## **Table of Contents**

1.	Introduction
2.	Objectives of the Survey1
	2.1 Broad Objective
	2.2 Specific Objective Assignment a) – areas of assessment
	2.3 Specific Objective Assignment b) – areas of assessment
	2.4 Specific tasks to be performed by Survey Agency/Institution
3.	Methodology12
	3.1 Survey Approach
	3.2 Survey Tools
	3.3 Coverage of the Survey
	3.4 Sampling procedure/design
	3.5 Quality Control
	3.6 Survey Team
	3.7 Data/information to be provided to the Survey Agency/Institution14
4.	Deliverables

# **Terms of Reference (TOR): Endline Socio-Economic Evaluation** (SEE) Survey and Project Completion Report

### 1. Introduction

Japan International Cooperation Agency (JICA) is providing financial assistance to Government of Sikkim to implement Sikkim Biodiversity Conservation and Forest Management Project (SBFP) through Forest and Environment Department (FED), Government of Sikkim. The overall goal/objective of the project is to "strengthen biodiversity conservation activities and forest management capacity and to improve livelihood for the local people who are dependent on forests by promoting sustainable biodiversity conservation, afforestation and income generation activities including eco-tourism for the community development, thereby contributing to environment conservation and harmonized socio-economic development of Sikkim'. The project involves the community institutions like Joint Forest Management Committee (JFMC)/ Eco Development Committees (EDCs)/ Pokhri Sanrakshan Samitis (PSS)s and Self Help Groups (SHGs) and targets to reach out 180 Joint Forest Management Committee (JFMC)/ Eco Development Committees (EDCs) in phased manner.

The Loan agreement was signed on March 31, 2010 and has been closed on June 15, 2022. The date of loan effectuation for the project is June 15, 2010 and originally project implementation would get close by June 15, 2020. The project was implemented in 10 years duration, starting from 2010-11 till 2019-2020, however due to earthquakes in year 2011 and 2012 and later in years 2020 and 2021 due to the COVID 19 the pace of works got hampered and thus JICA gave time extension of 2 years to complete the unfinished/remaining works. The loan repayment period is defined from March 20, 2020 till March 20, 2040.

Now the project has been completed and it is envisaged to undertake end line evaluation survey to assess the project impacts. At the same time, it is also necessary for the project to produce a Project Completion Report (PCR) as per the prescribed format by JICA within six months after the completion of the project.

## 2. Objectives of the Survey

## 2.1 Broad Objective

There are two broad objectives of this assignment -a) undertake socio-economic evaluation (SEE) survey in the project areas and b) Prepare Project Completion Report (PCR)

Assignment a) Socio-Economic Evaluation Survey: The overall objective of the survey is to collect endline socio-economic information of the households in project villages/Gram Panchayat and on JFM areas being managed by Joint Forest Management Committee (JFMC)/ Eco Development Committees (EDCs)/ Pokhri Sanrakshan Samitis (PSS)s by surveying sample villages. The endline surveys capture information both at macro and micro level and would ascertain socio-economic status of communities involved in the project through primary data collection. Thus, it is imperative to identify key areas where change is expected through the project interventions, and capture the primary information by undertaking household-level surveys.

**Assignment b) Prepare Project Completion Report (PCR):** Annex 1 of the Minutes of Discussion (MoD) prescribe template for preparing the PCR. The Survey Agency/Institution will study the template and prepare the PCR required for submission to JICA.

## 2.2 Specific Objective Assignments a) – areas of assessment

The specific objective of the endline survey is to holistically assess the project intervention and its impacts. The assessment will be both quantitative as well as qualitative. To undertake the assessment survey component-wise areas of project interventions and indicators for measuring results are indicated in the tables 1a to 1d below:

	Sub-Component	Area of intervention	Indicators-Quantity	Indicators-Quality
a)	Enhancement and Management of Forest and Biodiversity Information base	Update of Topographical and Land Use maps	GIS lab established	Fully-staffed GIS lab operational beyond project period
			• New digital database on land use and forest cover assessment created	Digital time-series data procured for developing maps
			• Number of maps updated/created	<ul> <li>Number of new maps utilized for better management of biodiversity/ and forests in Sikkim</li> </ul>
			• Number of persons trained on GIS applications	Number of persons utilizing GIS skills for planning and monitoring
		Inventory and Monitoring Biodiversity	• Number of samples collected through Rapid Biodiversity Survey (RBS)	<ul> <li>Proper database of information is created</li> <li>Information utilized in future by research institutions/forest department</li> </ul>
			Number of Hotspots identified during the RBS	Hectares of Hotspots focused for better management and protection
			• Number of trek/trails identified during RBS (kms)	<ul> <li>Length of trek/trails identified during RBS (kms)</li> <li>Information utilized for Ecotourism promotion</li> </ul>
		Study of impacts of Grazing in the Himalayan Eco- system	Study on impacts of Climate Change completed	Climate Change Mitigation Plan prepared for alpine ecosystems/KBR
			Study on impacts of Grazing completed	Hectares of grazing areas regulated/better managed alpine zones of the State
	<ul> <li>b) Enhancement of the basis for Forest Management and Biodiversity Conservation</li> </ul>	Extended PAs and gazetting PAs as National Parks	Study completed on movement & migratory behavior of birds and animals and distribution pattern of plant species	Number of PAs considered for expanding protected area boundaries for biodiversity conservation
			Protected Area boundary pillars installed and geo- coded	GIS maps indicates     PA boundaries
			New protected areas established	Hectares of new area brought under protection
		Management and	Studies conducted to	<ul> <li>Population estimates</li> </ul>

#### Table 1a: Forest and Biodiversity Conservation – Key Performance indicators

	conservation of	estimate population	are available for all
	flagship species habitats	Number of observation points established for sighting identified along trekking routes	<ul> <li>endangered and flagship species</li> <li>Number of guides know observation points for awareness on Ecotourism amongst tourists</li> </ul>
	Enhancement of Working Plans and establishment of forest management zones	• Number of Preservation Plots established	• Plots are depicted on GIS database
		Number of compartments surveyed	• -
		<ul> <li>Forest boundary pillars installed and geo-coded</li> </ul>	GIS maps indicates     forest boundaries
Process of Khangchendzonga Biosphere Reserve on the	Khandchendzonga and Lepchas listed on UNESCO's World Heritage List	<ul> <li>Inscription document prepared</li> </ul>	KBR listed as World Heritage site
		<ul> <li>Number of Himal Rakshak (Mountain Guards) trained</li> </ul>	<ul> <li>Number of Pas that are well managed and protected by Himal Rakshak</li> </ul>
		<ul> <li>Proper garbage disposal facilities created along trekking routes/nature trails</li> </ul>	• Number of EDC regularly collecting garbage along trekking routes/nature trails and adequately dispose
		Number of Interpretation Centers constructed for KBR	<ul> <li>Number of tourists by nationality visiting Interpretation Centre per year</li> <li>Number of Interpretation Centers exhibits uniqueness of KBR</li> </ul>
,	Ex-situ conservation of Biodiversity	Butterfly Park established	<ul> <li>Number of tourists by nationality visiting Park per year</li> <li>Gate fee collected (Rs) per year</li> </ul>
		<ul> <li>Study for establishing Bird Park at Rabdentse completed</li> </ul>	• -
		Red Panda breeding center established	• Population of Red Panda increases in the state
		Himalayan Tahr     Park created	•
		<ul> <li>Nurseries or propagation of rare and endangered plant species established</li> </ul>	<ul> <li>Saplings sold by species (nos.) per year</li> <li>Revenue generated (Rs) per year</li> <li>Employment days</li> </ul>
			<ul> <li>Employment days</li> </ul>

		facility built and commissioned	Wildlife receiving better treatments and care per year
		• Rescue Centre built and commissioned	• Number of injured animals given better care per year
a b	Knowledge generation and dissemination of biodiversity and best practice information	Biodiversity     Conservation     Centre built and     commissioned	• Number of Research papers published by the Centre to improve and conserve biodiversity
		• Types of publicity material-booklets of best practices published	<ul> <li>Publications are available in all tourists places/book stores</li> </ul>

## Table 1b: Ecotourism – Key Performance Indicators

Sub-Component	Area of intervention	Indicators-Quantity	Indicators-Quality
a) Formulation of an Ecotourism Policy, Strategy	Policy formulation and publicity	Policy formulated and published	Number of public consultations conducted during policy formulation
		• Number of Campaign conducted to publicize the content of the policy throughout the state	Number of state institutions/tour operators/agencie s adopted policy to promote ecotourism in state
b) Establishment of an Ecotourism Marketing Cell	Cell established for the development and promotion of ecotourism in Sikkim	• Fully staffed EMC established and functional	<ul> <li>Number of publications brought out for creating awareness about Sikkim as a tourist destination in national and international market places</li> </ul>
		<ul> <li>Number of ecotourism events/festivals organized</li> <li>Share of ecotourism increases in tourism revenue</li> </ul>	<ul> <li>Employment days created</li> <li>Additional income (per annum) of local community from ecotourism activities</li> </ul>
c) Formulation and implementation of a Five Year Ecotourism Marketing Strategy	Five year marketing strategy formulated and implemented	Requisite strategies are developed studies completed	<ul> <li>Action plans are developed following strategies and implemented</li> </ul>
		Website developed     and launched	Counts of Visitors/Tourists accessing website
		Number of Overseas/national tours for private tour operators conducted	<ul> <li>Number of Tour Operators by nationality promoting</li> </ul>

		<ul> <li>Number of tour Operators participated in overseas tours</li> <li>Numbe4r of Tour operators participated in national tours</li> </ul>	ecotourism in State
		<ul> <li>Monitoring system in place</li> </ul>	<ul> <li>Progress and effectiveness of strategies regularly monitored</li> </ul>
d) Selection of a funding scheme to Finance the subsequent marketing strategies	The marketing strategies implemented	• New funding system in place to ensure sustainability of the marketing efforts	<ul> <li>Funds available annually to finance marketing strategies</li> </ul>
e) Creating links between Tour Operators and Local Community offering Tourism	Tour operators linked with local communities offering tourism services	• Number of priority ecotourism villages selected adopting the prescribed selection criteria	<ul> <li>Number of Study tour conducted for Tour Operators in priority villages to assess the facilities and the opportunities available in Sikkim</li> <li>Number of persons from Tour Operators visited priority villages</li> </ul>
f) Development of Trekking Routes	Trekking routes for International and domestic tourists	<ul> <li>Number of international trekking routes developed/improved</li> </ul>	<ul> <li>Number of tourists by nationality opting for newly developed trekking routes per year</li> <li>Annual income from newly developed trekking routes per year</li> <li>Annual income from newly developed trekking routes (Rs)</li> </ul>
		<ul> <li>Number of Camping sites developed/improved</li> </ul>	<ul> <li>Number of camping sites where amenities like- water, shelter for porters, kitchen, eco-friendly toilets are developed</li> </ul>
		Reconnaissance survey conducted to select the best potential treks	<ul> <li>Number of smaller treks linked to villages developed/impro ved</li> <li>Number of villages benefitted from</li> </ul>

					linking of treks
		in	umber of Signage stalled at all propriate locations	•	Number of treks having signage installed at different locations
		vi ne	umber of exposure sits conducted to wyly developed eks	•	Number of persons from international tour operators taken newly developed treks Number of persons from national tour operators taken to newly developed treks
g) Development of Wildlife- Watching Areas	Wildlife Watching areas in Buffer Zone/outside protected areas	w: co	rvey of bird – atching areas onducted	•	-
		_ '	umber of Butterfly watching areas entified	•	Number of treks having butterfly watching areas
		co s t W	umber of local ommunity member trained as Wildlife atching guides	•	Annual Income of local guides (Rs)
		vi wi ar	umber of exposure sits conducted to ildlife watching eas	•	Number of persons from international tour operators taken to wildlife watching areas Number of persons from national tour operators taken to wildlife watching areas
h) Construction of Interpretation Centres and Renovation of Forest Rest Houses (FRHs)	Tourism infrastructure created to provide interpretation and information on areas of interests to tourists	In	umber of terpretation centers onstructed	•	Number of tourists by nationality visiting Interpretation Centers per year
		ap de op m	equisite staff ppointed and pployed for peration and anagement of enters	•	Recruited managers and assistants trained by inviting external expert
		• Ni Ra re up	umber of Forest est Houses (FRHs) novated and ograded	•	Number of renovated FRHs outsourced to secure maintenance and sustainability of operation Number of nights tourists by nationality stayed (occupancy) in FRH per year
i) Comprehensive Study for Baseline Information on Solid Waste Management	Primary Information on SWM and its commercial potential in		blid waste samples ollected from	•	Action Plan based survey

	tourist areas generated for 10 prioritized villages	different location	results prepared and followed
		Sample survey completed from different location	<ul> <li>Action Plan based survey results prepared and followed</li> </ul>
j) Operating Solid Waste Management (SWM) Functions	SWM operation strengthened and local communities/ stakeholders sensitized/trained towards environmental clean-up and maintenance	• SWM equipment and aids procured as per plan	<ul> <li>Number of Workshops conducted for SWM operators</li> <li>Number of staff members of the SWM operators oriented through workshops on waste collection tools methods and safeguards</li> </ul>
		<ul> <li>Bins installed at strategic location in public places and trekking base camps</li> </ul>	<ul> <li>Number of Trekkers by nationality that brought back waste generated during trekking to the base camp</li> </ul>
		<ul> <li>Number of JFMC/PSS engaged in manure production from bio-degradable waste collected locally</li> </ul>	Income from sales of compost produced (Rs) per year
		Tons of waste collected from domestic and commercial sources	• -

## Table 1c: Joint Forest Management – Key Performance Indicators

Sub Component	Area of Intervention	Indicators-Quantity	Indicators-Quality
a) Preparation of JFMC,EDC and PSS Management Manual	Guidance on institutional functioning and project activities implantation	<ul> <li>Management Manual developed and published in English and Nepali languages</li> </ul>	<ul> <li>Number of JFMC/EDC/PSS utilizing manual for forest management and biodiversity conservation</li> </ul>
b) Marketing Study	Support SHGs on IGAs/marketing priorities and strategies	Marketing Study completed	<ul> <li>Short – list developed of products with high market potential for IGAs</li> <li>Marketing strategies formulated for the short-listed products</li> </ul>
		• Number of training modules developed to enable JFMC, EDC, PSS to implement strategies	<ul> <li>Number of members trained on various skills</li> <li>Number of JFMC/EDC/PSS benefitted from such trainings</li> </ul>
c) Formation of District Facilitation Unit (DFU)	Project management and implementation	Number of DFUs     established	• Number of DFUs operation with full staffing
		Number of	<ul> <li>Number of COs</li> </ul>

		Community Organizers (Cos) recruited	extending continued support in project clusters
d) Selection of villages for JFMC/EDC/PSS activities	Villagers selected under the project	• Number of IIVs and SEVs selected following the criteria	<ul> <li>Hectares of area demarcated under JFM</li> <li>Number of JFMC/EDC/PSS where pillars are installed to distinguish JFM area</li> <li>Number of JFMC/EDC/PSS where pillars are Geo-coded for GIS</li> </ul>
e) Establishment of Committees and Planning of activities		<ul> <li>Number of JFMC/EDC/PSS registered under Society Registration Act 1860 to secure their legal status</li> <li>Number of</li> </ul>	<ul> <li>Number of JFMC/EDC/PSS where MOU signed between the Executive Committee and Forest Department</li> <li>Number of</li> </ul>
		JFMC/EDC/PSS where Micro-plan are prepared	JFMC/EDC/PSS where Micro-plan reflect the real needs of the village community for natural resources
		• Number of JFMC/EDC/PSS where Micro-plan is approved – jointly signed by Committee and FD	• Number of JFMC/EDC/PSS for which required budget is secured by Forest Department to implement micro- plan for 5 years
f) Entry Point Activities	Small-scale community assets created based on community priorities	Number of JFMC/EDC/PSS where EPA is identified and implemented	Number of JFMC/EDC/PSS where assets created under EPA are well maintained
g) Forest Management and Biodiversity Conservation	l Reserved Forests, khasmal, gorucharan and protected areas well managed by committees	Number of JFMC/EDC/PSS maintain boundaries of jointly managed area	Number of JFMC/EDC/PSS regularly clear vegetation in JFM area
		Number of Committee members trained on basic fire-fighting skills	Number of JFMC/EDC/PSS regularly patrol and watch for fires during dry season
		<ul> <li>Hectares of Plantation accomplished under JFM in reserved and protected areas</li> </ul>	<ul> <li>Survival percentage after three years of plantation</li> <li>Number of JFMC/EDC/PSS regularly monitors illicit and criminal activities in jointly managed area</li> </ul>
			• Number of JFMC/EDC/PSS regulates grazing and fodder collection under guidance of forest department

		• Number of Central and village nurseries established	<ul> <li>Number of nurseries operational</li> <li>Income generated from nursery sales (Rs) per year</li> </ul>
h) Action Research or Sustainable Use of Forest Resources		• Number of JFMCs identified containing resources of high value and are willing in research initiative	<ul> <li>Number of forest products studied</li> <li>Number of forest products recommended as source for income generation</li> </ul>
i) Forest Management ir Religious areas	Sacred groves and other religious areas conserved	Hectares of     Plantation     accomplished	Number of saplings     planted
j) Formation of SHGs	Community groups formed as envisaged for undertaking IGSs	Number of SHGs formed/promoted under the project	<ul> <li>Number of SHGs operational</li> <li>Number of SHG Bank account opened</li> </ul>
		<ul> <li>Number of SHGs that prepared Business Plan</li> </ul>	• SHGs received funds to initiate IGAs
k) Microfinance	SHG members are enabled for developing IGAs	Number of SHGs conducting meting every month	Number of SHGs having regular savings Cumulative savings of SHGs (Rs)
		Number of SHGs initiated inter- loaning from monthly savings	Number of members utilized inter-loans for productive activities
		<ul> <li>Number of JFMC/EDC/PSS are appraised for capacity to handle project block grant</li> </ul>	<ul> <li>Number of JFMC/EDC/PSS extends loans to SHGs for IGAs</li> <li>Number of SHGs supported by loans from JFMC/EDC/PSS</li> </ul>
l) Training on the management of JFMCs EDCs and PSSs	1	Number of members representing JFMC/EDC/PSS trained on various skills	<ul> <li>Number of Committees efficiently managing forest resources</li> <li>Number of Committees efficiently managing ecotourism</li> <li>Number of Committees efficiently managing IGAs activities</li> </ul>
m) Skill development Training for IGAs	Enhance productivity, quantity and profitability of production activities and service provision	Managing committees	• -
		Number of SHG members trained on skills improvement	• Additional income of members from IAGs per year (Rs)
n) Exposure visit	SHG and JFMC, EDC, PSS members exposed to successful works outside state for better project implementation	Number of members adopted learnings/models from exposure visits outside state	Number of members adopted learnings/models from exposure visits

	and IGAs		
o) Training on Ecotour	ism Ecotourism is well developed under the project	Number of persons trained for managing village ecotourism	<ul> <li>Number of tourists coming to villages per year</li> </ul>
p) Monitoring	Committees undertaking regular monitoring	Committees conducting social Audits every six month	<ul> <li>Social Audit results are utilized for revision/modification s in five-year micro- plan and annual work plan</li> </ul>
q) Village Developmer	tt Fund Funds utilized for community purpose	Assets are maintained through VDF funds	• Cumulative size of VDF fund (amount Rs.)
		SHGs are Regularly supported from revolving fund in VDF account	• Size of fund with JFMC/EDC/PSS generated from IGA loan interest collections (Rs.)
r) Implementation of ecotourism subcomp	bonent Activates performed with involvement of JFMC, EC and PSS	Activities     accomplished as     per plan	• -

## Table 1d: Organizational Strengthening of FOREST Department- Key Performance Indicators

Sul	o-Component	Area of Intervention	Ind	Indicators-Quantity		Indicators-Quantity	
a)	Development of infrastructure and Equipment improvement Plan	Infrastructure and equipment Improvement	•	Survey of physical infrastructure and equipment conducted	•	Plan prepared for development including installation of information technology	
b)	Construction and renovation of offices	Identified facilities improved/upgraded	•	Headquarter renovated and improved as per plan	•		
			•	Range offices and check points renovated as per plan	•		
			•	Building codes and other codes are developed	٠	Incorporated in the implementation Manual and adopted for all construction works	

Sub-Component	Area of Intervention	Indicators-Quantity	Indicators-Quantity
c) Procurement of Equipment	Mobility and connectivity strengthened	• Procurement of mobility (car, motorcycle etc.) completed as per plan	<ul> <li>Latest specifications are procured</li> </ul>
		<ul> <li>Procurement of equipment done as per plan</li> </ul>	<ul> <li>Latest gadgets/ Specifications are procured</li> </ul>
		<ul> <li>Procurement manual development</li> </ul>	<ul> <li>Procurement manual published and utilized for all procurements</li> </ul>
d) Training Biodiversity Management	In-house capacity enhanced for biodiversity conservation and wildlife-management	Number of persons trained on courses organized for forest officers	Number of cources organized for forest officers

		<ul> <li>Number of persons trained through Overseas programme organized for exposure to skills, techniques and technology</li> </ul>	• Number of countries forest officers are exposed to under the project
e) Training Forest Management	Capacity enhanced of all officers and frontline staff on forest management	Number of officers and frontline staff trained through courses conducted as per plan	• Number of courses organized for forest frontline staff/officer
		Number of ACFs, Range Officers, Head Forest Guard and Forest Guard trained through conducting exposure visits as per plan	• Number of states forest staff are exposed to under the project
f) Training Ecotourism	Expertise and capacity of forest department enhanced on ecotourism	<ul> <li>Number of persons trained through courses on ecotourism activities</li> </ul>	Number of courses organized for forest frontline staff/officers
g) Monitoring & Evaluation	Annual Review of project	• Seminars organized by PMU at end of each fiscal year	<ul> <li>Lessons learnt through Annual Reviews are incorporated in annual plans each year</li> </ul>
h) Establishment of sustainable Finance Mechanism	Financial resources secure to sustain project's biodiversity conservation initiatives	Rules established within JFMC, EDC, PSS to collect and/or share fees with forest department for ecotourism (non- consumptive use)	• Cumulative size of fund with JFMC/EDU/PSS generated from such collections (Rs.)

Sub-Component	Area of Intervention	Indicators-Quantity	Indicators-Quantity
		• State allocation available for biodiversity conservation	• State funds are earmarked for each fiscal year
		International financing schemes for environment protection explored	• International finances available to support the cause
i) New Establishment of Training	Training facility for capacity building of frontline staff	<ul> <li>Training centre established as per plan</li> </ul>	• State fund supports continuous operation of the centre
Facility			• Number of courses of conducted per year
			• Number of persons trained per year

#### 2.2 Specific Objective Assignment b)-areas of assessment

This process will require close consultation and discussions with PMU, thus the survey agency/institutions will prepare the PCR after the completion of the endline SEE survey, and many of the inputs from the survey will for the part of the PCR. While preparing the questionnaire for the SEE the survey agency/institution will study the Annex 1, and will include the question to generate the information for the PCR.

### 2.3 Specific tasks to be performed by Survey Agency/INSTITUTION

Following are the tasks to be performed by survey agency/institution

- 1. Undertake the sample project village and areas for primary and secondary data collection:
- 2. Undertake the survey by administrating the semi-structure questionnaires/check-list in selected areas as per sample size;
- 3. Conduct face-to-face interviews with the households by visiting selected location;
- 4. Prepare a compilation sheet in the desired format based on the information collected, and share the filled/complete questionnaire and data compilation sheet with PMU;
- 5. Capture important socio-economic aspects using digital camera and submit digital photographs with PMU along with data;
- 6. Document sample success stories due to the project interventions

#### 3. Methodology

#### 3.1 Survey Approach

Households in selected project GPU/ wards would be interviewed, and the survey would broadly cover the scope as defined in previous sections 2.2.

Face-to-face interviews with households is proposed for the socio-economic survey. A qualified staff would be hired for short-term for the data collection. The random sampling method would be followed to identify households within the defined ward as per the defined sample size.

Prior to initiating the survey work a training programme for the survey team would be organized. It would also be explained that caution need to be taken by the survey teams-not to 'lead' respondents by suggestion answers or reinterpret any question that may likely affect answers. It would be mandatory for all survey staff to attend this training/orientation.

#### **3.2 Survey Tools**

Following the standard particles for undertaking any socio-economic survey given tools would be adopted for eliciting information from the randomly identified household or a group.

- Questionnaire: A semi- structure questionnaire need to be adopted for primary data collection i.e. interviewing household directly involved in the project. The questionnaire should be pretested and suitably modified prior to initiating socio-economic survey.
- Focused Group Discussions (FGDs): FGDs need to be organized with stake holders (15-20 people involving both adult man and women across age and set-ups within the sampled JFMC/EDC or PSS as well as SHGs to generate information using a check-list. The check-list could be further modified at the time of actual execution based on the local conditions.

#### **3.3** Coverage of the Survey

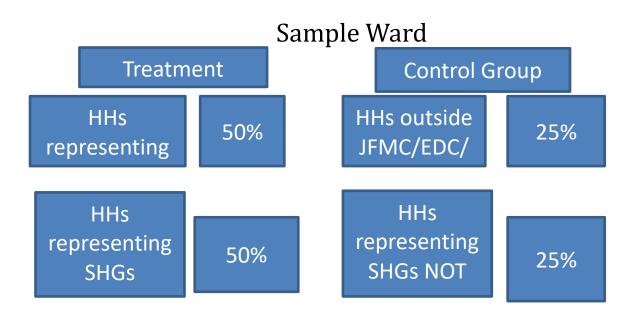
The survey would cover representative EDCs/JFMCs falling in identified project areas following a random sampling method to select the JFMCs/EDCs out of the total list of JFMCs/EDCs under the project.

A highly representative sample with low uncertainty will, under almost any realistic circumstances, be 90-100 units for population over 1000 or say approximately 10%. This sample size is normally recommended for highly varied population with+10% sampling error at the 95% confidence interval. If the target population is less varied, which may be the case with the target population around forest areas under the project, even less that 10% sample size may be chosen. For the socio-economic endline survey in the identified 10% JFMCs/EDCs, 10% sample households is to be considered.

#### 3.4 Sampling procedure/design

The sampling has to be rigorous to compare changes pertaining to different groups of beneficiaries of a project or compare changes for beneficiaries with those of control group.

Accordingly, the treatment group and control group would be selected out of two set of household viz., a) representing JFMS/EDC and SHG **supported under the project**, and b) otherwise. Subsequently random sampling will be done in identified wards to select households as per sample size to participate in the survey as respondents.



It is suggested that the general members of the LFMC/EDC in non-project villages and the SHGs not supported by the project could act as 'good' control group. However, the number of sample to be covered under 'control' will be half the number of sample that will be covered under the 'treatment' group.

#### **3.5 Quality Control**

Field investigators will need to be instructed to check questionnaire completeness and accuracy at interview locations. At the end of each day, questionnaire debriefing sessions between the Survey Coordinator and all Field Investigators will be necessary to identify any complication and to agree on common definitions. Field investigators will be asked to write down all additional qualitative information which is observed and analyzed by the team per ecotourism wards under consideration. This process would be important to capture important data that otherwise could be left out by the restrictive design of the research instruments.

#### 3.6 Survey Team

The survey team will comprise of key professionals and field survey professionals. The key professional team will be held by senior M&E Specialist and will be supported by a forestry specialist as well as sociologist. The survey agency hired for the purpose must deploy one or two teams comprising of 3 Field Investigators each (2 males and one female) each. These survey teams must be supervised by a Survey Coordinator whoc is experienced in survey supervision and can guide the survey work and ensure quality data collection. Overall, survey work would be guided by some senior key specialists.

#### 3.7 Data/Information to be provided to the Survey Agency/Institution

All required primary data will be collected by the survey agency/institution however all the secondary data that is required for this assessment exercise will be provided by the client. The sample survey will be randomly checked by the PMU officials during the survey duration.

### 4. Deliverables

Following will be the key deliverables of this assignment

SI.	Deliverable and brief description	Timeline
1	Inception Report-including the methodology, survey tools, team composition and work plan	Within 15 days of the contract
2	Draft SEE Report-based on the primary survey and secondary data collection	Within 4 months of signing of contract
3	Draft PCR-based on the Annex 1 of the MoD	Within 1.5 months of submission of Draft SEE report
4	Final SEE Report and PCR	Within 15 days after approval from the Clint of draft reports

< END >

End Notes