Status and spatial diversity of Sorghum wild species in Malawi

Nolipher Khaki Mponya
Malawi Plant Genetic Resources Centre
P.O. Box 158, Lilongwe, Malawi.
noliemponya@yahoo.com.
Activities Summary report

This summary report covers the last project implementation period. It includes activities that were implemented from August to October 2018 and their outputs. These activities include those whose outcomes were not included in the main report. Suggestions and recommendations are therefore included this summary report and the activities include;

- Species gap and threat analysis and proposition of conservation actions for the threatened sorghum wild species.
- Project monitoring
- Project Evaluation

The table below summarizes all the above activities, outcomes and recommendations

Table 1: Summary table with activities and recommendations

<table>
<thead>
<tr>
<th>Activity</th>
<th>Activity description</th>
<th>Outcomes/recommendations</th>
</tr>
</thead>
</table>
| Species gap and threat analysis and proposition of conservation actions for the threatened wild sorghum species. | -This activity was conducted based on collated data.  
- The main aim was to identify *in situ* and *ex situ* conservation gaps of sorghum wild species and threats facing the sorghum wild species.  
- Species distribution and biasness/richness maps were produced to identify species range distribution across Malawi.  
- National gene bank and National herbarium records were used to determine species *in situ* and *ex situ* conservation status. | -Mobilized data revealed the following;  
- Sorghum wild species Fig. 1 occur across the country.  
- Most of the observations for sorghum wild species were made in the southern region of Malawi Fig. 1.  
- Southern region has the highest number of sorghum wild species (highest diversity) Fig. 1 and Fig. 2.  
- However, there was biasness in number of specimen observed. Fig. 2.  
- There were conservation gaps for all the species (both *in situ* and *ex situ*).  
- Some species only occur in one region. |
Based on the above revelations, the following were recommended:

- MPGRC should embark on collection missions for the ex situ conservations.
- More field surveys should be conducted to assess the current status of the species on the ground.
- Check if some species are falling in the protected areas to help identify potential *in situ* conservation sites.

This activity has highlighted the status of wild sorghum species and helped in defining conservation actions.

| Project monitoring |  
|--------------------|-------------------------------------------------|
| -This was part of the project implementation and it shaped the progress of the project.  
-This helped the project to expand its collaboration to other stakeholders which initially were not part of the list. | -The project achieved its outputs. |

| Project Evaluation |  
|--------------------|-------------------------------------------------|
| -Evaluation was done in order to check the whether the projects achieved its milestones.  
-Recommendations were made for the first review and incorporated into the implementation of the last phase of the project | -Recommendations and comments made in the last evaluation include;  
  
- The evaluation team recommends the design and methodologies of the project implementation.  
- Other recommendations included;  
  i). The need for identification of some |

*This programme is funded by the European Union*
specimen which were labeled as wild types so that their taxonomic status is identified.
ii). That the project results need to be shared and publicized to a wide range of stakeholders eg. Nature and agricultural learning institutions, other policy makers etc.
iii). That future work on Sorghum species need to include large component of field collections of specimen/sample.

| Conclusion | The project achieved its objectives and milestones. |
This programme is funded by the European Union

Fig. 1 Map of Malawi showing distribution of sorghum wild species
This programme is funded by the European Union.
Fig2. Map of Malawi showing diversity of wild sorghum species collected or observed from a particular site.
This programme is funded by the European Union