

TERMS OF REFERENCE

Promoting the use of energy efficient stoves and fuelwood in Khulo Municipality (Ajara Autonomous Republic, Georgia)

Background

German Federal Ministry for Economic Cooperation and Development (BMZ), jointly with WWF Germany, supports the project *“Improving the resilience of forest ecosystems through adaptive forest management in Georgia”* (the “Project”). The project is implemented in Autonomous Republic of Ajara, Georgia. It aims to incorporate climate adaptation issues in forest management, in order to ensure the resilience of forest ecosystems.

The project is carried out over a three-year period (January 2015 – December 2017). It is implemented by WWF-Caucasus Programme Office (WWF-CauPO) in close coordination with WWF Germany and with the assistance of local project staff in Ajara. The key objectives of the project are:

- 1) *Decreasing the levels of forest degradation through adaptive forest management and more efficient use of wood.*
- 2) *Contribution to the conservation of forest ecosystems and their services*
- 3) *Identification and mapping forests with High-Conservation Values.*
- 4) *Improvement of the livelihoods of local population.*
- 5) *Conducting awareness-raising activities for the general public, including schoolchildren.*
- 6) *Capacity building of relevant forestry authorities in Ajara.*

The promoting of use of energy efficient stoves and dried up wood is one of the key components of the project. It should help reduce the overall consumption of fuelwood in the target area and, in this way, reduce the pressure on natural forests. The target location is a selected village in the mountainous area in Khulo Municipality of Ajara. WWF-CauPO will hire an organization or a consulting firm (hereafter, “the consultant”) to implement this task.

Objectives of the assignment

The main objectives of this assignment are to: a) supply energy efficient stoves to the selected rural community, b) construct solar wood drying facilities and supply fuelwood for drying to the selected households, c) renovate and equip a small workshop (with relevant tools, equipment and facilities) for the production of energy efficient wood burning stoves and d) train artisans in the manufacturing of stoves and wood drying facilities.

Scope of services

The selected pilot village shall include approximately 10 households. Each household will receive one energy efficient stove and one solar wood drying facility (shelter). The following stages are envisaged for this assignment:

Renovating and equipping a selected workshop for manufacturing wood burning energy efficient stoves - the workshop should be selected in the location as close as possible to the pilot village, preferably within walking distance. The operating area of the workshop building shall at least be around 40 m². The refurbishing will include (if necessary) the installation of good quality door(s) and window(s) and improving electric power supply facility. In addition, the following new equipment/machinery will be provided to the workshop, as needed: iron table, devices for holding and cutting iron sheets, welding apparatus, electric driller, pulverizer, measuring tapes, hammers, rulers, rectangular rulers, pliers, leveler, drills, iron cutting scissors, electric extenders, electrodes, blades/stones for iron cutting devices, working gloves, iron brushes, etc. The machinery/equipment should be new, in good condition and ready for operation. It is envisaged that at least three workers will be employed in this workshop. In the future, the workshop will serve not only the target village, but also villages nearby.

Manufacturing energy efficient wood burning stoves - the stoves shall have cooking and baking chamber(s) and water heating tanks (up to 50 liters). Further details related to the design and functions of the stoves, as well as the material of which they will be made, will be determined by the consultant after close consultations with the beneficiary households. The stoves will be made in the workshop described above, by the trained artisans (see below).

Construction of wood drying shelters - the shelters will be made of wood (with preferably iron joints) and will preferably have the following sizes: length – 4 meters, width – 3 meters and height – 2 meters. They shall have a stable cover to protect from rain (and not to be removed by wind) and be designed in a manner, to safeguard maximum efficiency of drying (i.e. allowing maximum aeration of wood and reception of solar energy). The shelters will be constructed in the yards of the residence houses of the selected households. It is anticipated that the construction of wood drying shelters will be completed by August 2017.

Fuelwood will be purchased by WWF-Caucasus (in autumn 2017) and transferred to the selected households free of charge, for placing in already constructed wood drying shelters. Concrete volumes of fuelwood (most likely up to 15 m³ per household) will be determined in consultation with the consultant, after the latter assesses the demands of the households, based on their past usage of wood. It is planned that the selected households will start the consumption of the dried fuelwood in autumn 2018.

Training of artisans in manufacturing wood burning energy efficient stoves – initially, it is envisaged that at least three artisans (working in the selected workshop, which will be refurbished and equipped) will be trained by the invited specialist. These trained artisans will manufacture the stoves, which will subsequently be transferred to the selected households. In addition, one of these three trained artisans will later conduct a multiplier training for 10 days, to the interested residents/artisans living in nearby villages. The training will be conducted in the workshop constructed under these ToRs.

Further training and awareness raising - additional trainings will be conducted in 10 other villages of Khulo Municipality (one training per village; the training lasting one day). These trainings will be of theoretical character and will include information about energy efficient wood burning stoves, wood drying facilities and adaptation of forest management towards climate change in

general. The training can be conducted by an invited specialist. Main purpose of these trainings is to encourage the participants to adopt the practice of efficient use of fuelwood.

Training of independent artisans to build wood drying facilities (shelters) – this training will be conducted by invited specialist(s) for the period of seven working days. The participants and their number (at least ten persons to be trained) will be determined in due course. Later, the wood drying shelters will be built either by the trained persons, or by invited specialists.

All of this work will be conducted in the period commencing at the end of April or beginning of May 2017 and ending by end November 2017. It includes the time necessary for the submission of the final report.

Reporting and Approval Procedures

The consultant will prepare and submit to WWF-CauPO a detailed work plan for the fulfilment of the above-mentioned tasks within about two calendar weeks from the signature of the contract agreement. The plan should include detailed time schedule and volumes of work and methodology. Interim report will be provided within about two-three calendar months from the beginning of the assignment, after the completion of the construction of workshop for production of energy efficient wood burning stoves. The report will be in MS Word format and include: the description of used materials, provided tools, and produced outputs, photos and other type of documentation/evidence. Final report will be provided after completion of work within about six-seven calendar months from the beginning of the assignment. The final report will be submitted in MS Word and pdf formats. It will include the detailed description of used methodology, outputs, photo materials, meeting/training reports and other respective documentation.

All reports should be sent to Zurab Manvelidze, project coordinator of WWF-CauPO in Ajara (zmanvelidze@wwfcaucasus.org). The project coordinator will provide feedback to the consultant within ten working days after receiving the reports. If no response is received by the consultant after the expiration of this period, the report will be deemed as accepted, unless a written request is provided by the coordinator to allow for more time for the revision. The comments and requests for further information/corrections should be addressed by the consultant in a timely manner. Only after the formal acceptance of the Final Report by the coordinator (by signing the acceptance form by both parties - the consultant and the coordinator) can the contract be considered as completed.

WWF's Input

WWF will help the consultant identify the pilot village. All information available at their office, which might be useful for the completion of this assignment, will be provided to the consultant free of charge. WWF will purchase the fuelwood and transfer to the selected households free of charge. All other tasks outlined in these ToRs (except purchasing fuelwood) are the responsibility of the consultant and the respective costs will be covered by the latter.

Qualification requirements for the consultant

- Minimum two years of experience in alternative energy resources as well as the application of energy efficient technologies
- Minimum five years of experience in socio-economic assistance for and capacity building of the communities

- Significant experience in conducting procurement within the framework of projects funded by international donors
- Significant experience in the field of promotion of manufacturing activities
- Ability and willingness of communication with local population in Ajara
- Ability and willingness to involve local residents to the maximum possible extent in the works envisaged by these ToRs
- Advantage will be given to the candidates which have working experience in Ajara and, especially, in Khulo Municipality in the areas outlined in the ToR above.