3] This guideline covers Disaster context in Nepal, Risk transfer mechanism, Insurance, Microinsurance, Risk transfer through insurance, Task to be initiated by LGs for risk transfer, Required documents for insurance, Insurance process, and Insurance claim.

DRRM Policy, Strategic Action Plan and many frameworks. It also proactively engaged in disaster preparedness through regular surveillance and in disaster readiness through emergency operation center (EOC) networks, provided capacity-building training in flood, fire and earthquake response through the mobilization of security forces, fire stations, local authorities and, in addition, beneficiaries and communities at risk. IEC materials were developed in close coordination with NDRRMA and MoFAGA. Federal stakeholders such as NDRRMA, MoFAGA and Ministry of Home Affairs (MoHA) and National EOC (NEOC) benefited from project-generated data and information. Regular monthly coordination meetings organized by ECHO partners provided ample opportunities to learn from each other's experience, coordinate and complement activities, and promote the cross-fertilization of knowledge. Exposure visits of project staff and MEOC representatives to the District EOC (DEOC) in Banke and Bardiya and the LEOC in Barbardiya helped project and MEOC staffs to learn from the ECHO-funded Danish Red Cross (DRC) project's efforts to form and strengthen LEOCs. The Tayar/USAID project in Bhimeshwor supported the preparation of risk sensitive land use plan (RSLUP) where urban DP project supported the initiatives by making data on risks, vulnerabilities, and capacities available with geo-references to Tayar team. Policies and guidelines developed at the municipality level were shared with MoFAGA and NDRRMA officials to get their input and feedback before finalizing policies and plans. A consortium led by the Save the Children helped to foster school-based DRR (DRR through the school approach) and a WHO-led consortium helped enhance health-crisis preparedness. Both the DRR and health-crisis initiatives were funded by ECHO. The project also coordinates with Tayar Nepal to promote synergy through regular meetings on a monthly basis. In Ratnanagar municipality (adjoining to Bharatpur), the project Building Resilience through Inclusive and Climate Adaptive Disaster Risk Reduction, which gets funding support from the Asian Disaster Preparedness Centre, helped to coordinate with local and federal government entities. Functional coordination with other agencies helped to reduce duplication, utilize resources in a meaningful way and create synergy through joint policy advocacy.

The selection of three partner NGOs was relevant as their long-term goals and strategies were congruent with the project's overall goals and strategies. The goals and strategies of the three NGOs included (i) improving the quality of life of marginalized communities through empowerment, socio-economic transformation, inclusive development, and risk reduction (FORWARD in Bharatpur), (ii) contributing to livelihoods, DRR, food security, climate change adaptation, WASH and governance through local resource mobilization and knowledge management with special focus on poor and marginalized communities (FSCN in Lalitpur), and (iii) contributing to human rights, DRR, good governance, livelihoods, education, health and WASH by strengthening institutional capacity (HURADEC in Bhimeshwor). There was a great deal of coherence between the project's overall goals and its partner NGOs.

5.3 Efficiency

Responding to questions about the alignment of project's activities with expected results, nearly 93% of informants said that activities were fully aligned with the expected results and 7% said partially aligned. Similarly, in terms of the efficiency of resource use, 88% key informants rated the project as highly efficient and 12% said efficient (refer Table 2). Evaluation of efficiency was made in the following heads:

Table 2: Key informant's responses on efficiency

1. To what extent the project's activities were aligned with the expected results?					
Total responses (n=42)					
Fully	Partially	To Some extent	Not at all	Don' t Know	
39 (93%)	3 (7%)	0	0	0	
2. How did you find the implementation and resource (technical, financial) mobilization of the project?					
Total responses (n=42)					
Highly Efficient	Efficient	Moderately efficient	Not efficient	Not efficient at all	Don' t Know
37 (88%)	5 (12%)	10	0	0	0

Source: KII, 2021

a. Timeliness of the project's achievement of its results: Evidence gathered during the evaluation consultations revealed that the project successfully utilized its human, material and financial resources to achieve results. Good coordination and collaboration among the project, partner NGOs, project municipalities and wards, and users' committees helped it to achieve results in a timely fashion despite the impacts of the pandemic. Project's records revealed that around 20% of project activities were completed significantly before the planned date, almost 50% by the planned date and 30% activities during the seven months' extension period. Delays were attributed to the pandemic, the fact that none of the three project municipalities had concrete DRRM policies, and the length and tediousness of government procedures to ensure matching funds. As urban DRR is a new issue for UNDP Nepal, the agency took time to be able to streamline project activities despite its being a pioneer agency in community-based DRR. The project utilized learning derived from other projects and applied it to the new urban context. Consultations with project staff revealed that the types of activities, the expertise required and the human resources available and the time were all very well matched. The number of activities and the project's tenure were not well correlated. The project managed human resources[4] logically and efficiently. In the lead role of Project's Coordinator, Senior Communication Consultant effectively supported communication, knowledge management and making urban disaster preparedness visible and a Consultant Engineer (not originally provisioned for in the project's document) provided technical backstopping for structural and non-structural activities. Municipality officials admired the role Information Management Officers (IMOs) seconded to the project municipalities played in ensuring the smooth functioning of LEOCs, maintaining a database, and transferring skills and knowledge to municipal staff. Project stakeholders acknowledged the high quality and prompt provision of inputs from the Disaster Resilience Program Specialist and the M&E and GESI Officers of UNDP/CDRMP even though they were not able to physically monitor activities frequently due to the pandemic.

A few staff left their jobs during project implementation. That said, in Lalitpur, the IMO left his job in February 2021 and the Municipal Technical Officer (MTO) in May 2020. Both vacant positions were filled within a month, one with a new recruit and the other with a lateral transfer from another project. In Bharatpur, the Project Support Officer (PSO) discontinued his service in February 2021 but his post, too, was filled within a month. Because of the quick filling of vacant posts and the proper induction of new staff members, there were only minimal gaps in progress. The project was also successful in utilizing its financial resources (refer Annex-6, table 2); indeed, almost all of its resources had been utilized by the end of October 2021. The funding plan was realistic, an assessment illustrated by the fact that there was little difference between planned and actual expenditures despite the impacts of the pandemic. The analysis of the budget by result revealed that expenditure was between 97% (the project leveraged more resources than it had anticipated from municipalities and third parties) and 101% (slightly more training and simulation events were conducted than planned), refer Annex-6, table 3.

Consultations with stakeholders revealed that the project faced several challenges during implementation but that the project was able to address those challenges by applying its effective and systematic approach. To fill the gaps in the disaster-related database, primary and secondary data were gathered, compiled and maintained in a more coherent way than they had been. The project's thorough risk assessment was instrumental in raising awareness about various disasters which contributed toward risk realization and thereby reducing risk at the local level. In Bhimeshwor, to address the problem of coordination which arose due to a lack of a forest, environment and disaster management section, the project worked closely with DRR focal person (through Planning officer) and social welfare section. To change the municipality authorities' belief that infrastructure development initiatives should get priority over DRR and preparedness, a series of advocacy and subsequent review-and-reflection sessions were organized. Involving the senior management of municipalities in DRRM review-and-reflection sessions helped to increase budget allocations to

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[4] The project provided one Coordinator (PC), three Municipal Technical Officers (MTOs), and one Administration and Finance Associate. It was good that three Project Support Officers (PSOs) and six Community Development Workers (CDWs) were hired to serve under the MTOs stationed in each project municipality.

DRRM through regular municipal planning and budgeting processes. To address the multi-faceted vulnerabilities of urban areas, vulnerability criteria for urban areas were defined and agreed upon in a participatory fashion and then acted upon.

b. Appropriate project management structure for generating results: The project management structure was appropriate for and efficient in generating the anticipated results. Because of its efficiency, results were generated within a limited time and with limited resources despite the impacts of pandemic. It was said that partnerships with NGOs considerably reduced the time required by and the management costs of the project. During interviews, stakeholders appreciated the project's use of existing social platforms such as school and hospital management committees, tole lane organizations (TLOs), women groups rather than establishing new institutions. During fieldwork, the participants in FGDs and KIIs said that forming users' committee was a logical step toward expediting mitigation work and fostering ownership of project activities. The majority of the junior staff of the partner NGOs were from project areas, a fact which helped the project to build rapport with municipalities and project stakeholders. The social capital and institutional memory of the partner NGOs helped increase programmatic efficiency. There was a sense of team spirit and belonging among all staff, whether they worked for UNDP, the project or one of the partner NGOs.

c. Implementation strategy and cost effectiveness: The project's approach and strategies were efficient because they were developed so that they ensured (i) the participation of at-risk communities in decision-making during design and implementation, (ii) the practice of GESI in institution-building and service delivery, and (iii) transparency in project work. As the local staff of partner NGOs were from project communities, the risk of turnover was limited and efficiency was high. According to informants, the project implementation strategy and its execution were efficient and cost effective. Virtual meetings with MTOs and IMOs were instrumental in updating stakeholders about the project's progress, sharing issues and concerns, and crafting plans to resolve issues without delay. Where possible, in-house experts were used to carry out studies and develop policy instruments[5], otherwise at least NPR 3.0 to 3.5 million need to arrange for external consultants, which saved project money. Such efficiency was attributable to the fact that the project (i) promoted local resources like wood and stone in mitigation works, (ii) used local human resources (skilled and unskilled), (iii) designed labor-intensive schemes in which community contributions ranged from 14% to 17%, (iv) used local municipality rates while designing mitigation work, and (v) made payments based on actual field measurements rather than on initial estimates. Hospital-based activities were not implemented in Lalitpur Municipality as the ECHO-funded WHO consortium project[6] had already contributed a lot to hospital preparedness and emergency response.

The project achieved value for money by mobilizing resources strategically, sharing costs equitably, and employing a competitive procurement process. The project allocated only 5% as management costs to partner NGOs (excluding the costs of human resources and office operation). The matching fund modality that the project adopted not only increased the efficiency of resource use but also fostered local ownership of the project. Where applicable, relevant government officials were used as resource persons in various capacity-building trainings, a practice which helped to build new connections between local communities and municipality officials. In order to avoid program duplication and foster managerial efficiency, the project maintained a good relationship with humanitarian agencies and development actors.

The project was successful in leveraging NPR 49,38,806[7] as co-funding from the government and private sectors while imparting training, organizing drills and carrying out mitigation work (refer

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[5]Those policy instruments included (i) a document on lessons learned regarding COVID-19, (ii) a guideline of mobilizing volunteers, (iii) a guideline for mainstreaming disasters (Bhimeshwor), (iv) a municipal fire station capacity assessment, and (v) a MEOC assessment.
[6] Strengthening emergency response capacity of critical hub hospital networks through enhanced hospital safety and their linkages with prehospital and post-hospital care services and the community.
[7]In Bharatpur, a total of NPR 1182000 was contributed as co-funding from government and private agencies for use in training, drills and small-scale mitigation. In Lalitpur, a total of NPR 1809516 was contributed as co-funding from government agencies (project wards) for

Annex-6, table 4). Because of this cost-efficient approach, the project was also successful in mobilizing resources from municipalities, wards and the private sector.

d. Allocation of resources to achieve outcomes and outputs: The project allocated resources such as funds, staff, and expertise strategically to achieve its anticipated results. Only one additional staff member was recruited, a consultant engineer, who was hired to oversee the technical aspects of both structural and no-structural activities. As the project's human resources had several years of experience in policy advocacy and were very familiar with urban issues, the project had good results in providing policy support to municipalities. The project's internal planning was also realistic in that all its majority of the activities were completed within the timeframe laid out and all were of high quality. In Dhaugal Bazar (Lalitpur-16), the underground water tank constructed with project support has not yet been connected with a fire hydrant system though ward officials are committed to complete do so within this fiscal year. The estimated cost of the work, which is to be invested by the ward, is NPR 70,000). Though officials are committed to act once a municipal council meeting is organized and policy documents approved, approval has been delayed as internal conflicts and political reasons prevented a meeting from being held. Plans and guidelines were drafted and trainings in SAR, first aid and fire preparedness (all exercises which the findings of the simulation exercise suggested were necessary) were conducted after the lockdown was lifted.

Having a cost-free extension was also logical given the impacts of the pandemic as the project had struggled to act for around 10 months (from 23rd March to end of October 2020; and from April to May 2021). The project provided revised activities and budgets to the partner NGOs to meet the objectives in the pandemic context. Project records revealed that the no-cost extension ran from April to July 2021 and the cost-incurring extension from August to October 2021. Both extensions were made possible following consultations with EU officials. During the local lockdown period knowledge management and policy supports were fine-tuned. The extension was utilized to implement the remaining activities and to refine and consolidate already implemented activities.

5.4 Effectiveness

The project was effective, as is illustrated below. The evaluation found that project's outcomes were achieved with the fulfilment of its outcome-wise outputs. The views of local-level stakeholders and field observation revealed that project's programmatic approach and process were very effective. Out of the total key respondents, 93% said that the project was highly effective whereas 7% opined that its activities are effective (table 3).

a. Delivery of projects' activities in terms of quality, quantity and timing: Though the project faced several challenges during its implementation, its effective approach helped it to deliver the

Table 3: Key informant's response on project's effectiveness				
To what extent the project was effective in the local context'? (N=42)				
Highly effective	Effective	Partially effective	Not effective	Don' t Know
N=39 (93%)	N=3 (7%)	N=0 (0%)	N=0 (0%)	N=0 (0%)
Source: KIIs, 2021				

majority of its activities on time without compromising quality. None of the ward officials consulted said the quantity of services provided by the project was inadequate. The evaluator discovered that field-level project activities were partially hampered for 10 months due to the first two waves of the COVID-19 epidemic, both of which resulted in humanitarian crises that presented uncertainty and a dilemma to project stakeholders. Since the project supported municipal officials in responding to the impacts of COVID-19, it was able to build a great deal of trust. All the municipality officials interviewed said that the UNDP project was 'a real friend during a difficult time'. Municipal authorities admired the project's support to address COVID-19 crises, which including personal

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training, drills and small-scale mitigation. In Bhimeshor, a total of NPR 1947290 was contributed as co-funding from government agencies (municipalities, wards and users committee) 'for training, drills and small-scale mitigation.

protective equipment (PPEs), thermal guns, face masks, and sanitizers. Support for the COVID-19 response helped to mitigate the state of uncertainty. The pandemic rendered the gathering of project-related data a challenge, but it was sorted by engaging in one-to-one dialogues then discussions in groups of 3-4 people following health protocols. Small groups consultations were made emergency preparedness and response plans (EPRPs) formulations in all three municipalities. Trainings were imparted by reducing the number of participants by half[8] and by increasing the number of training events. Arranging resource person for training events was also tough during the pandemic.

Bhimeshwor had no dedicated staff at the fire station and, in consequence, the capacity of that station was poor, but with the project's continuous support and advocacy, the municipality assigned relevant staff and is now very capable of responding to fires with trained firefighters and city police. Initially, municipal authorities said that the project should minimize its capacity-building initiatives and instead increase the budget allocated to the improvement of physical infrastructures. Once a capacity-gaps analysis had been conducted using through mapping, authorities were convinced about the rationale behind capacity-building initiatives. Not have any dedicated staff for the forest, environment and disaster management' section of the municipality created a problem for the expedition of project activities. Initially, there was limited coordination among Humanity and Inclusion (HI), Tayar/USAID and the project was mitigated through a series of coordination meetings. The project also coordinated with local-level organizations[9] such as Rural Development Tuki Association, RRN, REDC, CDF, and HURADEC (NGOs) to carry out urban risk reduction and emergency response-based activities.

In Bharatpur, it was not possible to geo-reference of highly vulnerable Muslim households on a digital hazard and resource map as they refused to be mapped, claiming mapping was a security risk. The project honored their right to maintain secrecy. In Milan Tole, where the majority of residents are squatters living on non-registered *Ailaani* land, it was challenging to use municipality resources to reduce risk. The participation of PwDs in meetings and trainings was not initially possible because the majority of meeting venues were upstairs in rooms inaccessible to them. When training venues

Figure 2: Beneficiaries from ethnic diversity
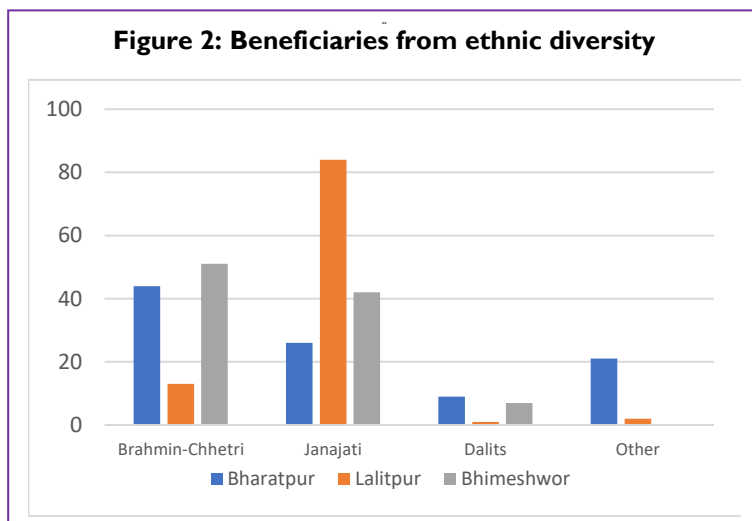
were moved to civil servant federation's office on the ground floor, their participation increased. Despite much effort, the project was not able to hand over eight isolation beds provided to the Bharatpur municipality as part of the COVID-19 response to a geriatric ward of Bharatpur Hospital for their best use. However, those beds were utilized by the Saradanagar community hospital, which later was changed into COVID-19 hospital, in ward-19, Bharatpur. Ward officials in Lalitpur said that socio-cultural challenges delayed retrofitting work on an underpass and that there was a dispute between the house owner and service receivers. Mesh wire technology learned after the 2015 earthquake and used in Government of India funded project of housing reconstruction was employed for the retrofitting work.

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[8] For example, 12 people were involved in the first aid training instead of 24, and two events were organized to impart training to the planned total of 24 people.

[9] HURADEC was the UNDP's partner NGO for this project, whereas it worked with REDC and CDF on other projects.

Despite COVID-19, very few project activities were readjusted. Some of the activities that were readjusted included capacity-building (training, awareness-raising, exposure and study visits, and guidelines for capacity-building), policy support (standard operating procedures, SOP) in Lalitpur, and a few small-scale mitigation activities. Lalitpur allocated NPR 795,000, Bharatpur allocated NPR 545,000 and Bhimeshwor allocated NPR 490000 for COVID-19 preparedness and response (refer Annex-6, table 5). These activities included the installation of hand-washing stations, the mobilization of volunteers for awareness-raising and the dissemination of IEC materials, sanitation campaigns in communities, wall painting, and the handover of materials such as thermal guns, sanitizer, masks, and PPEs.

b. Reached previously unreached and deprived communities: The project achieved all three results by involving men, women, and excluded groups, including PwDs. The project reached 61547 beneficiaries. 543 of the total beneficiaries were single women, 301 were PwDs and 160 were members of the LGBTQ+ community (refer Annex-6, table 6). In terms of caste/ethnicity, 35% were Brahmin and Chhetri, 51% *janajati*, and 6% Dalit and 8% other (refer Annex-6, table 7). The project also included other minorities like 178 Muslim households (1,032 population of two wards) in Bharatpur and 34 Thami households in Bhimeshwor. These statistics demonstrate that the project served large sections of poor, marginalized and deprived communities living with multiple risks. Stakeholders admired the fact that there were linkages between the private sector, hospitals, schools, and vulnerable populations and municipal and ward authorities. The project's engagement in preparedness was a breakthrough for urban communities in that they were able to build their capacity for disaster preparedness and emergency response. Regular communication, coordination and information management together strengthened beneficiaries' ownership of the project. The findings of the risk assessment were helpful in engaging vulnerable groups, including women who did household chores and encountered the risk of fire on a daily basis.

c. Factors that contribute to achieving or not achieving the project's intended results: Some of the factors that contributed to the achievement of results include (i) the involvement of different stakeholders in project activities, (ii) the previous footprints of UNDP's programs, and (iii) the project's fund flow mechanism. During discussions, key informants said that because the project had involved six tiers of government stakeholders—stakeholders at the community, ward, municipality, district, province and federal levels—during project implementation, it was very effective in listening to and acting upon issues. The project also involved the private sector and civil society. UNDP's previous footprint also contributed to the effectiveness of the project because rapport and coordination were both strong. UNDP has been working in Bhimeshwor on different projects since 2015. This continuous involvement helped to foster trust among district stakeholders. In five wards of Bharatpur (3, 4, 7, 9 and 11) and Bhimeshwor (1, 2, 4, 5 and 7), UNDP implemented a project called Reducing disaster risks and enhancing emergency response capacities for multi-hazard prone urban municipalities.

The project's fund-flow mechanism contributed to the effectiveness of the project. Initially, 80% of the total approved budget was disbursed from ECHO to UNDP. This first instalment was meant for the implementation of planned activities. The remaining 20% was promised after the project had completed all activities and submitted a final report. This mechanism helped ensure that the project's resources were invested on time without any constraints. Project records revealed that funds flowed from CDRMP/UNDP to the partner NGOs on time. The initial three instalments were planned for April 2020, March 2021, and June 2021 and the fourth instalment was made in October 2021 instead of September 2021 due to amendments to the budget. As small-scale risk mitigation schemes were planned based on thorough assessment jointly carried out by municipal authorities and the project and those assessments were based on scientific facts and figures, the project won the trust of municipal authorities. Small scale risk mitigation activities helped to reduce the disaster risk. The considerable budget allocated to non-structural measures for disaster preparedness and emergency response was logical as it helped in system strengthening and institutionalization (refer Annex-6, table 8).

The use of knowledge products has helped to understand urban risk and thereby to add value to the project. Stakeholders were able to understand risk through the various types of IEC materials[10] that the project produced (on fire, lightning, insurance for risk transfer, landslides, and earthquakes). The materials were developed in coordination with MoFAGA and NDRRMA. The project's decision to develop and print two sets of IEC materials, one set to demonstrate accountability to the donor and increase visibility and the other for NDRRMA to use with other development agencies, was effective. The project's production of IEC materials on preparing for fires through rainwater harvesting (RWH) helped to change the mindset of people. In this endeavor, the project applied learning from the RWH projects the UN-HABITAT implemented from 2009 to 2011 in Kathmandu Valley. The project also used social media and radio to disseminate its message. Social media such as Facebook were used to reach out to a large population. FM radio stations were used to broadcast risk-related messages through public service announcements (PSAs) and radio jingles. Ward-level digital hazard and resource maps, including evacuation maps, were developed by municipal stakeholders and erected in strategic locations for beneficiaries to observe, reflect on the illustrated risks, and take action to reduce them. Not all maps were in a proper location for the best use, however. The digital hazard and resource map of ward 6 in Bhimeshwor, for instance, needs to be relocated. In Bhulkhu, ward-16 of Lalitpur, the digital hazard and resource map is often blocked by vegetable sellers. Thus, it is difficult to use. It was estimated that the project reached 48,500 households (75% of the total population) through flipcharts, posters, and maps and mobilizing more than 60 volunteers by conducting door-to-door campaigns.

The project erected visibility materials and seven hoarding boards to disseminate information on its objectives, locations, tenure and budget. Information is displayed at each of the small-scale mitigation sites. The project used users' committees as a social platform to disseminate its mandates among project beneficiaries (refer Annex-6, table 9). Regular review-and-reflection sessions as well as sharing at the community, ward and municipal levels also helped to foster accountability and transparency. The project did not use accountability and transparency tools such as social auditing, public hearings, feedback boxes, dedicated toll-free numbers to lodge complaints, or a complaint-handling committee to receive and resolve conflicts. Social auditing and public hearings are not particularly feasible during a pandemic as those tools require people to gather. Despite the absence of such tools, the evaluator did not notice any signs that project funds were being mismanaged.

This evaluation explored some opportunities the project missed, opportunities which, had they been considered, could have generated better results and greater effectiveness. The pandemic and inadequate coordination at the federal level delayed the production of IEC materials by two months, thereby rendering them inadequately linked at the household level. Coordination at federal level specially for policy level initiatives, vehicle tracking application, and LEOC strengthening was good but finalization of IEC was little delayed as they were too occupied during monsoon-based disaster response. Stakeholders said that IEC materials were widely used during online training for teachers and that Zoom-friendly electronic IEC materials were developed and disseminated to 27 schools. The engagement of the private sector could be increased by involving it in fire and earthquake preparedness and response. If the project had been able to reform and strengthen the LEOCs in Bharatpur and Bhimeshwor at the outset of its work by allocating proper space and providing tools and equipment, those LEOCs could have generated additional results. Despite much efforts, LEOCs received materials only in July/August 2019. BIPAD data could have been better systematized if an IT/DRR focal person and city police had been mobilized at the outset and then operationalized as per the SOP. Local government-level risk transfer guidelines and other associated legal instruments were not produced on time for smooth rolling out. As a result, at-risk communities could not be interested in risk transfer initiatives through non-life insurance at the fullest possible scale. As

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[10]The project disseminated its key message through the development of eleven types of IEC materials. These included (i) one project brief, (ii) five animated PSAs on preparedness and response, (iii) four animated social media cards on preparedness and response, (iv) four radio PSAs, and (v) four TV PSAs. Other IEC materials included (i) two short videos, (ii) four printed awareness-raising materials, (iii) five posters/flyers, (iv) three types of maps, (v) 11 visibility items and (vi) 20 publications. These IEC materials helped to disseminate the project's key message to its beneficiaries.

insurance companies asked people to submit copies of *lalpurja* (land registration certificate, valuation of properties, etc.), people were reluctant to sign on to schemes. It was agreed that an insurance scheme would be piloted with 50 families from Bhimeshwor. The same situation was also in Bharatpur. The project and municipality also allocated NPR 1,00,000 each to cover the premiums of some of the families. Unfortunately, this scheme did not materialize as time was limited and the municipality was not confident about scaling it up and ensuring its sustainability. Stakeholders said that the premium for a assets worth NPR 24,00,000 was NPR 700-800 per year.

d. Monitoring and review arrangements: The project's M&E approach and mechanisms were instrumental in its achieving good results. Indicator tracking sheets were used to track activities and an online database system was developed to track the number of beneficiaries without duplication. This database was updated by the IMOs. Stakeholders admired the project's decision to monitor in four layers. First, as provided for in the project's implementation plan, Community Development Workers (CDWs) visited project activities and prepared monitoring reports at the inputs and activity levels. Second, PSOs ensured the quality of implementation by visiting project activities and produce monitoring reports at the activity level. Third, MTOs ensured the quality of project activities within the municipality at the output level and fourth, the PC, along with the Disaster Risk Management Program specialist and M&E and GESI officers provided technical backstopping and monitor outcome-level progress on a regular basis. During the project's tenure, four monitoring missions (three face-to-face and on virtual) were carried out by the EU Head of Delegation and the ECHO Program Officer (along with local governments and government ministries), and four monitoring visits by the UNDP CO (three face-to-face and on virtual), and regular monitoring visits by the government, CDRMP senior officials and joint monitoring visits by the project and local governments at the municipality level (refer Annex-6, table 10). These visits were instrumental in helping the project to understand the progress it had made in achieving urban preparedness and response, crafting a plan to reduce the gaps and lapses in the project's implementation mechanism, and checking whether project activities were either aligned or mainstreamed with the municipalities' plans and programs to ensure their sustainability. The review meetings and workshops held at the end of mission were instrumental in enabling the project to reflect on progress and identify areas of improvement and solutions. The visit of the EU Head of Delegation, EU Program Officer to Lalitpur was particularly helpful in creating a positive feeling among municipal authorities and the visit of the UNDP Resident Representative, Assistant resident representatives helped municipal authorities realize their role in disaster preparedness and emergency response.

e. Incorporation of lessons and feedback in the project's design and implementation: Evidence gathered during the review phase confirmed that the project had used earlier good practices and major learning in its design, planning and implementation. The RVA tool, for example, was refined, contextualized and employed in this project. It was a learning from a UNDP pilot study carried out in 2016 in coordination with the Department of Urban Development and Building Construction. The focus of that study was fire and earthquake mitigation in Thamel, Kathmandu, a core city area. This tool provided insight into urban exposure, vulnerability and risk accumulation and how to address those risks and build resilience. The RVA tool was used with 2,217 households in the project municipalities. It focused on inundation in Bharatpur, landslides, fire and earthquake in Bhimeshor and earthquake in Lalitpur. It was found that the percentage of extremely high risk, high risk, moderate risk, low risk and no risk houses were 1, 5, 38, 35 and 21 respectively (refer Annex-6, table 11). The improved RVA tool also helped the project map urban critical infrastructure and explore multi-hazard and multilayer vulnerabilities. While mapping vulnerable populations and exploring the protection issues of women, children, and senior citizens, the project used the UN-HABITAT's learning from the 2015 earthquake. The ECHO-funded Pragati project implemented in Shankharapur and Changunarayan municipalities of Kathmandu and Bhaktapur respectively was instrumental in engaging community emergency response teams (CERT) and the private sector in urban disaster preparedness and emergency response. The learning of the ECHO-funded Reconstruction Project (2017-2019) implemented by UNDP in Dolakha helped to ensure that the

poor, marginalized, and deprived and those populations receiving social security allowances (SSAs) were included as potential beneficiaries in the UNDP's urban risk reduction initiatives.

In Bharatpur, in collaboration with the USAID-funded sexual and reproductive health project, the projected worked with 28 LGBTQ+ individual living in fire-prone sub-standard settlements through fire preparedness and safety, first aid and dengue prevention. The ECHO-supported child-centered DRR project provided insight into the DRR through schools approach as schools are key to linking knowledge about DRR and risks with families. The project used the learning generated by the DCA consortium that implemented the Safer Cities Project (in three wards of Lalitpur) till 2019. This project focused on municipal preparedness and response and on the formation and strengthening of emergency response teams. Monthly coordination meetings between DRC and UNDP were instrumental for the cross-fertilization of knowledge. Trainers from the Assessment and Coordination Team (ACT) roster available on the DRR Portal were utilized during the training with support from DRC. This project also supported the institutionalization of initial rapid assessment (IRA) through trainings and a series of inductions as well as IEC materials available with DRC.

Figure 2: Gender-wise trained people
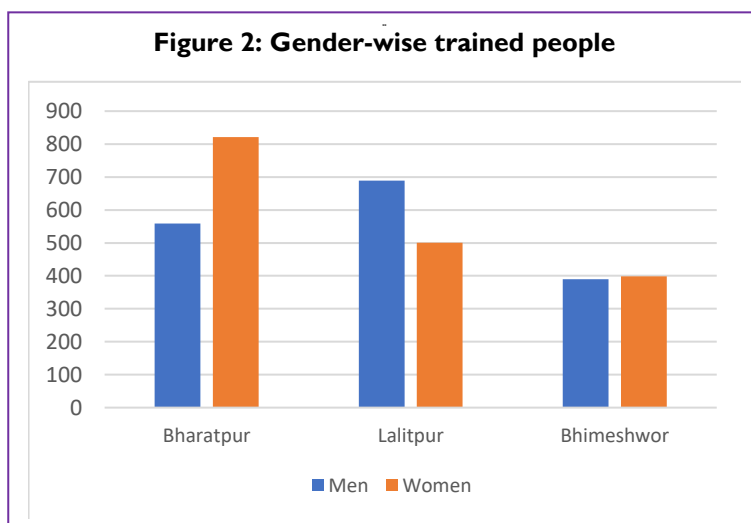
f. **Enhance the capacity of communities and local governments in urban DRRM:** The project conducted thematic trainings at the community level. For example, fire-related trainings were held for petrol pump operators, first aid training for those who have very poorly built houses that could collapse at any time and rainwater harvesting-related training for people who live in frequently inundated areas and live in narrow alleys. At the community level of the project municipalities, several types of training were organized. Thanks to the project, the capacities of 58 PwDs and 29 members of the LGBTQ+ community were enhanced through trainings. The project also reached marginalized Thami households in Bhimeshwor and Muslim households in Bharatpur with its capacity-building initiatives. These trainings were instrumental in enhancing the capacities of the communities, local governments, and urban stakeholders and thereby helped to create an enabling environment for urban disaster preparedness initiatives. Women volunteers who participated in FGDs confirmed that need/issue-based capacity-building helped them to create an environment conducive for working despite COVID-19 for promoting urban risk reduction and emergency response. For instance, kitchen fire response trainings were targeted to women's groups; fire response training to staff working at fire stations, the city police and CERT; and training/orientation to fire fighting and preparedness to vulnerable communities, including senior citizens, Muslim women, members of the LGBTQ+ community and so on. Trainees said that training helped the project reach previously unreached sections and promote urban disaster preparedness and emergency response by providing knowledge and skills. Ward chair of Bharatpur, said:

> *"With the support of a series of capacity-building initiatives, we now have a better understanding of the risks associated with multiple hazards. The VCA and RVA tools were instrumental in identifying the most-at-risk wards and communities and individuals within these wards. As a result, we are able to involve the Muslim and LGBTQ+ communities in disaster preparedness and response-based activities for the very first time. We also adequately addressed the need for risk reduction among urban slum dwellers and squatters. We are happy for the first time that the private sector is deeply involved. As you are well aware, however, the demands are enormous and the resources limited. The project leaves us with a path to follow to achieve high-quality risk reduction and emergency response. I wish the project would consider a second phase in which it could consolidate its initiatives."*

The project's mechanism for coordinating with other stakeholders during the planning of capacity-building initiatives was also exemplary. For instance, that project coordinated with security agencies such as the Armed Police Force (APF), Nepal Army, Nepal Police, the fire station in Kathmandu and trained Nepal Red Cross Society (NRCS) volunteers while organizing training on SAR, firefighting and first aid. The project also supported light SAR equipment, first aid kits and fire-fighting equipment to improve the urban fire-fighting capacities.

In coordination with NEOC, MoFAGA and NDRRMA, the project provided training to MEOC staff along with city police and staff working at fire stations. NRCS's IMO stationed at the Provincial EOC (PEOC) of Lumbini Province supported Initial Rapid Assessment (IRA) training and tabletop simulations for the municipal team, support made possible through the coordination between DRC and UNDP. In Bhimeshwor, more than 170 women took part in a four-day fire preparedness training. Cascading trainings were also imparted at the community level, a practice which generated large impacts. On International Women's Day, a group of women successfully demonstrated how to put out an LPG-triggered fire. The skills and knowledge gained through capacity-building trainings were starting to replicated within and outside project communities. Trainees said that among the many trainings offered, the training for electricians was especially beneficial. In all three municipalities, NCRS trainees were used as resource persons for community-level orientation and training, particularly in SAR, community actions for disaster response (CADRE) and first aid, as well as drills and simulations.

Box-1: Replication of the project's good practices in new areas without project resources
1. The project's good practices were replicated both inside and outside the project's wards. For example, inspired by ward 19 of Lalitpur, ward 29 of the same municipality also installed fire hydrants.
2. Trainings on fire preparedness and response were organized in other wards of Lalitpur and Bharatpur which had learned about these topics from the capacity-building outreach of in project wards.
3. Search-and-rescue items were stockpiled in all wards of Lalitpur and Bharatpur using the annual budgets of the wards and the municipalities themselves.
4. Monsoon preparedness related items were procured and stockpiled in Bhimeshwor by using municipal budget.
5. In all wards of Bharatpur and Lalitpur, funds have been allocated by municipality for specific activities targeted to disaster preparedness and emergency response.
6. Wards 8 and 9 of Bharatpur and ward 8 and 9 of Bharatpur have adopted the approach of risk mapping using their own resources.
7. Fire extinguishers were installed in hotels, at petrol pumps and in other large buildings in the project municipalities.
8. In Bharatpur, fire preparedness and response training were organized in wards 2 and 10 and such training is slowly rolling over into other wards. In Bhimeshwor, social development section conducted orientation and training sessions to TLOs using their own resources.
9. Inspired by the project wards in Bharatpur, all wards of Bharatpur and Bhimeshwor adopted the practice of allocating budget to produce disaster response-trained volunteers at the ward level and holding fire safety training in schools and communities after engaging in risk mapping in all wards.
10. Wards 3, 4, 7, 9, and 11 of Bharatpur have used VCA to identify vulnerability, capacity and risk.
11. The TLOs nears the mills area in Bharatpur-2 purchased fire extinguishers and installed them in strategic locations on their own initiative.
12. A total of 65 fire extinguishers were installed in the wards of Bharatpur as well as in Bharatpur Metropolitan office buildings and different government offices. All used their own budgets.
13. Fire safety training was jointly organized by gas distributors and the petroleum dealers Association of Chitwan.
14. Non-structural mitigation works were undertaken at Narayani Community Hospital. Old fire extinguishers were replaced, fire alarms and smoke detectors upgraded, and oxygen cylinders managed. The hospital used its own resources. Other private hospitals adopted the same initiative.
15. Learning from the project's initiatives, Narayani Model Secondary School of Bharatpur installed fire extinguishers using its own resources.

g. Resilience fund by leveraging resources from government and other stakeholders: Resilience funds were established to carry out small-scale risk mitigation work. The project contributed to resilience

funds and encouraged municipalities to do the same. A total of NPR 1,53,70,000, NPR 1,52,50,000 in cash and NPR 1,20,000 in materials, was raised. The resilience fund of Bharatpur Municipality, NPR 1,50,00,000, is greatest and Lalitpur Municipality, with NPR 1,20,000, has the smallest (refer Annex-6, table 12). It was the emergence of this fund, informants claimed, that spurred the practice of allocating budget for specific activities related to DRR and emergency response. Prior to this project, a bulk amount was allocated in the name of DRR but later transferred to other budget headings. Though the municipalities have started to allocate annual budget for disaster preparedness and response-related activities, some of those activities are stand-alone although it is best if they are mainstreamed into sectoral programs. Once capacity-building efforts had increased their understanding, wards and municipalities started to allocate budget for reducing urban disaster risks and conducting emergency response. All the working ward and municipal authorities consulted during the field visits demonstrated their commitment towards building the resilience of their communities. For instance, the project helped Bhimeshwor harmonize its disaster management fund mobilization guidelines with relief standards and advocated that it kept at least NPR 5,00,000 in its disaster management fund. With the project's NPR 7,00,000 contribution and municipal resources worth NPR 3,50,000, it was possible to impart CADRE training and risk transfer initiatives following the conduct of a series of orientations, the adoption of policy instruments, and the capacity-building of TLOs. In Bhimeshwor, NPR 42,50,000 (37.4% of the total budget) was allocated to DRRM-related specific activities, however total budget allocation under forest, environment and disaster section is NPR 1,13,50,000. Bharatpur Municipality allocated NPR 1,50,00,000 (FY 78/79) and supported for the installation of three portable booster pumps in the 5,000-liter storage tanks from the project in Aaptari area (Ward 2). This demonstrates the leveraging of local government resources for disaster preparedness. Local government also allocated the cost to conduct CADRE training for local volunteers, municipal staffs and city police for emergency mobilization during disaster events and of a one-day fire-fighting training at the community level. To supplement the project budget, community contributions constituted NPR 15,00,000 of the total budget, municipalities contribution was NPR 4928805, and third-party contribution was NPR 10,000 (refer Annex-6, table 13).

h. Assessment of indicators (baseline and end-line indicators)

The assessment of specific objective and results wise indicators revealed that they all meet their anticipated targets at the end of the project. The details of assessment are as follows:

i. Assessment of specific objectives and their indicators

Parameter	Baseline	End-line
Specific objective	Enhance understanding of the communities and local authorities of at-risk urban areas about underlying multi-hazard risks and vulnerabilities to undertake system strengthening, structural and non-structural interventions for effective and coordinated emergency response and risk reduction. (Target 64,536 population)	The findings of end-line survey revealed that the knowledge, attitude and practice (KAP) of targeted population as well as the local authorities has been enhanced. Institutional structures such as local level disaster management plans along with allocation of necessary resources (human and financial) are at place, emergency operations centers are now operational and local disaster management committees are now active which ensured that people at the project's locations are better prepared for disaster risk.
Indicator 1	% increase of population with an enhanced understanding of disaster risks. (Target: 25%)	End line survey identified that 25% population have increased their KAP based on 'self-assessed method' and 29.6% people have increased their understandings on disaster risks based on 'multi-criteria weighted score'.
Indicator 2	Number of wards in the urban municipalities with plans and systems in place for effective emergency response	All six targeted wards of three project's municipalities have made institutional setup through the formulation of plans and allocation of resources from the annual budget which helped to build community level structures to support effective emergency response.
Indicator 3	% reduction in the number of affected people (experienced, expected or modelled)	Consultations, KIIs and FGDs at municipality, ward and at the communities confirmed that number of disaster-affected people have been reduced with increased knowledge on risk reduction

	(Target: 50%)	initiatives. Observation during the field visit was evident to reduce the risks of inundation, fire with the availability of skills, infrastructures and tools/equipment. More than 50% community members expressed that they have better prepared to reduce the risk of disaster.

Source: KAP survey, 2019 and 2021

ii. Assessment of results 1 and its indicators

Parameter	Baseline	End-line
Result 1 *(Enhanced understanding of disaster risks at community and municipal levels in selected high-risk urban areas)*	Enhanced understanding of disaster risk at community and municipal levels in selected high-risk urban areas (Target: 48,400)	More than 90-95% people confirmed that project has been increasing the awareness of people on earthquakes, fire, road accidents, flood, lightning and landslides preparedness at the community level. It has enhanced the understanding of 60,000 populations (extrapolated) out of 64,536 on disaster risks at community and municipality level.
Indicator 1	Number of people reached through Information, Education, and Communication on DRR	Project's database and reports revealed that it has reached to 50089 people through DRR based IEC materials
Indicator 2	Percentage of population benefitted through Hazard and risk assessment, mapping	Project's database and reports revealed that 77.38% population have been benefitted on hazard and risk assessment mapping.
Indicator 3	Number of buildings structurally assessed using Rapid Vulnerability Assessment (RVA) tool	A total of 2,308 buildings were structurally assessed in three municipalities through RVA tools

Source: KAP survey, 2019 and 2021

iii. Assessment of results 2 and its indicators

Parameter	Baseline	End-line
Result 2 *(Systems strengthened/established at all levels for effective emergency response and management)*	System strengthened/established at all levels for effective emergency response and management (Target 64,536 population)	The project has contributed in system strengthening for effective emergency response through (i) crafting emergency preparedness and response plan, (ii) strengthening local emergency operations center, (iii) building capacities of LDMCs which helped to reach to more than 540,000.
Indicator 1	Number of people covered by early action/contingency plans (Target 64,536 population)	The preparation of emergency preparedness and response plan, relief standard guideline, strengthening emergency operations center, and activation of DMCs cumulatively addressed the needs of disaster affected populations through early actions/contingency plans.
Indicator 2	Number of municipalities establishing and operationalizing Resilience Funds	All three municipalities have formulated disaster management fund operational guidelines and set the criteria to use this fund in disaster preparedness and response.
Indicator 3	Number of guidelines and frameworks operationalizing emergency preparedness and response mechanisms	A total of 25 (Bharatpur – 9, Bhimeshwor – 10, Lalitpur – 6) policy guidelines/framework developed to contribute in emergency preparedness and response

Source: KAP survey, 2019 and 2021

iv. Assessment of results 3 and its indicators

Parameter	Baseline	End-line
Result 3 *(Enhanced disaster preparedness at community and municipal level for effective emergency response and risk reduction)*	Enhanced disaster preparedness at community and municipal level for effective emergency response and risk reduction (Target: 1050)	NA
Indicator 1	Number of community small-scale infrastructures and facilities built or protected (Target: 12)	Project's database and observation/physical verification revealed that 31 small-scale infrastructures and facilities have been built to

		reduce the disaster risks.
Indicator 2	Number of community volunteers, as CERT members, trained and equipped on life-saving response skills and readiness (Target: 1050)	The project's database and reports suggested that more than 1110 CERT members have been trained and equipped with lifesaving skills.
Indicator 3	Community readiness was attested and ensured through the conduct of several emergency simulation exercises (Target: 12)	Project report, photographs and media coverage confirmed that 12 emergency simulation exercises were imparted which helped in community's readiness against disaster
Indicator 4	Number of Municipal EOCs established with the minimal functional benchmark, enlisted by MOHA (Target: 3)	Physical verification and reports from EOCs revealed that three municipalities have strengthened the functionality of EOCs.

Source: KAP survey, 2019 and 2021

5.5 Sustainability

While it is too early to claim for sure that the project is sustainable, the following initiatives made a considerable contribution to its likely sustainability. Of the total key informants interviewed during this evaluation process, 69% key informants during interview said that structures created by the project will be fully maintained, and 71% expressed that project's outcomes will be sustained after the project (Table 4).

Table 4: Key informant's responses with respect to the sustainability of schemes

To what extent is it likely that the structures created by the project will be maintained after the programme?			
Total responses (n=42)			
Will be fully maintained	Maintained to some extent	Will not be maintained	Don' t know
29 (69%)	13 (31%)	0	0
What is your assessment of the overall sustainability of the project outcomes after the project?			
Total responses (n=42)			
Fully sustainable	Partially sustainable	Will not be sustained	Don' t know
30 (71%)	12 (29%)	0	0

Source: KIIs, 2021

a. Sustaining the benefits of the projects after the project is complete: *Institutions are equipped with skills and knowledge:* Evidence gathered during interviews revealed that the project's benefits are likely to be sustained and continue even after the project is complete. Inclusive ward disaster management committees (WDMCs) and local disaster management committee (LDMCs) were formed and institutionalized and now, following a series of capacity building measures, are capable of continuing to carry out risk reduction initiatives. Stakeholders' understanding of risk has been increased, a fact that resulted in municipalities allocating budget and the project being able to scale up its structural and non-structural initiatives. The project's support for building the capacities of CERT was acknowledged by all stakeholders and this new capacity is likely to result in the sustainability of the project's initiatives in disaster preparedness and emergency response. It is commendable that project-trained community members and other stakeholders now function as local assets that can be called upon in times of need. The project facilitated the building connections among community-, ward-, municipality-level institutions. The Mayor of Bhimeshwor municipality, during consultations said:

> *"We never felt that this was a UNDP-managed project and we are just beneficiaries. From day one, the municipality lead the project and UNDP was just a facilitator. Coordination between us was excellent. In fact, this project was mainstreamed into the municipal system. This integration, as well as resource-sharing, was the reason that we had tangible results despite the limited timeframe. Thanks to the UNDP project, we also started to build the capacity of Jiri Municipality in fire preparedness and response. We are committed to replicate the project's good practices not only within Bhimeshwor but also within all local governments in Dolakha District. The pandemic did not allow us to work on developing a risk transfer mechanism. There are many means by which this project and its associates will be remembered even several years in the future as DRRM-related policy instruments are in place. Indeed, I feel that these instruments are the foundation of risk reduction initiatives in Bhimeshwor."*

Policy instruments are in place: The project facilitated the development of 10 types of DRRM policy instruments in Bhartapur and Bhimeshwor and six types in Lalitpur (refer Annex-6, table 14). All polices have been finalized and approved by municipality councils, except in Lalitpur. As the relief standards, policies, and cluster plans of federal and provincial governments and international humanitarian standards were reviewed while policy instruments were being developed, no controversy has arisen. It is good to see that the majority of the policy instruments adopted by the project are beginning to be enacted by the three project municipal councils. Progress in Lalitpur is slow, however, because no municipal council meeting has been held to approve these instruments. Some, like relief standards, have already been put into practice. Using the standards set, relief was provided to fire-, cold wave- and pandemic-affected families. Bhimeshwor municipality distributed NPR 15,000 to disaster-affected people. During consultations, municipality officials confirmed that the relief guideline had helped them to make swift decisions during emergencies and provide immediate relief to disaster-affected families. Once councils had endorsed policy instruments, they were able to easily allocate budget for urban disaster preparedness and emergency response-based activities. As the private sector and civil society were actively involved in formulating policies, these policies were easy to implement. The preparation of plans and policies and their institutionalization at the municipality level created a positive feeling. The 'Volunteer Mobilization Guideline' was instrumental in institutionalizing a body of trained CERT members. The level of dedication, enthusiasm, and confidence and the true spirit of volunteerism exhibited by volunteers suggested that CERT could impart skills and knowledge continually as long as received refresher training. LDMC chair of Lalitpur, during consultations opined:

> *"We implemented several projects related to disaster preparedness and response in the past, especially following the earthquake of 2015, but we never had a project that supported us in developing policy documents, strengthening LEOCs, and building the capacities of fire station and WDMC and LDMC officials as well as community-based volunteers. Because of the good coordination, we were able to demonstrate a few tangible results, including innovative initiatives such as analog and digital sirens, fire hydrants hooked up to underground water tanks and digital hazard and resource maps. We are happy that the project's good practices have been replicated in other 27 wards too. We have allocated the required resources for fine-tuning project-initiated activities to get large impacts. The only reservation on our end that the timeframe of the project was very limited."*

Knowledge products are in place for policy advocacy: A policy brief on fire preparedness at the local and national levels was prepared to make municipal stakeholders aware about fire-related preparedness and emergency response issues. In addition, a report on 11 fire case studies was developed. It provided tips on building the capacity and institutionalization of fire stations. Simulation guidelines formulated by municipal authorities in consultation with DRR stakeholders helped sharpen skills and knowledge. EPRP guidelines tested with a tabletop simulation in the project municipalities in the presence of municipalities and relevant stakeholders helped to identify the key tasks to be carried out during emergency preparedness and response.

LEOCs are being institutionalized: The LEOCs in all three municipalities have gradually assumed a greater role as they have grown more institutionalized. The evaluators' visits to the LEOCs revealed that they are equipped with the tools and equipment they require, have SOPs which were developed based on the learning from the ECHO-funded DRC Consortium, and had built the capacities of IMOs and relevant municipal staff. LEOCs are now clear about their key mandates, including communication, coordination and information management. Enriched by the project-run series of capacity-building initiatives, LEOCs have started to develop (i) a detailed inventory of trained people with detailed contact addresses, (ii) data and information, (iii) web-based GIS maps, and (iv) a digital fire incidence report using the KOBO tool. During the consultation, municipal authorities claimed that the LEOCs had made a tremendous difference. To ensure EOCs function well, all municipalities assign dedicated staff and allocate budget. During the COVID-19 pandemic, LEOCs supported database management and upgraded information in the BIPAD Portal. Out of the 12 benchmarks of a functional LEOC, the LEOCs of Lalitpur, Bhimeshwor and Bharatpur have fulfilled all 12 benchmarks. LEOCs have been instrumental in generating progress reports and reports on disaster incidents. All

municipalities have installed a toll-free number with a recording system that answers around the clock with the help of fire brigade and municipal police. As called for in the SOPs of all three municipalities, the LEOCs are linked to fire stations and follow the city policy for 24/7 operation and effective response. With the institutionalization of LEOCs, disaster risk governance has improved. LEOCs now have SAR materials, step-wise simulation guidelines, and feedback mechanisms. In the Bhimeshwor, LEOC staff have (ii) carried out capacity and resource mapping, (ii) developed a timeline of disaster events from 1990 AD to 2021 AD, (iii) updated SSAs data with GIS location references, (iv) mapped urban risks, hazards, vulnerability and resources, including open spaces, (v) developed the KOBO tool to collect information on fire incidents, (vi) updated data on the BIPAD portal regularly, and (vii) established a toll-free number for smooth operations. Project also supported the installation of a GIS-based vehicle tracking system to follow the progress of fire trucks and ambulances. To be able to visualize the risk and support the regular planning process project together with LEOC supported to develop an Atlas Book. The project also provided PPE and other tools and equipment to fire stations based on the assessments carried out in the fire brigade. LEOCs also received solar back-up systems, computers, inverters, generators, and projectors to ensure their smooth operation. At the time of evaluation field work, the project was in the process of handing over generators to wards and municipalities in Lalitpur and Bhimeshwor. Generators help to operate fire hydrants for 24/7 as electricity is normally cut-off after the fire incidence.

Partner NGOs are locally based so they can leverage resources from local governments: One of the beauties of the project is that each partner is well connected to project municipality its serves, has several years of experience in the DRR and emergency response, and has built excellent rapport with municipal stakeholders. This social and institutional capital ensures that each partner will be able to leverage resources from the concerned municipality and thereby promote sustainability. Since they are based locally, these partner NGOs should be able to provide the support, mentoring, and advice needed to sustain the project's initiatives and leverage external resources.

b. Plans or approaches for the continuation of project's initiatives: All municipalities have developed plans for or approaches to continuing the project's good practices with their own budgets. Some of these approaches and plans include the establishment of (i) a disaster management (DM) fund, (ii) a resilience fund, and (iii) DM fund mobilization guidelines. The guidelines have been endorsed by project municipalities. After receiving feedback from the MoFAGA, the project reviewed the guidelines and made explicit provisions for the allocation and investment of funds in disaster preparedness, risk reduction and resilience. The project also helped to institutionalize and operationalize the guidelines. The harmoniousness of the relationship among elected representatives, municipal staff, TLOs, women's groups, CERT, and vulnerable population suggests that they will continue the project's good practices. CERT developed at the municipality and ward levels are gradually being institutionalized, and wards and municipalities have started to allocate budget for providing need-based refresher training to CERT. As CERT was formed from the representatives of existing social organizations such as TLOs, women's groups, scouts, retired army and police, there is no risk that members will be lost. The evaluation consultation found that the CERT of Bhimeshwor and Lalitpur were instrumental in imparting orientations to and simple drills on SAR, first aid, fire preparedness and emergency response in schools and communities. In Bharatpur, CERT was successful in raising awareness within their peer circles using IEC materials.

The project's key components have been mainstreamed in the five-year and annual plans and programs of all three project municipalities and all six project wards. This mainstreaming has helped to command internal resource from the government, private sector and civil society organizations for the continuation of fire and earthquake preparedness and emergency response. In all three municipalities, the amount of fiscal budget allocated for DRRM is increasing trend. In Bhimeshwor, Tayar/USAID is working in all nine wards to promote disaster preparedness.

c. Replication of initiatives at the local level: The project effectively facilitated municipalities and wards in replicating its initiatives. It developed a tripartite agreement with municipalities and the

private sector to promote the continuation of the project's good work. Learning from the changes in Narayani Community Hospital, a few hospitals in Bharatpur have procured and installed fire extinguishers on their own and provided to orientations to operationalize those fire extinguishers. In Lalitpur, ward-level budgets were used to extend the water pipes of fire hydrants by 100 m to better serve the communities during fire response. In Lalitpur, following the example of the stockpiling of SAR materials in project wards, similar the remaining 27 wards allocated NPR 30,000 to NPR 50,000 to stockpile their own SAR materials. The cost of a standard set of SAR materials developed by NDRRMA is ranging from NPR 50,000 to 1,00,000. Fire preparedness-related orientations were replicated by CERT in non-project wards. Learning from wards 16 and 19 of Lalitpur, Harisidhi (Lalitpur Ward 22) allocated NPR 20,00,000 to install fire hydrants. In Bharatpur (Ward 2, Milan Tole, where many urban dwellers and squatters live), the project assisted in scaling up the existing boring wells using municipality resources (NPR 12,00,000) and project finances (NPR 1,50,000), installed booster/jockey pumps and operationalized fire hydrants that cover a radius of 200 m. Inspired by the project's work and the role of LEOCs in information management, communication and coordination, Bharatpur allocated NPR 10,00,000 immediately through *tippani* adesh (instruction memo) to manage relevant human and technical resources. The project's coordination with Tayar in Bhimeshwor from the beginning of the project tenure not only reduced the duplication of activities in the two project wards but also created programmatic synergy. In fact, the good practices of the two project wards were gradually replicated in other wards by Tayar/USAID, HI International, and CDF Nepal. Orientations are being imparted to TLOs and women groups from ward offices in Bharatpur and Lalitpur and trainings on first aid and fire-fighting are being carried out with the financial resources from the municipalities.

d. Potential new areas of work and innovative measures for sustaining the results: Potential new areas and innovative measures for sustaining the results included (i) the development and strengthening of resilience funds, (ii) the development and endorsement of policy documents, (iii) the allocation of budget by municipalities and wards for specific DRRM-related activities, and (iv) rainwater harvesting to collect water underground for use in fire hydrants (Ikhalukhu, Lalitpur-19), and analog (Dhaugal Bazar, Lalitpur 16) and digital siren systems (Ikhalukhu, Lalitpur-19) to warn people during emergencies. Stakeholders rated (i) vehicle tracking system with GPS and (ii) training curriculum to electrician on fire safety as some of the innovative activities that could be replicated by municipalities.

e. Document and share lessons learned: The project successfully documented key lessons [11] generated during implementation and sharing with project stakeholders. Lessons learnt from the distribution of relief to daily wages laborers at the local level during the COVID-19 pandemic were also captured in the Relief Standard Guideline. As called for in federal-level relief standards, municipalities increased their relief packages. Learning from the past, LEOCs have started to develop a roster of all trained people so they can be immediately mobilized in assessment and relief distribution activities during emergency response. The project also developed the curricula of some trainings, including SAR, first aid and firefighting based on the gaps and needs identified during pre-simulation exercises. School-based disaster preparedness plans, safety drills and orientations on life-saving skills for students, teachers and parents were developed based on identified knowledge gaps.

5.6 Impacts

The following qualitative evidence of effects and impacts was gathered during the evaluation process.

a. DRRM-related policies helped to reduce the amount of *beruju* (unauthorized expenses) of municipalities: The project helped to enhance disaster risk governance through a number of

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[11] Project had documented (i) EOC's assessment and functionality, (ii) fire capacity assessments (iii) learning from COVID-19 preparedness and response, and (iv) rapid assessment of IECs and shared those learning products with communication group to improvise before dissemination during COVID-19 related awareness campaigns.

interventions namely, (i) building stakeholders' understanding of risks; (ii) capacity-building; (iii) the development of key disaster risk management plans, frameworks, policies, and guidelines; (iv) the implementation of disaster mitigation measures; and (v) emergency preparedness and response. With the project's support, DRR-related legal instruments were prepared and enacted and their operationalization was begun. Disaster risk governance was strengthened through the preparation of emergency preparedness and response plans, and relief guidelines for emergency response. These documents helped the municipalities prepare and cope with shocks and stresses and thereby to reduce future risks. Municipal authorities said that their knowledge had increased because the process of policy formulation was learning-oriented. Earlier data and reports were used as much as possible to avoid 'reinventing the wheel'. For instance, in Lalitpur, a DM fund mobilization guideline developed by IoM was finetuned in coordination with municipal authorities and revised to make it context-specific. In Bharatpur, the local disaster and climate resilient plan (LDCRP) developed by NSET was modified because data were not much reliable, hence the project had to collect additional data from ward offices. Municipal authorities were happy that these policy documents helped them to sort out their *beruju* (non-authorized expenses) as, with the policy provisions, such transactions would be justified. In Bhimeshwor, a task force comprising a municipality technician, ward representatives and the DRR focal person released NPR 10,000 to each ward to procure basic materials for monsoon preparedness and each ward started to replenish its stock using its own budget based on the provisions of the new policy.

b. Generated short-term employment for the poor and marginalized: Small-scale mitigation works relied on local laborer and local materials as far as practicable. Local people transported the construction materials required for landslide treatment, dug underground tanks, and rehabilitated water ponds, for example. They were involved during site clearance and subsequent stages of constructions. This helped to create local employment, thereby helping many poor families earn a livelihood and meet multiple needs after many daily wage laborers lost their jobs due to the pandemic. The impact on families with one or more members who worked as paid masons or laborers during construction was very positive. During the project's tenure, NPR 27,49,750 (USD 23,107) was generated from the local employment of skilled and non-skilled laborers. Out of this, Bharatpur, Lalitpur and Bhimeshwor generated 7%, 63% and 30% respectively (refer Annex-6, tables, 15).

c. Increased synergy in and ownership of risk reduction activities: The project's approach to implementation involved collaboration with municipalities/wards, NGOs/CBOs and the private sector also shared resources to promote synergy and ownership. For instance, working with petroleum dealer association's (LPG dealers and the Nepal Oil Corporation) to develop their capacities through a series of orientations and trainings and preparing SOPs and a 16-point checklist helped a lot. The project helped dealers/associations to realize of the importance of the safe loading and unloading of petroleum products to reduce the fire risk. The checklists were developed into IEC material and distributed to all relevant stakeholders.

d. Improved the culture of safety and the feeling of being safe: The project helped stakeholders at the household and municipality levels to understand the nature of risk and promoted a culture of safety. In Bhimeshwor, for example, the project supported one of the community hospitals for the assessment of fire safety and its structure. Based on the assessment, the hospital management made the corrective measures to reduce the risks. Now that people understand the multi-layer and multi-faceted risks that exist, more are making resilient housing, a practice derived from a UNDP project in Gorkha supported by the Government of India and ECHO funded projects in Dolakha and Sindupalchowk. At the municipality level, understanding of DRRM in increased following the pre- and post-simulation of LEOCs. The practice of keeping SAR and firefighting materials at the ward and community levels is growing. The Bhimeshwor, SAR task force continuously advocated for the allocation of ward budget to stockpile SAR materials at the ward office. Consequently, NPR 50,000 was allocated for all seven wards for fire preparedness-related orientations and management of materials. Bharatpur issued urgent circulars/directives to relevant agencies to keep fire extinguishers

in fire-prone areas and install fire escapes in tall public buildings to reduce the risk. In Dolakha, Jiri Municipality was developed as sister municipality by involving it in firefighting and fire preparedness training. Understanding risk was further promoted by systematic community engagement. Inspired by the true spirit of preparedness and response, many government offices, wards, the private sector, hospitals, hotels, and petrol pumps have started to install fire extinguishers. In coordination with TLOs, fire extinguishers and other fire-fighting equipment were installed and prepositioned in strategic locations in Bharatpur, Lalitpur and Charikot. The project also provided orientation to 37 senior citizens and people with intellectual disability of *'Manab Sewa Ashram'* and installed fire extinguishers to reduce the risk of fire. With the installation of lightning arresters and fire extinguishers, fear regarding lightning and fire was reduced. The private sector was engaged in fire and earthquakes safety, too: it invested in fire safety and installed fire extinguishers and fire alarms in critical areas. The private sector was taught how to use and replenish fire extinguishers. The second wave of COVID-19 strengthened understanding that preparedness is crucial for dealing with the impact of disasters. Non-structural risk mitigation measures such as fixing of furniture and hanging objects using clamps helped to reduce the risk. Shared learning dialogues with municipal, ward, and other stakeholders helped senior municipal authorities understand risks and motivated them to commit to replicating the project's good practices in other wards too. Commitments to act were made during the project's closure workshops. It was claimed that involving authorities in fire and earthquake preparedness and emergency response endeavors helped to reduce their fears gradually and that authorities now feel more secure than they used to. With the new project-built ramps, PwDs have greater independent access to public places and government offices. New infrastructures are now child- and disabled-friendly. Ongoing construction work at the local level also employed earthquake-resilient technologies. Indeed, such technology has been replicated in individual houses as well as public infrastructures.

e. Urban DRRM-related issues are started to be covered in local and national media: The capacity of local media has been increasing and they have started to cover disaster risk and emergency response related news. Messages related to fire and earthquake preparedness are broadcast as PSAs and radio jingles on FM channels. In Bharatpur, the project produced more than a dozen digital champions for a disaster information management system. Project records shows that IEC materials on lightning, urban floods and landslides have more than 1.2 million views in multiple platforms, including Facebook, Twitter, Instagram and LinkedIn and were shared over 20,000 times.

f. Increased the feeling of educating others: Project records revealed that CERTs were trained and drilled in IRA, first aid, SAR, and firefighting and linked with fire stations and LEOCs. They were also equipped with tools/apparatus and materials to translate their knowledge into practice. In all three municipalities, trained women successfully demonstrated the project's lifesaving initiatives by responding to fires. Women are seen as DRRM champions because they share their knowledge with family members and peers. The trainings eliminated misconceptions about the nature of first aid. For instance, a woman who had participated in an orientation run by the project put out a fire in a surgical house in Bharatpur with a fire extinguisher. Later she was awarded by the ward and municipality for her noble work. The CERT members in all three municipalities also ran orientations and simple drills for other members of society on their own. During the evaluation mission in Bhimeshwor, women CERT members successfully demonstrated how to put out an LPG cylinder fire using wet cloth and a bucket. They also demonstrated on how to use a Type C fire extinguisher to put out the same type of fire. These examples show that learned skills and knowledge are gradually translated into action.

g. Changes in mindsets and acts: The project's series of capacity-building measures was successful in changing the mindsets and acts of stakeholders. PwDs and senior citizens have benefited from the project's services. In Schools of Bhimeshwor, the meeting halls were moved to ground floor from the first floor to increase access to PwDs. In Ward 16 of Lalitpur, the SSAs was distributed from the upstairs, was moved from the second floor of the building to the ground floor, where PwDs and senior citizens could easily access it. The provision of a ramp with safety railings made it even easier

for them to access services. The project reached the unreached sections with the use of the vulnerable focal point approach derived from Handicap International (one of the agencies in the ECHO-funded WHO consortium), an approach which helped to foster social protection among vulnerable populations, assess the basic and specific needs of the vulnerable and provide services or refer the vulnerable to concerned service providers.

h. Increased confidence about managing emergencies: Thanks to the project's efforts, beneficiaries claimed that they would be able to manage upcoming emergencies using the knowledge and skills they had learned. Such confidence was derived from project interventions such as the erection of digital maps, installation of sirens, use of media, arrangements of tools and equipment, and training with drills. In Lalitpur and Bhimeshwor, open spaces identified by IOM were linked to the digital maps. IEC materials and PSAs on FM channels were instrumental in increasing knowledge and understanding of risks. PSAs and IEC materials also enhanced people's understanding of risks and ways to save lives and properties from recurrent disasters. Digital maps erected in strategic locations of communities helped local people to understand the types of risk, risk accumulation, evacuation routes, safe spaces, possible service providers and so forth. However, the project faced some difficulty locating the geo-codes of SSA beneficiaries as some senior citizens temporarily resides in other cities but still got SSAs from their native wards. The project used different techniques such as telephoning, SMS text, official websites and the Facebook page of municipalities and LEOCs for incident reporting and information dissemination. LEOCs have started to collect data on hazards and loss and damage in their databases and upload it into the BIPAD portal. In Bhimeshwor, based on an understanding among the municipality, the project and Tayar/USAID, it was agreed to prevent duplication and make the best use of resources. Consequently, the project managed basic tools and equipment for LEOCs and Tayar/USAID agreed to stockpile SAR materials in LEOCs (though this commitment has been delayed due to the length of the procurement process). During the consultation, the evaluators found that people are very familiar with the do's and don'ts before, during and after disasters. People's confidence was built through training, participation in drills, and be provided with rescue equipment. Many said that they had already used the skills, knowledge and information they had acquired and that they planned to do so again in the future, with some modifications based on the learning. They are vocal and confident; they have developed a we-can-do-it feeling as a result of the many capacity-building initiatives the project offered. They have vulnerable and high-risk areas and also recognized what strategies and actions are needed to minimize risks. Among the several trainings provided, the stakeholders admired that in electric wiring the most as electric short circuits are a main cause of urban fires as houses are very old and their wiring system are sub-standard and incapable of bearing the load of modern appliances. It shows that awareness raising programs are especially required for electrical safety during the winter season.

i. Spillover effect on disaster preparedness and emergency response: Because of the effectiveness of its approach and process, the project was successful in reaching other municipalities. For instance, in Dolakha, a spillover effect on disaster preparedness and emergency response was created as all nine local governments were involved in meetings and provided with the basics of earthquake and fire risk reduction and emergency response. In the meeting, the project's key components, the modality of its working approach with Bhimeshwor municipality; ways of carrying out risk mapping, data generation and updates on the BIPAD portal; and how to allocate and best use municipality budget for DRRM endeavors through public-private partnerships were shared. Meetings were coordinated with Dolakha District Coordination Committee. Other municipalities in Dolakha were also sensitized to fire and earthquake preparedness and emergency response and they, too, committed to allocate fiscal budget to DRRM activities in a consolidated fashion. Similarly, for Bharatpur and Lalitpur meetings were coordinated with municipal executive and ward chairperson to share project initiatives, replicable models etc. to have replication and spillover effects. In coordination with municipal education section, school-based awareness sessions have been imparted with the use of IEC materials developed by the project. Gas distribution association of Chitwan has started their discussion with Kalika municipality for fire-fighting training to gas distributor.

j. Reached previously unreached sections with 'last mile' communication: One of the key strengths of the project was 'last mile' communication with key vulnerable families, populations and communities to identify their risks and mitigate those risks using a participatory approach. The issues and concerns of PwDs and senior citizens were addressed by constructing disabled-friendly structures, providing psycho-social counselling and ensuring better quality health services in government hospitals. Teachers' and children's issues were addressed through the provision of WASH facilities. The economic vulnerabilities of the landless, urban dwellers and squatters, Dalits, daily wage workers and people in pockets of poverty were addressed through COVID-19 relief in coordination with municipalities and wards. These groups were also involved in small-scale mitigation activities that generated local employment. In Bharatpur-2, in collaboration with the social structure/association formed by Lumanti Support group for shelter (NGO) under misereor, the project helped to build the capacities of urban dwellers and squatters living in sub-standard settlements near tall trees that are at risk of fire and lightning. Project also supported to prepare evacuation routes and conducted drill on the urban squatters of Bharatpur. The needs of Muslim communities in Bharatpur and Thami communities of Bhimeshwor were also addressed through fire and landslide preparedness respectively. Following the RVA[12], the data it generated was mapped and overlaid on Google Earth map with other information such as hospitals, temples, schools, and government offices. RVA helped to identify the risk accumulated in each ward and thereby supported planning for structural and non-structural mitigation measures. Based on the extent of risk accumulated by the critical infrastructures, municipal authorities have issued urgent circulars to relevant sections or authorities for fire and earthquake preparedness in order to reduce the potential risk.

k. DRRM is mainstreamed in sectoral plans and program: The project wisely involved the education, health and other service sectors in urban disaster risk reduction initiatives, a move which helped to mainstream DRRM-related issues in sectoral plans, policies and programs. For example, along with structural and non-structural measures, urban DRR issues such as risk mapping and drills were beginning to be built into school curricula. Municipality stakeholders said that they had started to mainstream DRRM in the seven-step planning process, a decision which helped them to address DRRM issues in their annual plans. The project chose one private and one public school (in case of Lalitpur, both schools were private) to work with after considering indicators such as (i) having a large number of students, (ii) being located in a strategic area for the dissemination of project learning, and (ii) having high exposure and facing multiple risks and vulnerabilities. In Bhimeshwor, DRR mainstreaming guideline was developed in the participation of all thematic sections which helped to incorporate risk reduction and mitigation related activities in different thematic plans and programs.

l. More learning through innovative approach and actions: The project helped to enhance understanding of disaster risks at the individual, household, community and municipal levels through its innovative approaches and was thereby able to achieve its planned results despite the shortness of its tenure. In Lalitpur Municipality, the project introduced community-based sirens (both analog and digital), underpass retrofitting (using mesh wire technology introduced after the 2015 earthquake), and context-specific fire hydrants tapping into underground water reservoirs through rainwater harvesting. Each underground tank has a 30,000 L to 35,000 L which is recharged from three to four different pits (a system based on the Bangladesh experience, and carried out in collaboration with Smart Pani, a private sector organization). Communities benefited doubly: they have fire hydrants facilities even in narrow streets and no longer have to contend with inundation during the peak monsoon season. In Bharatpur-10, the project installed a fire hydrant system with a multipurpose tank. Applying learning from the 2020 landslide response in Sindhupalchock and coordinating with NDRRMA, an emergency vehicle tracking application was installed in fire trucks, water tankers, and ambulances. Technical support for this GPS system was provided by Youth

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[12]The RVA report identifies the vulnerabilities of specific buildings with regard to multiple hazards and recommends actions to local authorities to reduce the risk.

Innovation Lab and NAXA Pvt Ltd. Though this innovation needs further work and support from the municipalities, it will help to track the vehicle and identify incident sites as quickly as possible in the densely populated urban areas. In Bhimeshwor Hospital, the project supported the clamping of tools and equipment as well as glass lamination. In Bharatpur (which is often referred to as the Medical City of Nepal since it has 27 hospitals within a radius of 200 m), the project supported structural as well as non-structural risk mitigation measures and reduced the risk of fire through the installation of fire hydrants, conducted awareness-building on fire and earthquake-related risks through the mobilization of CERT, and provided training/orientation. It supported the installation of a 5000 L overhead tank by connecting booster pumps which serve an area with a radius of 200 m. In the core city area of Bhimeshwor, four water tanks, each with a capacity of 5,000 L, were installed in strategic locations and connected to hoses/jockey pipes to make the fire hydrants functional. The municipality provided a booster pump worth NPR 2,50,000. The project coordinated with an ADB-funded urban development project to allocate one water tap to each water tank for a perennial supply of water. In Bharatpur, a drainage channel was constructed in the four areas most likely to be inundated in order to reduce the risk of flooding/inundation. In coordination with local traffic police, the project also erected traffic signs and signals and divergent mirrors in the corners of road to reduce accidents. These initiatives generated more ideas for risk reduction.

m. Saving lives and properties: The project promoted various communication measures to comprise early warning siren systems, both analog and digital. Lalitpur-16 installed four analog sirens in four different location which covered the whole ward area. These were instrumental in warning communities, WDMC members and other relevant stakeholders in the event of a disaster of any type. This system is being managed by WDMC. During consultations, CERT explained that whenever there is a fire, earthquake, robbery, or other event, a siren is blown. Then people move immediately toward an open safe space along a preselected evaluation route. After that, an SAR team initiates further operations. The siren is electric but there is a power back-up system. Beneficiaries said that this simple system could save many lives and assets during an emergency. In Ward 19 of Lalitpur, the project installed five digital sirens (each covering an area with a 200 m radius). Mechanisms are in place for the security and O&M of the systems, the renewal of the membership of beneficiaries, the setting of rules and regulations, and the collection of annual tariffs. All of these measures will ensure the sustainable operation of early warning systems (EWSs). As all the major components of the systems (transmitters, receivers, battery backup systems, sirens, battery chargers/casings) are available locally, WDMC members stated that the systems would run with minimal support on their part. Under this digital system, those who are at risk or need support will just dial the agreed upon number from their mobile and the siren will ring a warning to all community members that are connected with this system. The name of the person who rings the system first is displayed in the main control system and SMSs are sent to all committee members and responsible stakeholders for them to provide immediate support. The annual tariff is just NPR 50 and O&M is not very complicated. In Bhimeshwor, only one digital system has been operationalized, but it covers a command area with a 500 m radius. Its annual O&M fee of NPR 8000 to be paid to the vendor and the municipality has to renew every year. The mobile number '9810382964' is set in individual mobiles in the form of a speed dialing system. Beneficiaries claimed that these small techno-based initiatives will definitely help to save lives and assets and contribute to long-term disaster preparedness and emergency response mechanisms. The comparison of baseline and end line data will be analyzed before finalization of this report.

6. Cross cutting issues

The project identified GESI, disability and human right as cross-cutting themes.

6.1 GESI

a. Gender and inclusion in the project's design, implementation and monitoring: Since gender, age, disability, ethnicity, culture and poverty are key factors that affect a person's vulnerability to the effects of disaster, the project addressed both gender issues and the issues of marginalized groups

while designing, implementing and monitoring the project. The project also developed criteria for selecting women, girls and vulnerable communities. Review-and-reflection meetings resulted in the development of actions for mainstreaming GESI in the project's plans and programs. 4858 men and 3289 women were involved in trainings, orientations, meetings and workshops (refer Annex-6, table 15). Affirmative approaches were used to promote the inclusion of women in various services and facilities. These initiatives also influenced decision-making and leadership at home and in the wider society as women are in the leadership positions in many CBOs at local level. Project has generated local employment and engage women from marginalized groups. The project addressed the issues of highly marginalized people, including 178 Muslim households in Bharatpur and 34 Thami households in Bhimeshwor. The project also addressed the needs of 28 members of the LGBTQ community through fire preparedness and response-based initiatives. Households headed by single women comprised 543. Overall, the proportions of women and men served were 52% and 48% respectively. In terms of ethnic diversity, 35% were Brahmin and Chhetri, 51% *janajati*, and 6% Dalit and 8% other.

Women's groups claimed that project had promoted positive changes among them and that, as a result, the representation of women in user committees (UCs) had increased. It was estimated that 54% of members in groups, task forces and UCs are women. In Bhimeshwor and Lalitpur, women said that they earned more social recognition and felt more empowered once they had got involved in committees and groups and learned several skills from the project, including fire response, first aid and SAR. In all three municipalities, 3437 people from poor and marginalized families got jobs in project-run small-scale risk mitigation activities. Learning skills and earning additional income despite the pandemic-built women's confidence, leadership qualities and power to negotiate with duty bearers. Despite the project's tireless efforts, however, gender stereotypes are still ingrained in society and in social norms and traditions. Many communities in the project areas are still patriarchal, patrilineal and patrilocal. Gender differences have not been eliminated but gender equality is now seen as a desirable end. Some traditional gender roles have changed and men and boys speak and behave in a fashion that suggests their attitudes toward women and gender equality have changed.

b. Alignment of UNDP's GESI policy with the project's management structure: Despite the efforts to ensure GESI, the proportion of men and women staff at partner NGOs is 66% and 34% and 87% and 13% respectively. The men and women presence in the executive board of NGO partners is 56% and 44% respectively (refer annex-6, table 16). Although the GESI diversity of the executive boards and staff members was assessed before selecting partner NGOs, the number of women-staff was still limited. The institutional capacity, human resource management, financial and technical capacity of partner NGOs were also properly analyzed before they were selected to ensure alignment with UNDP's GESI policy (2017).

The project treated both men and women equally and gave them the same opportunity to participate in discussions, processes and activities. It was said that the gap between men and women regarding their knowledge about disaster management decreased which was also observed during the evaluation consultations. Trained women continue to run orientations and drills although the project formally ended on 31 October, 2021. Women's groups also played a key role in leveraging resources for disaster preparedness and emergency response from the three municipalities. Informants opined that once the confidence and leadership quality of women had increased, their representation in CBOs also increased.

6.2 Disability

a. Involvement of PwDs in program planning and implementation: The needs assessment stage explored the issues and concerns of PwDs and program designing, planning and subsequent implementation addressed them. The project acknowledged the roles PwDs could play by facilitating their participation in capacity-building training, providing assistive devices, offering both the structural and the non-structural components of disability-friendly services. Disability-friendly

structures were built in public facilities like wards, schools and health posts. The inclusiveness of infrastructures resulted in a high degree of ownership among all people, irrespective of age.

The project's use of its skill in and knowledge of Humanity and Inclusion (HI) helped (i) make the project's interventions inclusive by collecting data related to PwDs and populations receiving SSAs, (ii) develop inclusive EPRP and relief guidelines, and (iii) train deaf children from two schools by organizing a two-day ear camp. More than 80 of the 205 attendees were screened at the ear camp and 25 were identified as needing hearing aids. After a thorough analysis, nine people with hearing impairments were fit with devices. It was said that two students who heard sounds for the first time in their lives were very excited indeed. The project also supported the deaf school in managing haphazard electrical wiring that posed a risk electrical short circuit fire to deaf children and school.

b. Barriers faced by PwDs to participate in and benefit from the project: The participation of PwDs in meetings and trainings was not initially possible because the majority of meeting venues were upstairs, in rooms inaccessible to them. When training venues were moved to civil staff offices on the ground floor, the participation of 68 PwDs increased. The project and municipalities recognize the barriers that PwDs face. A series of consultations involving local NGOs working on disability and inclusion was held to make policies, plans and programs as inclusive as possible. Applying learning from the 2015 earthquake, the project practiced a targeted rather than a blanket approach to ensure that the specific needs of PwDs would not be overlooked. The project helped to identify barriers that PwDs face and their mitigation measures. Many trainings and meetings, as well as SSA services, have been moved to the ground floor to increase their access.

6.3 Human rights

The project's records and evidence revealed that project practices the human right based approach (HRBA) in its design and implementation. Its resources were used efficiently to address human rights during implementation by means such as the participation of targeted stakeholders and collection of disaggregated data. Local government officials also disaggregated data for their own databases. Using this disaggregated data, approaches were adjusted to encourage the participation of target groups in the project's work and services. Consultation with project stakeholders and beneficiaries revealed that Dalits, ethnic minorities, PwDs, women and other marginalized groups benefit from the project's services. The project employed affirmative action measures in some cases. It prioritized activities which benefited people from marginalized communities and had the greatest number of beneficiaries HHs. The project's monitoring system also ensure that people from disadvantaged communities would benefit from the project's support. Through partner NGOs, the project also indirectly influenced local governments to include HRBA in their planning processes. The bottom-up and participatory approaches promoted by the project helped to foster ownership among rights holders and enabled them to influence duty bearers to claim their rights and entitlements.

Despite the call for equal pay for equal work and the project's continuous follow-up, there were still cases in which women got less than men for doing the same job. The representation of women and people from marginalized communities in UCs, especially in the executive/leadership positions, is still meagre.

7. Conclusion

This project, which ran for 29 months in six wards of three municipalities, created good understanding of urban disaster risks and evolves mechanisms and measures that aided communities, municipal governments, and the private sector to address risks and effectively respond to emergencies with a specific focus on vulnerable populations. The project contributed to reducing urban disaster risks and preparing for emergency response through non-structural and structural components. Among its non-structural components, the project supported communities, schools and hospitals, wards and municipalities by providing capacity-building; arranging tools, equipment and

materials; and supporting for policies, plans and programs. The project's inception meetings at the ward and municipality levels, along with VCA, RVA, Community led awareness and a KAP survey helped a lot in sensitizing stakeholders and beneficiaries. The capacity-building training in different subjects and drills involving CERT, the city police, staff working at fire stations, ward and municipal staff, the private sector, and civil society helped to build the confidence of all participants. Beneficiaries came to trust the project because it included marginalized and deprived sections, including Muslims and Thamis, members of the LGBTQ+ community, senior citizens, PwDs, urban dwellers and squatters, and urban populations living in chronic poverty. Activities like an ear camp targeting senior citizens and person with hearing impairments created a positive vibe among communities. The study tours and learning-sharing dialogue sessions helped people learn what to do and what not to do before, during and after a disaster. By holding simulations before and after the project began to operate, the project was able to observe how much the knowledge, skills and practices of training recipients changed. After local journalists were trained, they began to include disaster management-related reports in paper and electronic media (including social media) as well as on FM radio.

In addition to training, the stockpiling of search-and-rescue, first aid and fire response-related materials, the installation of traffic signs and signals (for example Tichugalli of Lalitpur-19), the provision of digital hazard and resource maps, and the installation of lightning rods in school and other strategic locations also helped to sensitize people about how to prepare for disaster risks and manage disaster emergencies and how to reduce disaster risks with the use of the knowledge, skills and tools/materials they had acquired. Together, these initiatives prepared the groundwork and an enabling environment for the formulation of plans, SOPs, guidelines, strategies, policies, and programs through careful review, consultation, and reflection at the ward, municipality, and piloted school levels. Stakeholders now have a better understanding of urban disaster risk preparedness and emergency response. The project's initiatives, particularly post-disaster need assessments, risk transfer and transformation of the LEOCs in the three municipalities into 'disaster learning centers' through structural and non-structural capacity-building, was instrumental in yielding multi-faceted impacts.

The designs of different small-scale risk mitigation schemes in different municipalities suggested that the schemes were selected based on the VCA and RVA tools. As the schemes were needs-based, they have helped to reduce disaster risks. Some of the schemes, including sirens/emergency alarm systems, fire hydrant systems, overhead water tanks, drainage management, the installation of booster pumps and water tanks for fire preparedness, and the construction of PwD-friendly structures in schools, served a diverse population. Among the schemes were gabion net support for lift irrigation in Bharatpur and an underground water tank with rainwater harvesting, a water pump to reduce waterlogging, and underpass retrofitting in Tichugalli of Lalitpur-19. In Bhimeshwor, landslide treatment (Mahankal School and Gairaghar at ward-6), water source protection (Salles-wara, Maidane, Gaptole, and Gutamtole Khanepani), the installation of lightning rods in three lightening prone locations (Gumba of Charighyang, Charikot view tower, and Kolinka Office-Simpani), the renovation of traditional ponds for multiple use (Purano Bazzar, District Court area, ward-3) and the lamination of glass in Charikot hospital doors and windows, installation of smoke detector fire alarm system in municipality and hospital buildings were among the schemes. The provision of arrangements of mismanaged electric wiring to a school for the deaf, the clamping down of Kalinchowk Secondary School and Charikot hospital-based furniture, tools and equipment; and the provision of an emergency siren system were other schemes in Bhimeshwor. Provisions for establishing resilience funds in the municipalities helped to leverage resources and create synergy.

Despite these positive developments, there were some missed opportunities. More could have been done in terms of earthquake preparedness through policy advocacy and capacity-building as the project's municipalities are not just fire-prone but also earthquake-prone. More collaboration could have been done with federal-level stakeholders, including government officials, to build synergy. Though the project was successful in leveraging government budget, it was not able to access much

funding from private sectors, in part due to the COVID-19 situation. Though the project focused only on two wards in each of three municipalities and the project's results were good, it has very limited interventions with DDMC or other district stakeholders. The engagement of the private sector could have been increased by involving it in fire and earthquake preparedness and response. If the project had been able to reform and strengthen the LEOCs in Bharatpur and Bhimeshwor at the outset of its work by allocating them proper space and providing them with tools and equipment, those LEOCs could have generated additional results. BIPAD data could have been better systematized if an IT/DRR focal person and the city police had been mobilized at the outset and then operationalized as per the SOP.

To ensure that there are holistic benefits from the project in the long run, there is a need to employ a multi-hazard approach, provision O&M funds for small-scale risk mitigation activities, develop an inventory of DRRM-related tools and materials, uphold international standards and protocols, and provide timely policy support to municipalities to translate policy into action. Other grey areas to incorporate in future project designs include (i) the localization of NBC and bylaws for the expansion of earthquake-resilient technologies, (ii) linking most-at-risk urban communities with vocational skills and markets, (iii) developing LEOCs as disaster learning centers, (iv) helping WDMCs of other wards understand disaster risk, (v) using TLOs and women's groups as an entry point for risk-reduction initiatives and (vi) carrying out disaster impact assessments and audits.

In a nutshell, the project enhanced understanding of the disaster risks at community and municipal levels, strengthened and/or established systems at all levels for effective emergency response and management, and increased disaster preparedness at the community and municipal levels for effective emergency response and risk reduction.

8. Recommendations

Based on the overall findings and conclusions, the evaluation makes the following recommendations for developing future similar project.

a. *Allocate one-month for preparatory phase:* Design at least a one-month "preparatory phase" to share project details among the stakeholders and beneficiaries, orientation on contributions required and formation of sustainability and exit plans, sharing standard criteria for selecting small scale risk mitigation schemes, forming or reforming and then registering committees, and imparting major trainings as part of sensitization.

b. *Develop LEOCs as disaster learning centers:* Consider LEOCs as an entry point for urban DRR and emergency response. Allocate proper space for its LEOC in each municipality in the beginning. Making LEOCs institutionally strong will solve many challenges. In order to strengthen and institutionalize LEOCs, prepare LEOC operation guidelines and institutional growth plans under the leadership of a municipality. These guidelines would give ideas about what information to feed to the BIPAD portal. Apart from practicing strong data management on preparedness and emergency response, keep data on the capacities of hardware shops, groceries, marts, shopping centers, and food suppliers and map the emergency stockpiling each of these businesses. Carry out MoUs between these business house with local governments so that supplies could be used immediately during an emergency. To improve the data and establish a database, involve university students studying disaster management as part of their social work/internship by having a municipality and a university sign an MoU. Hire one IT person/information management officer to systematize the BIPAD data.

c. *Build the capacity of fire stations:* To develop the capacity of fire stations and their firefighters, prepare a standard training module and curricular along with a standard step-wise guideline for drills. Draft a training-curricula for electrical and industrial fires and carry out safety audits of electrical lines in small- and medium-scale enterprises. Establish a mechanism for exchanging information with fire stations, security forces and other critical services (ambulances and hospitals) for quick and systematic fire responses by using very high frequency (VHF) radio sets.

Manage fire trucks and fire motorbikes suitable for narrow streets. Educate people about and enforce the provisions of fire building codes and a minimum level of mandatory safety measures to be put in place in all buildings based on their type and capacity. Advocate for the mainstreaming of fire code-related provisions in building bylaws and the DRRM-related policy landscape of the national, provincial and local governments.

d. *Consolidate risk-transfer initiatives further:* Developing a risk transfer mechanism is not an easy task. To simplify it, the project need to (i) prepare a risk transfer guideline along with other associated legal instruments under the leadership or each concerned municipality, (ii) develop MoUs with private insurance companies, municipalities, and media, and (iii) carry out policy advocacy and sensitization by involving different categories of stakeholders and beneficiaries through IEC materials and knowledge products to erase the myths that risk transfer through insurance has many challenges. Develop disaster financing strategy in the local context to operationalize its provisions into practice.

e. *Link most-at-risk urban communities with vocational skills and markets:* Support most-at-risk communities living in pockets of poverty to draft business plans, register enterprises with relevant agencies, and develop ideas for market linkages in order to ensure that any small-scale enterprises they establish are sustainable. Organize life skills and vocational training in subjects like electric wiring, plumbing, vehicle repair and maintenance for men and wool yarn spinning; carpet weaving; and bead necklace-, bangle-, and sweater-making for women to generate income, thereby increasing their resilience.

f. *Engage the private sector more intensively:* Engage FNCCI and other private sector associations at the local, provincial and federal levels in resource pooling by crafting business continuity plans as many businesses and enterprises are likely to collapse after a disaster. Sensitize private sector for leveraging resources in DRRM endeavors and increase investment in risk reduction initiatives as disaster is everybody's business. Facilitate the development of a framework and guidelines for disaster risk-informed budgeting and investment at the municipality level to help ensure DRRM activities are prioritized, and that the required budget is allocated in the annual and periodic plans of local governments to make up for the fact that the local DM fund operation guidelines currently available focus only on response and relief. Considering the recurrence of disaster events, develop guidelines for identifying and managing open spaces as was done in Kathmandu Valley, mapping water reservoirs to use immediately during an emergency, and increasing their preparedness and response capacity if any disaster strikes. Guidelines and a framework for mobilizing the private sector at the municipal level is necessary to provide continuity after a disaster.

g. *Mainstream GESI in the programmatic cycle:* Mainstream GESI in the programmatic cycle i.e., collecting baseline data, designing, implementing and monitoring the project in order to distribute the projects benefits to all people irrespective of gender and caste/ethnicity.

h. *Develop a disaster impact assessment (DIA):* Develop a DIA tool to identify major project activities thar are developed by the RSLUP. Updated the current tools viz. IEE and EIA by incorporating DRR indicators. Carry out disaster audits at the completion of the project to ensure that the resilience capacities of the actors and beneficiaries are increased enough for them to be able to cope with upcoming disaster events without external supports.

i. *Include few but strategic activities in the program:* Because there were too many project activities, the project team was overstretched and struggled to meet targets on time, let alone follow up on completed activities and establish the sort of institutional linkages which could promote sustainability. Engage in a few strategic activities such as (i) support policy initiatives from the beginning, (ii) craft standard training curricula and impart ToTs, (iii) design few but model small scale risk mitigation activities and (iv) document learning and disseminate among the relevant stakeholders well rather than in many activities superficially. Develop a mechanism to replicate the learning of project wards in other, non-project wards through proper dissemination by involving members of other WDMCs through periodic review-and-reflection sessions that help increase understanding of risk.

j. *Knowledge management:* Continue to replicate the project's good practices in the designs of future projects. Engage the project in a detailed documentation of good practices and lessons

learned utilizing UNDP's internal budget as many innovations are already in place and could be replicated in new areas so that other agencies could also benefit. Without documentation, practices may erode after some time. Then replicate project's learning and good practices in different networks to cross-fertilize knowledge and promote resource leveraging. Unless sharing is made part of the project, the project will remain inadequately visible and many development partners and agencies will not be made fully aware of its commendable efforts. Mainstream project's good practices and learning into UNDP's program development processes and incorporate them while designing similar projects in the future.

9. Good practices and learning

9.1 Good practices

- The formulation of DRRM-related policy instruments, standards and guidelines for municipalities to win the trust of municipal authorities and encourage them to allocate more of their budgets to DRRM-related activities.
- The establishment of resilience funds to leverage resources from projects, municipalities, the private sector and civil society organizations to carry out small-scale risk mitigation activities and ensure the sustainability of the schemes.
- The construction of underground water tanks in Lalitpur and the collection of water by practicing rainwater harvesting and linking fire hydrants is a good practice for fire response in narrow streets that fire trucks cannot access. These measures also reduce the impact of inundation/submergence during the peak monsoon. The water collected could be used for cleaning the community and other purposes as decided by the communities.
- The preparation of digital hazard and resource maps in consultation with ward stakeholders and beneficiaries using data derived from VCA and RVA and the erection of such maps in accessible locations to help to guide people during emergencies.
- The inclusion of people who receive SSAs and those who live in disaster-prone areas as project beneficiaries adds value to the project and such recognition creates positive energy among beneficiaries irrespective of their age.
- The installation of above ground water tanks in strategic areas of Bhimeshwor and Bharatpur and the connection of each tank with water hydrants to promote multiple use. In coordination with drinking water offices, the project ensured that there would be a perennial supply of water in such tanks.
- The installation of analog and digital sirens to warn people in advance to reach designated safe locations following established evacuation route during emergency management.
- The development of an inventory of trained volunteers with detailed contact information and addresses by LEOCs for use in assessing capacity gaps and prompt disaster preparedness and emergency response.
- The construction of ramps with safety railings in public structures with safety bar to serve PwDs and senior citizens and the organization of ear camps to help people with hearing impairments.

9.2 Learning

- *Coordination meetings and contingency plans:* It was learned that project's coordination meetings with senior authorities of municipalities helped to (i) integrate the project's plans with those of municipalities, (ii) leverage municipal resources, and (iii) involve the private sector in urban disaster preparedness and emergency response. The development of contingency plans helped to manage emergency situations despite the COVID-19 pandemic. Building rapport with senior municipal authorities, identifying technical/thematic heads and promoting understanding of risk through policy induction, vulnerability walking, observation, review-and-reflection sessions, VCA

and RVA helped to increase ownership of project activities. The second wave of the pandemic further helped stakeholders realize the need to understand risk.

- *Selection criteria for trainees:* The effectiveness of capacity-building initiatives is high if participants are selected based on agreed-upon criteria including interest, age, proven knowledge, and willingness to share major learning with others.
- *Schools and hospitals are the best platforms for knowledge creation and dissemination:* Choosing schools and hospitals as an entry point was a wise decision as they create knowledge about risks as well as disseminate urban risk reduction-related messages to a broad population. Schools and hospitals can model good behavior and disseminate information about exposure, risk and vulnerabilities at schools and hospitals. VCA and RVA help to reduce disputes, select core urban wards, and sample schools and hospitals.
- *Use of existing social platforms:* The use of existing social platforms such as women's groups, TLOs, *guthis,* SMCs, Cooperatives and PTAs, and health management committees helps save time, effort and resources.
- *Linkage of LEOCs with Municipal city police and fire stations:* When LEOCs are linked with city police and fire stations and are developed as disaster learning centers, the project gains momentum. The provision of the emergency telephone numbers of service providers in flyers that were judiciously disseminated, data repository and coordination, the preparation of SOPs to engage all sectoral departments, and the stockpiling of firefighting and SAR equipment also boosted the effectiveness of LEOCs.
- *Geo-referencing of vulnerable households and communities:* The preparation of digital hazard and resource maps using GIS features to map highly vulnerable communities and households helped to draw the attention of municipal authorities to understanding the risks of marginalized and deprived communities and the erection of these maps in strategic locations helped communities to understand the risks they faced.
- *EPRP formulation through the public-private partnership model:* The public-private partnership model helps stakeholders (identified through mapping) to expose the issues of disaster preparedness and emergency response at a wide level and thereby helps in the formulation of EPRPs. The matching of funds and the O&M of small-scale risk mitigation measures not only fostered synergy but also the sustainability of such measures.
- *Earlier experience of project and partner NGO staff:* The proven experiences of project and partner NGO staff in urban disaster preparedness and emergency response helped the staff grasp the project's issues quickly, internalize them timely and translate them into action without delay. The experience also helped the project to reach municipal senior authorities and advocate for joint action in order to ensure multi-faceted and multi-layer risk reduction.
- *Put municipalities in the front:* Implementation of the project's key activities with municipal authorities taking a lead role creates a positive environment for leveraging municipal budget, avoiding resource duplication and creating synergies. Putting municipal authorities at the front of risk reduction initiatives helps in the development of policy instruments.
- *Reach women through kitchen fire-related training and drills:* Women are engaged with household chores and encounter fire on a daily basis. Using fire preparedness and response-related training with drills as an entry point for women increased their interest in the project's activities. Having individuals realize risks and experience a direct impact at a household level could be key to the internalization of risk at the community level.
- *Policy instruments and relief standards helped to reduce likely conflicts:* Policy instruments and relief standards helped to reduce conflicts as they clearly state (i) who is eligible for the relief, and (ii) how much cash and material each relief recipient is to receive. In Bhimeshwor, the municipality decided to provide cash support based on the provisions laid out in the Municipal Disaster Relief Guideline[13] (though it had not been endorsed by the municipality at that time).

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[13]Supported through EU-Civil Protection and Humanitarian Aid (ECHO) funded Urban Disaster Preparedness and Response Project implemented by UNDP

- *Involving people receiving SSAs as active beneficiaries to build trust:* Identification of the population accessing SSAs irrespective of age and special categories fosters trust among the project's stakeholders and beneficiaries.

Annex

Annex-1: Terms of Reference

UNITED NATIONS DEVELOPMENT PROGRAMME
Nepal Comprehensive Disaster Risk Management Programme
Final Evaluation of "Reducing Disaster Risk and Enhancing Emergency Response Capacities in Multi-hazard Risk Prone Urban areas of Nepal"

1. Introduction
1.1 Background and Context

United Nations Development Programme (UNDP) has been present in Nepal since 1963, working towards sustainable development and resilience with a focus on the most remote, poor, vulnerable population in sparsely populated rural areas and dense settlements in urban areas. Reduction of vulnerability to disaster and climate risks is a core UNDP approach to promote resilient and sustainable development. UNDP has been a key partner to the Government of Nepal (GoN) along with key ministries on disaster risk management (DRM) with a focus on: promoting seismic resilience in urban areas, emergency preparedness and recovery, DRM governance, policy and legal issues, climate change adaptation, and community-based DRM. UNDP has been a technical partner to GoN on innovations relating to urban resilience, e.g., risk-sensitive land use planning for urban areas, with piloting in Kathmandu Valley, promotion and formulation of national building codes, building capacity of the federal and provincial government and municipalities in its implementation and scaling up. UNDP engagement with GoN has been significant in strengthening DRM governance, emergency preparedness for better response and promoting early warning systems across the country.

Nepal is one of the ten least urbanized countries in the world. However, it is also one of the top ten fastest urbanizing countries. Urbanization in Nepal is dominated by a few large and medium-sized cities with excessive population concentration in the Kathmandu Valley. High urban growth is occurring in the Kathmandu Valley, the Inner Terai valleys, and in market and border towns located on highway junctures between the east-west highway and the five main north-south corridors. Studies link the changing urban pattern - where once dense residential city core areas are evolving as economic hubs, with changing use of the buildings, densification due to influx of rental population, unauthorized vertical increment of buildings without upgradation of infrastructure - with the concentration of risks. This is largely due to severe deficit of basic infrastructure and services such as water supply, vehicular access, drainage systems, and electrical supplies, leading to severe negative impacts during any crisis. As witnessed in the 2015 earthquakes in Nepal, densely populated areas in the Kathmandu Valley and old settlements with irregular and narrow streets, congestion and fragile buildings amplify challenges in emergency response and evacuation, thus aggravating the impact of hazards like earthquakes and fires.

Similarly, urbanization patterns vary based on ecological regions, where the urban areas of the hilly belt, with high concentration of urban population, are mostly situated on the ridge tops. The flat plains, with a high number of urban municipalities, are developed along the highways and valley areas and have urbanized with dense, clustered building stock. The prevalent seismic risk aggravated by non-compliant and rampant construction in densifying urban core areas have increased risks to lives and challenges to effective disaster response. Similarly, in hilly areas, development of high-rise structures, without structural assessments, in steep slopes could lead to major impacts during landslides/earthquakes, while the urban sprawl in flood prone areas in flat lands have resulted in loss of lives, property and livelihoods.

In addition, in urban areas, fire incidence is high, compounded by high sensitivity of structures and activities to fire, and inadequate response capacities. The communities as first responders and local fire-fighting systems lack adequate knowledge and capacity on possible response options, which is evident from frequent fire incidents and fatalities not just in hinterlands but also in highly urbanised areas, including the Kathmandu valley. Fire risks, as a consequence, need to be prioritised. With a growing number of urban municipalities recognizing the urban risk and vulnerabilities, UNDP with support from the European Union (EU) is implementing the "Reducing disaster risks and enhancing emergency response capacities in multi hazard-risk prone urban areas of Nepal" project (hereafter 'Project') for enhancing urban disaster preparedness and strengthening the disaster risk governance in selected municipalities. The project has been implemented under the EU/ECHO Humanitarian Implementation Plan (HIP) 2019-2021.

This project is being implemented since June 2019 in core urban areas of three at-risk cities, one each from Terai (Bharatpur Metropolitan City), Hills (Bhimeshwor Municipality) and Valley (Lalitpur Metropolitan City), that are representatives of other cities across Nepal. The project aims to create a shared understanding on urban disaster risks and evolve mechanisms and measures that aids the communities, municipal governments, and private sector to address the risks and effectively respond to emergencies, with specific focus on vulnerable populations. In achieving its aim, the project contributes to enhance understanding of the communities and local authorities of at-risk urban areas and private sector about underlying multi-hazard risks and vulnerabilities, identifies and supports in key areas to undertake system strengthening and demonstrates possible structural and non-structural interventions to enable effective, coordinated emergency response and risk reduction.

The interventions focus on urban disaster risk reduction (DRR) implemented through this project encompass three major components:

- Enhanced understanding of disaster risks at community and municipal levels in selected high-risk urban areas.
- Systems strengthened/established at all levels for effective emergency response and management.
- Enhanced disaster preparedness at community and municipal level for effective emergency response and risk reduction.

1.2 Project Location, Beneficiaries, Duration and Budget:

The project has been implemented in three municipalities of three districts in Bagmati Province. It covers a total of six urban wards (2 each) of Lalitpur Metropolitan City in Lalitpur District, Bharatpur Metropolitan City in Chitwan District, and Bhimeshwor Municipality in Dolakha District. However, the entire municipalities were benefitted by the interventions through development of plans, policies, frameworks and guidelines.

Since its inception, the Project has been able to contribute towards enhanced understanding of disaster risks through various consultation meetings at community, ward and local levels. With the realization of risk among the communities and elected representatives, the Project has been able to identify risks and vulnerabilities in the project wards and support for the preparation of ward level preparedness and response plans. Further, IEC materials were developed based on the findings of Knowledge, Attitude and Practice (KAP) survey together with the National Disaster Risk Reduction and Management Authority (NDRRMA) and the Ministry of Federal Affairs and General Administration (MoFAGA) which has supported to enhance awareness of people on urban related disaster risks and vulnerabilities. The preparation of ward level plans has also supported to prioritize the activities on DRRM for annual planning of wards and local governments.

As mentioned above, the Project has also supported in preparation of various plans, policies and guidelines as a steppingstone for preparing local level elected representatives and staff along with communities to prepare and timely respond to disasters through coordinated efforts. With the learnings from past disasters, such as the 2015 earthquakes and 2017 floods, and understanding the risk in urban areas, the Project has also supported in identification and training of community emergency response team in first aid, search and rescue, fire preparedness and domestic fire prevention. Many of the trained volunteers have already demonstrated the skills in preventing fire events at the local level and some of the volunteers have been able to use their skills on search and rescue and firefighting. With identification of risks and vulnerabilities, the Project has been able to bring in private sector actors and vulnerable populations in various preparedness initiatives.

With enhanced understanding of risks, local governments have also been able to increase the budget allocations for disaster preparedness in annual planning, and the Project has been able to leverage the local government funding. Further, Municipal Emergency Operation Centers (MEOC) have been operationalized and working as hubs for coordination in disaster preparedness and response related activities through allocation of staff. With multiple activities on risk assessment, disaster risk governance, increased investment in disaster preparedness

The Project commenced in June 2019 with an end date of February 2021. However, the Project implementation was directly impacted by the lockdown and travel restrictions imposed by the government to contain the spread of COVID-19. Hence, the project was granted a no-cost extension, with some modifications, until 31 October 2021. Thus, the total duration of the project is 29 months, between June 2019 - October 2021. The total approved budget for the project is USD 1,188,824.42.

- Installation of more than 50 contactless handwashing stations in hospitals, health posts, market, and municipal and ward offices.
- Disinfectant sprayed in markets in two wards of Lalitpur Metropolitan City.
- Supported in mobilization of Female Health Community Volunteers (FCHVs) and volunteers to have increased outreach to communities for COVID-19 preparedness and messaging related to social stigma.
- Support in information management of returnee migrants and vulnerable groups during lockdown for relief distribution.
- Documentation of lessons learnt from COVID-19.
- Rapid Assessment on effectiveness of risk and safety messaging through IEC materials and media for COVID-19 patients living in home or institutional isolation.

In light of the COVID-19 related risks, the Project utilized alternative strategies of engaging local level and communities through virtual means for meeting and information collection required for risk assessments, and preparation of plans and guidelines to meet the specific objectives. However, close contact trainings, like first aid, search and rescue, and fire safety trainings were kept on hold. Small focus group discussions (FGDs) and key informant interviews (KIIs) were also promoted as an alternative means to collect information ensuring engagement of local authorities and communities.

As project implementation was going on full-fledged after the ease in restrictions from the first lockdown, it was again affected by the second wave of COVID-19 which began in Nepal in April 2021, resulting in a prohibitory order in place till date. The Project, with consent from local level and district authorities, has conducted the planned trainings adhering to all safety protocols and limiting participants by doing trainings in two sessions. Along with that, virtual means of communication is also used.

2. Purpose and objectives of the evaluation:

The overall purpose of this final evaluation is to assess the results achieved and lesson learnt by the project. The final evaluation should assess the implementation approaches, results against output targets, contribution to higher level outcome results (changes in socio-economic status through the project implementation), and challenges encountered, as well as identify and document the lessons learnt and good practices and make specific recommendations for future course of actions.

The specific objectives are:

- To ascertain the achievements of the project and its relevancy, effectiveness, efficiency, sustainability and impact, including synergies with other UNDP support efforts.
- To assess the effectiveness and usefulness of the various DRR strategies implemented with support from the Project to enhance the understanding of disaster risks by the elected representatives and other local stakeholders including most vulnerable people for early preparedness and mitigation measures.
- To review and assess the risks and opportunities (in terms of resource mobilization, synergy and areas of interventions) directly linked to the Project .
- To assess engagement of the municipal and ward stakeholders in the project, and their understanding, including financial and other commitment for sustainability of activities beyond the scope of the Project.
- To assess the effectiveness and relevancy of the capacity enhancement trainings, such as fire fighter, Search and Rescue, first aid, etc.

- To assess the effectiveness of Municipal Emergency Operation Centers (MEOCs) supported by the Project in emergency response and management.
- To assess the formulation process and effectiveness of the DRM plans, guidelines and enhancement of community capacity to respond to future disasters.
- To assess the extent of the engagement of vulnerable populations including women and excluded groups for enhancement of disaster preparedness.
- To assess effectiveness of COVID-19 response support activities with the local governments that were woven into the project in response to the first wave of COVID-19 in Nepal.

3. Scope of Work:

The final evaluation should assess the relevance, coherence, effectiveness, efficiency, sustainability and impact of the project intervention in three municipalities. In addition, the evaluation should indicate if the produced results are in the right direction towards facilitating and enhancing urban disaster preparedness and management in the project areas. Particularly, the evaluation should cover, but not be limited to, the following areas:

- Relevance of the project: review the progress against its purpose, objectives, outcomes, outputs and indicators, as per the project document and as defined in the project's Theory of Change, as well as ascertain whether assumptions and risks remain valid. Identify any other intended or unintended, positive or negative results.
- Effectiveness and efficiency of implementation approaches: review project's technical as well as operational approaches and deliverables, quality of results and their impact, alignment with national priorities and responding to the needs of the stakeholders covering the results achieved, the partnerships established, as well as issues of capacity enhancement and utilization.
- Review the project's approaches, in general and with regards to mainstreaming of gender equality and social inclusion, with particular focus on women and excluded groups, including persons with disability.
- Review and assess the sustainability of the results achieved, risks and opportunities (in terms of resource mobilization, synergies and areas of interventions) related to future interventions.
- Review external factors beyond the control of the project that have affected its implementation positively or negatively.
- Review planning, management, monitoring, reporting and quality assurance mechanisms for the delivery of the project interventions.
- Review coordination and communication processes and mechanisms with the key Project stakeholders.
- Review how the implementation of project interventions may have been impacted by COVID-19 and if/how the reprogramming for immediate response was effective and appropriate.

4. Evaluation Criteria and guiding questions

The evaluation will follow the OECD-DAC's revised evaluation criteria - Relevance, Coherence, Effectiveness, Efficiency, Impact and Sustainability. Human Rights, GESI and Disability will be added as cross-cutting criteria. The guiding questions outlined below should be further refined by the consultant and agreed with UNDP before commencement of the evaluation.

5. Methodology:

The evaluation methods provided here are indicative only. The consultant should review the methodology and propose the final methods and data collection tools as part of the inception report. The methods and tools should adequately address the issues of gender equality and social inclusion as well as the SDGs.

The evaluation should undertake a mix of qualitative and quantitative assessment. The evaluator must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, project team, UNDP Country Office and other key stakeholders, including project beneficiaries. Therefore, the evaluator will be responsible for designing and conducting the evaluation including finalizing appropriate methodologies, designing tools and questionnaires for data collection and analysis. The consultant is responsible (but not limited) to conduct:

- Document review: review of project document/proposals, Theory of Change and results framework, Annual Work Plans, activity designs, consolidated quarterly and annual reports, minutes of project board meetings, project modification document, project quality assurance reports, technical/financial monitoring reports, knowledge products, communication materials, and any other relevant documents.

- Interviews and meetings: Consultations with key stakeholders, such as key government counterparts (NDRRMA, MoFAGA), local authorities (municipalities/ward representatives), development partners, representatives of key civil society organizations, beneficiaries (men and women, Dalit, persons with disabilities and other excluded groups) and other stakeholders as per the need. o Semi-structured interviews: based on questions designed for different stakeholders based on the evaluation criteria and questions around relevance, coherence, effectiveness, efficiency, impact and sustainability.
  - Key informant interviews and focus group discussions with beneficiaries and stakeholders, including men and women, and representatives from excluded groups.
  - All interviews should be undertaken in full confidence and anonymity. The final evaluation report should not assign specific comments to individuals.
  - Surveys and questionnaires: to project beneficiaries including male and female participants, other stakeholders at strategic and programmatic level.
  - Field visits: for observations and on-site validation of key tangible outputs and interventions in all three municipalities.
  - Briefing and debriefing sessions: with UNDP and Project team as well as with other partners will be organised. The evaluator should ensure triangulation of the various data sources to maximize the validity and reliability of data.
  - Data review and analysis of monitoring and other data sources and methods. To ensure maximum validity, reliability of data (quality) and promote use, the evaluator will ensure triangulation of the various data sources.

GESI and human rights lens: All evaluation products need to address gender equality, social inclusion, and human right issues. The process/steps mentioned above should ensure that the most appropriate and relevant data are gathered for the above-mentioned objectives. Based on the analysis and findings, the recommendations should be provided for future direction of the initiatives.

The consultant will have to submit the final full report in English. The structure and content of the report should meet the requirements of the UNDP Evaluation Guideline. The final report must meet the IEO's Quality Assessment (QA) criteria. Multiple reiterations may be required until the final report is approved.

The final methodological approach, including interview schedule, field visits, evaluation matrix and data to be used in the evaluation should be clearly outlined in the inception report and fully discussed and agreed with UNDP. The evaluator should select the respondents using an appropriate sampling technique. While selecting the respondents, the evaluator should ensure gender balance. Care must be taken to ensure the voices of women, minority and vulnerable groups are captured.

6. Evaluation products (Deliverables)
The evaluator should submit the following deliverables. All the evaluation products need to address gender, disability and human rights issues.
- **Inception report** detailing the reviewer's understanding of what is being evaluated, why it is being evaluated, and how (methodology) it will be evaluated. The inception report should also include a proposed schedule of tasks, evaluation tools, evaluation questions for each evaluation criteria and interviewee, activities and deliverables. The inception report should be prepared based on preliminary discussions with UNDP after the desk review and should be submitted before the evaluation starts (before any formal evaluation interviews, survey distribution or field visits.
- **Evaluation matrix** that includes key criteria, indicators and questions to capture and assess them.
- **Evaluation debriefing**- immediately after completion of data collection, the evaluator should provide preliminary debriefing and findings to UNDP, the project team and stakeholders.
- **Draft Evaluation report** for review and comments.
- **Evaluation Audit Trail** – The comments on the draft report and changes by the evaluator in response to them should be retained by the evaluator to show how the comments have been addressed.
- **Final report** within stipulated timeline with sufficient detail and quality by incorporating feedback from the concerned parties.
- An **exit presentation** on findings and recommendations.

7. Team composition and required competencies

The evaluation will be carried out through a national consultant. The person involved in any way in the design, management or implementation or advising any aspect of the intervention that is the subject of the evaluation will not qualify. The evaluator will be selected by UNDP CO.

National consultant
Duty Station: UNDP Country Office (home based) with required field visits to project implementation sites.
Total working days: 30

Major roles and responsibilities:
The national consultant will be responsible for conducting the final evaluation. She/he will be solely responsible to ensure quality and timely submission of all the deliverables including the evaluation report and briefing to UNDP, and for ensuring gender equality, social inclusion and human rights perspectives are incorporated throughout the evaluation work and report. Specifically, the national consultant will have the following roles and responsibilities:
- Gathering and review of relevant documents
- Finalizing and designing the methodologies and data collection instruments
- Prepare inception report, evaluation matrix including the evaluation questions, data collection instruments, etc.
- Ensure GESI and human rights perspectives are incorporated throughout the evaluation process and final report
- Conduct field visits in project areas/communities and conduct interviews (by in-persons or virtual means) with the selected target groups, partners and stakeholders.
- Facilitate stakeholders' discussion and focus groups to collect, collate and synthesize information
- Analyse the data and prepare a draft evaluation report in the prescribed format
- Incorporate the feedback and finalize the evaluation report
- Coordinate with UNDP CO for evaluation related information

Qualification and Competencies:
- At least Master's degree in International Development, Development Economics/Planning, Economics, Statistics, Social sciences or other relevant subjects.
- Demonstrated experience in designing and leading similar kinds of evaluations of development projects related to DRR/reconstruction/EQ safety or related areas
- At least seven years' experience in development projects related to disaster preparedness and risk reduction, including in earthquake-affected areas, with particular emphasis on recovery needs, and resilient community infrastructures building
- Excellent analytical and report writing skills in English
- Excellent command in different data collection methods including FGDs, KII and Social surveys
- Adequate knowledge on GESI sensitive evaluation, and human rights issues.

8. Evaluation Ethics
This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The consultants must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The consultant must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information, knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.
Consultants will be held to the highest ethical standards and are required to sign a Code of Conduct upon acceptance of the assignment.

9. Implementation arrangements
The principal responsibility for managing this Evaluation resides with the UNDP CO in Nepal. The UNDP CO will contract the consultant and ensure the timely provision of logistic arrangements for implementation of the evaluation. The consultant will directly report to Evaluation Manager, i.e. RBM Analyst in this case.
RBM Analyst/Evaluation Manager will assure smooth, quality and independent implementation of the evaluation with needful guidance from UNDP's Senior Management. The Project team will be responsible for providing required information, furnishing documents for evaluation to the consultant in leadership of Portfolio Manager of the Resilience Portfolio. They will also be responsible for the logistic arrangements of the evaluation, for

setting up stakeholder consultations and interviews as needed, arranging field visits, coordinating with the governments and development partners, etc. For travel related cost (fare and DSA), UNDP will cover travel costs as per the UNDP's rules and regulations.

The evaluation will remain fully independent. The consultant will maintain all the communication through Evaluation Manager. The Evaluation Manager should clear each step of the evaluation. The final evaluation report will be signed off by the UNDP CO Deputy Resident Representative. A mission wrap-up meeting during which comments from participants/stakeholders will be noted for incorporation in the final report.

The evaluator will be briefed by UNDP at the start of the assignment on the objectives, purpose and scope of the Final evaluation. Key relevant project documents mentioned in Annex (13 (i) will be provided to the consultant after signing the contract. The consultant should review the relevant documents and share the draft inception report before the commencement of the field mission. The consultant should revise the methodology, data collection tools and evaluation questions as deemed necessary. The final methodology and instruments should be proposed in the inception report, including the evaluation schedule and evaluation matrix which guides the overall implementation of the evaluation.

10. Timeframe
The evaluation is expected to start in Mid of September 2021 for an estimated duration of 30 days. This will include desk reviews, primary information collection, field work, analysis and report writing.

11. Use of Evaluation Results
The findings of the evaluation will be used to analyse the lessons learned and recommend ways forward for future course of actions. Therefore, the evaluation report should provide critical findings and specific recommendations for future interventions.

12. Application submission process and criteria for selection
It will be mentioned in Request for Proposal (RFP) document.

Annex-2: Evaluation matrix and checklist
Evaluation criteria: Relevance

Key questions	Data source	Data collection tools	Indicators/ success standard	Data analysis
• How relevant were the overall design and approaches of the project? • To what extent was the project in line with national development priorities, Country Programme Document outcome and outputs, and the SDGs? • To what extent were lessons learned from other relevant projects considered in design? • To what extent the project was able to address the needs and priorities of the target groups and communities in the context of COVID-19 pandemic • To what extent the objectives of the project design (inputs, activities, outputs and their indicators) and its theory of change were logical and coherent? Did the project contribute to the outcomes and outputs of the CPD? • To what extent the results contributed in facilitating the preparedness efforts of the NDRRMA and MoFAGA at federal and local level? • How the project contributed and was relevant in strengthening disaster risk governance at local level, contributing towards effective urban preparedness? • To what extent the project was able to adapt to the needs of the different target groups (including tackling the gender	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders and UNDP staff and PEB members • Review of project documents including progress report • Review of COVID-19 impact assessment by GON. • Review of country support strategy, SDG • FGD with beneficiary groups • Review of case studies and media reports	• Desk review • KII • FGD • Competency analysis • Case study • MIS data	• Extent to which Project supports national priorities, policies and strategies • Extent to which the project is aligned with national priority, SDGs and UNDP's country support strategy • Degree to which the project supports aspirations and/or expectations of stakeholders and beneficiaries (incl. women) • Number of project indicators with GESI • Adequacy of project design and implementation to national realities and existing capacities	• Context analysis using PESTLE framework • Excel program

Key questions	Data source	Data collection Tools	Indicators/ success standard	Data analysis
equality and social inclusion aspects) in terms of creating an enabling environment for inclusive and vulnerable population centred preparedness policies and actions?				

Evaluation criteria: Effectiveness

Key questions	Data source	Data collection Tools	Indicators/ success standard	Data analysis
• To what extent the project activities were delivered effectively in terms of quality, quantity and timing? • To what extent the project contributed to the Country Programme Document outcomes and outputs, the SDGs, the UNDP Strategic Plan, and national development priorities? • To what extent were the project results achieved, considering men, women, and excluded groups, including persons with disability? • Which factors contributed to achieving, or not achieving, the intended results? • To what extent different stakeholders were involved in project implementation? • To what extent the project contributed to gender equality, the empowerment of women and persons with disability and the realization of human rights? • To what extent monitoring arrangements have been effective and supported adaptive management? What were the lessons and how was feedback/learning incorporated in the subsequent process of planning and implementation? • How effective the project has been in enhancing the capacity of the communities and local governments, urban stakeholders (hospital, schools) to create an enabling environment for Urban Disaster Preparedness Initiatives? • To what extent the project interventions, like Resilience Fund support, were effective in leveraging government funds/resources and resources from other stakeholders? • To what extent the support provided to respond to the impact of COVID-19 was effective?	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders and UNDP staff • Review of fund flow and management cost at project level • MIS data disaggregated by gender and ethnicity • Review of project documents including progress report • Review of country support strategy, SDG • FGD with beneficiary groups • Review of case studies and media reports, training reports • Review of target vs achievements (outputs level) • KII with project team, and partners • Governance, procurement, audit and compliance	• Desk review • KII • FGD • Competency analysis • Most significant change • Case study • Observation • MIS data	• Level of achievement as per result chain (target vs achievements) • Achievement of outputs (qualitative, quantitative) • Evidence of adaptive management and/or early application of lessons learned • Proportion of women and marginalized in the total direct beneficiaries • Number of communities led initiatives led by women • Proportion of women representation in DMCs • Number/types of gender responsive technologies introduced by the project	• Content analysis • Excel program

Evaluation criteria: Coherence

Key questions	Data source	Data collection tools	Indicators/ success standard	Data analysis
• How well the intervention fit in changed context like during COVID-19 pandemic? • To what extent the intervention was coherent with Government's policies • To what extent the intervention addressed the synergies and interlinkages with other interventions carried out by UNDP (internal coherence). • To what extent the intervention was consistence with other actor's interventions in the same context or	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders and UNDP staff • Review of project documents including progress report • Data on Co-funding/co-financing/parallel funding • COVID-19 context, federalization, local govt. priorities, and other actors.	• Desk review • KII • Competency analysis • Case study • Observation	• Evidence of project modification based on the external environment • Evidence of synergies and interlinkages with other agencies • Evidence of added value, reduce	• Content analysis

			duplication and foster synergy	
adding value to avoid duplication of the efforts? (External coherence).	• Review of NRA, Climate change and DRR, SDGs			

Evaluation criteria: Efficiency, implementation approach, M&E

Key questions	Data source	Data collection tools	Indicators/ success standard	Data analysis
• How efficiently were the resources, including human, material and financial resources, used to achieve the project results in a timely manner? • To what extent was the project management structure, as outlined in project document, appropriate and efficient in generating the expected results? • To what extent has the project implementation strategy and its execution been efficient and cost-effective? • To what extent has there been an economical use of financial and human resources? Have resources (funds, staff, time, expertise, etc.) been allocated strategically to achieve envisioned outcomes and outputs? • To what extent have project funds and activities been delivered in a timely manner?	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders and UNDP staff • Review of project documents including progress report • Review of country support strategy, SDG • FGD with beneficiary groups • Review of case studies and media reports • Fund flow mechanism, AWP vs implementation, value for money, procurement guidelines, power delegation, community contribution, equity, co-financing /leverage • Timeliness, process efficiency • Social and public audits, grievance handling mechanism etc.	• Desk review • KII • FGD • Competency analysis • Case study • MIS data	**Implementation and management** • Extent for partners for time and resources, to take over project activities • Evidence of clear roles and responsibilities O&M structure **M&E** • Actual use of the M&E system to change or improve decision- making/adaptive management • Share of M&E in the budget **Financial planning** • Extent to which inputs available to achieve the expected results • Timely delivery of funds, mitigation of bottlenecks. • Level of satisfaction of partners and beneficiaries in the use of funds, fund flow mechanism	• Content analysis • Excel program • VfM analysis

Evaluation criteria: Sustainability

Key questions	Data source	Data collection Tools	Indicators/ success standard	Data analysis
• To what extent are the benefits of the projects likely to be sustained after completion of this project? • What are the plans or approaches of the local authorities/DRM committees to ensure that the initiatives will be continued after the project ends? • How has project contributed towards replication of initiatives at the local level? • What could be potential new areas of work and innovative measures for sustaining the results? • To what extent have lessons learned been documented by the project on a continual basis and shared with appropriate parties who could learn from the project? • What could be done to strengthen exit strategies and sustainability of the project?	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders and UNDP staff and PEB members • Review of project documents including progress report, workshop reports • FGD with beneficiary groups • Review of case studies and media reports	• Desk review • KII • FGD • Competency analysis • Case study • Observation • MIS data	• Extent to which risks and assumptions are adequate and are reflected in the project document • Extent to which project is likely to be sustainable beyond the project • Extent to which sustainability to the project's results in the future, including financial resources	• Content analysis • Excel program

Evaluation criteria: Impacts

Key questions	Data source	Data collection Tools	Indicators/ success standard	Data analysis
• To what extent the project initiatives and results indicate that intended impact will be achieved in the future?	• Outcomes level indicators analysis and review (UNDP MIS), • Review of progress reports • FDGs and KII with beneficiaries and stakeholders	• Desk review • KII and FGD • Competency analysis • Case study and MIS data	• Extent to which the level of changes in people's lives, livelihoods with decreased disaster risks and increased resilience and accessibility	• Content analysis • Excel program

Evaluation criteria: Disability

Key questions	Data source	Data collection tools	Indicators/ success standard	Data analysis
• Were persons with disabilities consulted and meaningfully involved in programme planning and implementation? • What proportion of the beneficiaries of the project were persons with disabilities? • Did persons with disabilities face any barriers to participate in and benefit from the Project?	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders and UNDP staff • Review of project documents including progress report • Review of country support strategy, SDG • FGD with beneficiary groups • Review of case studies and media reports • MIS and GESI data • Enablers and barriers analysis • Disability related data and information	• Desk review • KII • FGD • Competency analysis • Case study • MIS data	• Level of achievement • PwDs involvement	• Content analysis

Evaluation criteria: GESI

Key questions	Data source	Data collection Tools	Indicators/ success standard	Data analysis
• To what extent have gender equality and the empowerment of women been addressed in the design, implementation and monitoring of the project? • To what extent has the project promoted positive changes of women, people with disability and marginalised groups. • To what extent the project contributed to gender equality and the empowerment of women and persons with disability, social inclusion, and the human rights-based approach?	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders • Review of project documents including progress report • FGD with beneficiary groups • Review of case studies and media reports • Data disaggregation in MIS, GESI targeted activities, GESI analysis in project design • Analysis of data disaggregated by gender, ethnicity, disability, anecdotes from field, composition of DMCs (leadership),	• Desk review • KII • FGD • Competency analysis • Most significant change • Case study • MIS data	• Level of achievement (as laid out in the log-frame, target vs achievements) • Achievement of GESI outputs (qualitative, quantitative)	• Content analysis • Excel program

Evaluation criteria: Human rights

Key questions	Data source	Data collection tools	Indicators/ success standard	Data analysis
• To what extent have women and excluded groups, including Dalit, ethnic minorities, persons with disability, and others, benefitted from the work of the project? • To what extent has the project integrated Human Rights based approach in the design, implementation and monitoring? Have the resources been used in an efficient way to address Human Rights	• Desk review of project design and technical documents; national policies and strategies (including GoN, UNDP) • Interviews with project staff management, project partners, stakeholders • Review of project documents including progress report	• Desk review • KII • FGD • Competency analysis • Case study	• Level of achievement (as laid out in result chain) • Achievement of human rights outputs (qualitative, quantitative) and description of activities	• Content analysis • Excel program

in the implementation (e.g., participation of target stakeholders, collection of disaggregated data, etc.)?	• FGD with beneficiary groups • Review of case studies and media reports			

Annex-3: Checklist and guide questions

United Nations Development Programme

Reducing Disaster Risk and Enhancing Emergency Response Capacities in Multi-hazard Risk Prone Urban areas of Nepal, CDRMP/UNDP

Checklist and questionnaire for Key Informants

(Federal and Municipality level stakeholders: UNDP, Ministries, Municipal authorities, other relevant agencies)

Face-to-face/virtual interview

Introduction and Consent
Namaste. My name is _____. I work for UNDP as an indenpenednt consultant to evaluate the performance of the project. The purpose of this evaluation is to understand how the project was sucessful inachieveing its objectives and how efficient and effectvely the the project was in mobilizing its resources. In this regard, I am interested to understand your opinions and experinces so that we could make evaluative judgment more precisely. We will take approximately 40-45 mins of your time. All information you provided remain confidential and

Responded Name:	Sex: Male ☐ Female ☐
Name of organization	
Designation:	Contact No.:
Roles in this project:	

1. To what extent 'this project was relevant in reducing disaster risk and enhancing emergency response capacities in multi-hazard risk prone urban areas of Nepal'?				
Fully relevant ☐	Relevant ☐	Partially relevant ☐	Not relevant ☐	Don' t Know ☐
Why?				

2. How did you find the effectiveness of implementation structure of this project?				
Highly effective ☐	Effective ☐	Moderately /partially effective ☐	Not effective ☐	Don' t Know ☐
Why?				

3. How effective was UNDP and senior government officials in project management?				
Highly effective ☐	Effective ☐	Moderately /partially effective ☐	Not effective ☐	Don' t Know ☐
Why?				

4. To what extent did this project coordinate with other similar projects/programes in country?			
Fully coordinated ☐	Partially coordinated ☐	Not Coordinated ☐	Don' t Know☐

How?

What were coordination mechanism?

5. To what extent the project has been successful in achieving its expected results/objectives of this project (for example, enhanced understanding of disaster risks at community and municipal levels in selected high-risk urban areas)?			
Fully successful ☐	Partially Successful ☐	Not Successful ☐	Don' t Know ☐

Why?

6. To what extent this project's activities were aligned with the expected results?			
Fully aligned ☐	Partially aligned ☐	Not aligned ☐	Don' t Know ☐``

How?

7. How was the participation of National level stakeholders in the project's (e.g., relevant ministry department, NRA, DoHM, etc.) design, monitoring and evaluation process?			
Highly participatory ☐	Moderately participatory ☐	Not participatory ☐	Don' t Know☐

Why and how?

8. To what extent this project has been successful to meet expectation of funding agencies?			
Fully successful ☐	Partially successful ☐	Not successful ☐	Don' t Know☐

Why? And how? Any evidence's of success…

9. How frequently learning sharing events organized among the project stakeholders and partners?			
Frequently (at least twice in a year) ☐	Rarely (one of two times throughout the project period) ☐	Not at all ☐	Don' t Know☐

Any evidences /example

10. To what extent project learning and practices were adapted /scale up in the project implementation?			
Highly adapted ☐	Partially adapted ☐	Not adapted ☐	Don' t Know ☐

Why?

11. To what extent have project integrated GESI, disability and human rights based approach in the project design? (e.g. participation of targeted stakeholders, collection of disaggregated data, etc.)

Fully integrated ☐ Partially integrated ☐ Not integrated ☐ Don' t Know ☐

Why?

12. In your opinion who benefited the most from this project? and how?

Men ☐		Women ☐	Youth ☐		☐ Elderly	`PwD☐	Don' t Know☐

Why and how ?

13. What are the positive and negative impacts (if any) of this project on communities, partner organization, and government agencies?

	Positive impacts	Negative impacts
National level stakeholders	▪	▪
UNDP	▪	▪
Government agencies	▪	▪
Others if any ……	▪	▪

14. What are your key (three) recommendations for its improvement if similar project to be deigned in future?
-
-
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United Nations Development Programme

Reducing Disaster Risk and Enhancing Emergency Response Capacities in Multi-hazard Risk Prone Urban areas of Nepal, CDRMP/UNDP

Focused Group Discussion with Disaster Management Committees and most at risk population

<u>Checklist</u>

Date of discussion: …….../………/……………
District:…………… Municipality………………………………………… Ward No:…… Settlement: ………..………
Name of DMC …………………………………………………………..

SN	Name of participant	Gender	Main occupation	Position
1				

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1. How many members are in your committee? (By gender, ethnicity wise)? How many women are in vital /leadership position?
2. What are the key objectives of this committee? And what types of role and activities have you conducted in the community in reducing the disaster risks and enhancing the emergency response?
3. How do you coordinate with local government –municipality, ward, and settlements?
4. Any other agency other than this project working with you? If yes, how do you coordinate with them?
5. What are the main risks, challenges and opportunities for reducing the disaster risks and enhancing the emergency response in your localities?
6. What type support the project provided to the most vulnerable families for protecting their lives through reducing the disaster risks and enhancing the emergency response capacities?
7. Was this project a priority needs of community, if yes /no why?
8. How did you identify this project, and why? Who decided?
9. Do you have division of roles– segregation of roles/responsibility- sub-committees (procurements, public audit, accountability mechanism?
10. Do you have robust procurement process? (Policy and cost effectiveness and value for money)
11. Do you have capacity building plan?
12. What support did you receive from this project? (Materials, cash training, technical support, inputs etc.)
13. Who (men or women) benefited the most from the project's initiatives undertaken and how?
14. What are the outputs generated by your DMC in coordination with project? physical improvements, structural changes, etc.)
15. What types of improved technologies your groups/committees have adopted as a result of this project?
16. What are the key challenges encountered reducing the disaster risks and enhancing the emergency response capacities and how you able to mitigate those challenges?
17. What opportunities do you see to reduce the disaster risks and enhance the emergency response capacities in and around the communities?
18. Did you receive support from this project on time? What are they? Were they based on your need and priority and of quality?
19. How do you coordinate with project and the government stakeholders in carrying out project's activities?
20. What are your observations regarding this project? *(Probe: What are the things you like most of project, what could have done better/differently for project effectiveness).* Any unintended positive or negative results/consequence?
21. What is your plan for the sustainability of your initiatives for reducing the disaster risks and enhancing the emergency response capacities through insurance, networking, capacity building, etc.?
22. How do you see sustainability of the outcomes/results of the project implemented?
23. Do you find any of the good practice of approach that can be replicated at local level?
24. What is your future plan in reducing the disaster risks and enhancing the emergency response capacities?

25. What are other most significant changes you think in your group/committees due to this project? Why do you think these are significant for you, your family and as a whole for the society in reducing the disaster risks and enhancing the emergency response capacities?

Annex-4: List of relevant secondary information

- Project document/proposals
- Consolidated quarterly and annual reports
- Minutes of project board meetings
- Project modification document
- Knowledge products
- Communication and Visibility reports
- IEC Materials
- Emergency Preparedness and Response plan (EPRP), relief Guidelines, Ward level EPRP, Volunteer mobilization guideline
- MEOCs Standard Operating Procedures
- Simulation guidelines
- Fire incidences documentation

Annex-5: List of people consulted

a. Municipal level
Lalitpur

Sn	Name	Gender	Position	Email	Phone
1	Haris Chandra Lamichhane	M	DRR Focal Person	er.hclamichhane@gmail.com	9851052073
2	Narayan Lal Awale	M	Chairperson, DRM committee, LMC		9851076023
3	Keshab Aryal	M	Officer - DRR department	aryalkeshav180@gmail.com	9841425559
3	Binod Tamrakar	M	Chairperson, ward # 19, LMC	binodtamraka@gmail.com	9841435702
4	Nirmal Ratna Shakya	M	Chairperson, ward # 16, LMC	nirmaljiguman@gmail.com	9840051038
6	Rajkumar Thaukari	M	Fire Brigade team member Fire Brigade Office, LMC		9841151111
7	Ganesh Paudel	M	Fire Brigade team member, Fire Brigade Office, LMC	poudelganesh846@gmail.com	9845090349
8	Indra Kafle	M	School Principal- Purnachandi Boarding School		9851142211

Bhimeshwor

Sn	Name	Gender	Position	Email	Phone
1.	Bharat Bahadur KC	M	Mayor	kcbharat651@gmail.com	9851143779
2.	Kamala Basnet	F	Deputy Mayor		9844060271
3.	Man Bahadur Khadka	M	Chief Administrative Officer	khadkamb@yahoo.com	9854046111
4.	Suresh Raut	M	DRR Focal Person/Chief of Planning Section	rtsuresh@hotmail.com	9854045074
5.	Narayan Prasad Sendai	M	Senior Officer/Head of Social Development Section	narayanshedhain@gmail.com	9854045833
6.	Nabin Lama	M	Ward Chair, BNP-6		9851153774
7.	Harishan Siwakoti	M	Ward Chair- BNP-3		9844304545
8.	Shiva Khadka	M	Fire Fighting Focal Person		9851207101
9.	Thir Bahadur Khadka	M	SCOUT		9844427660
10.	Ganesh Shrestha	M	CERT Member	shresthaganesh395@gmail.com	9861081347

Bharatpur

Sn	Name	Gender	Position	Email	Phone
1.	Padam Pani Subedi	M	Coordinator -LDMC		9855013145
2.	Arun Pidit Bhandari	M	Ward 10 chairperson and spokesperson		9855013151

3.	Purna Bahadur Shrestha	M	Ward 2 chairperson		9855013142
3.	Bal Krishna Thapaliya	M	MEOC focal person	Balkrishna127@gmail.com	9845051127
4.	Devendra Raj Regmi	M	Fire brigade		9865214056
5	Bikram Adhikari	M	Manager, National city hospital		9855053122
6	Bishnu prasad Paudel	M	Chairperson, Gas distribution association		9855057404

b. Municipal team
Lalitpur

Sn	Name	Gender	Position	Email	Phone
1	Avishek Ojha	M	Project Support Officer	ojhaavishek@gmail.com	9848250754
2	Ranjita Singtan	F	Community Development Worker	rs.singtan@gmail.com	9843639075
3	Sujita Bajracharya	F	Community Development Worker	bajracharyasujita@gmail.com	9849592109
4	Esha Singtan	F	Finance Officer	singtanesha@gmail.com	9860030079
5	Himal Ojha	M	Project Officer	himalay.ojha@undp.org	9851113024
6	Madan Acharya	M	Information Management Officer	madan.acharya@undp.org	9844619141

Bhimeshwor

Sn	Name	Gender	Position	Email	Phone
1.	Bhesh B. Parajuli	M	Municipal Technical Officer	bhesh.parajuli@undp.org	9851156418
2.	Nishan Basnet	M	IMO	nishan.basnet@undp.org	9843576295
3.	Rajesh Bhattarai	M	Project Support Officer/HURADEC	jesh.bhattarai@gmail.com	9851137878
4.	Phanindra Chaulagai	M	Community Development Worker/HURADEC	cdw6.huradec@gmail.com	9849623097
5.	Rojina Sunuwar	F	Community Development Worker	cdw3.huradec@gmail.com	9843813203
6.	Sundar Laminchhne	M	Project Focal Person,	ed.huradec@gmail.com	9851049186
7.	Krishna Bahadur Bhujel	M	Admin and Finance Officer	hoa.huradec@gmail.com	9851141432

Bharatpur

Sn	Name	Gender	Position	Email	Phone
1.	Anjana Sharma	F	Municipal Technical Officer	Anjana.sharma@undp.org	9851245676
2.	Biraj Pokharel	M	Information Management Officer	Biraj.pokharel@undp.org	9851108001
1	Himalaya Subedi	M	Project Focal Person	himalaya.subedi@forwardnepal.org	9855047650
2	Uttam Aryal	M	Project Support Officer	uttam.aryal@forwardnepal.org	9851162496
3	Ram Dayal Yadav	M	Admin Finance Officer	rdtharau@forwardnepal.org	9848267950
4	Manju Regmi	F	CDW	regmimanju74@gmail.com	9845065046
5	Rashu Thakali	F	CDW	rthakali013@gmail.com	9845394744

c. Project teams

Sn	Name	Gender	Position	Email	Phone
1	Sushant Sharma	M	Project Coordinator	Sushant.sharma@undp.org	9851010393
2	Abhushan Gautam	M	Senior Communication Assistant	Abhushan.gautam@undp.org	9860462408
3	Rajendra Kumar Gurung	M	Admin/Finance officer	rajendrak.gurung@undp.org	9803006935
4	Ramniwas Kushwaha	M	Admin/Finance Assistant)	Ramniwwas.kushwaha@undp.org	9855033323
5	Sunoj Joshi	M	Engineer- Consultant	sunojjoshi@gmail.com	9843323786

d. UNDP senior management and ECHO

Sn	Name	Gender	Position	Email	Phone

I	Vijay Singh	M	UNDP Policy Advisor	Vijay.singh@undp.org	9851041653
2	Pragyajan Yalamber Rai	M	Portfolio Analyst	Pragyajan.rai@undp.org	9851157091
3	Binda Magar	F	GESI Advisor/	Binda.magar@undp.org	015523200 ext 1548
4	Kedar babu Dhungana	M	OIC, CDRMP	Kedar.dhungana@undp.org	9851007816

Annex-6: Analysis of project data

Table 1: RVA finding summary

Municipality /hazard	Sampled HHs	Extremely high risk (HHs)	High risk (HHs)	Moderate risk (HHs)	Low risk (HHs)	No risk (HHs)
Bharatpur	641					
Earthquake	641		10	204	343	84
Fire	641		6	124	371	140
Inundation	641	10	13	16		602
Landslide						
Multi-hazard	641		8	88	523	22
Sub-total		10	37	432	1237	848
Lalitpur	690					
Earthquake	690		39	370	251	30
Fire	690	22	116	264	219	69
Inundation		16	17	512		145
Landslide						
Multi-hazard	690		49	514	127	
Sub-total		38	221	1660	597	244
Bhimeswor	696					
Earthquake	696		66	266	297	67
Fire	696		23	145	314	214
Inundation	696					
Landslide	696	27	36	291		342
Multi-hazard	696		22	294	374	6
Sub-total		27	147	996	985	629
Total		75	405	3088	2819	1721
Percentage		1	5	38	35	21

Table 2: Planned and actual budget allocation per result (Lalitpur)

Results	Planned budget	Actual budget	Reason for variation
I	1298650	2051150	Extension of the project
2	3050193	4606672	Extension of the project
3	8168472	9688472	Extension of the project

Table 3: Planned and actual budget allocation per result (Bharatpur)

Results	Planned budget	Actual budget	Reason for variation
I	1694362	1668434 (98.47%)	
2	2094215	2025951 (96.74%)	More budget than expected contributed by metropolitan city
3	8121648	8235889 (101.41%)	High demand of training event and large-scale simulation event conducted

Table 4: Co-funding and parallel funding in generated by the project

Bharatpur

Sn	Trainings/workshops SSM	Collaborated with agencies	Collaborated amount
I.	CADRE training	Bharatpur Metropolitan city	84000
2.	End line Simulation Exercise	Bharatpur Metropolitan city	175000

3.	Installation of booster pump	Bharatpur metropolitan city	900000
4.	Fire Fighting Training	Bharatpur metropolitan city	13000
5.	Fire Fighting Training	Gas and petroleum distribution Association	10000
	Total		1182000

SSM-small scale mitigation

Sn	Trainings/workshops SSM	Collaborated with agencies	Collaborated amount
1	First Aid training	Ward 19	41516
2	CADRE training	Ward 19	328000
3	Light search and rescue training	Ward 16 and 19	40000
4	Fire hydrant	Ward 19	25000
5	Underground water tanks	Ward 16 and 19	1300000
6	Siren Installation	Ward 16 and 19	25000
7	PwD Friendly ramp	Ward 16	50000
	Total		1809516

SSM-small scale mitigation

Bhimeshwor

Sn	Trainings/workshops SSM	Collaborated with agencies	Collaborated amount
1	Landslide mitigation	Ward -6/Users Committee	91956
2	Water source protection	Ward-3 & 6/Users Committee	72467
3	Maintenance and renovation of Water reserve tank (1500000 liters capacity)	Bhimeshwor Municipality/Users Committee	488379
4	Installation of fire hydrant	Bhimeshwor Municipality	1036488
5	Installation of Emergency Siren	Bhimeshwor Municipality	8000
6	Community Action for Disaster Response (CADRE) training	Bhimeshwor Municipality	150000
7	Capacity Building Orientation Program for TLOs & CERT	Bhimeshwor Municipality	50000
8	Health Camp for Hearing Impaired Vulnerable Population	Bhimeshwor Municipality	50000
	Total		1947290

Table 5: Adjustment of project's activities as a result of COVID-19

Sn	Activities adjusted	Budget	New/proposed activities	Budget
	Community awareness programs and meetings	Lalitpur	• Installation of hand washing station. • Awareness through mobilization of volunteers and dissemination of IEC materials. • Sanitation campaigns in communities. • Handover of COVID 19 related materials.	795000
	Community awareness and Mitigation measures	Bharatpur	• Installation of hand washing station. • Awareness through mobilization of volunteers • Wall paintings for Covid-19 awareness messages	545000
	Community awareness and Mitigation measures	Bhimeshwor	• Installation of contactless hand washing station. • Awareness through mobilization of volunteers and dissemination of IEC materials.	490000

| | | | • Sanitation campaigns in communities. | |
| | | | • Handover of COVID 19 related materials | |

Table 6: Number of beneficiaries

Municipalities	Planned (men/women)	Actual (men/women)	Single women	PwD/CwD	LGBTQ	Total
Bharatpur	28500	30779	370	59	160	31368
Lalitpur	13125	15629	93	212		15934
Bhimeshwor	14000	14135	80	30		14245
Total		60543	543	301	160	61547

Table 7: Caste/ethnicity-wise final beneficiaries

Caste	Bharatpur (Percentage)	Lalitpur (Percentage)	Bhimeshwor (Percentage)	Average
Brahmin-Chhetri	44	13	51	35
Janajati	26	84	42	51
Dalits	9	1	7	6
Others	21	2	0	8

Table 8: Budget allocation (structural and non-structural components)

Municipalities/Category	Structural (%)	Non-structural (%)
Bharatpur	27	73
Lalitpur	30	70
Bhimeshwor	30	70

Table 9: Types of IEC materials/Media/Radio/TV mobilized by the project

Type of IEC materials	Set/episode/event	Print/electronic	Remarks
Project Brief		Print	
Animated PSAs on preparedness and response			
Animated PSA on lightning		Electronic	1.2 million views
Animated PSA on landslide		Electronic	13.5k views
Animated PSA on flood		Electronic	5.8k views
Animated PSA on fire		Electronic	1.5k views
Animated PSA on role of MEOC		Electronic	500 views
Animated PSAs Social Media Cards on preparedness and response			
Animated PSA on landslide		Electronic	210.8k views
Animated PSA on lightning		Electronic	124.8k views
Animated PSA on earthquake		Electronic	30.1k views
Animated PSA on fire		Electronic	3.3k views
Radio PSAs			
Radio PSA on earthquake		Electronic	
Radio PSA on lightning		Electronic	
Radio PSA on fire		Electronic	
Radio PSA on earthquake		Electronic	
TV PSA			
Awareness music video on disaster preparedness		Electronic	
Short Videos			
Event videos (Ambassador visit, high level visits)		Electronic	
Simulation Exercise Video for		Electronic	

Bharatpur, Bhimeshwor, Lalitpur			
Printed Awareness Raising Materials			
Flip Charts on urban disaster preparedness and response (flood, fires, earthquake, lightning among others)		Printed	
Posters/Flyers			
Poster on roles and responsibilities of LDMCs		Printed	
Emergency Numbers Sticker		Printed	
Emergency Numbers Poster		Printed	
Petrol Pump Checklist Sticker		Printed	
Petrol Pump Checklist Poster		Printed	
Maps			
Indoor/ Outdoor Ward level risk maps		Printed	
Indoor/ Outdoor Ward level multi-hazard maps		Printed	
Admin Maps		Printed	
Visibility Items			
Visibility Stickers (Round/Rectangle/Square)		Printed	
CERT Helmets		Printed	
CERT Visibility Jackets		Printed	
First Aid Bags		Printed	
Information Boards		Printed	
Handover Boards		Printed	
Inauguration Boards		Printed	
Backpack		Printed	
T-shirts		Printed	
Water Bottle		Printed	
Firefighting/SAR Equipment		Printed	
Publications			
KAP Survey (Baseline/End line Report)		Printed/Electronic	
Rapid Vulnerability Assessment		Printed/Electronic	
COVID-19 Lessons Learned		Printed/Electronic	
Rapid Assessment of the effectiveness of risk communication for COVID-19 patients		Printed/Electronic	
Assessment of Municipal Fire Response Capacity		Printed/Electronic	
Fire Incidents Report		Printed/Electronic	
Urban Fire Risk Assessment		Printed/Electronic	
Insurance Mini Booklet		Printed/Electronic	
Booklet on Disaster Management Plans & Guidelines (Bhimeshwor)		Printed/Electronic	
EPRP, SOP and Simulation Guideline Lalitpur, Bharatpur and Bhimeshwor		Printed/Electronic	
Relief Standard and Fund Mobilization Guideline Lalitpur, Bharatpur and Bhimeshwor		Printed/Electronic	

		Printed/Electronic	
EPRP (Ward level) Lalitpur, Bharatpur and Bhimeshwor		Printed/Electronic	
District Disaster Preparedness & Response Plan Lalitpur, Bharatpur and Bhimeshwor		Printed/Electronic	
Policy Brief on Fire Preparedness & Response (National)		Printed/Electronic	
Policy Brief on Fire Preparedness & Response (Local)		Printed/Electronic	
Photo Mini Book ECHO III		Printed/Electronic	
Lessons Learned Document		Printed/Electronic	
School level DRR plan		Printed/Electronic	
VCA Report for Wards		Printed/Electronic	

Table 10: Monitoring visits by ECHO and UNDP CO

Agencies	When	Where	What monitor?	Key outcomes of these visits
EU, UNDP CO,	5-6 August 2021 22 Oct 2021	Ward 16, ward 19 and LMC	Project interventions	Was able to know the impact of the project in project areas. Handover of materials support at community and local level fire brigade. Interaction with communities
Municipality and project (jointly) along with engineers from wards and local level for small scale mitigation	Regular	In all working wards	Project interventions	Was able to know the impact of the project in project areas.
EU virtual monitoring mission	30 November 2020	Virtual with Mayor, CAO, DRR focal persons, WDMC, beneficiaries and vulnerable groups	Project interventions	Was able to know the impact of the project in project areas and suggestion on focusing on fire and earthquake.
EU and UNDP EU ambassador visit together with UNDP DRR and ministries	22-23 February, 2021	Ward 10 and BMC	Project intervention, Fire brigade, MEOC inauguration	MEOC inauguration, know the impact of project at community through monitoring of project activities and vulnerabilities, able to know the impact of project to empower the women for risk reduction
Project team CDRMP/UNDP	Regular	All project wards	Project intervention, impact of project	Able to identify the best practices and room of improvement. Identified the correction and modification points.

Table 11: Finding of RVA summary

Municipality /hazard	Sampled HHs	Extremely high risk (HHs)	High risk (HHs)	Moderate risk (HHs)	Low risk (HHs)	No risk (HHs)
Bharatpur	641					
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Landslide						
Multi-hazard	641		8	88	523	22
Sub-total		10	37	432	1237	848
Lalitpur	690					
Earthquake	690		39	370	251	30
Fire	690	22	116	264	219	69

Inundation		16	17	512		145
Landslide						
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Sub-total		38	221	1660	597	244
Bhimeswor	696					
Earthquake			66	266	297	67
Fire			23	145	314	214
Inundation						
Landslide		27	36	291		342
Multi-hazard			22	294	374	6
Sub-total		27	147	996	985	629
Total		75	405	3088	2819	1721
Percentage		1	5	38	35	21

Table 12: Status of resilience fund by municipalities

Municipalities	Cash	Materials	Total
Bharatpur	15000000		15000000
Lalitpur		120000	120000
Bhimeshwor	250000		250000
Total	15250000	120000	15370000

Table 13: Resource mobilization by municipality

Municipality	Community contribution (NPR)	Municipal contribution (NPR)	Third Party contribution (NPR)	Total NPR
Bharatpur	1500000	1172000	10000	2682000
Lalitpur		1809516		1809516
Bhimeshwor		1947289		1947289
	1500000	4928805	10000	6438805

Table 14: Legal documents supported to municipalities

Bharatpur

Sn	Name of legal documents (*year, new/modify*)	Status (draft/final)	Approved/or in the process of approval
1.	Emergency Preparedness and Response Plan, 2078	Final	Approved
2.	Standard Operating Procedure for MEOC, 2078	Final	Approved
3.	Emergency Preparedness and response simulation guideline, 2078	Final	Approved
4.	Disaster Relief standard, 2078	Final	Approved
5.	Disaster Management fund mobilization guideline, 2078	Final	Approved
6.	Volunteer mobilization guideline, 2078	Final	Approved
7.	Risk Transfer guideline, 2078	Final	Approved
8.	Ward level Emergency Preparedness and Response Plan, 2078	Final	Approved
9.	School level DRR Plan	Final	Approved
10.	Disaster Preparedness and Response Plan 2078 (Chitwan)	Final	Approved

Lalitpur

Sn	Name of legal documents (*year, new/modify*)	Status (draft/final)	Approved/or in the process of approval	Remarks
1	Municipal level emergency preparedness and response plan	Final	In the process of approval	For Lalitpur executive meeting has not been held due to several political reasons
2	Risk transfer guideline	Final	In the process of approval	
3	Municipal level disaster relief standard.	Final	In the process of approval	
4	SOP of MEOC	Final	In the process of approval	
5	Disaster management volunteer mobilization guideline	Final	In the process of approval	
6	Disaster fund mobilization guideline	Final	In the process of approval	IOM funded we facilitated

				and supported for refinements

Sn	Name of legal documents (*year, new/modify*)	Status (draft/final)	Approved/or in the process of approval
1.	Emergency Preparedness and response plan	Final	Approved
2.	EOC-SOP	Final	Approved
3.	Municipal Disaster Relief Standard	Final	Approved
4.	DRM Fund Operational and mobilization Procedure	Final	Approved
5.	Disaster Risk Reduction Strategic Action Plan	Final	Approved
6.	DRR Policy	Final	Approved
7.	Risk Transfer Guideline	Final	Approved
8.	Emergency Preparedness and Response Simulation Guideline	Final	Approved
9.	Municipal DRM Volunteers Bureau Formation and Mobilization Guideline	Final	Approved
10.	DRR Mainstreaming Guideline	Final	Approved

Table 15: Short-term employment generation from small scale mitigation work

Bharatpur

SN	Small scale mitigation works	Skilled/unskilled person involved (tentative person-days)	Average rate/day	Total amount generated
1	Fire hydrant installation	110	1200	132000
2	Construction of PwD friendly structure (Ramp)	50	1000	50000
	Total			182000

Lalitpur

SN	Small scale mitigation works	Skilled/unskilled person involved (tentative person-days)	Average rate/day	Total amount generated
1	Water tank with rainwater harvesting system (5 nos.)	1500	950	1425000
2	PWD friendly ramp	52	950	49400
3	Fire hydrant	135	1500	202500
4	Underpass retrofitting	40	1500	60000
	Total			1736900

Bhimeshwor

Small scale mitigation works	Small scale mitigation works	Skilled/unskilled person involved (tentative person-days)	Total amount
Landslide mitigation	950	145	137750
Water source protection	950	126	119700
Installation of lightning arrester	1500	34	51000
Wheelchair ramp renovation/Railing	950	17	16150
Maintenance and renovation of Water reserve tank (1500000 liters capacity)	950	235	223250
Hospital doors/windows glass lamination	1500	16	24000
Installation of a fire hydrant	1500	145	217500
Installation of Overhead water tanks for the purpose of refilling water in a fire truck	950	12	11400
Management of electric wiring at Deaf School	1500	6	9000
Installation of Emergency Siren	1500	5	7500
Clamping work at School	950	8	7600
Fire alarm System	1500	4	6000

Total					830850

Table 16: GESI diversity

Executive committees	Men-%	Women-%
FORWARD	55	45
FSCN	54.5	45.5
HURADEC	60	40
Average	56	44
Staff at Partner NGO		
FORWARD	75	25
FSCN	60	40
HURADEC	62	38
Average	66	34
Staff at UNDP project		
Project staff	87	13

Table 17: List of trainings/workshops/seminar and benefitted people

Community/ward level

Lalitpur

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Initial rapid assessment training	2	2 days	37	17	54		
2	Light search and rescue training (LSAR)	2	3 days	39	14	53		
3	Basic firefighting training.	3	2 days	66	60	126		
4	Basic first aid training.	3	4 days	33	65	98		
5	CADRE Training	1	4 days	26	11	37		
6	Kitchen Fire Training	2	1day	82	0	82		
7	Training to electrician on fire safety	1	3 days	27	7	34		
8	Ward level EPRP workshop	4	1 day	57	30	87		
9	School level DRR plan	2	1 day	33	29	62		
10	School level First Aid and Search & rescue	4	1 day	33	30	63		
11	School level simulation	2	1 day	256	238	494		
	Total			689	501	1190		
	Percent			58	42			

Bhimeshwor

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Initial rapid assessment training	2	2.5 days	46	13	59		
2	Light search and rescue training (LSAR)	3	3 days	42	38	80	1	
3	Basic firefighting training.	3	2 days	73	21	94		
4	Basic first aid training.	4	4 days	19	53	72		
5	CADRE Training	1	4 days	14	10	24		
6	Kitchen Fire Training	4	1 day		146	146		
7	Training to electrician on fire safety	1	3 days	21	2	23		
8	Ward level EPRP workshop	4	1	53	39	92		
9	School level DRR plan	2	1	46	27	73		
10	School level Search and rescue	1	1	38	25	63		
12	School level simulation drills	2	1	38	25	63		
	Total			390	399	789	1	
	Percent			49	51			

Bharatpur

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Initial rapid assessment training	3	2 days	30	23	53		
2	Light search and rescue training (LSAR)	3	3 days	43	37	80	1	

3	One day Fire-fighting training	9	1day	17	205	222		
4	Basic firefighting training	5	2 days	73	106	179		
5	Basic first aid training.	3	4 days	23	43	66		
6	CADRE Training	1	4 days	17	6	23		
7	Ward level EPRP workshop	4	1day	32	15	47		
8	School level DRR plan	2	1day	35	18	53	2	
9	School level Search and rescue	2	1day	25	28	53		
10	RVA orientation and KAP orientation	3 for RVA 2 for KAP	1 day	64	65	129		
11	Awareness on Earthquake Day	1	1 day	41	106	147		
13	VCA consultation workshop	9	1 day	115	150	265		
14	Project Inception (Ward level)	1	1 day	44	19	63		
	Total			559	821	1380	3	
	Percent			41	59			

Municipality/district level

Lalitpur

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Basic Firefighting, Rescue & HAZMAT Handling Training to fireman and fire truck drivers of Lalitpur Fire Station	1	4 days	23	0	23		
2	Basic firefighting training to gas and petrol dealers	1	1 day	17	0	17		
3	Basic firefighting training to PWDs	1	1 day	8	16	24	24	
4	EPRP Workshop	2	1 day	95	17	112		
5	Risk transfer	3	1 day	95	18	113		
6	MEOC SOP	3	1 day	89	15	104		
7	EOC training	1	3 days	5	5	0		
8	Pre SIMEX	2	1 day	272	229	501		
9	Post SIMEx	1	1 day	623	348	971		
	Total			1227	648	1865	24	
	Percent			65	35			

Bhimeshwor

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Basic Firefighting, Rescue & HAZMAT Handling Training to fireman and fire truck drivers of Lalitpur Fire Station	1	4	21	3	24		1
2	Fire Orientation Hospital and Hotel Staffs.	4	1	59	222	281		
3	EPRP shared vulnerable groups		1	10	5	15		
4	FDG with vulnerable groups	9	2	27	29	56		
5	EPRP Workshop	2	2.5	61	11	72		
6	Risk transfer	2	1	13	1	14		
7	MEOC SOP	2	1	37	5	42		
8	Pre simex	2	1	83	65	148		
9	Post simex	2	1	146	125	271		
	Total			457	466	923		1
	Percent			50	50			

Bharatpur

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Basic Firefighting, Rescue & HAZMAT Handling Training to fireman and fire truck drivers of Lalitpur Fire Station	1	4	21	3	24		
2	One day Fire-fighting training to private sectors (Gas distribution association,	4	1 day	70	6	76		

	petroleum association, Hotels, Hospitals)							
3	One day Fire-fighting training to vulnerable community (Marginalized Muslims, LGBT, senior citizen)	3	1	31	26	57		28
4	Disaster Reporting for Journalists	1	1	14	4	18		
5	Training to electrician on fire safety	1	3 days	34	0	34		
6	Risk transfer	1	2 days	15	3	18		
7	Municipal Level EPRP	3	1 day	75	21	96		
8	SOP workshop	2	1 day	60	18	78		
9	Pre-simex	2	1 day	32	56	88		
10	Post-simex	2	1 day	212	128	340		
11	Project Inception (Municipal level)	1	1 day	30	7	37		
12	Project Closure	1	1 day	78	24	102		
	Total			672	296	968		28
	Percent			69	31			

Bhimeshwor

Sn	Name of training	Event	Duration	Men	Women	Total	PwD	LGBTQ
1	Health camp for deaf people	1	1	99	108	207	40	
2	Emergency siren	1	1	39	26	65		
3	SOP workshop	2	1	37	5	42		
4	EPRP workshop	2	2.5	61	11	72		
5	Risk transfer guideline	2	1	13	1	14		
6	Relief Standards workshop	2	2	15	7	22		
	Total			264	158	422	40	
	Percent			63	37			

Table 18: Small scale mitigation by category, number and benefitted people/families

Bharatpur

Sn	Types of SSM	Number	Benefited population	Benefited families	Remarks
Non- structural mitigation					
1.	Installation of traffic sign and signals	1	2184		10% population of ward 10
2.	Installation of evacuation route map	1	1400	311	
3.	Installation of lighting arrestor at school	1	2647		
	Total		6231	311	
Structural mitigation					
4.	Installation of Fire hydrant system	1	1153	125	
5	Overhead water tank	1	1250	175	
5.	Construction of Drainage management to reduce inundation	4	827	126	
6.	Installation of booster pump with water tank for fire preparedness	1	1750	389	
7.	Construction of PwD friendly structure at school (Ramp)	1	200		PwD population of school
8.	Gabion Net support to lift irrigation	1	297	66	10% HHs of respective tole
	Total		5477	881	

Lalitpur

Sn	Types of SSM	Number	Benefitted population	Benefitted families
1	Underground water tank with rain water harvesting	5	9900	990
2	PwD friendly ramp	1	1087	
3	Installation of Fire Hydrant System	1	1500	150
4	Water pump support for water logging	1	415	42
5	Underpass retrofitting	1	650	45

6	Installation of traffic signs and signals	2		
7	Installation of siren/emergency alarm system	12	5400	900
	Total		18952	2127

Bhimeshwor

Sn	Types of SSM	Number	Benefitted population	Benefitted families	Remarks
1.	Landslide mitigation	2	163	36	
2.	Water source protection	4	502	115	
3.	Installation of lightening arrester	3	1200	80	
4.	Wheelchair ramp renovation/Railing	1	900		3 months beneficiaries
5.	Maintenance and renovation of Water reserve tank (1500000 liters capacity)	1	243	51	This facilitates firefighting in whole municipality and adjoining municipalities
6.	Hospital doors/windows glass lamination	1	3500		Per month
7.	Installation of fire hydrant	1	2898	161	Also supports water refill in the fire truck
8.	Installation of overhead water tanks for the purpose of refilling water in fire truck	4	1200	240	This also supports fire fighting
9.	Management of electric wiring at Deaf School	1	45		
10.	Installation of emergency siren	1	2250	250	
11.	Clamping work at school	2	1350		
12.	Fire alarm system	3	7500		Per month
	Total		21751	933	

Table 19: Progress status (target/achievements)

Lalitpur
Result 1

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Focused discussion with the identified vulnerable groups to identify their issues and needs	10	11		
2	Focused consultations with other important stakeholders	5	12		Need of more meetings with stakeholders.
3	Meeting for rapid vulnerability assessment (RVA) (municipal level- 2 events.	2	2	100	
4	Conduct community led awareness campaigns to outreach communities and municipality.	2	5		Had to conduct awareness on COVID 19
5	Focused groups discussions to understand extant capacity of the key stakeholders	4	5		
6	Organize exit workshop at municipal level.	1	1	100	
7	KAP Survey	2	2	100	

Result 2

Sn	Planned activities	Target (number/event.)	Achievements	% of progress
1	Conduct meetings and trainings for formation of disaster risk management committees (DRMC).	2	2	100
2	Organize meeting to formulate EPRP (Ward level)	4	4	100
3	Consultation and discussion meetings to formulate guidelines and SOP (municipal level)	3	3	100
4	Organize training of officials and community volunteers on	2	2	100

Sn		Target (number)	Achievements	% of progress
	conducting post disaster need assessment.			
5	Conduct consultation workshops with engagement of stakeholders in risk transfer schemes	2	2	100
6	Exposure visits of WDMC	2	2	100
7	Shared Learning sharing dialogue	3	3	100

Result 3

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Organize trainings of communities on community training on firefighting (CERT- 2 days)	2	2	100	
2	Conduct consultation meetings and organize emergency response simulations (SIMEX) before formation of CERT and after trained CERTs are in place	4	3		Events were merged.
3	Organize consultation meetings with stakeholders to identify, plan small-scale structural and non-structural risk mitigation measures.	4	7		
4	One day training on fire safety to community women	2	2	100	
5	Training on fire safety to representatives of petrol dealers.	1	1	100	
6	Training on fire safety to PwDs (one day)	1	1	100	
7	Training to electricians	1	1	100	
8	Organize safety drills in schools	2	2	100	

Bharatpur
Result 1

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Organize series of inclusive consultation meeting at community level (resident and non-resident, key actors)	5	5	100	
	KAP survey through mobilization of enumerators	2	2	100	
2	Focused discussion with the identify vulnerable groups to identify their issues and needs	10	10	100	
3	Focused consultation with other important stakeholders	7	7	100	
4	Focused groups discussion to understand extant capacity of the key stakeholders	4	4	100	
5	Conduct community led awareness campaign to outreach communities and municipality	28000	28500	100	
6	Organize dissemination workshop at municipal level	4	3	100	Merged ward level exit workshop with municipality
7	Disaster Reporting training to journalist	1	1	100	

Result 2

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Consultation and discussion meeting with various stakeholders for preparation of EPRP	5	7	100	Need additional event to cover various stakeholders
2	Conduct meeting and trainings for formation of disaster risk management committees (DRMC) and development of relief standards and guideline	4	7	100	Need additional meeting for document review
3	Organize training of officials and community volunteers on conducting post disaster need assessment (30 people, 3 day)	3	3	100	
4	Organize meeting for identification of emergency response team, trained volunteers, and fire response teams	10	12	100	Limited participants in meetings during covid lockdown
5	Conduct consultation workshops with engagement of stakeholders in a risk transfer schemes	2	2	100	

Sn		Target	Achievements	% of progress	
6	Establishment and institutionalization of the Resilience Fund in the municipality	1	1	100	

Result 3

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Organize consultation meetings with stakeholders to identify plan small scale structural risk mitigation measures	2	3	100	
2	Support in implementation of small-scale structural risk mitigation measures	5	8	160	Additional work from leveraged budget and community contribution
3	Organize inclusive community and municipality planning meetings to formulate activities to address issues of the most vulnerable population and identify risk mitigation measures	-	-		Mitigation measures had identified from VCA consultation meeting and FGD of result 1
4	Implementation of the physical interventions to address vulnerability of most vulnerable population*	3	3	100	
5	Organize trainings on community training on fire fighting	18	21	116	Demand from community people and collaborated with stakeholders
6	Conduct consultation meetings and organize emergency response simulations (SIMEX) before formulation of CERT and after trained CERTs are in place	4	4	100	
7	Organize safety drills in schools	2	2	100	
8	Strengthen municipal and community fire response capacity	2	2	100	
9	Light search and rescue training to CERT	3	3	100	
10	First Aid Training to CERT	3	3	100	
11	Training to Electrician	1	1	100	

Bhimeshwor
Result 1

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Organize series of inclusive consultation meeting at community level (resident and non-resident, key actors)	5	5	100	
	KAP survey through mobilization of enumerators	2	2	100	
2	Focused discussion with the identify vulnerable groups to identify their issues and needs	9	9	100	
3	Focused consultation with other important stakeholders	7	7	100	
4	Focused groups discussion to understand extant capacity of the key stakeholders	5	5	100	
5	Conduct community led awareness campaign to outreach communities and municipality	16000	16000	100	
6	Organize dissemination workshop at municipal level	4	4	100	Merged ward level exit workshop with municipality
7	Disaster Reporting training to journalist	1	1	100	Organized virtually on the occasion of IDDR 2020

Result 2

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Consultation and discussion meeting with various stakeholders for preparation of EPRP	7	8	100	Need additional event to cover various stakeholders
2	Conduct meeting and trainings for formation of disaster risk management committees (DRMC) and development of relief standards and guideline	4	6	100	Need additional meeting for document review
3	Organize training of officials and community volunteers on conducting post disaster need assessment (30 people,3 day)	2	3	100	
4	Organize meeting for identification of emergency response team, trained volunteers, and fire response teams	8	10	100	limited participants in meetings during covid lockdown
5	Conduct consultation workshops with engagement of stakeholders in a risk transfer schemes	2	3	100	
6	Establishment and institutionalization of the Resilience Fund in the municipality	1	1	100	

Result 3

Sn	Planned activities	Target (number)	Achievements	% of progress	Reasons for variation
1	Organize consultation meetings with stakeholders to identify plan small scale structural risk mitigation measures	3	4	100	
2	Support in implementation of small-scale structural risk mitigation measures	8	14	160	Additional work from leveraged budget and community contribution
3	Organize inclusive community and municipality planning meetings to formulate activities to address issues of the most vulnerable population and identify risk mitigation measures	-	-		Mitigation measures had identified from VCA consultation meeting and FGD of result 1
4	Implementation of the physical interventions to address vulnerability of most vulnerable population*	3	3	100	
5	Organize trainings on community training on fire fighting	10	16	100	Increased numbers of events due to interest of community people and stakeholders
6	Conduct consultation meetings and organize emergency response simulations (SIMEX) before formulation of CERT and after trained CERTs are in place	4	3	100	The final SIMEX was merged and organized as wider participation of district level stakeholders
7	Organize safety drills in schools	2	2	100	
8	Strengthen municipal and community fire response capacity	2	2	100	
9	Light search and rescue training to CERT	3	3	100	
10	First Aid Training to CERT	3	3	100	
11	Training to Electrician	1	1	100	
12	CADRE Training	1	1	100	

Table 20: Cost sharing mechanism with other agencies

Types of activities	Collaborated with agencies	Tentative amount and % of total amount collaborated	Remarks
Capacity building trainings	Ward office	49516 (30%)	
Small scale mitigation	Ward office	1400000 (23%)	
Capacity building	Municipality and ward office	350000	
Capacity building trainings and event	Private sectors and metropolitan city	282000 (30%)	Bharatpur
Small scale mitigation and disaster preparedness	Metropolitan city	900000 (75% for collaborated scheme)	Bharatpur

Annex 7: UNEG Code of Conduct signed by the evaluator

Evaluation Consultants Agreement Form

To be signed by all consultants as individuals (not by or on behalf of a consultancy company) before a contract can be issued.

Agreement to abide by the Code of Condcut for Evaluation in the UN System, 2008

Name of Consultant: **Dr. Dhruba Gautam**

Name of Consultancy Organisation (where relevant): Independent Evaluator and Consultant

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation in the US System, 2008.

Signed at (Place) on (date): 12th November 2021, Kathmandu

Signature: