

# Rubber Smoked Sheets GIS Service Provider Terms of Reference

**Reports to:** Senior Intervention Manager for Rubber, GROW

**Also involved:** Team Leader, Market Development Specialist, and Monitoring & Results Measurement Manager, GROW

**Location:** Monrovia, with travel to Montserrado, Margibi, and Bong Counties

**Duration of engagement:** 40 working days

**Start date:** April 2017

## Background

GROW is a Sida-funded market development initiative utilising the 'Making Markets Work for the Poor' (M4P) approach to facilitate sustainable, pro-poor economic growth and stability across Liberia. Currently working in the oil palm, rubber, vegetable and cocoa sectors, the programme seeks to contribute to sustainable peace and poverty reduction through inclusive and integrated economic development in Liberia. Its objective is substantially increased incomes and employment opportunities for a large number of poor women, men and youth, created through agricultural market system change.

The focus of GROW's work in the rubber sector is on supporting smallholder rubber producers to access an alternative market for the sale of rubber. This will be achieved through the development of a Ribbed Smoked Sheet (RSS) processing industry in partnership with selected Business Cluster Developers (BCDs). GROW currently has partnerships with two BCDs, ARI and COR Corporation, who are looking to source a reliable supply of latex and wet sheets from farmers surrounding their facilities in order to produce RSS.

Smallholder farmers, through cooperatives, stand to benefit from their involvement in RSS processing, as opposed to simple, routine production/tapping. Processed RSS will create opportunities for economic cooperation between farmers of different scales. Farmers may either sell liquid latex or wet sheets directly to a processing facility that will then process RSS, adding value to raw latex. They may also become the owners or co-owners of processing plants or factories, increasing their income and viability. To strengthen the information available to BCDs and cooperatives,

## The assignment

GROW is seeking a service provider with expertise in developing Geographic Information Systems (GIS) to undertake a mapping exercise for at least 40 farms affiliated to two cooperatives, Kwapahgei and Garmue, who will supply the BCDs with latex. The service provider will develop a dynamic map to enable the BCDs and target farmers to visualise, question, analyse and interpret data associated with individual farm base maps. The output will be used by the BCDs, cooperatives and GROW to deduce the production information for business planning. This information will inform farmers' decision-making around life expectancy and yield.

The service provider will collect data on the farms and surrounding areas (including road network, natural water sources etc.) and develop a base map for each farm, area planted, the age of the farms and clonal variety of the trees. Along with a map, a database will be developed on the production capacity and life expectancy of the farms.

## Responsibilities

1. Develop and draft concept or diagram describing how the GIS will function to meet the need of BCDs and their cluster farmers;
2. Conduct field-based data collection to capture all data needed for the development of the map;
3. Develop a scalable and dynamic GIS map that displays information about cluster farmers in terms of farm size, area of farm under cultivation, area that could be used for farm expansion, latex production volume among other data;
4. Coordinate with relevant groups, cooperatives and organizations to collect, collate and analyse all spatial data sets for the farms throughout the project;

**Key Deliverables:**

- › Initial report – detailing results of stakeholder (GROW, BCDs, cooperatives/smallholders) consultations and different needs that will be served;
- › A fully functional combined GPS/GIS database that will include the following functionalities:
  - a. Visual farm base map displaying farm size, age of trees etc.
  - b. Enable the user to undertake a clear data analysis of findings including calculation of land size per cooperative and smallholder farmer;
  - c. Produce records of mapping data from BCDs to cooperatives and farmers;
  - d. Be fully usable in urban and rural settings;
  - e. Additional functionality of the system that will enhance the utility of a separate electronic pricing and payment platform being developed by GROW.
- › User guide of the maps.

**Required Skills and Experience:**

- Proven expertise in designing, developing, and implementing mapping systems and databases
- Strong background in information technology including database development and management and GIS mapping;
- Expertise in engaging and consulting with different stakeholders, including large commercial farmers, local communities, cooperatives, smallholder farmers;
- Experience in capacity building initiatives in GPS/GIS within the agriculture/commercial sector
- An excellent command of written and spoken English, strong communication skills and attention to detail; and
- Excellent report writing skills.

Applicants should submit a CV and covering letter outlining their relevant experience and technical capacity required to undertake the consultancy to [opportunities@growliberia.com](mailto:opportunities@growliberia.com). Please entitle the email "RSS GIS Service Provider Application". The closing date for applications is 16<sup>th</sup> April 2017.