

Terms of Reference (TOR) for Consultancy Services

Title	Mapping and Assessment of Climate-Induced Disasters and Livelihood Vulnerabilities in India, and Preparation of Detailed Project Report
Timeline	3.5 Months
Expected area of expertise	Subject Matter Knowledge on climate, environment, and livelihood vulnerabilities in the Indian context. Familiarity with Disaster Risk Reduction (DRR) and livelihood resilience frameworks. Expertise in designing and executing mixed-method research, including field surveys (PRA, KIIs). Demonstrated ability to produce high-quality analytical reports and actionable recommendations (DPRs) for program design.
Apply Link	https://forms.gle/KvXiEJk96GA9AxLn7 (Contact Procurement for Form Link)
Last Date for Apply	05th December, 2025

About SELCO Foundation:

SELCO Foundation is an open-source, not-for-profit organization that engages in field-based R&D and ecosystem building for the deployment of clean energy solutions that alleviate poverty by improving access to sustainable energy to underserved communities in tribal, rural, and urban poor areas. The organization works in collaboration with practitioners in the social sector, energy entrepreneurs, NGOs from various developmental sectors, and educational institutions to link the benefits of sustainable energy to poverty eradication. The organization works across verticals such as energy access, health, and livelihoods with practitioners in the social sector, energy entrepreneurs, and partners from various developmental sectors. You can find more information about the SELCO Foundation on our organization's (Read more about SELCO here: <http://www.selcofoundation.org/>)

1. Background of the Programme:

India, with its diverse climatic conditions, is among the most disaster-prone countries in the world, with over two-thirds of its geographical area vulnerable to natural hazards like floods, drought, unseasonal rains, cyclones and heat stress. Climate change is intensifying the frequency and severity of these disasters placing immense strain on rural livelihoods, local economies, and ecosystems. The impacts are particularly pronounced among smallholder farmers, women, and marginalized communities whose livelihoods are closely tied to natural resources and agriculture.

In recent years, extreme weather events have disrupted cropping cycles, reduced productivity, led to asset losses, and increased indebtedness among rural households. **60% of marginal farmers in India** have suffered major crop losses due to extreme weather events in the past five years, with **more than 3.2 million hectares** of cropped land affected in 2024 alone. Simultaneously, traditional coping mechanisms are being stretched thin, and local adaptive practices are often under-documented or unsupported by formal systems. **Understanding these localized impacts and the ways communities are adapting** is critical to designing responsive livelihood, resilience, and energy access programs.

2. Project Goal and Objective:

SELCO Foundation is seeking to engage an individual consultant or consultancy firm to conduct a **comprehensive study on Mapping Climate-Induced Disasters and Livelihood Vulnerabilities in India**. This strategic initiative is designed to address the intensifying frequency and severity of climate-induced disasters, which place immense strain on rural livelihoods, particularly among smallholder farmers, women, and marginalized communities.

The proposed study aims to map and analyze **disaster-prone geographies** across key focus regions of the organization - including **the flood and cyclone-prone Cachar (Assam), Bhubaneswar (Odisha), drought and heat-stressed zones of Nagpur (Maharashtra) and Raichur of (North Karnataka).** These regions represent diverse climatic and socio-economic contexts, offering valuable insights into the intersection of **climate hazards, livelihoods, and adaptive capacities**. By systematically mapping vulnerability and resilience patterns across the above-mentioned regions, the research will provide a foundation for developing **context-specific solutions** that create safety nets for livelihoods, enhance adaptive capacity, and align with national and state-level climate resilience priorities.

- Identify major **climate and disaster risks**.
- Assess the impact on **livelihood systems** (agriculture, livestock).
- Document indigenous and **emerging adaptive strategies**.
- Generate evidence for **climate-resilient livelihood planning** and integrated program design.

3. Scope of Work

The study will focus on **four climate-vulnerable regions across India** that represent diverse ecological and livelihood contexts. Each of these geographies faces distinct climate hazards driven by changing rainfall patterns, extreme heat stress and ecosystem degradation leading to adverse livelihood and socio-economic outcomes.

S. No	Region / Zone	Key States / Examples	Major Climate Hazards
1	Assam	Cachar	Floods and riverbank erosions
2	Coastal Odisha	Puri	Cyclones, storm surges, coastal flooding, salinity intrusion

4	Maharashtra	Nagpur	Droughts and heat stress
5	North Karnataka	Raichur	Drought, erratic monsoon, heat stress

Applicants must refer to **Annexure 1** for the **region-specific requirements** corresponding to the state(s) or climatic zone(s) for which they are submitting a proposal.

1. **Desk Research:** Collate secondary data from validated sources to map disaster-prone areas and historical impacts on livelihoods.
2. **Surveys:**
 - a. **Field survey** - Conduct household surveys to capture livelihood disruptions, income loss, food insecurity, health impacts, and coping costs. A minimum of 100 households should be surveyed per district.
 - b. **Key Informant Interviews:** Engage local leaders, panchayats, Institutions and NGOs to validate findings and identify systemic vulnerabilities.
 - c. **Participatory Research (PRA):** Involving community to map local disaster hotspots, seasonal vulnerability calendars, and problem trees to capture lived experiences and community knowledge.
3. **Displacement and Social Impact Analysis:** Document migration patterns in search of livelihoods, health challenges, and social fragmentation.
4. **Assessment of adaptation and mitigation Strategies and Resilience Practices:** Identify and evaluate local innovations and safety-net mechanisms, with a focus on understanding existing adaptation strategies.
5. **Analysis and Reporting:** Synthesize findings into a comprehensive report, summary deck, and supporting documentation.
6. **Prepare a Detailed Project Report:** Outline scalable solutions and vendor mapping, along with recommendations for actionable implementation.

4. Methodology

- **Mixed-Methods Approach:** Combines quantitative surveys with qualitative interviews and participatory exercises.
- **Desk-Based Profiling:** Use secondary data for frequency, intensity, and historical impact analysis.
- **Human-Centered approach:** Focuses on lived experiences, livelihood disruptions, and resilience practices.
- **Participatory Tools:** PRA mapping, seasonal calendars, problem trees, and storytelling to capture nuanced insights.

5. Deliverables

The consultancy deliverables are:

Deliverables	No of units
Inception Note and framework of the report Develop a detailed research framework outlining objectives, methodology, sampling, tools, and data collection plan. Analyze qualitative and quantitative data; prepare a comprehensive report summarizing key findings on livelihood disruptions, climate vulnerabilities, coping mechanisms, and institutional gaps	1
• Final Detailed Project Report (DPR) Develop a Detailed Project Report (DPR) outlining evidence-based, actionable, and scalable interventions; include mapping of solutions, vendors, and linkages with government programs and subsidy schemes. • Final Presentation of Designed Deck on key findings and outcomes (First full draft submitted for review + Final approved and designed DPR and summary presentation)	1 (each)

6. Detail Outputs and Timeline:

S. No.	Deliverable / Output	Description	Timeline
1	Research Framework	Develop a detailed research framework outlining objectives, methodology, sampling, tools, and data collection plan.	Week 1–2
2	Primary and Secondary Data Collection	Conduct field-based data collection through Household Survey, Key Informant Interviews (KIIs), Participatory Rural Appraisal (PRA), and Focus Group Discussions (FGDs); compile and review relevant secondary data and government reports.	Week 3–6
3	Data Analysis and Synthesis Report	Analyze qualitative and quantitative data; prepare a comprehensive report summarizing key findings on livelihood disruptions, climate vulnerabilities, coping mechanisms, and institutional gaps.	Week 7–8

4	Recommendations and DPR Preparation	Develop a Detailed Project Report (DPR) outlining evidence-based, actionable, and scalable interventions; include mapping of solutions, vendors, and linkages with government programs and subsidy schemes.	Week 9–10
5	Final Presentation and Submission	Present key findings and recommendations to stakeholders; finalize DPR incorporating feedback.	Week 11–12

7. Expected Outcomes

- Comprehensive mapping of disaster-prone regions in India with severity and **vulnerability insights**.
- Clear understanding of **livelihood disruptions**, social vulnerabilities, and displacement patterns.
- Identification of **community-driven, climate-smart interventions** to reduce risk and enhance resilience.
- **Evidence-based recommendations - DPR** to guide programs.

8. Timeline:

- **Duration:** 3.5 months
- **Completion:** 25/03/2026

9. Eligibility Criteria:

Consultancy Profile / required experience and expertise

- Proven experience in conducting research, synthesis, and writing reports related to environment, climate, livelihood vulnerabilities etc., in the Indian context.
- Experience in designing and executing mixed-method research, including field surveys, participatory rural appraisals (PRA), and key informant interviews.
- Demonstrated ability to produce high-quality analytical reports, policy briefs, and visual summary decks for government, donor, or development audiences.
- Familiarity with climate concepts, disaster risk reduction (DRR), and livelihood resilience frameworks used by development organizations.
- Capacity to mobilize experienced researchers and field teams for data collection and validation within tight timelines.
- Experience in translating qualitative and quantitative findings into actionable insights and recommendations for program design.

- Prior collaborations with development partners, NGOs, or government agencies in India will be considered an advantage.
- Preference will be given to applicants proposing work in a single region, as the objective is to engage consultants for region-specific assignments.

10. Selection Criteria:

The selection criteria will be based on:

Criteria	Specific Requirements (Short Description)	Score (Max)
1. Thematic Experience	Minimum 5 years in climate, environment, and livelihood studies	5
2. Research Methodology Expertise	Proven experience in mixed-method research (quantitative + qualitative); at least 300 household surveys conducted; experience with PRA, KII, and FGD tools.	5
3. Analytical & Reporting Skills	Demonstrated ability to produce analytical reports, policy briefs, and summary decks for NGOs, Philanthropies or government partners.	5
4. Field Implementation Capacity	Ability to mobilize and manage field teams across multiple states; proven systems for data validation and quality control.	5
5. Translation to Action	Experience converting research findings into actionable program recommendations or DPRs; evidence of influencing program design.	5
6. Institutional / Partnership Experience	Prior collaboration with NGOs, development agencies, or government institutions; regional networks	5



7. Team Composition & Qualifications	Qualified team with domain experts – climate and livelihoods; clear roles and responsibilities in proposal.	5
8. Work Plan & Timeliness	Feasible work plan aligning with 4-month duration and deliverable timelines.	5

11. Payment Terms:

No of Installments	Details
1st Installment	40% of the total project costs will be released after the submission of the Inception Note and framework of the report
2nd Installment	30% of the total project costs will be released after the submission of the Detailed Project Report (DPR) (First full draft submitted for review)
3rd Installment	30% of the total project costs will be released after the submission of the Final presentation of designed DPR & Deck on key findings and outcomes (Final approved and designed DPR and summary presentation)

12. Submission Requirements:

The study may be undertaken **either by a single lead consultant/agency** covering all identified geographies, **or by multiple region-specific consultants** engaged for specific states or climatic zones, depending on demonstrated expertise and capacity. Applicants are therefore encouraged to **indicate their preferred scope of engagement** — national (covering all regions) or regional (specific to one or more focus states).

Interested and qualified consultants/agencies are invited to submit the following documents:

- Organizational/Individual Profile:** Overview of your team/experience (Updated **CV** highlighting relevant research experience)
- Proposed Approach:** A brief document outlining your understanding of the assignment and proposed approach.
 - Covering hot spots for disasters like floods, drought etc
- Sample(s)** of previous reports or publications on environment, climate, livelihoods etc.

4. **Financial Proposal:** Detailed quotation for the execution of the entire scope of work and HR.

Please ensure your application directly addresses your capability to own the end-to-end execution of communication design across strategy, production, and dissemination.

Note: Applicants are required to submit **applications to apply in the link**. Each application should detail the plan, methodology, and deliverables specific as per the requirement mentioned in the scope of work.

Sample Budget Breakup format: Apply with region specific of your financial proposal

SI No	Cost Component	Cost for Assam - (Cachar)	Cost for Bhuwaneshwar	Cost for Nagpur	Cost for Raichur
1	Professional Fees for Desk Research – Per Site				
2	Charges for Field Survey and Interviews – Per Site				
3	Charges for Overall Project Report and Analysis and Assessment				
4	TA/Lodging Charges for Consultant/Agency (Inclusive of meals and taxes)				
5	Administrative / Contingency charges				
6	Any Applicable Taxes or Duties (Inclusive in the total cost)				
	Total Cost (Inclusive of GST and Travel)				

13. Intellectual Property

All final outputs, templates, and visual assets created under this engagement will be the intellectual property of SELCO Foundation and will be freely available for public sharing under an open-source license.



14. To apply

Interested consultants / organizations, with relevant experience (please include samples and/or references of the previous similar work as proof of experience) and based out of India are requested to reach out with a detailed proposal giving a brief on the methodology and the process they will uptake for this project, including budgets (with break-ups and explanation), timelines and milestones and submit the same through this google form <https://forms.gle/tZn3dgDF5BHWj4yK8> on or before **05th December, 2025**.

Any further queries please write to procurement@selcofoundation.org with a subject line: “**Consultancy-Mapping and Assessment of Climate-Induced Disasters and Livelihood Vulnerabilities in India, and Preparation of Detailed Project Report**” (Name of the chosen region among the specified ones **Assam/Odisha/Maharashtra/Karnataka**.)

Note:

Kindly apply with your quotation in Clearly Region-Specific and Scope (e.g., Assam / Odisha / Maharashtra / Karnataka).

Annexure 1

For Maharashtra: Context

Nagpur region of Maharashtra represents some of India’s most climate-stressed agro-ecological zones, characterized by **recurrent droughts, groundwater depletion, and agrarian distress**. Over the past decade, annual rainfall across these regions has declined by **15–20%**, while **over 70% of cultivated land remains rainfed**. This prolonged rainfall deficit, combined with **increasing rising heat stress**, has led to severe **crop failures, fodder shortages, and indebtedness**, pushing households toward **distress migration**. Beyond agriculture, **livelihood linkages across MSMEs and service sectors** are also disrupted — food processing clusters, and traditional crafts are increasingly impacted by **heat stress, water shortages, and power unreliability**.

Against this backdrop, this study seeks to **map drought-induced livelihood vulnerabilities** across selected drought-prone districts to inform the design of **contextual, climate-resilient livelihood and energy interventions**, culminating in a **Detailed Project Report (DPR)** that provides a blueprint for scalable and sustainable solutions.

Specific Objectives

1. To analyze the **extent and patterns of drought and water scarcity** across selected districts using both historical and current data.
2. To assess **sectoral livelihood vulnerabilities** (agriculture, livestock, MSMEs, and labor migration) and identify underlying social, economic, and gender dimensions.
3. To map **community-level coping and adaptation practices**, institutional mechanisms, and access to financial, technological, and policy support.

4. To identify **priority intervention areas** based on existing practices and design a set of potential climate-resilient livelihood and energy solutions.
5. To develop a **comprehensive DPR** detailing the problem statement, intervention strategy, implementation modalities, cost estimates, and sustainability framework.

Region Selected for the Study

State	Focus Districts	Rationale for Selection
Maharashtra	Nagpur	High drought frequency, depleted groundwater, recurring agrarian distress, migration hotspots

Major Climate Hazards

Hazard Type	Underlying Causes / Climate Drivers	Typical Impacts on Livelihoods
Droughts	Rainfall deficit, declining water table, high evapotranspiration	Crop loss, fodder scarcity, rural out-migration
Heat Waves	High temperature (>42°C), loss of vegetation cover	Reduced labor productivity, livestock mortality
Erratic Rainfall	Irregular monsoon onset and withdrawal	Delayed sowing, increased input costs

Livelihood Profile and Affected Sectors

Livelihood Sector	Primary Activities	Climate Impacts	Adaptive Practices Observed
Agriculture	Crop production	Crop failure, pest attack, soil moisture stress	Mulching, drip irrigation, crop diversification
Livestock	Dairy, goats	Fodder scarcity, water stress	Community fodder banks, silage preparation
MSMEs	Food processing,	Disruptions due to power cuts, reduced productivity	Adoption of solar dryers, efficient machinery



	small petty shops, etc		
Labor Migration	Seasonal labor movement	Distress migration due to drought	SHG loans, migration mapping by local NGOs

Vulnerability Hotspots and Community Mapping

The study will identify **3–5 block-level hotspots** within the selected district based on:

- Frequency and intensity of droughts
- Groundwater depletion and irrigation dependence
- Migration intensity and livelihood diversification levels

Participatory mapping will include:

- **Water resource and drought maps**
- **Seasonal calendars** for agriculture and migration
- **Drought** vulnerability and **groundwater depletion** mapping
- Seasonal agricultural calendars tracking sowing–harvest–fallow cycles
- Crop and livestock loss analysis
- **Adaptive practices** documentation (drip irrigation, mulching, crop diversification)
- **Problem tree analysis** on Livelihoods

Data Collection Plan

Tool / Activity	Coverage / Sampling Plan	Expected Output
Household Surveys	100 HHs per district	Quantitative data on drought impacts, coping costs, migration trends
KIIs	10–12 per district	Institutional responses, access to credit and water management
PRA	2–3 per district	Local adaptation mechanisms, social safety nets
FGDs	5 FGDs	Gendered vulnerabilities and collective action insights

Secondary Data Review	Govt & academic sources	Historical drought and livelihood pattern analysis
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Deliverable: Preparation and submission of a Detailed Project Report (DPR) outlining the challenges, proposed interventions, implementation plan, financials, and sustainability framework based on the findings from the study.

For Raichur (Karnataka): Context

Northern Karnataka districts such as **Raichur** experience extreme heat and water scarcity, making them highly vulnerable to climate-induced livelihood stress. Characterized by recurrent droughts, erratic rainfall, heat stress, and poor infrastructure, it significantly affects overall resilience of rural livelihoods. With temperatures often exceeding **44°C** during summer, the region faces declining crop yields, postharvest losses, heat stress and livestock mortality, and energy-intensive cooling costs for small businesses.

Over 60% of agricultural land is rainfed, and declining groundwater levels have further exacerbated distress. Smallholder farmers, agri-laborers, and women engaged in post-harvest processing are particularly affected by heat stress, drought reduced work hours, health issues, and income instability. Microenterprises such as food processing, art and crafts, textiles face production losses due to heat and unreliable power supply.

SELCO Foundation seeks to undertake a comprehensive **Disaster and Climate-Induced Vulnerability Mapping** to identify risks, losses, and adaptation practices, and to recommend **scalable, climate centric interventions**. The final output will include a **Detailed Project Report (DPR)** highlighting evidence-based, actionable, and vendor-mapped solutions recommended for implementation.

Objectives

- Assess the impact of climate related shocks – heat, drought, erratic rainfall on livelihood activities focusing on Agriculture and allied sector and Small businesses.
- Identify household- and community-level adaptation and coping mechanisms currently in practice.
- Evaluate existing government schemes, social protection programs, and subsidies relevant to resilience-building.
- Prepare a Detailed Project Report (DPR) with actionable recommendations, potential solution providers/vendors, and convergence opportunities with government programs.

Region Selected for the Study

State	Focus Districts	Rationale for Selection
Karnataka	Raichur	High temperature zones, erratic rainfall, heat-induced productivity loss in agriculture and MSMEs

Major Climate Hazards

Hazard Type	Underlying Causes / Climate Drivers	Typical Impacts on Livelihoods
Heat Waves	Extreme summer temperatures, loss of vegetation	Labor productivity decline, livestock stress
Droughts	Rainfall deficit, groundwater depletion	Crop failure, fodder scarcity

Livelihood Profile and Affected Sectors

Livelihood Sector	Primary Activities	Climate Impacts
Agriculture	Crop production	Heat-induced crop loss, soil moisture stress
Livestock	Dairy, goats	Heat stress, fodder shortage
Small Business	Food processing, textiles, bricks	Productivity loss, machine overheating
Labor	Agricultural laborers	Reduced working hours due to heat

Scope of Work :

Vulnerability Hotspots and Community Mapping

The study will identify and profile **3–5 heat-stressed regions** per district based on:

- Temperature and heatwave frequency
- Rainfall data and crop loss
- Occupational heat exposure and health risks

Participatory exercises will include:

- **Heat exposure mapping** with communities
- **Seasonal livelihood calendars** tracking work-rest cycles
- Crop loss and income fluctuation mapping
- **Problem tree analysis** - Livelihoods

Data Collection Plan

Tool / Activity	Coverage / Sampling Plan	Expected Output
Household Surveys	100 HHs per district	Quantitative data on heat exposure, income loss, adaptation costs
KIIs	10–12 per district	Insights from agriculture, health, and MSME departments
PRA	2–3 per district	Local coping mechanisms and energy adaptation mapping
FGDs	4 FGDs	Women’s health and productivity impacts
Secondary Data Review	District-level datasets	Climate and livelihood risk analysis

Deliverable: Preparation and submission of a Detailed Project Report (DPR) outlining the challenges, proposed interventions, implementation plan, financials, and sustainability framework based on the findings from the study.

For Puri (Odisha): Context

Odisha is one of India’s most disaster-prone states, with its 480 km coastline along the Bay of Bengal repeatedly exposed to cyclones, storm surges, and floods. Between 2000 and 2023, the state has faced over 15 major cyclonic events — including *Fani* (2019), *Amphan* (2020), and *Yaas* (2021) — severely impacting both human settlements and the local economy.

Districts such as Puri represent high-risk zones, where recurrent exposure to **cyclones, saline intrusion, and erratic rainfall** is gradually eroding livelihoods based on **agriculture, fisheries, livestock, and coastal MSMEs**.

Salinization of soil and groundwater due to sea-level rise and storm surges has reduced agricultural productivity and freshwater availability. Similarly, **prolonged power outages** and infrastructure disruptions after disasters have led to business interruptions for **micro and small enterprises (MSMEs)**, especially those dependent on continuous power for operations (ice plants, food processing units, coir-based industries, etc.).

These recurrent shocks compound **pre-existing socioeconomic vulnerabilities** particularly among **smallholder farmers, fish workers, landless laborers, and women-headed households**, who often lack access to insurance, formal credit, and social protection schemes.

The study aims to generate **granular, block-level insights** on the intersection between climate-induced hazards and livelihood systems, identifying high-vulnerability zones and opportunities for climate-resilient interventions including renewable energy-enabled livelihood solutions.

Objectives of the Study

The study will:

1. **Map climate-induced disaster risks** (cyclones, floods, saline intrusion) and their spatial overlap with livelihood systems in coastal Odisha.
2. **Assess the multi-dimensional vulnerability** of rural and peri-urban households across agriculture, fisheries, livestock, and MSME sectors.
3. **Document local adaptation strategies**, social protection access, and gender-differentiated impacts.
4. **Inform the design of an implementation-oriented DPR (Detailed Project Report)** outlining priority interventions, investment needs, and institutional mechanisms for scalable impact.

Region Selected for the Study

State	Focus Districts	Rationale for Selection
Odisha	Puri	High cyclone frequency, saline intrusion, recurrent flooding, and economic vulnerability in agriculture and fisheries.

Major Climate Hazards

Hazard Type	Underlying Causes / Climate Drivers	Typical Impacts on Livelihoods
Flood, Cyclones & Storm Surges	Warm sea surface temperatures, intense monsoon depressions	Housing damage, loss of fishing boats, livestock mortality, crop loss
Saline Intrusion	Sea-level rise, storm surges	Soil degradation, reduced crop yield, loss of freshwater sources

Livelihood Profile and Affected Sectors

Livelihood Sector	Primary Activities	Climate Impacts
Agriculture	Crop production	Crop loss due to inundation and post harvest losses, salinity stress
Fisheries	Marine and brackish water fisheries	Cyclone damage to boats, gear loss
Livestock	Dairy, small ruminants, Backyard – Poultry	Fodder loss, disease spread post-cyclone
MSMEs	Food processing, coir, crafts, pottery	Power cuts, market disruptions

Vulnerability Hotspots and Community Mapping

The study will identify **3–5 block-level hotspots** in the selected districts based on:

- Cyclone exposure, saline intrusion extent, and historical loss data.
- Dependence on agriculture, fisheries, and coastal MSMEs.
- Access to early warning and recovery mechanisms.

Participatory mapping will include:

- **Hazard exposure maps** (cyclone and salinity overlay).
- **Seasonal calendars of fishing and agriculture activities vis-à-vis hazard periods.**
- **Crop and livestock loss** mapping to understand the scale and frequency of impacts.
- **Identification of livelihood** disruptions and recurring problems faced by communities..
- **Institutional mapping** for disaster preparedness and recovery.
- **Problem tree analysis** on Livelihoods

Data Collection Plan

Tool / Activity	Coverage / Sampling Plan	Expected Output
Household Surveys	100 HHs per district	Quantitative data on income loss, recovery cost, and food insecurity

KIIs	10–12 per district	Institutional insights on disaster management and livelihood recovery
PRA	2–3 per district	Local adaptation mapping, gender roles, and social protection
FGDs	4 FGDs	Qualitative narratives on resilience and challenges
Secondary Data Review	District-level datasets	Vulnerability and resilience profiling

Deliverable: Preparation and submission of a Detailed Project Report (DPR) outlining the challenges, proposed interventions, implementation plan, financials, and sustainability framework based on the findings from the study.

For Cachar (Assam): Context

Assam, located in India’s North-East region, is among the most **climate-sensitive and flood-prone states**, with over 40% of its total area susceptible to annual inundation. The **Brahmaputra and Barak river basins**, along with their extensive tributary networks, make the region highly vulnerable to **floods, riverbank erosion, and sedimentation**.

Districts such as **Cachar** face **recurrent, multi-hazard exposure** experiencing annual floods that submerge croplands, damage infrastructure, and displace communities. According to estimates, nearly **30–35% of cultivable land** in these districts is affected by floods each year, while **riverbank erosion claims around 8,000 hectares annually**, leading to permanent land loss and mass displacement of rural households.

The **livelihood base of Assam** built on **smallholder agriculture, livestock rearing, inland fisheries, and bamboo or handloom based microenterprises** is being severely eroded. Changing rainfall patterns, siltation, shortened crop cycles, and erratic dry spells are further reducing agricultural reliability. Floods not only destroy standing crops but also deposit heavy silt, requiring significant recovery time before land becomes cultivable again.

The **social consequences are acute: women-headed**, landless, and displaced households face deep livelihood insecurity, asset depletion, and rising food and nutrition stress. Many migrate temporarily or permanently to urban centers such as Guwahati and Silchar in search of wage labor. Recurrent climate shocks also lead to **intergenerational impacts** on children's education, women’s unpaid care burden, and health outcomes deteriorate.

This study seeks to build an integrated understanding of **how climate-induced disasters affect livelihoods, displacement patterns, and resilience capacities** in these high-risk districts and to develop a **localized, implementable resilience plan** through participatory and spatial analysis.

Objectives of the Study

1. **Map and analyze flood, erosion, and rainfall variability patterns** in selected districts to identify high-risk blocks and vulnerable livelihood clusters.
2. **Assess the multi-dimensional vulnerability** of households dependent on agriculture, livestock, fisheries, and microenterprises.
3. **Document local adaptation practices** and community-driven coping mechanisms, with attention to gender, social inclusion, and displacement.
4. **Identify intervention opportunities** that enhance livelihood resilience, asset protection, and disaster preparedness.
5. **Develop a Detailed Project Report (DPR)** with proposed interventions, cost estimates, and institutional linkages for scale-up.

Region selected for the study

State	Focus Districts	Rationale for Selection
Assam	Cachar	High flood frequency, riverbank erosion, loss of cultivable land, displacement, and livelihood disruption

Major Climate Hazards

Hazard Type	Underlying Causes / Climate Drivers	Typical Impacts on Livelihoods
Floods	Heavy monsoon rainfall, the overflow of the Brahmaputra and Barak rivers and their tributaries	Crop loss, damaged homes, infrastructure loss, livestock mortality, silt accumulation
Riverbank erosion	Sedimentation, shifting river course, deforestation of catchment areas	Permanent land loss, displacement, fragmentation of communities
Prolonged dry spells	Monsoon delay, variability in rainfall distribution	Reduced crop yield, fodder scarcity

Livelihood Profile and Affected Sectors

Livelihood Sector	Primary Activities	Climate Impacts
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Agriculture	Crop production	Flood-induced crop loss, siltation, post harvest losses
Livestock	Dairy, goats, backyard poultry	Fodder loss, disease post-flood
Fisheries	Riverine and pond fisheries	Pond overflow, fish mortality
Handloom & Bamboo crafts	Microenterprises	Raw material damage, market disruption

Vulnerability Hotspots and Community Mapping

The study will identify and profile 3–5 **block-level hotspots** within the selected districts based on:

- Flood frequency and erosion intensity (using historical data valid sources).
- Proportion of landless or displaced households.
- Dependency on agriculture and livestock.
- Major livelihoods practiced and how they are affected by seasonal floods
- Potential solution mapping and recommendations.

Participatory mapping will include:

- **Flood exposure maps** created with local communities.
- **Livelihood seasonal** calendars
- Community **migration and displacement** timeline mapping
- **Adaptive practices documentation** (raised granaries, flood-tolerant crops, etc.)\
- Problem tree analysis on Livelihoods

Data Collection Plan (Regional Level)

Tool / Activity	Coverage / Sampling Plan	Expected Output
Household Surveys	100 HHs per district	Quantitative data on losses, coping costs, recovery timelines
KIIs	10–12 per district	Insights on institutional and systemic vulnerabilities

PRA Exercises	2–3 per district	Local hazard mapping, coping strategies, gender perspectives
FGDs	4 FGDs	Qualitative understanding of social and livelihood impacts
Secondary Data Review	Valid sources	District-wise vulnerability and impact profiling

Deliverable: Preparation and submission of a Detailed Project Report (DPR) outlining the challenges, proposed interventions, implementation plan, financials, and sustainability framework based on the findings from the study.

Refer Terms and Conditions:

1. **Sub-contracting:** In the event that the Consultant requires the services of subcontractors to perform any obligations under the Contract, the Consultant shall obtain the prior written approval of the Foundation. Any rejection or non-performance of the subcontractor shall not, in and of itself, entitle the Consultant to claim any delays in the performance, or to assert any excuses for the non- performance, of any of its obligations under the Contract, and the Consultant shall be solely responsible for all services, obligations and deliverables performed by its subcontractors
2. **Quality Assurance**
The data submitted to Selco Foundation should be accurate, complete, reliable and relevant. Consulting agency shall establish additional layers for data cleaning and submission.
3. **Financials & Reporting**
TDS will be deducted on the fixed amount as per Income Tax Act and Rate of Percentage. In accordance with the Central Board of Direct Taxes circular No. 7 of 2022 dated 30th March, 2022 in relation to the clarifications with respect to Section 114AAA of the Income-tax Rules, 1962, failure to link Aadhar number to the PAN card and/or failure by any person, who falls within the income tax bracket or otherwise, to file tax returns in relation to payment of TDS for any service (in accordance with Section 206AB and 206AA) and/or an inoperative PAN card will result in a 20% tax deduction.
4. **Indemnification**
Both parties shall indemnify and hold its Trustees, Directors and representative officers, employees, agents harmless from and against any and all claims, demands, actions, losses,



liabilities, charges, damages, costs and expenses (including but not limited to reasonable attorney's fees) arising out of or resulting from (1) any claims arising in connection with activities undertaken by both parties in connection with the project or (2) Consultant's gross negligence or willful misconduct or breach of any undertaking, covenant, representation or warranty contained in this agreement and/ or the actual infringement of any patent, trademark, copyrights, trade secret or any other intellectual property right of the third party.

5. Patent, Copyright and other Proprietary Rights

- (i) Except as is otherwise expressly provided in writing in the Contract, the Foundation shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Consultant has developed for the Foundation under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the Foundation.
- (ii) Subject to the foregoing provisions, all documents, reports, recommendations, documents, and all other data compiled by or received by the Consultant under the Contract shall be the property of the Foundation, shall be made available for use or inspection by the Foundation at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to the Foundation's authorized officials on completion of work under the Contract
- (iii) The Consultant will treat all information given to him/her as information with proprietary value and will not disclose the same to competitors or any outsiders. The Consultant will not at any time, except under legal process, divulge any trade or business secret relating to the Foundation or any customer or agent of the Foundation, which may become known to him by virtue of his position as consultant, save in so far as such disclosure shall be necessary in the interest and for the benefit of the said Foundation and will be true and faithful to the Foundation in all dealings and transactions whatsoever relating to the said Foundation.
- (iv) Reports or other data that are developed specifically for the performance of this Contract shall be the property of the Foundation and the Consultant shall deliver reports and data to the Foundation as per the milestones. Dissemination of the reports and any information from the said contracts shall be done with written approval from the Foundation.

- 6. Publicity, use of name & Logo of the Foundation:** The Consultant shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with the Foundation, nor shall the Consultant, in any manner whatsoever use the name, emblem, logo or official seal of the Foundation or that of SELCO in connection with its business or otherwise without the written permission of the Foundation.



7. Observance of Law:

- (v) The Consultant shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the Contract.
- (vi) The Consultant represents and warrants that neither it, its parent entities, partners or subcontractors nor any of its subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the *Child Labour (Prohibition and Regulation) Act of 1986*, which, *inter alia*, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
- (vii) The Consultant represents and warrants that it shall adhere to the mandates prescribed under the *Sexual Harassment of Women (Prevention, Prohibition & Redressal) Act, 2013*, which requires all workplaces to have a Policy and Internal Committee to address complaints of sexual harassment that women may face at the workplace

8. Termination:

- (viii) Either party may terminate this contract by giving a notice in writing to the other party stating their intention to terminate the same on the expiration of Seven (7) days from the date of such notice. In addition, the Foundation may also terminate this contract forthwith in the event of any fraud, misconduct or neglect of duties on the part of the Consultant. Any notice to be given hereunder shall be sufficiently given to the Consultant if forwarded by registered post or by Courier Service to the last known postal address of the Consultant and shall be sufficiently given to the Foundation if similarly forwarded to the registered office. Upon the termination of this contract and payment of the said fees due up to such termination, and payment of all disbursements and out-of-pocket expenses incurred up to the date thereof (provided the same have been incurred after obtaining prior approval), the Consultant shall deliver all deeds, documents and paper in his possession relating to the business of the Foundation or as the Foundation shall direct, and shall continue to afford him all reasonable assistance for concluding pending matters at the date of such termination without making any charge thereof.

9. Force Majeure:

- (ix) *Force majeure* as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, *provided that* such acts arise from causes beyond the control and without the fault or negligence of the Consultant
- (x) In the event of and as soon as possible after the occurrence of any cause constituting *force majeure*, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of *force majeure* or other changes in condition or occurrence, the affected



Party shall also submit a statement to the other Party of estimated expenditures that will likely be incurred for the duration of the change in condition or the event of *force majeure*.

- (xi) On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting *force majeure* shall take such action as it reasonably considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract.
- (xii) If the Consultant is rendered unable, wholly or in part, by reason of *force majeure* to perform its obligations and meet its responsibilities under the Contract, the Foundation shall have the
right to suspend or terminate the Contract on the same terms and conditions as are provided for in this Contract.

10. Both the Foundation and the Consultant fully and freely intend to create an independent Contractor relationship under this Contract. Nothing herein shall be deemed to establish a partnership, joint venture, association, or employment relationship between the parties. Both parties agree that the consultant has the right to sole and exclusive control over the manner and means employed in performing their activities under this Contract.

11. Settlement of disputes:

- (i) The Parties shall use their best efforts to amicably settle any dispute, controversy, or claim arising out of the Contract or the breach, termination, or invalidity thereof.

Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, the matter shall be referred by either Party to arbitration in accordance with the Arbitration and Conciliation Act, 1996. The venue of the arbitration shall be at Bangalore. Likewise, the jurisdiction will vest with courts in Bangalore.
