Terms of reference (ToR) for the procurement of services below the EU threshold

CONFIDENTIAL

Engagement of Technical Agency for developing Vulnerability Assessment for climate-induced hazards/extreme-climate events for Uttarakhand, India	**Project number/ cost centre:** **22.2133.1-001.00**

0. List of abbreviations

AG	Commissioning party
AN	Contractor
AVB	General Terms and Conditions of Contract for supplying services and work
FK	Expert
FKT	Expert days
KZFK	Short-term expert
ToRs	Terms of reference

1. Context

Uttarakhand, a Himalayan state in northern India, faces recurrent natural hazards including flash floods, landslides, earthquakes, forest fires, glacial lake outburst floods, and cloudbursts. Over the past decade, the frequency and intensity of such weather-driven disasters have risen sharply across the Himalayan belt. The region's fragile geology, steep mountainous terrain, and recurrent cloudburst events make it especially prone to landslides, with more than half of the state's area classified as highly or very highly susceptible. Major disasters—such as the 2013 floods and landslides that claimed around 4,000 lives, the 2016 forest fire that destroyed over 4,500 hectares of forest, and the 2021 rock-ice avalanche triggered by cascading processes—have severely disrupted development and reversed years of progress.

The risks are further amplified by climate change. Regional climate projections indicate that Uttarakhand could experience a temperature rise of 1.3–1.6°C by mid-century and 2.3–5.9°C by the century's end. Warming has already accelerated glacier loss, with roughly 1,950 glaciers in the state shedding around 16 gigatons of ice between 2000 and 2014, amounting to 3.5% of total glacier volume. Climate models also suggest a decline in pre-monsoon rainfall but an increase of 6–16% in monsoon precipitation by the end of the century, coupled with greater variability from year to year. These changes, combined with higher temperatures and accelerated glacier melt (10–20% of annual runoff), are expected to significantly increase peak flows during the monsoon season, heightening the probability of flash floods, landslides, and glacial lake outburst floods. In certain districts, climate change could raise landslide risks by as much as 90% during the monsoon months (May–October) by the latter half of the century.

Climate variability compounds existing pressures from human activities such as deforestation, land degradation, and excessive groundwater extraction. Alterations in streamflow patterns threaten agriculture, food security, hydropower generation, groundwater recharge, and rural drinking water supplies. Rising temperatures and declining pre-monsoon rainfall are also projected to increase forest fire incidents in the summer. With nearly 45% of the state covered by forests, and two-thirds of this area highly vulnerable to fires, wildfires are a recurring hazard. 11,256 forest fire incidents were reported between November 2023 and June 2024 across 11 of the 13 districts. Without urgent interventions, the scale and intensity of these events are expected to grow, disproportionately affecting rural communities reliant on forest ecosystems for their survival.

The Indo-German Climate Adaptation, Resilience, and Climate Finance in Rural India (CAFRI II) project, commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ India, supports the Ministry of Environment, Forest and Climate Change (MoEFCC) and the National Bank for Agriculture and Rural Development (NABARD). The project aims to strengthen the planning, implementation, financing, and monitoring of gender-responsive, transformative, and climate risk-informed interventions to enhance climate resilience in rural India. The focus states of CAFRI II implementation are Uttarakhand, Uttar Pradesh, Himachal Pradesh, Haryana and Tamil Nadu. While addressing climate risks in selected states, CAFRI II also contributes to national-level adaptation efforts.

A core component of CAFRI II is enhancing institutional and human capacities within public institutions to integrate gender-responsive climate risk and vulnerability assessments into decision-making processes. This is crucial for implementing climate adaptation measures at the local level and across key sectors.

Despite India's national climate adaptation commitments, challenges persist in translating these goals into actionable plans at subnational levels. Barriers include insufficient interdisciplinary knowledge, inadequate guidance for local-level implementation, limited participation of women in decision-making processes, and weak planning skills at district and community levels. Furthermore, the lack of localized scientific data and climate risk information hinders evidence-based adaptation measures.

Drawing on these insights, CAFRI II is providing technical support to the State Environment Conservation and Climate Change Directorate (SECCCD), Government of Uttarakhand, to undertake climate change impact studies and vulnerability assessments related to extreme climate events across multiple sectors.

CAFRI II has collaborated with Indian Institute of Technology Roorkee (IIT R) to develop climate hazard profile of Uttarakhand, which provides downscaled historical and projected scenarios (up to 2080 under different SSP scenarios) of precipitation, temperature, and extreme climate indices at a 5 km x 5 km resolution. Following on with the results, the team is conducting impact modelling in agriculture and water, and localized risk assessment at few vulnerable locations in Uttarakhand.

Through this tender, CAFRI II project intends to hire a technical agency to support SECCCD, Govt of Uttarakhand in developing a digital vulnerability atlas for Uttarakhand.

Objective of the assignment:

Detailed objectives of climate change impact studies and vulnerability assessments related to extreme climate events across multiple sectors of Uttarakhand, includes:

1. Leverage climate datasets (from secondary sources and IIT Roorkee) to quantify risks from extreme climate events and climate-induced hazards, identify causal factors, and produce a block-level Climate Vulnerability Atlas for Uttarakhand.
2. Evaluate the vulnerabilities of people, infrastructure, public utilities, and economic activities to extreme climate events, considering both current conditions and future growth scenarios over the next 50 years.
3. Develop a block-wise probability matrix of extreme climate events, assess potential intensities, and propose location-specific adaptation and mitigation measures with co-benefits to enhance climate resilience.

Scope:

The proposed study aims to undertake a vulnerability assessment and climate change impact analysis for Uttarakhand, with a focus on extreme climate events and climate-induced hazards at the block level. The selected agency will leverage the Climate Hazard Profile developed by IIT Roorkee under the CAFRI II initiative. This climate hazard profile provides an overview of the historical and future projected precipitation and temperature patterns across all 13 districts of Uttarakhand, India. To better understand these changes, climate indices defined by the Expert Team on Climate Change Detection and Indices (ETCCDI) have been generated and analysed for both historical and future periods using the IMDAA, CHIRPS, CHIRTS and

downscaled CMIP6 datasets. These indices help assess shifts in climate extremes, offering valuable insights into regional climate patterns.

Building on this robust scientific foundation, the agency will:

- Integrate physical, social, and economic vulnerability dimensions across relevant sectors.
- Utilize IIT Roorkee's findings on hazards such as floods, droughts, landslides, GLOFs, avalanches, and climate-linked public health risks.
- Draw upon district-wise analyses of precipitation intensity, frequency, duration, and magnitude, along with temperature extremes, to inform vulnerability mapping.
- Develop a Digital Vulnerability Atlas and propose location-specific adaptation and mitigation strategies aligned with state, district, and city-level master plans.

2. Tasks to be performed by the contractor

The contractor is responsible for providing the following services under the three work packages (WP):

WP 1: Impact Assessment of Projected Climate Change on Key Sectors

a) Use IIT Roorkee's downscaled projections and extreme climate indices to assess potential impacts under SSP2-4.5 and SSP5-8.5 scenarios for 2021–2050 (mid-century) and 2071–2100 (end-century).
b) Map projected climate impacts on priority sectors: tourism, forestry, agriculture & livelihoods, water resources, roads & critical infrastructure, energy, health, and water supply & sanitation.
c) Assess how climate hazards (floods, droughts, landslides, GLOFs, avalanches, heat stress) will affect different demographic groups, including women, children, and marginalized communities.
d) Synthesize findings to create sectoral impact layers that feed directly into the Digital Vulnerability Atlas.

WP2: Climate Induced Hazard, Vulnerability and Risk Assessment

Task 1: Climate Induced Hazard Assessment

The climate hazard assessment will include extreme climate events (flooding, drought etc.) dated as far back as possible. In addition to formal sources of information on location, time magnitude and impact, including consultations with local people for type, frequency and damages and losses.

a) Map all major Climate Induced Hazards in Uttarakhand and to assess the information in terms of their nature, geographical distribution, severity and frequency. Document the changing patterns including trends of the climate hazards.
b) Identify and review relevant data sources for conducting the climate induced hazard assessment, which includes all scientific data, hazard maps, existing assessments i.e. research publications, local knowledge, socio-economic databases and survey materials already available.

a) Collect and analyze historical information on all major extreme climate events /climate induced hazard events, those have occurred in the past 100 years, in terms of its nature, geographical distribution, severity and frequency.
b) Incorporate satellite imagery, aerial photographs, GIS & other IT methods to express the data as collected. In addition, incorporate information available with National and State Govt. agencies/other organisations. The objective is to express as accurately as feasible, the probability of various extreme climate events/climate induced hazard events of given proportions occurring in certain geographical areas.
c) Provide adequate scientific analysis in respect of causation, frequency and magnitude while establishing their probabilities by using models.
d) Establish a methodology for assessing risks posed by different climate hazards in the Uttarakhand covering all 13 districts (upto block level);
e) Develop risk parameters for these climate induced hazards, to present them both statistically and analytically.
f) Provide adequate scientific analysis in respect of causation, frequency and magnitude for each of the climate induced hazards identified while establishing their probabilistic models.

Task II: Vulnerability Assessment

a) Selection of Indicators to be done based on their analytical soundness, measurability, spatial coverage, relevance to the phenomenon being measured and relationship to each other. Kindly note that the selection of indicators needs to be based on review of existing studies/frameworks applicable in Indian Himalayan Region (IHR).
b) Conduct detailed assessment of economic vulnerability at the district level/city level. This will include assessment of extreme climate events/climate induced hazards impact on tourism, forestry, water, roads, human health, agriculture and livelihood, energy, water supply & sanitation, critical infrastructure in statistical and analytical terms.
c) Conduct detailed social vulnerability assessment. This will include the study of the population profile of the district, identification of the vulnerable groups and their level of access to basic services and livelihood. The assessment will also include vulnerabilities associated with gender, weaker sections, infants, children and the elderly, single parent families, women, widows, mentally and physically handicapped people, and other poor communities.
d) Produce district & block wise Vulnerability Maps, taking into consideration physical, social and economic vulnerabilities.
e) Generate the Uttarakhand district Vulnerability Index (CVI) developed using multivariate analysis of individual sectoral indicators (social, economic, tourism, forest, water, roads, human health, agriculture and livelihood, energy, water supply & sanitation, critical infrastructure and demographic groups, including women and children) that are vulnerable to climate change.
f) Generate sectoral vulnerability indices - Social Vulnerability Index (SVI), Economic Vulnerability Index (ECVI), baseline Agriculture Vulnerability Index (AGVI), health/climate extremes Vulnerability Index (CLVI) and Water Resources Vulnerability Index (WRVI) for the districts and blocks of Uttarakhand. The indices would facilitate the identification of districts, which are vulnerable to climate change and need special attention towards adaptation.
g) Develop projected vulnerability profile towards IPCC AR 6 SSP Scenario.
h) Grouping the districts according to their degree of vulnerability using cluster analysis, under 6 categories of vulnerability -very low (VL), low (L), moderate (M), high (H), very high (VH), and extremely high (EH).

Task III: Risk Assessment

a) Block wise projections of financial losses and damages: Estimation of the economic/financial loss and damage due to different extreme climate events, e.g. scenarios for loss to crops, tourism, forest, water, roads, human health, agriculture and livelihood, energy, water supply & sanitation and critical infrastructure.
b) Identification of the high-risk areas in terms of extreme climate events (up to Block level) in statistical and analytical terms.
c) Economic analysis of the impact of past climate induced disasters/extreme climate events and assess the impact of climate induced disasters in statistical and analytical terms
d) Combine hazard probabilities with vulnerability indices to develop block-wise risk profiles.
e) Development of a Risk Matrix
f) Mapping of adaptation and mitigation options against identified risks.

Task IV: Preparation of vulnerability assessment atlas:

a) To map out and delineate climate induced hazard prone areas within the State, districts down to the block level, covering geological (Landslide), water and climate (hydro-meteorological), and environmental hazards including the one anthropogenic in nature and to prepare GIS based Atlas at 1:10,000 scale. (with projections for at least next 50 years).
b) Geographical Information System (GIS) based district & block wise climate hazard maps showing their frequency impact, severity and the area likely to be affected.
c) Vulnerability Atlas and Maps, showing both Climate Hazards and Vulnerability (combined Vulnerability maps depicting Potential Risk areas) at the district (including Block) level.
d) To establish mechanisms for ensuring the sustainability of ongoing/updating Vulnerability Atlas and Maps.

Kindly note that Vulnerability Assessment will also include a detailed section comprising of feasible solutions for adaptation, mitigation and co-benefits at district/ city level/block level. The study should give specific sector wise recommendation measures and provide strategies for inclusion of these measures into the ongoing development programmes at the State/district/city level.

Vulnerability Assessment will entail determining baselines of the identified indicators to facilitate tracking progress in reducing vulnerability, enhancing adaptive capacity and building resilience. The outcomes of the vulnerability assessment will also inform the baseline setting exercise.

Note: *The selected agency shall leverage the existing Climate Hazard Profile datasets developed by IIT Roorkee to avoid duplication of climate modelling and hazard profiling efforts. The focus shall be on integrating existing datasets, conducting sectoral vulnerability and risk assessments, and preparing a Digital Vulnerability Atlas.*

Key Outputs/Deliverables:

- Hard & Soft copy of Vulnerability Atlas
- Digital Atlas/Maps, showing both hazards and vulnerability at all levels i.e. at State, District and Block levels.
- Data (raw as well as output data) in GIS format
- Comprehensive Report on Climate Impact Assessment of identified sectors (as per ToR).

- Reports and Recommendations of the Consultations
- Technical report at the completion of project describing the structure and contents of the vulnerability maps, narrative on vulnerability analysis and methodology employed.
- Non-technical summary for common users
- Prepare a detailed technical report describing the structure and contents of Hazard Vulnerability maps including narrative on vulnerability analysis, methods and recommendation for future work. The report should also provide technical guidelines and location specific solutions.
- Provide recommendations for adaptation, mitigation and integrating climate induced hazard vulnerability concerns in the sectoral developmental strategy/plans.

Transfer of Knowledge: It is mandatory for the selected technical agency to transfer the knowledge to the identified officers'/officials/ govt. functionaries with respect to the preparation of the Vulnerability Assessment and its application subsequently.

Certain milestones, as laid out in the table below, are to be achieved during the contract term:

Milestones/process steps/partial services	**Deadline/place/person responsible**	**Criteria for acceptance**
Inception Report capturing time plan and methodology	3 weeks after contract start	Draft report
Preparation: Screening existing materials	5 weeks after contract start	Draft report
Draft Comprehensive Climate Change Impact Assessment: Sectoral Reports: Presentation to GIZ and Govt of Uttarakhand	14 weeks after contract start	Draft Reports
Draft Report on Physical, Social and Economic Vulnerability: Presentation to GIZ and Government of Uttarakhand.	18 weeks after contract start	Draft Reports
Draft Risk Vulnerability Matrix and Presentation to GIZ and Government of Uttarakhand.	19 weeks after contract start	Draft Risk Vulnerability Matrix
10 Hard copies and soft copies of Vulnerability Atlas for the entire state and 13 districts along with all the blocks with raw as well as output data in GIS format	26 weeks after contract start	10 Hard copies and Soft copies of Vulnerability Atlas for the entire state and 13 districts along with all the blocks with raw as well as output data in GIS format
final draft report by incorporating all above interim reports.	27 weeks after contract start	final draft report
Final Technical report after incorporating comments of	28 weeks after contract start	Final Technical report

Uttarakhand Government and GIZ including non-technical summaries for common user		
Recommendations for adaptation, mitigation and integrating climate induced hazard vulnerability concerns in the sectoral developmental strategy/plans.	29 weeks after contract start	Final recommendations

Period of assignment: from November 2025 until June 2026

Place of Assignment: Uttarakhand.

All the milestones to be approved by Government of Uttarakhand & GIZ.

3. Concept

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering (1.3)** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes (1.4)** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) and GIZ and to promote scaling-up effects (1.5.2) under **learning and innovation (1.5)**.

Project management of the contractor (1.6)

The tenderer is required to explain its approach for coordination with the GIZ project. In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the contractor) must be explained in detail.

The tenderer is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the tender; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

The tenderer is required to describe its backstopping concept. The following services are part of the standard backstopping package, which (like ancillary personnel costs) must be factored into the fee schedules of the staff listed in the tender in accordance with Section 3.3.1 of the GIZ AVB:

- Service-delivery control
- Managing adaptations to changing conditions
- Ensuring the flow of information between the tenderer and GIZ
- Assuming personnel responsibility for the contractor's experts
- Process-oriented steering for implementation of the commission
- Securing the administrative conclusion of the project

4. Criteria for Eligibility of firms

The bidders must submit the documentary evidence for the criteria's cited below:

I. Commercial Eligibility assessment

a) Firm must be legally registered in India.
b) The average annual turnover for the last three financial years should be at least 120,000 Euros.
c) The average number of employees and managers in the past three (3) calendar years should be at least 5 people.

II. Technical Eligibility Assessment

a) The Agency should provide at least 02 reference projects with a focus on Hazard, Risk & Vulnerability Assessment in India and Impact Assessment of Projected Climate Change on Key Sectors in India.
b) The 02 reference projects must be India in the last 03 years with a minimum commission value of 35,000 euros.

III. Weighted Criteria

1. Technical Experience.
- 7 Years of technical expertise in the field of Comprehensive Vulnerability and Risk Assessment in India. Kindly submit the proof of previous experience of Comprehensive Vulnerability and Risk Assessment.
- 7 years of technical expertise in Impact Assessment of Projected Climate Change on Key Sectors in India. Kindly submit the proof of previous experience of Impact Assessment of Projected Climate Change on Key Sectors.
- 7 years of technical experience in liaising and coordination with Government agencies and Multilateral/Bilateral organizations in India.
- Minimum of 30% staff must be women OR Minimum of 30% of the experts proposed for the assignment are women.

2. Regional Experience
- The agency should have regional experience in Indian Himalayan Region.
3. Experience of development projects
- The agency should have experience of Other Development Assignments.

4A Personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 7), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points in the technical assessment.

Team leader (National)

Tasks of the team leader

- Overall responsibility for the advisory packages of the contractor (quality and deadlines)
- Coordinating and ensuring communication with GIZ, partners and others involved in the project
- Personnel management, in particular identifying the need for short-term assignments within the available budget, as well as planning and steering assignments and supporting local and international short-term experts
- Regular reporting in accordance with deadlines

Qualifications of the team leader

- Education/training (2.1.1): university degree (Master) in Climate Change, Disaster Management, Natural Sciences or another field relevant to this consultancy, with a specialisation in climate risk/climate adaptation
- Language (2.1.2): C1 -level language proficiency in English and Hindi.
- General professional experience (2.1.3): 10 years of professional experience in the climate change sector.
- Specific professional experience (2.1.4): 06 years in demonstrable knowledge & experience of managing projects related to Vulnerability assessment methodologies to include climate modelling, empirical data-based analysis, scenario-based sector risk/hazards projections, risks management, strategy, policy and programme development
- Leadership/management experience (2.1.5): 5 years of management/leadership experience as project team leader or manager in a company
- Regional experience (2.1.6): 6 years of experience in projects in Indian Himalayan Region.
- Development cooperation (DC) experience (2.1.7): 6 years of experience in DC projects

Key expert 1 “Climate Modelling” (National)

Tasks of key expert 1

- Technical input and oversight for delivery under WP 1, WP 2

Qualifications of key expert 1

- Education/training (2.2.1): university degree (Master or PhD) in Environmental science or Climate Science or a related field
  Language (2.2.2): C1 -level language proficiency in English and Hindi.

- General professional experience (2.2.3): 9 years of professional experience in experience in climate modelling, vulnerability and risk assessments or analysis at international level.
- Specific professional experience (2.2.4): 6 years working on international contracts with multi-disciplinary teams, organisation and experience in performing analysis, risk assessments, and vulnerability analysis of the Himalayan region.
- Regional experience (2.2.6): 6 years of experience in projects in Indian Himalayan Region.

Key expert 2 "Hydrometeorology" (National)

Tasks of key expert 2

- Technical inputs on WP1 & WP 2

Qualifications of key expert 2

- Education/training (2.3.1): university degree (Master) in Hydrometeorology or similar fields.
- Language (2.3.2): C1 -level language proficiency in English and Hindi.
- General professional experience (2.3.3): 9 years of professional experience climate induced hazard assessment.
- Specific professional experience (2.3.4): 6years of professional experience in delivering hydro-meteorological assessments and mapping.
- Regional experience (2.3.6): 5 years of experience in Indian Himalayan Region.

Key expert 3 "GIS Expert" (National)

Tasks of key expert 3

- Technical inputs on WP1 & WP 2

Qualifications of key expert 3

- Education/training (2.4.1): university degree (Master) in Geography, Geology, GIS & Remote-sensing, IT or related fields
- Language (2.4.2): C1 -level language proficiency in English and Hindi.
- General professional experience (2.4.3):9 *years of professional experience of working in GIS and Remote Sensing.*
- Specific professional experience (2.4.4): 6 years of professional experience in in using ArcGIS using desktop-most important Raster Analyst, and Spatial Analyst Extensions, ERDAS imagine LPS- independently perform image analysis, supervised/unsupervised image classifications and OpenSource GIS Software.
- Regional experience (2.4.6): 2 years of experience in projects in India.

Key Expert 4 "Vulnerability & Risk Assessment" (National)

Tasks of the Key expert 4

4.1 Technical input for WP 1 & WP 2

Qualifications of key expert 4

- Education/training (2.5.1): university degree (Master) in climate change/civil engineering/ Geotechnical Engineering/water resources, with advanced qualification in Vulnerability & Risk Assessment related discipline,
- Language (2.5.2): C1 -level language proficiency in English & Hindi.
- General professional experience (2.5.3): 9 years of professional experience in the field of Vulnerability & Risk Assessment of climate induced disasters/extreme climate events.
- Specific professional experience (2.5.4): 6 years of experience in conducting vulnerability and risk assessment of across sectors such as tourism, forestry, water, roads, human health, agriculture and livelihoods, energy, water supply and sanitation, and critical infrastructure assets. Skilled in recommending design measures, including nature-based solutions, to avoid or minimize physical risks, with additional expertise in assessing vulnerabilities and risks assessment related to landslides, flooding, and other climate induced hazards.
- Regional experience (2.5.6): 3 years of experience in Indian Himalayan Region.

Key Expert 5 "Climate Change Economics" (National)

Tasks of the Key expert 5

- Technical input for WP 1 & WP 2

Qualifications of key expert 5:

- Education/training (2.6.1): university degree (Master) in Economics, Environmental economics, Statistics, Climate Change, Disaster Management or related field.
- Language (2.6.2): C1 -level language proficiency in English & Hindi.
- General professional experience (2.6.3): 9 years of work experience in the fields of climate change adaptation, climate risks, loss & damage and Disaster Risk Reduction.
- Specific professional experience (2.6.4): 6 years of experience of climate change adaptation including understanding of comprehensive risk management (including risk transfer), especially on climate induced disaster data and statistics, conducting social research on climate induced disaster loss and damage data and statistics, with a developing country, economic & non-economic losses and human mobility, including migration, displacement and planned relocation.
- Regional experience (2.6.5): 5 years of experience in Indian Himalayan Region.

Key Expert 6 "Public Health" (National)

Tasks of the Key expert 6

- Technical input for WP 1 & WP 2

Qualifications of key expert 6:

- Education/training (2.7.1): university degree (Master) in Public Health/Epidemiology or related field.
- Language (2.7.2): C1 -level language proficiency in English & Hindi.
- General professional experience (2.7.3): 9 years of work experience in the Public Health Field.

- Specific professional experience (2.7.4): 6 years of experience in Public Health Programs in the areas of infectious disease monitoring and response, public health preparedness, surveillance with relation to climate change/climate extreme weather events.
- Regional experience (2.7.5): 5 years of experience in India.

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

Key Expert 7 "Agriculture & Livelihood" (National)

Tasks of the Key expert 7

- Technical input for WP 1 & WP 2

Qualifications of key expert 7:

- Education/training (2.8.1): university degree (Master) in Environmental Science/Agriculture/Climate Change/Natural Resources Management or related field.
- Language (2.8.2): C1 -level language proficiency in English & Hindi.
- General professional experience (2.8.3): 9 years of experience in climate change adaptation, vulnerability and risk assessment, economic modelling, climate modelling, or disaster risk management with understanding of the institutional framework and policies in the field of adaptation and disaster risk management in India
- Specific professional experience (2.8.4): 6 years of experience of working in the agriculture or allied sector and assessing impacts and risks while devising climate smart management practices.
- Regional experience (2.8.5): 3 years of experience in Indian Himalayan Region.

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

Key Expert 8 "Gender and Social Development" (National)

Tasks of the Key expert 8

- Technical input for WP 1 & WP 2
- He/She will ensure gender integration in entire vulnerability assessment process

Qualifications of key expert 8:

- Education/training (2.9.1): university degree (Master) in Development Studies/Gender Studies/Social Work or related field.
- Language (2.9.2): C1 -level language proficiency in English & Hindi.
- General professional experience (2.9.3): 9 years of experience working in gender, social and economic development and adaptation planning.
- Specific professional experience (2.9.4): 6 years of experience of working in the community participation, community-based actions, local-level development planning, multi-criteria analysis, participatory planning processes in adaptation and gender equality.
- Regional experience (2.9.5): 3 years of experience in Indian Himalayan Region.

5. Costing requirements

Assignment of personnel and travel expenses

The bidder must provide costing against each work package:

Work package I: Impact Assessment of Projected Climate Change on Key Sectors.
Work package II: Climate Induced Hazard, Vulnerability and Risk Assessment

Assignment of personnel and travel expenses

The bidder is required to calculate the travel by the specified experts and the experts it has proposed based on the places of performance and list the expenses separately by daily allowance, accommodation expenses, flight costs and other travel expenses.

Since the contract to be concluded is a contract for work, we would ask you to offer your services at a fixed lump sum price as per work packages mention above, which covers all relevant costs (fees, costs, etc.). The assessment of the financial bid is based on the lump sum price tendered. For the purposes of our internal calculations and any subsequent contracts, we would also ask you to state the daily rate used for the tender. A breakdown of the days is not necessary.

Travel cost must also be mentioned on lumpsum basis. Travel components like Local travel, outstation travel, accommodation, per diem must be separately mentioned separately on lumpsum basis.

Per diem allowances are reimbursed as a lump sum up to the maximum amounts permissible under tax law for each country as set out in the country table in the circular from the German Federal Ministry of Finance on travel expense remuneration (downloadable from the German Federal Ministry of Finance – tax treatment of travel expenses and allowances for international business travel as of 1 January 20242025 (GERMAN ONLY)).

Accommodation allowances are reimbursed as detailed in the specification of inputs below.

With special justification, additional Accommodation costs up to a reasonable amount can be reimbursed against evidence.

All business travel must be agreed in advance by the officer responsible for the project

Workshops:

The contractor implements the following workshops:

15 consultations/workshops (one day each) with local stakeholders of Uttarakhand: The selected technical agency shall propose the budget for the consultations, to be included as part of the financial proposal.

It is recommended to conduct up to 15 one-day consultations (**40 Participant each workshop x 1 day each)** with departments, district administrations, technical institutions, universities, and Central Government institutions within the State of Uttarakhand. The financial proposal shall cover costs related to conference hall/venue, food (tea 2 times per consultation and lunch), AV system, and LED screen/projector.

Consultations shall be organized at key stages of the assignment, including the inception phase, presentation of methodologies, sectoral deliberations, dissemination of key findings, and communication of their implications to stakeholders.

Note: Travel and accommodation costs of participants shall not be included in the financial proposal.

- **Sustainability aspects for travel**

GIZ has undertaken an obligation to reduce greenhouse gas emissions (CO_2 emissions) caused by travel. When preparing your tender, please incorporate options for reducing emissions, such as selecting the lowest-emission booking class (economy) and using means of transport, airlines and flight routes with a higher CO_2 efficiency. For short distances, travel by train (second class) or e-mobility should be the preferred option.

CO_2 emissions caused by air travel must be offset. GIZ specifies a budget for this, through which the carbon offsets can be settled against evidence.

There are many different providers in the market for emissions certificates, and they have different climate impact ambitions. The Development and Climate Alliance (German only) has published a list of standards (German only). GIZ recommends using the standards specified there.

Specification of inputs

Fee days	Number of experts	Number of days per expert	Total	Comments
Team Leader (National) **(Cluster 3 Level 3)**	1	80	80	Number of days required during the assignment
Key Expert 1 **Climate Modelling** **(Cluster 3 Level 3)**	1	80	80	Number of days required during the assignment
Key expert 2 **Hydro-Meteorology Expert** **(Cluster 2 Level 3)**	1	52	52	Number of days required during the assignment
Key Expert 3 **GIS Expert** **(Cluster 2 Level 3)**	1	60	60	Number of days required during the assignment
Key Expert 4 **Vulnerability & Risk Assessment** **(Cluster 3 Level 3)**	1	62	62	Number of days required during the assignment
Key Expert 5 **Climate Change Economics** **(Cluster 3 Level 3)**	1	50	50	Number of days required during the assignment
Key Expert 6 **Public Health** **(Cluster 2 Level 3)**	1	25	25	Number of days required during the assignment
Key Expert 7 **Agriculture & Livelihood** **(Cluster 2 Level 3)**	1	60	60	Number of days required during the assignment
Key Expert 8 **Gender and Social Development**	1	30	30	Number of days required during the assignment

(Cluster 2 Level 3)				
Travel expenses	**Quantity**	**Number per expert**	**Total**	**Comments**
Per-diem allowance in country of assignment	100		100	To be provided by the agency during financial proposal submission/ It will be part of Financial Proposal Location: New Delhi & Uttarakhand Please indicate per-diem allowance with respect to New Delhi & Uttarakhand in the price schedule. Allowance for settlement against evidence will be based on actual locations and as per cost in GIZ Travel guidelines.
Overnight allowance in country of assignment	100		100	Location: New Delhi & Uttarakhand Please indicate total overnight allowance with respect to New Delhi and Uttarakhand in the price schedule. Accommodation Allowance for settlement against evidence will be based on actual locations and as per cost in GIZ Travel guidelines.
Transport	**Quantity**	**Cost (in EUR)**	**Total**	**Comments**
Domestic flights	40		40	To be provided by the agency during financial proposal submission/ It will be part of Financial Proposal Location: New Delhi & Uttarakhand
CO_2 compensation for air travel India	40		40	A fixed budget upto INR 205000/- is earmarked for settling carbon offsets against evidence of travel within India.
Travel expenses (train, car) • Travel within India by Train (round trip)	40		40	Technical agency to calculate to train and local taxi related cost. It will be part of financial proposal.

• taxi local	60		60	Travel within and use of taxi services in Uttarakhand all 13 districts), as per requirements and New Delhi
Other costs	**Number**	**Price**	**Total**	**Comments**
15 Consultation Workshops **40 Participant each workshop x 1 day each** **(shall cover costs related to conference hall/venue, AV system, and LED screen/projector).**	**15**		**15**	Note: Travel and accommodation costs of participants shall not be included in the financial proposal.
Lunch Charges for Workshop participants (tea 2 times per consultation and lunch) **15 Workshops x 40 participants**	**600**		**600**	This head should include only the cost of the lunch charges with 2 rounds of Tea/Coffee and light snacks for each workshop days

6. Inputs of GIZ or other actors

GIZ and/or other actors are expected to make the following available:

- Introduce the agency to State Environment Conservation and Climate Change Directorate (SECCCD), Government of Uttarakhand at the start of the project.

7. Requirements on the format of the tender

The structure of the tender must correspond to the structure of the ToR. In particular, the detailed structure of the concept (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The tender must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in English (language).

The complete tender must not exceed 10 pages (excluding CVs). If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment. External content (e.g. links to websites) will also not be considered.

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs can also be submitted in English (language).

Please calculate your financial tender based exactly on the parameters specified in Chapter 5 Quantitative requirements. The contractor is not contractually entitled to use up the days, trips, workshops or budgets in full. The number of days, trips and workshops and the budgets will be contractually agreed as maximum limits. The specifications for pricing are defined in the price schedule.

8. Outsourced processing of personal data

The performance of the contract may be associated with the processing of personal data by the contractor, such as (but not limited to) names and contact information. In such cases, the contractor shall act as an independent Data Controller and must alone comply with ALL applicable data protection obligations, including those stemming from regional and local laws. The contractor shall process personal data only when a given goal cannot be reasonably attained without such data. The data protection principles such as lawfulness, data minimization, accuracy, purpose limitation, storage limitation, transparency, integrity and confidentiality, and accountability, as well as the numerous rights of the data subject must be paid due attention. GIZ is NOT in any way responsible for such processing.

Whenever the contractor executes the instructions of a partner to the GIZ with regard to such processing, the partner shall be the data controller, and the data processing shall be carried out in accordance with the partner's instructions as well as laws and standards to which it is subject.

Data protection and information Security

The provisions on data protection and information security of the current version of GIZ's General Terms and Conditions of Contract (section 1.10 Data protection) will apply.