

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

Provision of organic fertilizers, natural ameliorants, agricultural crops seeds and seedlings	Project number/ cost centre:
	<u>18.2062.0-002.00</u>

0. List of abbreviations	2
1. Context	3
2. Tasks to be performed by the contractor	4
3. Criteria for the assessment of candidates	5
4. Travel	6
5. Inputs of GIZ or other actors	6

0. List of abbreviations

AVB	General Terms and Conditions of Contract (AVB) for supplying services and work 2018
BMZ	German Federal Ministry for Economic Cooperation and Development
CV	Curriculum Vitae
ECOserve	“Management of natural resources and safeguarding of ecosystem services for sustainable rural development in the South Caucasus” Project
EU	European Union
EU4Sevan	“Environmental Protection of Lake Sevan” Project
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ToR	Terms of reference
UNDP	United Nations Development Programme
SSA	Small-scale agriculture
OF	Organic fertilizers
NA	Natural ameliorants
WD	Working days

1. Context

The EU4Sevan (Environmental Protection of Lake Sevan) Project is co-funded by the European Union (EU) and the German Federal Ministry for Economic Cooperation and Development (BMZ) and jointly implemented under a Multi-Partner Contribution Agreement by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the United Nations Development Programme (UNDP). The Project is part of the EU Action “EU4Energy Efficiency and Environment” and the BMZ-funded programme “Management of natural resources and safeguarding of ecosystem services for sustainable rural development in the South Caucasus” (ECOserve).

The Project’s overall objective is to enhance the environmental protection of Lake Sevan, which is the largest freshwater lake in the Caucasus Region. Lake Sevan is the most significant source of freshwater, irrigation water, aquaculture, as well as hydropower source in Armenia. Its condition has direct bearing on the region’s environmental health and Armenia’s economic potential.

Main beneficiaries of the project are people living in Gegharkunik region.

Biogenic elements, such as nitrogen (N), phosphorus (P), and potassium (K) are considered one of the major pollutants of lake Sevan water and are responsible for lake “blooming” and water quality worsening. The sources of these biogenic elements are different: wastewater and sewage that without treatment enter the Lake, agriculture, fish farming, and other sources. Vegetable growing, where large quantities of mineral fertilizers and chemicals are used, as well as livestock breeding are considered a major source of N in the lake. Consequently, the improved vegetable growing practices, that are using organic fertilizers, soil natural improvers, and environmentally friendly bio-liquids, as growth stimulants may considerably minimize the leaching of N element into the surrounding environment and its entrance into lake Sevan.

Agroecosystems are an irreplaceable means of human livelihood and play an important role in the processes taking place in the biosphere, therefore maintaining their stability is one of the priority issues of agricultural production. Sustainability is the main indicator of ecosystem assessment, which determines the complex of management measures of agricultural systems (modern and perspective). Sustainability is the preservation of the structure and practices of the agricultural system. Ensuring the best structure and stable productivity of those systems, preventing environmental pollution, i.e. maintaining their structure and normal operation, is regulated by the investment of additional materials (organic and mineral fertilizers, various mixtures, meliorants) and energy.

It cannot be denied the fact that the stability of agrosystems largely depends on soil and climate conditions, that is, energy processes, moisture regime, which directly or indirectly affect the formation of soil properties and the diversity, growth and development of soil biota, flora and fauna, on the creation of primary and secondary products. Therefore, any cultivated agricultural system must be based on resource, economic, ecological, technological and product quality criteria. In other words, the modern control of the sustainability of agro-ecological systems must be intelligently coordinated with the criteria of the quantity of production, its natural and technical resources and the scale of changes in the natural environment. It is also important to use different methods to adjust the mineral nutrition regime in such a way that nutrients are maximally involved in the processes of creating

agricultural products, to match the introduction of nutrients to the soil with the real requirements of plants, in order to ensure the highest yield, to contribute to the improvement of the quality indicators of the crop, at the same time on the formation of a unit crop from the soil, to the reduction of the specific consumption of nutrients and to cause a minimum load on the environment.

2. Tasks to be performed by the contractor

The objective of this service is in-time provision of organic fertilizers (OF), natural ameliorants (NA), seeds and seedlings to the model pilot small-scale agriculture (SSA) 4 different experimental sites in Gegharkunik region (Gavar, Martuni and Vardenis). The list of OF, NA, seeds and seedlings and their quantities are specified in the table below.

This service provider should agree with EU4Sevan project consultant the procurement and transportation of materials, seeds, and seedlings to project implementation sites in Gavar, Martuni and Vardenis.

Table 1
The list of materials, seeds, and seedlings to be provided to Gegharkunik region

No	Fertilizer/plant material	Required amount per 1 ha	Cost of 1 unit, AMD	Total cost, AMD
1	Organo-mix (organic origin fertilizer)	7560 kg		
2	Biohumus (organic origin fertilizer)	1495 kg		
3	Bio-liquid (organic origin fertilizer)	20 litres		
4	Zeolite+bentonit (Natural ameliorant)	3050 kg		
5	Potato planting material	1600 kg		
6	Cabbage planting material (broccoli, Brussel sprouts, cauliflower, cabbage)	5700 seedlings		
7	Seeds of legumes: Beans (green), Leafy vegetable seeds	19 kg		
	Total fertilizer/plant material			
8	Transportation cost for the items to transport to Gegharkunik region (Gavar, Martuni and Vardenis)			
	Total			

To achieve this objective the following tasks need to be carried out:

Task 1. Provision of organic origin fertilizers- organomix, bio-humus and bioliquid- to 4 piloting sites in Gegharkunik region (Gavar, Martuni and Vardenis communities). Only locally produced OF are acceptable.

Task 2. Provision of NAs (zeolite and bentonite) to 4 piloting sites in Gegharkunik region (Gavar, Martuni and Vardenis communities).

Task 3. Provision of agricultural crops seeds and seedlings (potato, variety of cabbages, legumes, and leafy vegetables) preferably from the local origin (Gegharkunik region) to 4 piloting sites in Gegharkunik region (Gavar, Martuni and Vardenis communities).

Certain deliverables, as laid out in the table below, are to be achieved by certain dates during the contract term:

N	Deliverable	Deadline	Number of the required expert working days (WD), expert/WD
D1	Organic origin fertilizers- organomix, bio-humus and bioliquid is provided to Gegharkunik region 3 communities (Gavar, Martuni and Vardenis)	April 19, 2023	up to 4
D2	NAs (zeolite and bentonite) are provided to 4 piloting sites in Gegharkunik region (Gavar, Martuni and Vardenis communities).	April 19, 2023	up to 4
D3	Agricultural crops seeds and seedlings (potato, variety of cabbages, legumes, and leafy vegetables) preferably from the local origin are provided to 4 piloting sites in Gegharkunik region (Gavar, Martuni and Vardenis communities).	April 21, 2023	up to 4

Period of assignment: 12 days in the period from April 15, 2023, until April 27, 2023.

3. Criteria for the assessment of candidates

Qualifications

- Relevant education and research background
- 5> years of experience of field-based agricultural activities and provision of fertilizers and/or seeds and seedlings of agriculture crops
- 5> years of experience to work in Gegharkunik region
- Knowledge and experience on innovative agriculture.

4. Travel

The service provider must travel to Lake Sevan to provide outlined materials, seeds, and seedlings.

5. Inputs of GIZ or other actors

The project will support the Contractor to meet responsible regional authorities if needed. EU4Sevan project consultant and field coordinator will participate in distribution of materials, seeds, and seedlings to selected farmers.