UN Multi-Partner Trust Fund Office

General Information

Fund	MPTF_00300: Infrastructure Resilience Accelerator Fund (IRAF)
FMP Record	MPTF_00300_00122: Enhancing risk-informed planning, data-driven decision making and early warning system for disaster-resilient urban infrastructure in major cities of Bhutan
MPTFO Project Id	
Start Date	
End Date	

Applicants

Status	Contact Type	Name	e-mail	Position	Telephone
Active: 02-Jul-2025 3:15:00 PM	Project Manager	Kinzang Dorji	kinzang.dorji@undp.org	UNDP Bhutan Project Coordinator	

Signatories

Signature Process	Role	Name of Organization	Name	User Email
Digital	Signatory	Coalition for Disaster Resilient Infrastructure (CDRI) Secretariat	Mr Amit Prothi	amit.prothi@cdri.world
Manual	Signatory	Department of Macro fiscal and Development Finance, Ministry of Finance, Bhutan	Mr. Tshering Dorji	tsheringdorji@mof.gov.bt
Digital	Signatory	UNDP (United Nations Development Programme (UNDP))	Mr Ronald Jackson	ronald.jackson@undp.org
Digital	Signatory	UNDP: UNDP (United Nations Development Programme (UNDP))	Mr Mohammad Younus	mohammad.younus@undp.org

Contacts

Contact Type	Name	e-mail	Position	Additional e-mail	Telephone
Project Manager	Nawaraj Chettri	nawaraj.chhetri@undp.org	Programme Analyst		

Description

This project complements a national urban resilience initiative (UNDP pipeline to be implemented in 2025) focused on building urban resilience to floods, landslides, and heat waves. It addresses gaps in data-driven planning, risk management, and infrastructure climate-proofing through vulnerability assessments, flood mapping, guidelines, and resilient master plans. This intervention provides a strategic policy framework and technical guidance to protect investments in critical infrastructure like stormwater systems, water supplies, and housing. Disaster-resilient infrastructure guidelines will ensure climate-adaptive and risk-informed future developments. Enhanced flood management and forecasting systems will strengthen early warning capabilities. Capacity building will build technical expertise and promote inclusion, creating synergy between the two projects to enhance institutional capacity for city governments, planners, engineers, disaster management officials, and communities. This project is crucial for ensuring successful outcomes and maximizing the impact of a USD 20 million GEF/LDCF-UNDP investment starting in early 2025.

Universal Markers

Gender Equality Marker	Risk
• GEM1 - The Key Activity contributes to GEWE in a limited way	• Low Risk

Fund Specific Markers	**THEMATIC FOCUS**	**Themes** • STRENGTHENING DATA FOR DECISION MAKING INCLUDING IMPACT BASED EARLY WARNING SYSTEM • PROJECT PREPARATION		
	GEOGRAPHICAL WINDOWS	**Geographical Funding windows** • Mountainous regions / countries		
	SECTORAL FOCUS	**PRIMARY SECTORS IN FOCUS** • Transport • Water		
	ELIGIBILITY TO RECEIVE IRAF FUNDING	**ELIGIBILITY CRITERIA - SELECT RELEVANT CRITERIA APPLYING TO YOUR ORGANIZATION -ATTENTION UN ORGANIZATIONS : ONLY SELECT n/a)** • Not applicable (UN Agencies only)		
	HAZARD SCOPE	**Hazards** • Extreme Heat / Extreme Cold • Flooding		
Geographical Scope	**Geographical Scope**	**Name of the Region**	**Region(s)**	**Country**
	• Country	• Bhutan	• Asia	• Bhutan
Participating Organizations and their Implementing Partners	**UN Participating Organizations**	**Government/ Multilateral/ NGO/ Other**	**New Entities**	**Implementing Partners**
	• UNDP - UNDP (United Nations Development Programme (UNDP))			
Programme and Project Cost	**Participating Organization**	**Amount (in USD)**	**Comments**	
	Budget Requested			
	UNDP	$640,812.00		
	Total Budget Requested	**$640,812.00**		
	Tranches			
	Tranche 1	Tranche 2	Tranche 3	
	UNDP (20%) $128,162.40 **Total: $128,162.40**	UNDP (50%) $320,406.00 **Total: $320,406.00**	UNDP (30%) $192,243.60 **Total: $192,243.60**	
	Other Sources (Parallel Funding)			
	Total	**$640,812.00**		
Thematic Keywords	• Early warning systems			
Programme Duration	**Anticipated Start Date**	01-Aug-2025		
	Duration (In months)	24		
	Anticipated End Date	01-Aug-2027		

Narratives

Title	Text

Qualification of the Participating Organization: Mission & mandate	UNDP is a global development agency working with 170 countries mandated to eradicate poverty, reduce inequalities, and strengthen democratic governance, the rule of law, and inclusive institutions. It advocates for change, connecting countries to knowledge, resources, and expertise to improve lives. Since 1973, UNDP has been a trusted partner of the Royal Government of Bhutan, advancing sustainable development goals through a permanent presence in Thimphu. Over five decades, UNDP has accelerated Bhutan's development results by leveraging innovation, digitalization, development financing, partnerships, and cutting-edge global expertise. UNDP's largest portfolio focuses on climate action, disaster risk reduction, biodiversity conservation, and resilience building. UNDP's support aligns with Bhutan's aspirations for sustainable and inclusive growth, addressing complex development challenges while promoting transformative change through the integration of innovation, digitization, and technology.
Qualification of the Participating Organization: Organization geographical coverage	Ministry of Infrastructure and Transport (MoIT) and (Department of Infrastructure Development (DoID) and Department of Human Settlement (DHS) - The DoID will lead capacity-building for climate-resilient infrastructure, while DHS will create resilient urban designs, including a green master plan, disaster-resilient housing standards, and a gender-responsive M&E framework National Center for Hydrology and Meteorology (NCHM) - NCHM will improve FFEWS and FFGS by integrating multi-hazard IBF, enhancing accuracy with in-situ data, and building hydro-met officers' capacity to implement and replicate IBF across other river basins. Department of Local Governance and Disaster Management (DLGDM) - Conduct vulnerability assessments, map critical infrastructure, update DMCCP for better preparedness, and develop design guidelines and standards for flood disaster mitigation, integrating best practices in urban planning and flood management Thimphu Thromde (TT) - Incorporate resilient features into Thimphu's open spaces, update the DMCCP, and conduct capacity-building initiatives to train planners, engineers, disaster officials, and data managers in gender-responsive planning and resilient infrastructure. Phuentsholing Thromde (PT) - Lead development of a green, open space master plan for Samtse Phuentsholing. Train planners, engineers, and disaster officials in gender responsive, climate-resilient infrastructure planning and management through capacity-building programs.

Qualification of the Participating Organization: Thematic expertise relevant to the project	The Participating organization has following prior expertise: 1. Project under implementation named Advancing Climate Resilience of the Water sector in Bhutan funded by GEF for 24 months, in urban and rural areas of Gasa, Punakha and Tsirang districts in Bhutan with a total of US $ 932,420. Under the theme of Resilient infrastructure and climate adaptation investment strategies, including nature-based infrastructure solutions, the project will address the shortages and declining water quality, with direct bearing on increased vulnerabilities of livelihoods, food production and human health that depend on forest resources. It aims to enhance the resilience of communities to climate change-driven impacts on water resources and water infrastructure in climate-vulnerable regions of Bhutan directly benefiting 37,334 persons (19,465 male and 17,869 female) residing across urban and rural areas of the three Dzongkhags and four watersheds from water supply and enhanced watershed services. It will restore, manage, and protect critical catchments to stabilize and enhance water yields, provide irrigation and support farmers to adopt climate-resilient agriculture, and Payment for ecosystem services that can replicated to sustain the management of critical catchments at a wider scale. 2. A three-year Project on Preparation of National Adaptation Plan (NAP) for Bhutan with focus on water sector completed in 2023, which was also funded by GEF for the Bhutan Government in project development and preparation support for risk informed urban water sectoral infrastructure design and planning worth of US $ 2,764,847.The National Adaptation Plan (NAP) formulation project was focused on climate vulnerability and risk assessments, adaptation measures, and a robust monitoring and evaluation framework. It addresses challenges highlighted by the Nationally Determined Contributions (NDC), Five Year Plan (FYP), National Adaptation Programme of Action (NAPA) 2012, and the National Integrated Water Resources Management Plan, while integrating lessons from related projects. The initiative emphasizes transformational adaptation by adopting systems thinking to tackle the interconnected needs of vulnerable communities, ecosystems, and infrastructure. Through an integrated approach, the project aims to enhance climate and disaster resilience, leveraging past experiences to achieve systemic change for sustainable adaptation outcomes. 3. Another project on Enhancing climate resilience of the Urban Landscapes and Communities in Thimphu Paro region of Bhutan is being implemented in urban areas of Paro and Thimphu, with a total of US $ 18,048,624 funded by GEF recently in 2025. The project will address the impacts of flooding, cyclonic events, and water stress on the residents of Thimphu and Paro cities, benefiting 25% of the country's population and represent over 40% of the country's GDP, and 46% of the urban population. Existing infrastructure is inadequate and lacks sufficient climate proofing, leading to increased risks. These risks are further compounded by a growing urban population. The project will enable to mitigating these urgent risks with solutions, resilient urban planning, and infrastructure development benefiting 146,298 residents and 800 hectares of watershed through water retention systems, and early warning systems. The project prioritizes gender-responsive planning for climate-adapted urban development pathways. Initiatives include training over 200 stakeholders and community members, developing local adaptation plans, empowering communities through participatory processes and fostering entrepreneurship (especially among women and youth). Additionally, the project involves the private sector through training, green financing, public-private partnerships and raising climate awareness. 4. A six-year Project completed on Enhancing Sustainable Resilient Livelihood (NAPA III) in12 districts funded by GEF/LDCF with a budget of US $ 13,967,124. The project addressed the climate change impacts on rural livelihoods, biodiversity, and ecosystem integrity in Bhutan's renewable natural resource sector, which employs 58% of the workforce. Climate-induced events like heavy rainfall, drought, and hailstorms threaten agricultural productivity and biodiversity. To mitigate these challenges, the project operationalized an integrated landscape management (ILM) approach, focusing on strengthening biological corridors, promoting sustainable forest and agricultural systems, and building climate-resilient infrastructure, including roads and irrigation systems, guided by eco-friendly practices and guidelines supported through the project. Key components included enhancing institutional capacity for ILM and climate adaptation, improving biological corridor governance, diversifying livelihoods through sustainable land management and climate-smart agriculture, and establishing a robust knowledge management system. The project secured sustainable livelihoods, safeguarded biodiversity, and supported climate-resilient national development, addressed rural livelihood security and finally addressing ecological impacts of development practices on Bhutan's forested landscapes. 5. Another four-years project named Addressing the risks of Climate Induced Disasters through Enhanced National and Local Capacity for Effective Actions was also implemented in Phunthsoling and Pasakha, Bhutan focused on Transportation Sector funded by GEF with a budget of US $ 11,908,005. The project helped Bhutan's capacity to prepare for and respond to multi-hazard climate impacts, protecting lives, infrastructure, and livelihoods. It has assisted the Government to prepare eco-hazard

risk mapping for vulnerable regions in Phunthsoling and Pasakha; it enhanced community resilience through preparing disaster management plans at national and local levels focusing on water harvesting systems, a water resource inventory. It improved climate information systems by upgrading meteorological infrastructure, expanding real-time weather observation, and enhancing the capacity of Bhutan's National Weather and Flood Forecasting and Warning Center.

Qualification of the Participating Organization: Human Resources

Name	Years of exp	Location	Proposed position
Kinzang Dorji	12	UNDP, Thimpu	Project Manger
Tshering Palden	20	UNDP, Thimpu	implementation & Programme support
Lhap Dorji	24	UNDP, Thimpu	Oversight - Coordination and Technical
Phurpa Tshering	28	UNDP, Thimpu	Oversight - Financial and Operational
Khurshid Alam	25	UNDP, Thimpu	Overall oversight and Strategic direction
Nawaraj Chhettri	25	UNDP, Thimpu	Program Technical Oversight

Qualification of the Participating Organization: Portfolio analysis

UNDP Bhutan's portfolio has grown significantly, from USD 6 Million (M) annually in 2020 to over USD 12.5M in 2024, with a projection to grow further. In past five years, UNDP managed several large-scale climate and disaster resilience and adaptation projects, including: 1) Building Urban Resilience: Addressing floods and water stress in Thimphu and Paro through nature-based solutions (USD 20M, implementation beginning 2025). 2) Advancing Water Resilience: Integrating catchment restoration, testing innovative financing and climate proofing water infrastructures in three districts (USD 35M including government co-financing). 3) Resilient Agrifood System: Promoting climate information and advisory systems, smart agriculture practices, climate-proofing of irrigation and roads, and managing landslide risks (USD 58M including government co-financing). 4) National Adaptation Plan Formulation: Risk assessments in climate-sensitive sectors and adaptation plan to integrate adaptation into development planning (USD 2.7M). 5) Integrated Landscape Management and Resilient Livelihoods: Addressing climate change impacts on rural livelihoods, biodiversity, and ecosystem and piloting Bhutan's first climate-resilient road (USD 56.6M including government co-financing.

<table>
<tr><td>Project justification: Needs assessment and Rationale (Word limit 1000)</td><td>This project complements a national urban resilience initiative (UNDP pipeline to be implemented in 2025) focused on building urban resilience to floods, landslides, and heat waves. It addresses gaps in data-driven planning, risk management, and infrastructure climate-proofing through vulnerability assessments, flood mapping, guidelines, and resilient master plans. This intervention provides a strategic policy framework and technical guidance to protect investments in critical infrastructure like stormwater systems, water supplies, and housing. Disaster-resilient infrastructure guidelines will ensure climate-adaptive and risk-informed future developments. Enhanced flood management and forecasting systems will strengthen early warning capabilities. Capacity building will build technical expertise and promote inclusion, creating synergy between the two projects to enhance institutional capacity for city governments, planners, engineers, disaster management officials, and communities. This project is crucial for ensuring successful outcomes and maximizing the impact of a USD 20 million GEF/LDCF-UNDP investment starting in early 2025.

The project will provide the following direct benefits to the city residents: Economically: resilient infrastructure reduces repair costs, protects businesses, and creates jobs in construction and maintenance. Thimphu is the capital and largest economic centre, while Phuentsholing is the commercial hub and main gateway to India, the largest training partner of Bhutan. Technically: training of local planners, engineers, and disaster managers will ensure better urban services and infrastructure management. Technologically: enhanced flood forecasting systems and real-time alerts, will reduce losses and improve preparedness. Socially: disaster-resilient housing and safer public spaces will enhance living conditions, and standards for affordable housing will safeguard communities. Beneficiaries include 18,244 vulnerable populations (minors, elderly & PWDs) and 50% of residents are women. Environmentally: green infrastructure and improved infrastructure designs and green spaces mitigate flooding, enhance sustainability, and promote healthier urban ecosystems enabling cities to be resilient and communities to be safer and more adaptive to climate change disaster challenges.</td></tr>
<tr><td>Project Goal (Word limit 100)</td><td>Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure.</td></tr>
<tr><td>Project Objectives (Word limit 100)</td><td>Objective1: To strengthen the resilience of critical urban infrastructure in Thimphu and Phuentsholing through risk-informed planning, vulnerability assessments, and disaster resilient design standards.

Objective2: To enable urban centres to effectively manage and operate infrastructure utilities during extreme climate events through improved flood management systems.

Objective3: To enhance capacities and community engagement for disaster-resilient urban infrastructure design, management, operation, and monitoring of critical urban infrastructure.</td></tr>
<tr><td>Project Key deliverables (Word limit 250)</td><td>
<table>
<tr><td colspan="2">6 Technical Reports will be produced - for e.g. Vulnerability assessment for loss & damage, and mapping/digitization of critical urban infrastructure (particularly water/stormwater infrastructure) to floods in Thimphu and Phuentsholing and Thromdes; gender-responsive M&E framework for safe and liveable urban centres (4 Thromdes and 60 Urban Centers)</td></tr>
<tr><td colspan="2">4 Policy Documents will be developed for e.g. Planning Guidelines for disaster-resilient Infrastructure (stormwater, pavement and urban road design; Design guidelines and resilient standards for affordable housing; green and resilient open space master plans for Samtse-Phuentsholing Linked Urban Center and incorporate resilient features into Thimphu open space design; Design Guidelines/Standards for Flood Disaster Mitigation Measures etc,</td></tr>
<tr><td>On-line blogs</td><td>Social media post, tweets and news case stories and knowledge management products</td></tr>
<tr><td>Other reports</td><td>Project Inception, Mid-term assessment, and End of Project reports</td></tr>
</table>
</td></tr>
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Project Approach and Methodology (Word limit 1000)	This project employs a phased approach (preparation, implementation, and monitoring). The preparation phase applied participatory methods, beginning with an ideation meeting in October 2024 involving key stakeholders (Ministry of Finance, disaster and infrastructure agencies, and municipalities) to discuss CDRI guidelines and climate-induced disaster challenges. This collaborative approach informed the development and approval of initial project information. Subsequent consultations further refined project activities, indicators, and co-financing, culminating in a validation workshop in December 2024, ensuring alignment with 13th Plan priorities and building on the future urban resilience project pipeline. Implementation will commence after a national inception workshop to finalize operational plans and a stakeholder engagement and gender action plan, prioritizing inclusivity and addressing infrastructure resilience challenges. This plan will guide engagement with local communities and governments, ensuring their active participation throughout the project. The project methodology utilizes a multi-pronged approach, focusing on three outcomes i.e. strengthening governance and infrastructure resilience through vulnerability assessments and mapping of critical infrastructure, developing an inclusive master plan for urban centres, and establishing disaster-resilient planning guidelines and housing standards. Secondly, enhancing climate event response capacity will be achieved by strengthening forecasting systems using impact-based forecasting methodologies and contingency plans. Finally, building capacity and promoting inclusivity will involve targeted training programs for relevant officials and the development of a gender-responsive M&E framework. Monitoring and reporting will be conducted regularly, including audits, and mid-term and end-of-project assessments to ensure sustainability. Social, environmental, communication and gender strategies will be developed to guide implementation, with active participation from local communities and governments.
Project Expected Impacts (Word limit 500)	The project will directly benefit 52% of the national urban population (274,967). This constitutes 48% women; 24% youth; and 13% vulnerable (elderly, minor and PWs who are often the most vulnerable to climate impacts). Resilient infrastructure, including standards for disaster-proof housing and improved stormwater systems, will ensure safer living environments for all. For women, the provision of safer public spaces and housing reduces the risk of displacement and enhances security, while community engagement activities promote gender-inclusive planning. Children (8% of the target pop.) will benefit from strengthened school infrastructure, ensuring their safety during extreme events. The elderly (5%) and PWDs (474 individuals) will have better access to inclusive infrastructure and evacuation plans, enhancing mobility and security. Low-income communities will gain access to affordable, disaster-resilient housing and reliable utilities, reducing financial burdens caused by climate disasters. Overall, the project's focus on inclusive planning ensures equitable protection and resilience for these vulnerable groups, improving their quality of life and adaptive capacity. Improved disaster-resilient urban infrastructure will ensure uninterrupted access to essential services like education, healthcare, and markets, which are often concentrated in urban areas. Women, particularly those managing households, will benefit from enhanced access to urban markets for selling goods or purchasing essentials, improving their basic economic security. Children will gain safer and more reliable access to schools in urban areas, even during extreme weather events. The elderly and differently abled individuals will benefit from improved access to healthcare facilities. Low-income rural households will indirectly benefit from stronger rural-urban economic linkages, as resilient urban centres create stable opportunities for trade and employment.

Project Alignment/Complementarity with Global, Regional & National Commitments (Word limit 500)	Project will contribute to UN SDGs - Goal 3: Good health and well-being Goal 5: Gender equality Goal 6: Clean water and sanitation Goal 9: Industry, innovation and infrastructure Goal 11: Sustainable cities and communities Goal 13: Climate action Goal 17: Partnerships for the goal This project directly contributes to the Paris Agreement by enhancing Bhutan's urban resilience. By conducting vulnerability assessments and developing disaster-resilient infrastructure standards, it strengthens adaptation to climate-related disasters like increased flooding, directly addressing the Agreement's adaptation goals. Integrating green and resilient principles into urban master plans promotes sustainable urban practices, reducing greenhouse gas emissions and aligning with mitigation goals. Enhanced flood forecasting and data-driven planning improve early warning systems, strengthening adaptive capacity and contributing to national commitments. Capacity-building activities for professionals equip them with climate-smart solutions, ensuring long-term resilience, while prioritizing vulnerable groups promotes inclusive development, aligning with the Agreement's emphasis on equity. In essence, the project advances the Paris Agreement's overarching goals of adaptation, mitigation, capacity building, and inclusive development for a climate-resilient future. It further strengthens the ability of urban government and communities to prepare for and respond to climate-related hazards, reducing vulnerability and minimizing loss and damage.
Project Contribution to the Sendai Framework for Disaster Risk Reduction targets (Word limit 500)	Applicable priorities and targets

Priority 1:	Understanding disaster risk
Priority 2:	Strengthening disaster risk governance to manage disaster risk
Priority 3	Investing in disaster risk reduction for resilience. Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction
Target a:	Reduce disaster mortality in the city
Target b:	Reduce the number of affected people in the city
Target c:	Reduce direct disaster economic loss in the city
Target d:	Reduce disaster damage to critical infrastructure and disruption of basic services in the city
Target g:	Increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to city population

Project Gender Equality and Social Inclusion (GESI) plan (Word limit 500)	This project adopts a human rights-based and gender-sensitive approach to climate hazards and disasters through appropriate policies, guidelines, and standards, that will benefit 47% of the female population within the project area. The project aligns with the UNDP Corporate Gender Equality Strategy 2022-25, the UNDP Bhutan Gender Equality Strategy 2021-2023, and Bhutan's National Gender Equality Policy 2020. Meaningful participation of women and girls including those with disabilities will be ensured throughout the implementation. Recognizing the multiple vulnerabilities and differentiated impacts women face, the project will empower women through targeted training, knowledge sharing, and adaptive skills development. Key activities include gender-responsive training for city planners, engineers, and disaster managers in designing resilient infrastructure that addresses diverse community needs; a gender-responsive monitoring and evaluation (M&E) mechanism; Disaster-resilient infrastructure designs; , such as accessible housing and public spaces, will cater to vulnerable groups, including women, PWDs, and low-income populations. A community engagement approach as part of a stakeholder engagement plan will ensure participation from marginalized groups, empowering them to contribute to decision-making. Bhutan's philosophy of Gross National Happiness embodies a strong commitment to realizing the equal rights of all, including people with disabilities (PWDs)
Project Sustainability strategy (Word limit 500)	The project will augment additional financing from Public Sector funds: DoID/MOIT ($264,205); NCHM ($ 479,081); Thimphu Thromde ($811,073). Phuentsholing Thromde ($ 9,804,807) tota 11543619 Other United Nations Development Programme (UNDP) 2000

DHS/MoIT	$184,451
DoID/MOIT	$264,205
NCHM	$479,081
Thimphu Thromde	$811,073
Phuentsholing Thromde	$ 9,804,807
United Nations Development Programme	$ 20,000
Total	$11,563,619

The project has a replication potential across the country in other cities with similar geographies. The project will use different occasions and events such as National and International Conferences, Global forums (e.g. World Urban Forum, COP) to share the knowledge products generated, it will use the National Media (Television, News Papers, press releases) for informing citizens and other stakeholders on the project outcomes. Similarly, there will be web-blogs and posts within partner Government Ministeries and agencies' websites and UNDP's website and other social media on the project results. These will ensure sustainability of the project results.

Project Implementation (Word Limit 500)

The project will be implemented through the UNDP Direct Implementation Modality (DIM), in collaboration with key national partners. Below is a list of partner organizations and their respective roles in the implementation of the project.

Organization	Role within the project
Department of Infrastructure Development (DoID), Ministry of Infrastructure and Transport (MoIT)	• Coordinate capacity and skills development for engineers, architects, and disaster management focal points to enable effective planning, design, implementation, and management of climate-resilient infrastructure.
The Department of Human Settlement (DHS), Ministry of Infrastructure and Transport (MoIT)	• Develop an inclusive green and resilient open space master plan for the Samtse-Phuentsholing Linked Urban Center, • Incorporate resilient features into Thimphu's open space design. • Develop Planning Guidelines for Disaster-Resilient Infrastructure, focusing on stormwater, pavement, and urban road design. • Develop disaster-resilient and urban-specific standards for affordable housing planning, design, and development. • Develop Design Guidelines that integrate best practices in urban planning and flood disaster mitigation will also be developed. • Develop a gender-responsive Monitoring and Evaluation framework for safe and livable urban centers, encompassing 4 Thromdes and 60 Urban Centers.
National Center for Hydrology and Meteorology (NCHM)	• Strenthen Forecasting Systems: Enhance the Flood Forecasting and Early Warning System (FFEWS) and Flash Flood Guidance System (FFGS) by integrating multi-hazard impact-based forecasting (MHIBF). • Improve Forecast Accuracy: Incorporate in-situ (on-site) data to refine and improve the accuracy of flash flood forecasts and guidance products. • BuildTechnical Capacity: Train hydro-meteorological officers in MHIBF to support implementation and replication of improved forecasting systems across other river basins.
Department of Local Governance and Disaster Management (DLGDM)	• Vulnerability assessment for loss & damage, and mapping/digitization of critical urban infrastructure (particularly water/stormwater infrastructure) to floods in Thimphu and Phuentsholing Thromde; • Review and update of Disaster Management Contingency Plan (DMCCP) for Phuntsholing and Thimphu Thromdes • Prepare Design Guidelines/Standards for Flood Disaster Mitigation Measures integrating best practices in urban planning and flood disaster
Thimphu Thromde (TT)	• Carry out vulnerability assessment for loss & damage, and mapping/digitization of critical urban infrastructure (particularly water/stormwater infrastructure) to floods in Thimphu Thromde; • Incorporate resilient features into Thimphu open space design; • Review and update of Disaster Management Contingency Plan (DMCCP) for Thimphu Thromde; • Participate in training of city planners, engineers, disaster management officials, and data managers for gender responsive planning, designing and management of resilient infrastructure.

	Phuntsholing Thromde (PT) • Carry out vulnerability assessment for loss & damage, • Conduct mapping/digitization of critical urban infrastructure (particularly water/stormwater infrastructure) to floods in Phuentsholing Thromde; • Develop inclusive green and resilient open space master plan for Samtse-Phuentsholing Linked Urban Center; • Review and update of Disaster Management Contingency Plan (DMCCP) for Phuntsholing Thromde; participation in training of city planners, engineers, disaster management officials, and data managers for gender responsive planning, designing and management of resilient infrastructure
Project Timeline (Word Limit 500)	24 months
Project Procurement plan	The Procurement Plan will be finalized during the inception

SDG Targets

Target	Description
Main Goals	
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	
TARGET_11.b	11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels
Secondary Goals	
Goal 13. Take urgent action to combat climate change and its impacts2	
TARGET_13.b	13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

SDG Indicators

Indicator Code	Description
C200304	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030
C200305	11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
C130b01	13.b.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate c

Contribution to SDGs

Participating Organization	% TARGET_11.b	% TARGET_13.b	% Total
UNDP	75	25	100
Total contribution by target	**75**	**25**	
Project contribution to SDG by target	**75**	**25**	**100**

Project Results

Outcome	Output	Description
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure		
	Output1: Improved risk-informed data architecture and planning strengthen the resilience of critical water infrastructure in urban centres	

Activities

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Activity 1.1:	Vulnerability assessment for loss & damage, and mapping/digitization of critical urban infrastructure (particularly water/stormwater infrastructure) to floods in Thimphu and Phuentsholing Thromde	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 1.2	Enable development of inclusive green and resilient Urban Centers	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 1.3	Prepare Planning Guidelines for disaster-resilient Infrastructure (stormwater, pavement, urban road design and sewage systems)	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 1.4	Prepare Design Guidelines for Flood Disaster Mitigation Measures integrating best practices in urban planning and flood disaster mitigation	UNDP - UNDP (United Nations Development Programme (UNDP))		

Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure		
	Output 2: Improved Response Capacity of cities for effective Flood and Infrastructure Management during extreme climate events	

Outcome	Output	Description
	Activities	

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Activity 2.1	Strengthen Flood Forecasting System (NCHM FFEWS) and Flash Flood Guidance System through a multi-hazard impact-based forecasting	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 2.2	Review and update of Disaster Management Contingency Plan for Thimphu Thromde (DMCP) and Phuentsholing Thromde	UNDP - UNDP (United Nations Development Programme (UNDP))		

Outcome	Output	Description
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure		
	Output 3: Improved capacities, skills and community engagement enable resilient design, operation and monitoring of critical urbann infrastructures	
	Activities	

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Activity 3.1	Train city planners, engineers, disaster management officials, and data managers for gender responsive planning, designing and management of resilient infrastructure	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 3.2	Prepare gender responsive M&E framework for safe and livable urban centers (4 Thromdes and 60 Urban Centers)	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 3.3	Document and create knowledge sharing/communication products	UNDP - UNDP (United Nations Development Programme (UNDP))		

Outcome	Output	Description
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure		
	Output 4: Project interventions coordinated, monitored results reported.	

Outcome	Output	Description
	Activities	

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Activity 4.1	Project Technical Coordinator	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 4.2	Annual audits	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 4.3	Annual planning and review workshops	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 4.4	Project Inception	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 4.5	Monthly/Quarterly/Semi-Annnual and Annual Progress Reporting	UNDP - UNDP (United Nations Development Programme (UNDP))		
Activity 4.6	Mid Term and end of project assessment	UNDP - UNDP (United Nations Development Programme (UNDP))		

IRAF OUTCOME 3 - Countries have increased access to knowledge and resources to increase the resilience and inclusivity of their existing and future critical infrastructure systems		CDRI offers direct technical assistance and grants to countries to develop and adopt enhanced disaster resilent and inclusive standards and practices for infrastructure system development through direct calls for proposals, access to relevant knowledge products and solutions meant to address specific geographical or sectoral vulnerabilities, and advisory services.
	Output 3.2 Enhanced city infrastructure environment, services and systems to improve urban infrastructure resilience across low- and middle-income countries	CDRI will support cities with the development and adoption of DRI country systems, standards and practices, and the facilitation of access to knowledge products and advisory services that are locally relevant in urban contexts.
	Activities	
	No activities available.	
IRAF OUTCOME 1 - Strengthened global partnerships to drive global, regional and local Disaster Resilient Infrastructure action		Outcome 1 - The CDRI coalition is meant to expand its membership and resource base to improve its global, regional and local outreach. The CDRI creates opportunities and platforms for its members and partners to network and collaborate with each other on DRI knowledge sharing, and advocate for and champion the DRI agenda. This is achieved through global DRI research, peer engagement, partnership building and resource mobilization.
	No outputs available.	

Signature Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Linked Outcome / Output
No signature indicators available.												

Imported Fund Outcome / Output Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Linked Outcome / Output
IRAF OUTPUT 3.2 - INDICATOR 2 (urban)		Increased access to data, tools and knowledge by Urban Local Bodies leading to improved design, operation, and maintenance of infrastructure	CDRI IRAF annual report and project monitoring reports	Capacity	Yearly	Country	Number	0	2022	Data support is provided to 20 cities, 4 resilience tools are developed, 10 SOP/ Guidelines are developed	2027	**Outcome :** IRAF OUTCOME 3 - Countries have increased access to knowledge and resources to increase the resilience and inclusivity of their existing and future critical infrastructure systems **Output:** Output 3.2 Enhanced city infrastructure environment, services and systems to improve urban infrastructure resilience across low- and middle-income countries

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Linked Outcome / Output
IRAF OUTPUT 3.2 - INDICATOR 1 (urban)		Increase in Nb. of cities receiving technical support and training in DRI inclusive standards	CDRI IRAF annual report and project monitoring reports	Capacity	Yearly	Global	Number	1	2022	20 cities received technical support in urban DRI inclusive standards and training provided to over 5,000 Urban Local Bodies officials by 2027	2027	**Outcome :** IRAF OUTCOME 3 - Countries have increased access to knowledge and resources to increase the resilience and inclusivity of their existing and future critical infrastructure systems **Output:** Output 3.2 Enhanced city infrastructure environment, services and systems to improve urban infrastructure resilience across low- and middle-income countries

Project Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Extent of infrastructure investment that would be influenced through this project (in USD)			Project closure report					0	2025	101,000,000	2027	**Out**: Im ed awa s an capa s fo info plan and ope s of criti urba infra ture
	No components available.											
Cost of operations and maintenance (in USD)			Project closure report	Investment	At closure	Country	Number	0	2025	34,000,000	2027	**Out**: Im ed awa s an capa s fo info plan and ope s of criti urba infra ture
	No components available.											
Number of people project caters to (Urban population Thimphu and Phuentsholing)			Project closure report	Beneficiaries	At closure	Country	Number	0	2025	142,209	2027	**Out**: Im ed awa s an capa s fo info plan and ope s of criti urba infra ture
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Hotspot map for vulnerable critical infrastructure available for risk informed planning			Maps, Reports	Other	At closure	Country	Yes/No	No	2025	Yes	2027	**Out**: Im ed awa s an cap s fo info plar and ope s of criti urba infra ture **Out** Out Imp risk- info data arch ure plar stre n th resi of c wat infra ture urba cent
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Planned green area (hectares) per 1000 population a. Phuntsholing b. Thimphu			Maps, Reports, Site Visit	Other	At closure	Country	Number	0	2025	a) 0.1, b)0.45	2027	**Out**: Im ed awa s an cap s fo info plan and ope s of criti urba infra ture **Out** Out Imp risk- info data arch ure plan stre n th resi of c wat infra ture urba cent
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Number of guidelines developed for resilient infrastructure systems and integrated into ECRUL project			Publications	Policy	At closure	Country	Number	0	2025	4 by end of year 1 and 6 by end of year 2	2027	**Out**: Im ed awa s an capa s fo info plan and ope s of criti urba infra ture **Out** Out Imp risk- info data arch ure plan stre n th resil of c wat infra ture urba cent
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Functional Multi-hazard early-warning system in place			Official correspondence letters, site visit, media coverage	Other	At closure	Country	Yes/No	No	2025	Yes	2027	**Out**: Im ed awa s an cap s fo info plar and ope s of criti urba infra ture **Out** Out Imp Res Cap of c for effe Floc and Infra ture Mar mer duri extr clim ever
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Revised DMCP of the cities incorporates flood risks and simulations conducted			Official correspondence letters, minutes of meetings	Other	At closure	Country	Text	DMCP for the cities outdated	2025	Revsied DMCP for Phuntsholing and Thimphu Thromdes available on websites of the Thromdes Simulations conducted on revised DMCPS	2027	**Out:** Imed awas an capas fo info plan and ope s of criti urba infra ture **Out** Out Imp Resp Cap of c for effe Floc and Infra ture Mar mer duri extr clim ever
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
NCHM officials trained on speialized skills on Strengthen Flood Forecasting System (NCHM FFEWS) and Flash Flood Guidance System through a multi-hazard impact-based forecasting (MHIBF)			Training Certificates, Training Reports Minutes of Meetings	Capacity	Yearly	Country	Number	0	2025	57	2026	**Out**: Im ed awa s an cap s fo info plan and ope s of criti urba infra ture **Out** Out Imp Res Cap of c for effe Floo and Infra ture Man mer duri extr clim ever
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Male and female professionals relevant to urban planning trained on gender responsive and inclusice designs and planning for resilent infrastructure			Training Certificates, Training Reports Minutes of Meetings	Capacity	Yearly	Country	Number	0	2025	57	2026	**Out**: Im ed awa s an capa s fo info plan and ope s of criti urba infra ture **Out** Out Imp capa s, sk and com ty eng ent ena resil desi ope and mon ng c criti urba infra ture
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
Gender responsive M&E framework for livable urban centers developed and operational			Annual Progress Report	Policy	At closure	Country	Yes/No	No	2025	Yes	2027	**Out**: Im ed awa s an cap s fo info plan and ope s of criti urba infra ture **Out** Out Imp cap s, sk and com ty eng ent ena resi desi ope and mon ng c criti urba infra ture
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Link Out / Ou
No of knowledge products generated			Annual Progress Report	Other	At closure	Country	Number	0	2025	4 by month 18 and 6 by the project closure	2027	**Out**: Im ed awa s an cap s fo info plan and ope s of criti urba infra ture **Out** Out Imp cap s, sk and com ty eng ent ena resil desi ope and mon ng c criti urba infra ture
	No components available.											

Risks

Event	Category	Level	Likelihood	Impact	Mitigating Measures	Risk Owner
1. Urban planners, engineers, and disaster management officials may lack the necessary technical expertise to develop and implement risk-informed, climate-resilient infrastructure plans effectively.	• Operational	Low	Possible	Minor	1. The project will design and implement targeted training programs through a "training of trainers" (ToT) model focusing on specific technical skills required for risk-informed, climate-resilient infrastructure planning.	Project Partner/UNDP

Urban planners and policymakers may resist adopting new disaster-resilient guidelines and standards due to limited understanding of long-term benefits.	• Operational	Medium	Possible	Moderate	A comprehensive strategy of integrated stakeholder engagement and capacity building will be implemented to promote the adoption of disaster-resilient infrastructure. From the project's inception, continuous engagement with stakeholders, including planners and policymakers, will be prioritized through various methods. This includes demonstrating the cost-effectiveness and tangible benefits of resilient infrastructure with concrete data and examples, while also working to integrate resilience indicators into national urban planning frameworks and standards. To address knowledge gaps and build practical skills, interactive workshops, training sessions will be conducted. Furthermore, the project will facilitate peer-to-peer learning opportunities, enabling planners and policymakers to interact with counterparts who have successfully implemented resilient infrastructure strategies including CDRI, thereby fostering a culture of shared learning and adoption of best practices.	Project/UNDP
Limited participation from urban communities and local governments could lead to poor project acceptance, implementation delays and sustainability	• Social and Environmental	Medium	Possible	Moderate	Building on consultations carried out during the project design, the project will develop a robust stakeholder engagement, inclusion, and gender action plan. This plan will include ensuring representation of vulnerable groups (women, youth, the elderly, and people with disabilities) and elected local leaders in planning and decision-making processes. The project will also regularly communicate project progress and benefits through review workshops and knowledge management.	Project partner/UNDP

Budget by UNSDG Categories: Over all

Budget Lines	UNDP (7%) *	Total
1. Staff and other personnel	$40,800.00	$40,800.00
2. Supplies, Commodities, Materials		$0.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation		$0.00
4. Contractual services	$260,300.00	$260,300.00
5. Travel	$96,332.00	$96,332.00
6. Transfers and Grants to Counterparts	$88,200.00	$88,200.00
7. General Operating and other Direct Costs	$113,257.72	$113,257.72
Project Costs Sub Total	**$598,889.72**	**$598,889.72**
8. Indirect Support Costs	$41,922.28	$41,922.28
Total	**$640,812.00**	**$640,812.00**

Budget by UNSDG Categories: 2025

Budget Lines	Fiscal Year *	Description	UNDP (7%) *	Total
1. Staff and other personnel	2025	1500*6 (for two quarters)	$9,000.00	$9,000.00
2. Supplies, Commodities, Materials	2025			$0.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	2025			$0.00
4. Contractual services	2025	Activty 1.2, 1.3	$68,675.00	$68,675.00
5. Travel	2025	Activity 1.1, 3.1	$56,320.00	$56,320.00
6. Transfers and Grants to Counterparts	2025	Activity 2.1, 3.1	$67,200.00	$67,200.00
7. General Operating and other Direct Costs	2025		$53,655.00	$53,655.00
Project Costs Sub Total			**$254,850.00**	**$254,850.00**
8. Indirect Support Costs			$17,839.50	$17,839.50
Total			**$272,689.50**	**$272,689.50**

Budget by UNSDG Categories: 2026

Budget Lines	Fiscal Year *	Description	UNDP (7%) *	Total
1. Staff and other personnel	2026		$22,800.00	$22,800.00
2. Supplies, Commodities, Materials	2026			$0.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	2026			$0.00
4. Contractual services	2026	Activity 1.3, 1.4, 2.1, 3.2, PMC	$175,875.00	$175,875.00
5. Travel	2026	Activity 1.1, 1.3, 2.2, 3.13.2	$40,012.00	$40,012.00
6. Transfers and Grants to Counterparts	2026	Activty1.3	$21,000.00	$21,000.00
7. General Operating and other Direct Costs	2026		$50,602.72	$50,602.72
Project Costs Sub Total			**$310,289.72**	**$310,289.72**
8. Indirect Support Costs			$21,720.28	$21,720.28
Total			**$332,010.00**	**$332,010.00**

Budget by UNSDG Categories: 2027

Budget Lines	Fiscal Year *	Description	UNDP (7%) *	Total
1. Staff and other personnel	2027		$9,000.00	$9,000.00
2. Supplies, Commodities, Materials	2027			$0.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	2027			$0.00
4. Contractual services	2027	PMC	$15,750.00	$15,750.00
5. Travel	2027		$0.00	$0.00
6. Transfers and Grants to Counterparts	2027		$0.00	$0.00
7. General Operating and other Direct Costs	2027		$9,000.00	$9,000.00
Project Costs Sub Total			**$33,750.00**	**$33,750.00**
8. Indirect Support Costs			$2,362.50	$2,362.50
Total			**$36,112.50**	**$36,112.50**

Performance-based Tranches Breakdown

Tranche			Total
Tranche 1	UNDP (20%)	$128,162.40	$128,162.40
Tranche 2	UNDP (50%)	$320,406.00	$320,406.00
Tranche 3	UNDP (30%)	$192,243.60	$192,243.60
			$640,812.00

Results based budget

Outcome *	Output *	Activity *	Agency *	Budget (USD) *
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure			**Sub Total**	**$209,762.00**
	Output1: Improved risk-informed data architecture and planning strengthen the resilience of critical water infrastructure in urban centres		**Sub Total**	**$209,762.00**
		Activity 1.1:	UNDP (7%)	$17,136.00
		Activity 1.2	UNDP (7%)	$94,192.00
		Activity 1.3	UNDP (7%)	$71,964.00
		Activity 1.4	UNDP (7%)	$26,470.00
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure			**Sub Total**	**$162,694.00**
	Output 2: Improved Response Capacity of cities for effective Flood and Infrastructure Management during extreme climate events		**Sub Total**	**$162,694.00**
		Activity 2.1	UNDP (7%)	$156,426.00
		Activity 2.2	UNDP (7%)	$6,268.00
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure			**Sub Total**	**$150,386.00**
	Output 3: Improved capacities, skills and community engagement enable resilient design, operation and monitoring of critical urbann infrastructures		**Sub Total**	**$150,386.00**
		Activity 3.1	UNDP (7%)	$114,158.00

		Activity 3.2	UNDP (7%)	$25,742.00
		Activity 3.3	UNDP (7%)	$10,486.00
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure			**Sub Total**	**$117,970.00**
	Output 4: Project interventions coordinated, monitored results reported.		**Sub Total**	**$117,970.00**
		Activity 4.1	UNDP (7%)	$38,520.00
		Activity 4.2	UNDP (7%)	$6,420.00
		Activity 4.3	UNDP (7%)	$7,490.00
		Activity 4.4	UNDP (7%)	$3,745.00
		Activity 4.5	UNDP (7%)	$29,963.00
		Activity 4.6	UNDP (7%)	$31,832.00
Total				**$640,812.00**

Programme Outcome Costs

Outcome	Output	Activity	Implementing Agent	Time Frame								
				2025		2026				2027		
				3	4	1	2	3	4	1	2	3
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure												
	Output1: Improved risk-informed data architecture and planning strengthen the resilience of critical water infrastructure in urban centres											
		Activity 1.1:										
			UNDP	☑	☑	☑	☐	☐	☐	☐	☐	☐
		Activity 1.2										
			UNDP	☐	☑	☑	☑	☑	☐	☐	☐	☐
		Activity 1.3										
			UNDP	☐	☑	☑	☑	☐	☐	☐	☐	☐
		Activity 1.4										
			UNDP	☐	☐	☑	☑	☑	☐	☐	☐	☐
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure												
	Output 2: Improved Response Capacity of cities for effective Flood and Infrastructure Management during extreme climate events											
		Activity 2.1										
			UNDP	☐	☐	☑	☑	☑	☑	☐	☐	☐
		Activity 2.2										
			UNDP	☐	☐	☑	☑	☑	☐	☐	☐	☐
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure												
	Output 3: Improved capacities, skills and community engagement enable resilient design, operation and monitoring of critical urbann infrastructures											
		Activity 3.1										
			UNDP	☑	☑	☐	☐	☐	☐	☐	☐	☐
		Activity 3.2										
			UNDP	☐	☐	☐	☑	☑	☐	☐	☐	☐
		Activity 3.3										
			UNDP	☐	☑	☑	☑	☑	☑	☑	☐	☐
Improved awareness and capacities for risk-informed planning and operations of critical urban infrastructure												
	Output 4: Project interventions coordinated, monitored results reported.											
		Activity 4.1										
			UNDP	☑	☐	☐	☐	☐	☐	☐	☐	☐

Outcome	Output	Activity	Implementing Agent	Time Frame								
				2025		2026				2027		
				3	4	1	2	3	4	1	2	3
		Activity 4.2										
			UNDP	☐	☐	☑	☐	☐	☐	☐	☐	☐
		Activity 4.3										
			UNDP	☐	☐	☐	☑	☐	☐	☐	☐	☐
		Activity 4.4										
			UNDP	☐	☐	☐	☑	☐	☐	☐	☐	☐
		Activity 4.5										
			UNDP	☐	☐	☐	☐	☑	☐	☐	☐	☐
		Activity 4.6										
			UNDP	☐	☐	☐	☐	☑	☐	☐	☐	☐

Signatures

Coalition for Disaster Resilient Infrastructure (CDRI) Secretariat (Digital) Mr Amit Prothi Director General CDRI amit.prothi@cdri.world	**SIGNATURE:** Amit Prothi **DATE:** 31-07-2025
Department of Macro fiscal and Development Finance, Ministry of Finance, Bhutan (Manual) Mr. Tshering Dorji Director Department Development Finance tsheringdorji@mof.gov.bt IRIS_UNDP_Bhutan_prodoc_Gov_signed 02.08.25.pdf	**SIGNATURE:** Tshering Dorji **DATE:** 04-08-2025
UNDP (United Nations Development Programme (UNDP)) (Digital) Mr Ronald Jackson UN Co Chair TFMC, Head of the Disaster Risk Reduction, Recovery for Building Resilience, UNDP ronald.jackson@undp.org	**SIGNATURE:** Ronald Jackson **DATE:** 02-07-2025
UNDP: UNDP (United Nations Development Programme (UNDP)) (Digital) Mr Mohammad Younus UNDP RR mohammad.younus@undp.org	**SIGNATURE:** Mohammad Younus **DATE:** 02-07-2025