



## Environmental Protection through Expanding Lemon grass growing and Education in Uganda

*Name of activity: Activity 3 : Supporting communities of women and youth farmers for accelerated uptake of lemon grass production for environmental protection.*

### Introduction

This activity targeted women and youth to ensure that they take on lemon grass growing. This grass crop would later contribute to the protection of the soil from agents of soil erosion that lead to environmental degradation in the targeted area.

### Sub Activities

With support from Japanese Fund for Global Environment (JFGE) and Global Bridge Network (GBN), SORAK Development Agency has been able to carry out the following sub activities under activity 3 “;

- Activity 3-1 Procure and supply 20 tons of lemon grass planting tufts to 200 individuals
- Activity 3-2 Carryout monthly on farm mentoring visits for 10 months
- Activity 3-3 Support farmers to deliver harvested grass to SORAK Community based lemon grass distilling plant
- Activity 3.4 Carry out lemon grass distillation into essential oil
- Activity 3.5 Transport and supply lemon grass spent grass to banana farmers

### Result of Activities

The report presents key achievements, challenges as well as key recommendations. Under this activity SORAK carried out the following

- **Activity 3-1 Procure and supply 20 tons of lemon grass planting tufts to 200 individuals**  
SORAK was able to procure 20 tons of lemon grass planting tufts. A total of 200 individuals were procured. The planting tufts were supplied to the youths and women trained in lemon grass growing and environmental protection by SORAK. The activity has yield environmental benefits of providing a permanent soil cover to the currently eroded bare grounds.  
The trained youth and women recommend SORAK to conduct more training on environmental conservation.



Supply, delivery and distribution of lemon grass planting tufts at SORAK offices  
 –Lusalira Kibalinga Mubende

- **Activity 3-2 Carryout monthly on farm monitoring visits**

SORAK has been able to carry out 10 monthly on farm monitoring visits to lemon grass growing farmers since the start of the project. This was led by a team of SORAK staff who managed to visit lemon grass farmers with in Mubende and Kyegegwa districts. Farmers are all praises this protect for involving them in lemon grass growing that has helped to protect their bare grounds from soil erosion. Lemon grass farmers take these monitoring visits as a valuable input by SORAK as the SORAK team shares with them how best lemon grass can protect the environment from degradation.

Monitoring has resulted into high quality lemon grass as. Apart from the information and experiences that we shared with the farmers, the visits also provide an excellent opportunity for team building and for celebrating our progress

The learning exchange visits as a result of monitoring is just the beginning of what we hope will be long and beneficial relationship with the farmers and possibly the beginning of a valuable network to restore the evergreen environment of the two districts



SORAK Programme staff during monitoring visit to Lemon grass farmers in Mubende district Uganda

- **Activity 3-3 Support farmers to deliver harvested grass to SORAK Community based lemon grass distilling plant**

SORAK has been able to support 5 lemon grass farmers to deliver harvested grass to SORAK distilling plant at Lusalira. The support is made for 110 tons to be distilled at the factory. Since this is a continuous process the farmers promise to work with SORAK as they struggle to fight environmental degradation in their respective areas.



Delivery of harvested lemon grass, emptying the distiller after boiling and the appearance of distiller.

- **Activity 3.4 Carry out lemon grass distillation into essential oil**

SORAK has been able to distill over 82 tons of raw lemon grass into essential oils. The distillation process at SORAK factory has been a success because of the availability of lemon grass. SORAK uses manual labor during the distillation process and this delays the distillation process.

The distillation plant or factory needs to be electrified in order to reduce on the cost of distillation and number of hours it takes to produce the lemon grass oils. Many tons need to be distilled in order to harvest many lemon grass from farmers.



Left: SORAK labourer feeding the distiller pan with lemon grass ;right: the energu saving stove under the distiller pan- at SORAK esential oil distilling factory –Lusalira –Kibalinga Subcounty Mubende district Uganda

- **Activity 3.5 Transport and supply lemon grass spent grass to banana farmers**

SORAK has of this period, been able to supply a total of 65 tons of spent grass to banana farmers since the start of the project. Of recent the farmers harvest high quality banana yields and appreciate SORAK for providing them with lemon spent grass which acts as manure. They also say that, the spent grass helps them on weed and soil fertility management as a result of decomposition into organic matter. Farmers also realized that spent grass helps protect the soil against heavy rainfall and intensive sunshine and also stimulates root development. They noted that since bananas are heavy feeders and need a lot of soil nutrients, spent grass helped them provide these nutrients.

SORAK faces a challenge of accessing these banana gardens during heavy rains due to impassable roads.

Pictures of healthy banana as a result of spent grass use



The banana and maize garden that have been fertilized by lemon grass spent grass-during the August –December 2017 planting season.

➤ **Key achievements**

- All the 200 individuals were procured and supplied with lemon grass planting activities.
- The monthly monitoring visits have led to production of high quality lemon grass which has led to increased yields of essential oils.  
*“the monitoring visits has enabled me produce high quality lemon grass as a result of interaction with the SORAK monitoring team”* demonstrated by Mr. Gaad our lemon grass growing farmer.
- Increased banana yields from increased use of lemon spent grass. Here the grass is used for serving as mulch which later decomposes into manure.

➤ **Challenges**

- Manual labor delays the distillation process.
- Lemon grass in some parts is prone to insects and diseases.
- Impassable roads during heavy rains.

➤ **Recommendations**

- Lemon grass growing farmers recommend SORAK and JFGE to expand more training of youth and women in lemon growing to protect the environment.
- SORAK need to electrify the distilling plant in order. This will help increase on the production of essential oils.