

TREE BIOTECHNOLOGY PROGRAMME STRATEGIES FOR SUSTAINABILITY OF BENEFIT STREAMS TO THE GRASSROOT COMMUNITIES

Introduction

Tree Biotechnology Programme (TBP) is a partnership technology transfer initiative between public and private sector institutions for incorporation of biotechnologies in the development of forestry in Kenya. The goals of the Programme are to: -

- Promote sustainable forestry and the widespread distribution of improved varieties of trees at a low cost;
- Make a significant environmental contribution in the form of reduction in deforestation in Kenya;
- Positively impact on poverty through access to affordable wood products and household income.

The Partners

In order to meet the above goals, the Programme has the following partners: -

1. Forest Department of Ministry of Environment and Natural Resources;
2. Kenya Forestry Research Institute of Ministry of Environment and Natural Resources;
3. Mondi Business Paper of South Africa;
4. Gatsby Charitable Foundation of United Kingdom;
5. International Services for Acquisition of Agri-biotechnology Applications based in USA;
6. Kenya Gatsby Trust.

The above partners constitute the Steering Board, which has continued to provide leadership and guidance in the implementation of the programme in accordance to the signed Memorandum of Understanding. TBP will continue to strengthen the partnership with the government through the Ministry of Environment and Natural Resources and appreciates the support in policy and facilities extended that enabled the achievement of the set objectives.

Achievements

The Programme has in the last six years been able to achieve the following: -

1. Establishment of nineteen (19) Trial sites across the country to provide scientific data on performance of selected clonal hybrids from South Africa and local progenies;
2. Established a fully operational clonal forestry nurseries with a capacity of over 3 million clonal hybrids and equal number of improved seedlings annually with over 11.5 million trees produced and distributed in the last five years;
3. Developed a infrastructural and human capacity in forestry biotechnology in Kenya for macro-propagation of selected tree germplasm;
4. Developed a regional network of collaboration between Kenya, Uganda and Tanzania for tree improvement and breeding programme;
5. Assisted in the promulgation of the MENR/Mondi Material Transfer Agreement for access to research germplasm to further improve plantation productivity and genetic diversity.
6. Assisted in membership for East Africa Countries into CAMCORE International Tree Domestication Programme for 2005/2006 with financial support from Gatsby Charitable Foundation. This allowed importation of two pine spp. for trials in East Africa;
7. Established a local distribution network for elite tree germplasm to small and medium tree growers through collaboration with public extension services, NGOs / CBOs, private growers and the opening of local distribution centers in critical high demand areas.

Future Strategies

TBP intends to continue as a “change-agent” in the provision of “cutting-edge” technologies in tree improvement programmes. In this regards the following strategies provide a basis for future approaches: -

1. Accelerate mainstreaming of clonal forestry technologies through downstream diffusion and adoption by grassroot communities on a wider scale;
2. Calibration and modification of clonal technologies to suit the local conditions and meet the needs for accelerated afforestation by local communities through utilization of locally available resources and capacities;

3. Enhancing participation of the private sector in professional tree nursery management by availing innovations and adoption of market driven incentives.
4. Development of micro-credit facilities to assist entrepreneurs access forestry technologies and increase levels of participation by a wider band of the communities;
5. Continue capacity building in tree biotechnologies to ensure sustainable flow of benefit streams;
6. Accelerate networks, linkages and association formation for joint research, information sharing and quality control both nationally and regionally;
7. Support upstream research to maintain dynamism of the clonal programme and enhance genetic diversity;

New Partnership for Sustainability

To enhance sustainability, TBP has partnered with Kilimo Trust, part of Gatsby Charitable Foundation of United Kingdom, in developing an innovative project targeting the small-scale growers and community based entrepreneurial propagators. The Board is hence pleased to confirm that Kilimo Trust has consented to a three-year financial grant from 2006/2007 in support of the partnership. The World Agroforestry Center (ICRAF) has also joined the partnership to develop a farm-based monitoring model to ensure impact delivery to the target group. This phase is now referred to as “Up scaling TBP benefits to small-scale Tree Growers.” Kilimo Trust has also accepted to provide K-Rep Development Agency with a seed capital to initiate a micro-credit scheme specifically for clonal trees entrepreneurs who start-up nurseries at community level. This will not only avail additional quality tree planting stocks widely but also transfer skills on biotechnologies that will increase job and wealth creation in the rural areas.

Global Pipeline

The global pipelines towards development of candidate trees to meet the growing demand for forest products will continue to provide impetus to TBP innovative projects as well as place forestry at the centre of rural development in addition to provision of environmental services.

“CLONAL FORESTRY IS THE FUTURE”