Terms of Reference
for a feasibility assessment and baseline survey in project areas of the HP-FES project in Himachal Pradesh

General Information

Project:	Forest Ecosystem Services in Himachal Pradesh
Project No.	112210000300
Duration of the consultancy	6 months
Contact person(s)	Dr. Joachim Schmerbeck (GIZ)

Background Information

The German Federal Ministry for Economic Cooperation and Development (BMZ) has recently commissioned Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to work with Himachal Pradesh Forest Department on Integration of the ecosystem services approach into forest management in Himachal Pradesh. Project activities have started from April 2016.

The selection of pilot's sites and the gathering of scientifically sound environmental and social data is crucial as a base for the project. Under this assignment high quality data from 16 project sites will be collected and based on this a data base for decision making and monitoring will be created

Rationale of the Assignment

The concept of FES and especially their management cannot be understood and performed without having basic information on the environmental and social settings of an area. The information about the area under concern must be available in a manner that allows a holistic view on key factors important for the FES approach.

The project will implement the FES approach in 8 sites all over Himachal Pradesh. Prior to implementation a feasibility study and base line survey for final sites selected needs to be carried out to generate a base for a decision on these approaches. Sites will be finalised by the project core team after analysing the feasibility assessment report. The following list contains the shortlisted forest divisions for final site selection. The sites will be on an average 100 Km. (to and fro) from the forest division headquarter mentioned below. Exact location of these sites will be provided by the project at the start of the contract. The area of the demonstration will be about 100 ha.

Shortlisted forest divisions for final project site selections

Forest Circle	Forest Division Selected	Reason for Initial Inclusion
Bilaspur	Kunihar	• ES for fodder is in demand by the local communities • Overlap with Lantana eradication programme. • The division has some exposure to FES approach
Chamba	Dhalousie	• ES for water is in demand Exposure to urban water supply issues • May be screened for tourism • The site selections needs to be discussed with KfW
Dharamshala	Palampur	• ES for water is in demand • Palampur Water Governance Initiative (PWGI) project is already operational • The site selections needs to be discussed with KfW
Hamirpur	Dehra	• ES for water is in demand • This is rain fed area • The area is fire prone • The site selection needs to be discussed with KfW
Kullu	Kullu	• ES for NTFP in demand • Hydel Project in the area
Mandi	Karsog	• ES for NTFP in demand • Multiple NTFP species in the area • Green accounting data available for NTFP - BASELINE
Nahan	Renuka ji and Solan	• In both the forest divisions working plan preparation is in progress • ES are fodder and NTFP (Resin) • Linkages with Lantana eradication programme • Water issues needs to be screened
Rampur	Rampur	• Hydel Projects
Shimla	Shimla	• To be consulted with concerned DFOs
Kinnaur	Kinnaur	• ES for NTFP and tourism

This assignment is about collecting the relevant data for the baseline survey and compiling them to a data base that will allow the monitoring of the effect of the project intervention on social and environmental indicators.

Description of the Assignment

This assignment is for six month. It includes a feasibility assessment of 16 sites and base line survey in finalised 8 project sites in Himachal Pradesh and the establishment of a data base that allow the monitoring of the survey outcomes during the course of the project implementation. The work needs to be completed in six months from the date of signing of contract.

Objectives of the Assignment

The main objective of the assignment is to establish the baseline data for the project sites which will be used to prepare the micro plan and monitoring system of the sites.

1. To know the status in the project sites regarding:
    a. land use pattern and their ownership status
    b. supply and demand of forest ecosystem services
    c. status of the forest in terms of biomass, tree diversity, human impact
    d. dependency of local communities on forests for various ecosystem services and their demographic profile.
    e. suggested implementation mechanism for micro plans
2. To accomplish a database that contains data about the projects sites as describe under "Scope of Work and Requested Services" and that enables the monitoring of the information collected under 1.

Scope of Work and Requested Services

The work includes the following activities

<u>Data collection</u>

At the beginning of the assignment most of the project sites will be fixed. The remaining sites will be decided soon. The collected data will provide a representative picture of each project sites regarding

- Overview over proportion of land use classes, their use and status of land ownership
- Status of forest vegetation in terms of tree composition and stand structure. Special emphasis on tree regeneration (density, composition, damages)
- Quantity and quality of provisioning services perceived from each forest type
- Use of regulation services water regulation (irrigation, drinking water)
- Status of cultural services (recreation, spiritual)
- List of regulating services
- Discrepancy between potential and actual supply of the regulating services carbon sequestration and water regulation
- Status of soil conservation
- Degrading impacts on forests
- Gender wise ratio and extent of households depending of forest for income and domestic use
- Demographic profile of the households and willingness of communities to adopt FES approach

<u>Data base</u>

The collected data will be arranged in a data base that allows to add new data of subsequent assessments as well as analyses that provide an overview over the status of the change in land use pattern; supply and demand of forest ecosystem services; status of the forest in terms of biomass, tree diversity, human impact on forest; dependency and income of local people on forest.

Expertise Required

Following expert of team is required for the assignment:

- Team Leader: More than 15 years of experience in the field of natural resource management and project management. Ph.D. is an advantage. No of days up to 25
- Team Manager: Expert in natural resources management and sound knowledge of social science, experience in the field in both subjects No of days up to 50
- Geographical Information System (GIS) expert with experience in database design and management. No of days up to 30
- Data Entry: Demonstrated experience in data entry. No of days up to 20
- Field Staff: Demonstrated experience in field data collection. No of days up to 360

The consultant/ organization should have

- Excellent records in feasibility assessment and base line assessment
- Special emphasis on forest inventory and forest ecosystem services
- Expertise and capacity in remote sensing, Geographical Information System (GIS) and database design
- Sufficient capacity to handle the task along with the CV of the team members
- Familiarity with Himachal Pradesh landscape

Expected deliverables with time lines

The consultant/ consultant organization should:

1. Four weeks after signing the contract:
   Inception Report and Presentation: Submission of inception report including
   a. Feasibility study methodology approved by project team
   b. Baseline methodology and tools to be used for data collection
   c. Final version of data base
   d. Initial draft of annotated outline of the report
2. 10 weeks after signing the contract:
   1st Interim Report:
   a) Submission of feasibility report of 16 sites and its presentation to core team. Final sites will be decided by the project.
   b) A report elaborating on the way each data for final 8 sites will be collected and how it is planned to be used in the analysis.
3. 20 weeks after signing the contract
   2nd Interim Report: Submission of report after completing 100% of field work for 8 sites. The report will elaborate on changes made in the methodology as described in the 1st interim report (if any), the way each data was collected and how was used in the analysis.
4. 21 weeks after signing the contract
   Presentation on the results of the baseline survey
5. 24 weeks after signing the contract
   Final report that shows the result of the baseline study and a clear link to the methodology applied as well as completed database

Location and Duration

This is 6-month assignment which will cover feasibility assessment and a base line survey in the 8 project sites all over Himachal Pradesh under the HP-FES project and the establishment of a data base for monitoring the outcomes of the baseline survey

Timeline:

Completion of deliverable no. 1	4 weeks
Data collection	12 weeks
Final report and completed database	2 weeks
Presentation of results	1 week
Final report and completed database	1 week
Total time	24 weeks