



## **Agro-biodiversity and landscape restoration for food security and nutrition in East Africa: Ethiopia and Uganda**

Diversifying farming systems by increasing the availability of diverse food tree and crop varieties as a component of land restoration management can help to support sustainable production under changing climatic conditions while at the same time promote diversifying diets to reduce malnutrition. Food trees can be integrated for landscape restoration not only in farming systems, but also on publicly available land such as in community forests and grazing land as well as in compounds of schools, hospitals, churches and other public places.

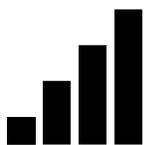
Trees provide several ecological service functions such as controlling soil erosion and improving microclimate and soil fertility. Food trees, in addition, produce nutrient-dense foods and increase resilience of farming systems as their deep rooting system makes them more tolerant to droughts caused by climate variability. In farming systems, tree foods have the potential to provide year-round food, complementing cereal, legumes, and vegetable crops. At the same time, increasing intra-specific diversity (varieties) of crops when combined with appropriate agronomic practices provide a risk management strategy for small holder farmers for mitigating the increased unpredictability of changing weather patterns for their staple foods. Together, 'Food tree and crop variety portfolios', defined as combinations of indigenous and exotic food tree and crop species and varieties, can provide year-round harvest and fill the 'hunger gap' and specific 'nutrient gaps'.

The **overall goal** of the project is to contribute to landscape restoration by harnessing ecologically suitable food tree and crop portfolios in ways that enhance livelihood and landscape resilience while addressing food insecurity and improving nutrition.

The **objective** of the project is to identify ecologically suitable and socio-economically relevant food tree and crop portfolios and make available the material, technical training and capacity to strengthen national partners' and smallholder farmers' engagement in integrating these portfolios into farming systems and restoring landscapes for increased food security and improved nutrition.

**Project Approach:** Food trees of different species together with diverse crop varieties are promoted for integration into farms and public land leading to restoration of degraded landscapes. A key component of the project includes working with national partners to support national and local systems ability to provide diverse quality seeds and seedlings of crop and food tree varieties, building on national partners' community seed banks and seed networks supported by Bioversity and seedling nurseries supported by ICRAF.

## Project Outputs



Output One: Current agro-biodiversity assessed, and suitable priority food tree and crop species identified.



Output Two: Food tree and crop portfolios for optimal species and systems productivity and resilience developed and validated in the project sites.



Output Three: National partners have access to quality planting materials of validated food tree and crop portfolios for wide distribution to farmers’.



Output Four: Innovative communication materials developed, and capacities of farmers and national partners developed.

**Project Sites:** Two sites in Uganda, Nakasongola and Nakaseke, and Ethiopia, Ziway and Debre Ziyet. The sites represent areas where land degradation has occurred due to inappropriate land use practices, and where communities have been mobilized through earlier projects in diversifying their crop varieties and food tree resources.



Investing in rural people

The Ag-biodiversity Project is implemented by ICRAF and Bioversity International, with national partners, and funded by IFAD.



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