

Terms of Reference

Study of Vi Agroforestry's impact on biodiversity and ecosystem services through SALM and agroforestry

Background

Vi-skogen (Vi Agroforestry) is a Swedish non-profit foundation established in 1983. We work with local partner organisations in East Africa, mainly in Kenya, Rwanda, Tanzania and Uganda to empower smallholders' farmers and their organisations to improving their living conditions. Vi Agroforestry has 39 years of experience in promoting agroforestry, sustainable agriculture, human rights-based approaches, gender equality, and empowerment of women, men, youth, and children. Vi Agroforestry works in partnership with farmer organisations, government agencies, and other civil society organisations to promote sustainable food production, a safe environment, and human rights-based approaches that benefit women, men, young people, and children.

Vi Agroforestry has, through sustainable agriculture and land management (SALM) and agroforestry, been promoting a diversification of species planted and animals reared on farmland. This methodology and the diversification have had an impact on biodiversity, both through direct diversification of crops but also indirectly through promoting an environment where species of animals, insects and plants can thrive. Through storytelling and observations, Vi Agroforestry has established that the biodiversity has increased but this has not been verified through a proper inventory.

Objective

The aim of the study is to establish the impact Vi Agroforestry's methods – SALM and agroforestry has on agrobiodiversity i.e., the variety and variability of animals, plants and micro-organisms that are used directly or indirectly for food and agriculture, including crops, livestock, forestry, and fisheries. It comprises the diversity of genetic resources (varieties, breeds) and species used for food, fodder, fibre, fuel and pharmaceuticals. It also includes the diversity of non-harvested species that support production (soil micro-organisms, predators, pollinators), and those in the wider environment that support agro-ecosystems (agricultural, pastoral, forest and aquatic) as well as the diversity of the agro-ecosystems (FAO,1999), through a field inventory of agrobiodiversity. Indicators such as the number of species in a given area will verify the agrobiodiversity on the farms. The general question we seek to answer through this inventory is how agrobiodiversity has changed with the implementation of SALM and agroforestry. The inventory will be conducted through both quantitative and qualitative participatory methods. Vi Agroforestry will provide data collection tools that the consultant will assist in refining before administration to the informants. Data collection will involve household surveys, focus groups discussions, and key informant interviews. The study will also involve use control farmers (farmers without agroforestry and SALM practices), taking pictures of different species of flora and fauna, taking of GPS points and most significant change stories.

More specifically, the study will seek to answer the following questions

1. The number and variation of species in the land use of land users implementing SALM based on agroforestry.
2. The number and variation of species in the land use of land users **NOT** implementing SALM an agroforestry (reference plots).
3. What are the land-based resources used from land outside the farm?
4. How has changes in the general biodiversity been observed by key informants?

Methods and Approach

The study shall be conducted through a consultative process with input from key stakeholders as well as collection of data through questionnaires distributed to land users. The consultant shall conduct direct interviews with land users (with questionnaires) as well as key informants such as members of the partner organisation and other key stakeholders working in the geographical areas.

Methodology of the study

- Vi Agroforestry will provide a detailed methodology including a questionnaire as well as the kobotoolbox software for data collection.
- The inventory will be conducted in at least two partner organisation working areas in each country (Kenya and Tanzania)
- For each partner organisation working area, the consultant shall interview at least 60 farmers (land users) implementing Vi Agroforestry's methods of SALM and Agroforestry as well as at least 30 farmers (land users) not implementing Vi Agroforestry's methods of SALM and Agroforestry to be used as reference plots. To identify the reference (control) farmers, project farmers will be asked to introduce the interviewer to a farmer who had similar socio-economic status and did not adopt Vi Agroforestry methods.
- In addition to the questionnaire, the consultant will, together with the land users, make an inventory of all different species included in the definition of agrobiodiversity. This data will be collected in an excel sheet and lists as follows: Local name, latin name (can be added at a later stage), plant usages (i.e., food, energy, medicinal plants). One mention of each species will be sufficient, except for genetical differences (i.e., green bean, mung bean and so on).
- Key informants, such as partner organisations and village leaders, will be interviewed for further information. Questions will be provided by Vi Agroforestry and will be discussed with the consultant for necessary improvement and the answers will be transcribed and summarized.
- An inception report will be prepared by the consultant based on and in line with this term of reference and it will be reviewed and agreed upon by Vi Agroforestry.
- The inception report must include a work plan for the study detailing reflections on the methodology with potential updates to the questionnaire and timeframe for conducting the interviews. It's the responsibility of the consultant to book meetings for the interviews through collaboration with the partner organisation. A list will be provided by Vi Agroforestry/Partner organisation.

Key Deliverables

The specific deliverables of the assignment include but are not limited to the following:

Deliverables		Deadline
<i>Deliverable 1:</i> Inception report- Production of one document detailing the consultant's approach to the study including reflection of the provided questionnaire for validation by Vi Agroforestry	Detailed work plan and timeline developed	3 days of signing contract
<i>Deliverable 2:</i> Draft report		

Production of one document showing key findings of the study	Draft report (word document in English)	1month after signing the contract
<p><i>Deliverable 3:</i> Final report</p> <p>Production of the final study report with the following information.</p> <ul style="list-style-type: none"> • Analysis of the results from the questionnaires in the form of summaries, tables, quotations, diagrams from both SALM users and references plots • Analysis of the species inventory in the form of tables and diagrams listing number of species, mean number of species, usage of species – both SALM users and references plots • Summary of the interviews with partner organisations and other key informants. • In addition, the report will include annexes including of list of species with local and scientific names, transcribed interviews, and answers to the questionnaires. • Final report of the study should include an executive summary of a maximum of one page. The main report must include a chapter of conclusions and recommendations for a toolkit and methodology for biodiversity measurement that can be developed from data collection and the data analysis. 	Final report (word document in English)	2 weeks

Duration of the assignment

The duration for the works specified under this Terms of Reference (TORs) shall be for two (2) months from the signing of the contract without extension.

Required Knowledge and Skills

Provide a technical and financial proposal that demonstrate the following

- Proper understanding of the TOR's demonstrating how the assignment will be designed and carried out.
- Qualification of the team and their role in delivering the assignment
- Experience from research on biodiversity and ecosystems services.
- Extensive experience in qualitative and quantitative research with an emphasis on climate change, natural resource management, and agriculture or agroforestry.
- Priority will be given to those applicants with demonstrated evidence of past work on the topic/ issues.

- Demonstratable ability to collect data in all the 2 countries
- Fluency in English and Kiswahili is required.

Term of validity of the consultancy and method of payment

The consultancy is expected to have a maximum duration of two months – 20 business days from the signing of the contract.

Ownership and confidentiality

Vi Agroforestry is the sole owner of the results of the evaluation and all other information produced as a result of the evaluation. The result of the evaluation can be used after previous authorization from Vi Agroforestry.

Receipt of offers

The submitted offer shall include:

- Cover letter
- Technical and financial Offer
- Offers shall be sent to the following electronic mail: peter.wachira@viagroforestry.org and matilda.palm@viskogen.se
- The deadline for the submission of the offer is 18th December 2022.