

# Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 16-Nov-2023 | Report No: PIDA0045



# **BASIC INFORMATION**

### A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
India	SOUTH ASIA	P179749	Uttarakhand Disaster Preparedness and Resilience Project
Financing Instrument	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
Investment Project Financing (IPF)	22-Nov-2023	30-Jan-2024	Urban, Resilience and Land
Borrower(s)	Implementing Agency		
India	Uttarakhand State Disaster Management Authority, Government of Uttarakhand		

### Proposed Development Objective(s)

To enhance the climate and disaster resilience of critical public infrastructure and strengthen disaster risk management capacity in Uttarakhand.

### Components

Enhancing Infrastructure Resilience Improving Emergency Preparedness and Response Preventing and Managing Forest and General Fires Project Management Contingency Emergency Response Component Front End Fee

**PROJECT FINANCING DATA (US\$, Millions)** 

### **Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)?	Yes

Is this project Private Capital Enabling (PCE)? No

### **SUMMARY**

# **Total Operation Cost**

200.00



200.00
160.00
0.00
160.00
40.00
40.00

### **B. Introduction and Context**

### **Country Context**

1. India is highly vulnerable to natural disasters and climate change increases this vulnerability. More than 80 percent of India's population lives in areas highly susceptible to extreme hydrometeorological (hydromet) disasters, including floods, droughts, cyclones, and consequential landslides. Out of the almost 3.3 million km<sup>2</sup> of landmass, 15 percent is susceptible to landslides, 12 percent is prone to river floods, 59 percent is prone to earthquakes of moderate to very high intensity, and 75 percent of the coastline is prone to cyclones.<sup>1</sup> By the 2090s, temperatures in India are projected to increase by approximately 4.5°C under the Representative Concentration Pathway (RCP) 8.5 scenario and by around 1.2°C under the RCP2.6 scenario. Rising temperature, sea-level rise, and extreme precipitation due to climate change are expected to further retreat the country's glacier mass, and increase the frequency and magnitude of wildfires, landslides, coastal and river flooding.<sup>2</sup>

2. India has demonstrated policy ambitions for both climate change mitigation and adaptation. The updated 2022 Nationally Determined Contribution (NDC) commits to reduce GDP emissions intensity by 45 percent, obtain 50 percent of its installed electricity capacity from renewable energy resources, and provide an additional carbon sink of 2.5 – 3.0

<sup>&</sup>lt;sup>1</sup> National Disaster Management Authority. 2019. "Annual Report 2018-19". National Disaster Management Authority, Government of India.

<sup>&</sup>lt;sup>2</sup> Ali, Haider, Parth Modi, and Vimal Mishra. 2019. "Increased Flood Risk in Indian Sub-Continent under the Warming Climate." Weather and Climate Extremes 25.



billion tons of carbon dioxide by increasing forest cover, all by 2030.<sup>3</sup> Alongside India's mitigation efforts, the country has pursued disaster risk reduction. The NDC calls for better adaptation to climate change, including in the Indian Himalayan Region. The 2019 National Disaster Management Plan puts the Sendai Framework for Disaster Risk Reduction into action.

# Sectoral and Institutional Context

3. Uttarakhand is a Himalayan region mountain state that is regularly impacted by flash floods, landslides, wildfires, glacier lake outbursts, cloudburst incidences, and earthquakes. The combination of unfavorable geology, steep sloping areas, and cloudburst incidences makes the occurrence of landslides very likely, with 51 percent of the State's area having high or very high landslide susceptibility.<sup>4</sup> Frequent disasters, such as the 2013 floods and landslides with 4,000 fatalities, the 2016 wildfire affecting more than 4,500 hectares of forest, the 2021 rock and ice avalanche, and the slow subsidence unfolding in Joshimath, are disrupting development in Uttarakhand. This is reversing hard-won development gains and having multi-dimensional effects on the State's economy. Most of the State's landmass falls under Seismic Zone IV or V, the highest seismic risk zones of the country, and the State has had 11 major earthquakes over the last century.<sup>5</sup>

4. **Uttarakhand's disaster vulnerability is further exacerbated by climate change.** Regional climate models predict a warming of 1.3 – 1.6 °C in Uttarakhand by the middle of the century and 2.3 – 5.9 °C by the end of the century.<sup>6</sup> This will further increase the risk of forest fires during the summer and contribute to the ongoing loss of glaciers. Increasing monsoon precipitation and enhanced glacier melt lead to a significant increase in peak runoff during the monsoon months.<sup>7</sup> This can elevate the risk of flash floods, landslides, and glacier lake outburst floods. The potential landslide activity of some regions of Uttarakhand might increase by up to 90 percent during monsoon season (May to October) by the second half of the century due to climate change-induced glacier melting and increased rainfall.<sup>8</sup> Altogether, climate change adds to the unpredictability of disasters and is further aggravated by anthropogenic trends, including unplanned urbanization, deforestation, and water extraction.

5. **The Government of Uttarakhand (GoUK) is committed to addressing climate change across sectors while supporting inclusive growth.** The GoUK has implemented initiatives to mainstream adaptation and build resilience, such as establishing the Uttarakhand State Disaster Management Authority (USDMA) under the 2005 Disaster Management Act and creating state, district, and village disaster risk management (DRM) plans. The 2014 Uttarakhand Action Plan on Climate Change (UAPCC) is the State's key climate change policy document, presenting climate-resilient development pathways for 12 key sectors. The GoUK has implemented the World Bank-financed Uttarakhand Disaster Recovery Project (UDRP) and Additional Financing (AF) since 2013. UDRP, which closes in September 2023, has restored housing and rural connectivity, built the resilience of communities, and increased the capacity of the State to respond to emergencies.

6. A holistic approach that integrates risk reduction into critical infrastructure planning is still lacking in **Uttarakhand.** The State will need to conduct a review of its infrastructure planning processes, mainstream resilience into processes and institutions, and build adequate planning capacity. For example, transport and health infrastructure are

<sup>&</sup>lt;sup>3</sup> Government of India. 2022. "India's Updated First Nationally Determined Contribution Under Paris Agreement (2021-2030)", Government of India, New Delhi. <sup>4</sup> Gupta, Vikram, Sandeep Kumar, Ramandeep Kaur, and Ruchika S. Tandon. 2022. "Regional-Scale Landslide Susceptibility Assessment for the Hilly State of Uttarakhand, NW Himalaya, India." Journal of Earth System Science 131 (1): 2.

 <sup>&</sup>lt;sup>5</sup> TERI. 2020. Roadmap for Mainstreaming Climate Action and Disaster Risk Management in Uttarakhand. The Energy and Resources Institute (TERI), New Delhi.
<sup>6</sup> Tyagi, Neetu, Tripti Jayal, Mukesh Singh, Vipan Mandwal, Atul Saini, Nirbhav, Netrananda Sahu, and Sridhara Nayak. 2022. "Evaluation of Observed and Future Climate Change Projection for Uttarakhand, India, Using CORDEX-SA." *Atmosphere* 13 (6): 947.

<sup>&</sup>lt;sup>7</sup> Lutz, A. F., W. W. Immerzeel, C. Siderius, R. R. Wijngaard, S. Nepal, A. B. Shrestha, P. Wester, and H. Biemans. 2022. "South Asian Agriculture Increasingly Dependent on Meltwater and Groundwater." *Nature Climate Change* 12 (6): 566–73.

<sup>&</sup>lt;sup>8</sup> NASA, 2020. Climate Change Could Trigger More Landslides in High Mountain Asia; Kirschbaum, D., Kapnick, S. B., Stanley, T., and Pascale, S., 2020. Changes in Extreme Precipitation and Landslides Over High Mountain Asia. Geophysical Research Letters, 47. https://doi.org/10.1029/2019GL085347

critical lifelines that are prone to climate and disaster risks. Disaster-related interruptions in the transport infrastructure in Uttarakhand cut off communities from markets, schools, medical facilities, other economic opportunities, and essential services. Timely emergency response and reconstruction are impaired by Uttarakhand's mountainous topography. To ensure all-weather connectivity, new resilient bridges are required at essential missing link locations and many existing bridges require upgrades. Slope stabilization is needed at critical locations to reduce the risk and impact of landslides and to improve safety. Health infrastructure upgrades are required to disaster-proof buildings, rejuvenate aging facilities, and enhance energy efficiencies to ensure effective health services before, during, and after disasters.

7. **Gaps remain in the State's emergency preparedness.** USDMA, the nodal agency for coordinating all DRM matters, works closely with other relevant departments, including the State Disaster Response Force (SDRF, focusing on relief and rescue operations), the Uttarakhand Fire and Emergency Services (UFES, de jure first responder for any type of small-scale disaster), and the Forest Department (FD, responsible for forest fire management). USDMA's coordinating role needs to be strengthened through capacity building, enhanced multi-stakeholder Standard Operating Procedures (SOPs), and mandated responsibilities. Moreover, agencies currently lack the capacity, infrastructure, training facilities, equipment, and technology to fulfill their functions effectively across the entire State. Despite frequent disaster incidents and a significant influx of tourists and a high number of communities in remote, hard-to-reach, mountainous areas, there are currently no disaster shelters in the State. Insufficient funds and access to external funding for urgently needed investments across all sectors is a key cross-cutting challenge.

8. The transformation of Uttarakhand's meteorological and hydrological services and early warning system is critical to reduce the increasing costs of natural hazards and increase the productivity of key economic sectors. Currently, the State relies on the India Meteorological Department's forecasting services, which are limited in quality and performance. To increase the granularity, accuracy, and timeliness of forecasts, Uttarakhand requires services from the private sector to improve the forecast quality, deliver user-oriented, fit-for-purpose products to different end-users, and build forecasting capacity in the State. The current early warning system is limited and fragmented, lacking people-centered approaches that allow for informed decision-making and action at all levels, down to the community.

9. The capacity within UFES to respond to fires in commercial, residential, and industrial areas and to enforce preventative fire safety measures is limited. Fire incidents have increased sixfold in the past 20 years in the State. Given the ongoing rapid population growth in Uttarakhand, the capacity gaps lead to increased fire response times which are directly related to loss of life and economic damages. The increasing risk of climate-induced forest fires also increases the risk of fires spreading across the wildland-urban interface. UFES is struggling to send its personnel to the centralized national training facility due to a lack of available personnel to maintain service delivery in the State's vast area that faces fire hazards. Although a set of regulatory requirements exists to ensure fire safety in buildings, UFES is unable to enforce these requirements. UFES requires capacity building through the provision of training, equipment, and enhanced coordination with other stakeholders. Public awareness raising is also needed.

10. **Forest fires are increasing in their intensity and spread.** Forests cover 45 percent of the State's area, with the rural population being largely dependent on natural forest resources.<sup>9</sup> Around 65 percent of the forest area is sensitive to forest fires, with 2,800 registered forest fires in 2021, affecting an area of almost 4,000 hectares. India's forest carbon stock is estimated at 7.204 Gt in 2021 - among the six most significant national carbon sequestration potentials worldwide.<sup>10</sup> However, forest fires and degradation have negatively impacted forest ecosystem services, including its carbon stock. The potential to monetize carbon sequestration services resulting from sustainable forest management including forest fire risk management remains largely untapped and gaps remain to effectively manage forest fire risk.

<sup>&</sup>lt;sup>9</sup> India State of Forest Report 2021, Forest Survey of India. <sup>10</sup> Ibid.



This includes a lack of equipment, infrastructure, and capacity within the FD and communities, awareness and incentives on the local level, and inter-agency coordination including the integration of the FD within the wider DRM system.<sup>11</sup>

11. Women tend to be more severely impacted by disasters and are underrepresented in DRM agencies. Women and men experience disaster impacts differently, with women often being more severely affected and having lower levels of resilience than men.<sup>12</sup> This also applies to Uttarakhand where more than 70 percent of the women workers are dependent on climate-sensitive sectors such as agriculture and are often in vulnerable employment.<sup>13</sup> Existing DRM mechanisms have often failed to address the differentiated impacts of disasters on women.<sup>14</sup> After the 2021 Uttarakhand floods, for example, 50 percent of women did not have access to safe spaces and 65 percent could not access adequate sanitary supply.<sup>15</sup> This insufficient consideration of women's needs is exacerbated by the lack of female employees in DRM agencies. For instance, among the almost 1000 employees of UFES less than 1 percent are female and existing fire stations do not have adequate facilities for women.

12. The proposed Project will promote a comprehensive multi-sectoral approach with much-needed investments, knowledge, and convening power required to improve the resilience of critical infrastructure and disaster preparedness in Uttarakhand. It will support a shift in the State's disaster and climate risk management from a reactive approach to a proactive approach, bring much-needed financing and technical support to address critical gaps in an integrated and sustainable manner, and convene critical sectors under a comprehensive approach.

# C. Proposed Development Objective(s)

# Development Objective(s) (From PAD)

To enhance the climate and disaster resilience of critical public infrastructure and strengthen disaster risk management capacity in Uttarakhand.

Key Results

- People benefitting from improved climate-resilient transport infrastructure (Number)
- People benefitting from new multi-hazard early warning system (Number)
- People benefitting from new and upgraded fire stations (Number)

### **D. Project Description**

13. The Project will finance the following activities in Selected Areas which are agreed between the GoUK and the World Bank and set forth in the Project Implementation Plan.

# Component 1 – Enhancing Infrastructure Resilience (Total: US\$69 million; IBRD: US\$55.2 million; Government: US\$13.8 million)

14. The objective of this component is to develop climate and disaster-resilient priority infrastructure and integrate resilience into infrastructure planning.

<sup>&</sup>lt;sup>11</sup> World Bank. 2018. Strengthening Forest Fore Management in India.

<sup>&</sup>lt;sup>12</sup> Bhadra, Subhasis. 2017. "Women in Disasters and Conflicts in India: Interventions in View of Millennium Development Goals". International Journal of Disaster Risk Science: 197.

<sup>&</sup>lt;sup>13</sup> Joshi C.S and Chaudhary Tanuja. 2021. "Women Participation in Agriculture Sector in Hilly Regions of Uttarakhand." Indian Journal of Hill Farming: 112.

<sup>&</sup>lt;sup>14</sup> Vasudha Gokhale, Vasudha. 2008. "Role of Women in Disaster Management: An Analytical Study with Reference to Indian Society." *Paper for the 14<sup>th</sup> World Conference on Earthquake Engineering*.

<sup>&</sup>lt;sup>15</sup> Uttarakhand Disaster Joint Needs Assessment Report. 2021. Sphere India.



(a) Enhancing the resilience of transport connectivity (Total: US\$52 million; IBRD: US\$41.6 million; Government: US\$10.4 million) through (i) improving the condition, safety, and resilience of select bridges that are prone to floods; (ii) reducing the risks of landslides to enhance population safety, including scaling up bioengineering solutions; (iii) supporting the new Uttarakhand Landslide Mitigation and Management Centre (ULMMC) achieve its vision of becoming a center of excellence for landslide risk management, including through capacity building, preparing an institutional development plan, and promoting the application of technology and innovation; and (iv) strengthening the capacity of the Public Works Department (PWD) in resilient design and construction, developing a PWD Climate Adaptation Policy, which will integrate disaster and climate risk management approaches into existing systems, and developing a Road Asset Management System with a climate module.

(b) Enhancing the resilience of health services (Total: US\$7 million; IBRD: US\$5.6 million; Government: US\$1.4 million) through (i) reducing hydromet, fire, and seismic vulnerability of priority Government health centers including upgrading stormwater drainages, improving fire detection and suppression systems, installing seismic retrofits, and enhancing biomedical waste management; (ii) optimizing energy and water efficiency of priority Government health centers, through, for example, vegetation, on-site renewable energy generation, and rainwater harvesting systems; and (iii) enhancing the capacity of the Department of Medical Health and Family Welfare (DMHFW) in climate and disaster emergency management.

(c) Providing disaster shelter (Total: US\$10 million; IBRD: US\$8 million; Government: US\$2 million) through (i) conducting a shelter needs and development assessment in the context of climate change; (ii) constructing pilot multi-purpose disaster shelters in disaster-prone areas along major routes with resilient, inclusive, and energy-efficient designs; and (iii) establishing institutions and procedures for shelter management including the use and maintenance of the shelters during non-emergency situations.

# Component 2 – Improving Emergency Preparedness and Response (Total: US\$57 million; IBRD: US\$45.6 million; Government: US\$11.4 million)

15. The objective of this component is to improve the capabilities of government entities and first responders to predict, prepare for, and respond to disasters.

(a) Strengthening emergency preparedness (Total: US\$8 million; IBRD: US\$6.4 million; Government: US\$1.6 million) through (i) establishing a State Emergency Operations Center (SEOC) with a Centralized Incident Command System to enhance coordination; (ii) reviewing and strengthening the State's multi-agency institutional emergency and response frameworks and standard operating procedures; and (iii) implementing community DRM activities.

(b) Strengthening hydromet and early warning systems (EWS) (Total: US\$43 million; IBRD: US\$34.4 million; Government: US\$8.6 million) through (i) improving impact forecasting for weather, climate, and hydrological hazards; (ii) establishing an end-to-end multi-hazard EWS to provide timely warnings directly to the vulnerable population, using multi-channel and multi-technology dissemination systems; (iii) developing fit-for-purpose hydromet tools and services for stakeholders in key sectors; and (iv) training and capacity building for DRM officials at State and local levels and communities.

(c) Strengthening the State Disaster Response Force (Total: US\$6 million; IBRD: US\$4.8 million; Government: US\$1.2 million) through (i) constructing SDRF outdoor search and rescue training facilities and sub-team stations; (ii) providing search and rescue and communications equipment; and (iii) providing training on equipment storage, maintenance, and repair.



Component 3 – Preventing and Managing Forest and General Fires<sup>16</sup> (Total: US\$54 million; IBRD: US\$43.2 million; Government US\$10.8 million)

16. The objective of this component is to enhance the capacity of the government and communities to prevent and manage forest and general fires.

(a) Improving general fire risk management capacity (Total: US\$42 million; IBRD: US\$33.6 million; Government US\$8.4 million) through (i) conducting a fire risk assessment in the context of climate change, and a gap analysis to prioritize resources and interventions; (ii) developing a fire risk management strategy and action plan that defines the roles of and coordination mechanisms between different stakeholders, sets targets, and defines budget needs for UFES; (iii) strengthening UFES' capacity for firefighting, application of innovative technologies, building inspections, enforcement of fire safety acts, rules and norms, and occupational health and safety management; (iv) constructing and upgrading fire stations to improve response time and effectiveness, meet the needs of female employees, and incorporate resilience, environment, health, and safety design considerations; (v) constructing a general fire risk management training facility; (vi) implementing community-based activities on fire safety norms; and (vii) supporting female UFES staff including by organizing on-the-job trainings, exposure visits, and outreach activities to make UFES a more attractive employer for women and increase the share of female employees.

(b) Improving forest fire prevention and management capacity (Total: US\$12 million; IBRD: US\$9.6 million; Government: US\$2.4 million) through (i) strengthening the FD's prediction, mapping, and early detection capacity, focusing on new technologies, such as mobile applications and artificial intelligence, taking into account shifts in fire risks due to climate change; (ii) assessing policies, processes, planning, and inter-agency forest fire coordination mechanisms, including creating an incident command system for forest fire management; (iii) strengthening the FD's forest fire suppression capacity by purchasing equipment, constructing and upgrading crew stations, and providing capacity building for officials and communities; (iv) establishing an incentive-based community program, including provision of Community Grants, for forest fire risk management to be guided by sustainable forest management principles for forest fire risk management that will be guided by sustainable forest management principles for forest fire risk management that will be guided by sustainable forest management principles, reduces fuel load, restores degraded lands, and enhances soil moisture levels; and (v) preparing a carbon-finance mechanism based on reduced emissions from the above-mentioned activities as a sustainable funding mechanism for community forest fire risk management activities.

### Component 4 – Project Management (Total: US\$20 million; IBRD: US\$16 million; Government: US\$4 million)

17. The objective of this component is to support project management and knowledge sharing.

(a) Carrying out the day-to-day coordination through (i) supporting financial management (FM), procurement, environmental and social management, communication, monitoring and evaluation (M&E), and stakeholder engagement, including community outreach; and (ii) enhancing the State's ongoing efforts on open data management.

(b) Supporting the establishment of a Lighthouse Uttarakhand platform through (i) disseminating lessons learned and good practices in Uttarakhand to other States in India, and (ii) supporting the exchange of knowledge and strengthening the capacity of institutions in India through partnerships.

<sup>&</sup>lt;sup>16</sup> General fires refer to instances of commercial, residential, or industrial fires which fall under the legislated accountabilities of UFES.



# Component 5 – Contingent Emergency Response Component (CERC) (US\$0)

18. The objective of this component is to allow for the reallocation of loan proceeds from other components to provide immediate support following an eligible crisis or emergency.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

19. **Environmental Risks and Impacts:** While the Project is envisaged to have overall positive environmental benefits, environmental risks are rated 'substantial' given the Project's setting in fragile disaster-prone mountainous terrain, the presence of ecologically sensitive areas/features, and limited familiarity/prior experience of the implementation agencies with environmental risk management, including with the application and implementation of requirements of the World Bank's Environmental and Social Framework. Key environmental risks/concerns from proposed Project interventions could potentially include: (i) impacts on the natural environment arising from sub-project locations within or near environmentally sensitive features/areas such as interventions on forest fire management and bridge constructions; (ii) disruption of services/usage during retrofitting works of buildings; (iii) occupational health and safety risks, debris/waste management, dust and noise during execution of civil works; and (iv) constraints in capacity to deal with environmental health and safety issues in geographically dispersed sub-projects involving multiple planning and implementation entities.

20. **Social Risks and Impacts:** From a social perspective, the Project activities could potentially lead to (i) constructioninduced adverse impacts on community health and safety, including project-induced labor influx, and risks of sexual exploitation and abuse/sexual harassment; (ii) limited private land acquisition (approximately 40 hectares) for bridges and road infrastructure under Component 1, resulting in minimal physical displacement (approximately 80 projectaffected families) and economic displacement (approximately 300 project-affected families), particularly of titleholders; including temporary restrictions to accessing Van Panchayat forest land for activities under Component 3; (iii) inadvertent exclusion of vulnerable and trans-nomads from accessing Project benefits; (iv) risks related to non-compliance of labor standards; and (v) weak capacity of multiple implementing institutions to effectively manage, monitor, and report on social risks.

21. **Risk Mitigation Measures:** The anticipated risks and impacts can be avoided, minimized, and managed effectively by conducting screening and scoping exercises, ensuring due diligence in impact assessment studies, integrating environmental, social, health, and safety aspects in the planning and design of works, implementing environmental and social management plans, and establishing robust monitoring mechanisms. The approaches, processes, and guidelines to this effect are embedded in the Project Environmental and Social Framework instruments, which include the Environmental and Social Management Framework, Stakeholder Engagement Plan, Labor Management Procedures, and Environment and Social Commitment Plan. These instruments have been prepared and disclosed. The Project has



developed mitigation measures to respond to related gender-based violence, sexual exploitation and abuse, and sexual harassment risks.

### **E. Implementation**

Institutional and Implementation Arrangements

22. The institutional and implementation arrangements will largely follow the existing structure of the UDRP, which has proven satisfactory. A High-Powered Committee (HPC) headed by the Chief Secretary will provide strategic oversight and sanctions and ensure the overall coordination and monitoring of the Project. A Project Management Unit (PMU) at the State level will be responsible for overall project management, implementation, and compliance. The PMU will be placed in USDMA, which has successfully managed UDRP since 2013. Four Project Implementation Units (PIUs) will be responsible for implementing specific project activities and managing respective funds: PIU PWD (Road Infrastructure), PIU Rural Works Department (RWD) (Health, Response, Fire), PIU USDMA (Shelters & Preparedness), and PIU Forest (Forest Fire). Field PIUs for PWD, RWD, and FD consisting of the departments' existing field offices will be responsible for implementing and monitoring project activities in their respective geographic areas. The PMU and PIUs will closely coordinate with other relevant entities, in particular DMHFW, SDRF, and UFES. The PMU will also appoint a third-party quality assessment consultant to oversee and support constructions in the field. USDMA and PWD have already implemented components under UDRP. RWD and the FD are new implementing agencies and will receive enhanced implementation support to familiarize staff with World Bank procedures and requirements. The detailed implementation arrangements of the community-based activities under Sub-Component 3b will be determined during the first year of implementation based on consultations and technical analysis.

23. The PMU will be headed by a Project Director who will be supported by two Additional Project Directors and four Project Managers (one for each PIU), a Finance Controller, and multi-disciplinary teams. The Project Managers will supervise the operations of the respective PIUs, including monitoring and coordination. Staff will be deployed from various government departments and through open recruitment. Training will be provided for all staff. Project management capacity will be closely monitored during the implementation supervision and addressed if needed.

### CONTACT POINT

### World Bank

Henrike Brecht Senior Disaster Risk Management Specialist

Wanli Fang Senior Urban Specialist

Vijetha Bezzam Transport Specialist

### **Borrower/Client/Recipient**



### India

K. Manicka Raj, Joint Secretary, Department of Economic Affairs, manickraj.k@nic.in

### Implementing Agencies

# Uttarakhand State Disaster Management Authority, Government of Uttarakhand Ranjit Kumar Sinha , Secretary Disaster Management, Uttarakhand, pd.udrpaf@gmail.com

### FOR MORE INFORMATION CONTACT

The World Bank 1818 H Street, NW Washington, D.C. 20433 Telephone: (202) 473-1000 Web: <u>http://www.worldbank.org/projects</u>

# APPROVAL

Task Team Leader(s):

Henrike Brecht, Wanli Fang, Vijetha Bezzam

### **Approved By**

Practice Manager/Manager:		
Country Director:	Hideki Mori	16-Nov-2023