



Tanzania Tree Seed Agency (TTSA)

INTRODUCTION

In the 1970s the government launched national tree planting campaigns to rehabilitate degraded environments. This created high demand of tree seeds of local and introduced species for various end uses. The government recognized the seriousness of the situation and this led to the establishment of the National Tree Seed Programme (NTSP) under the Ministry of Natural Resources and Tourism in 1989. The objective was to enhance sustainable supply of high quality tree seeds and other propagating materials as demanded in Tanzania.

Following the government reforms, National Tree Seed Programme (NTSP) has been transformed into Tanzania Tree Seed Agency (TTSA) with the purpose of enhancing sustainable supply of forest products and environmental conservation by producing, procuring and marketing high quality tree seeds and other propagating materials.

ROLES

The roles of TTSA are as follows;

- ♣ To provide high quality tree seed and other propagating materials for different end uses.
- ♣ To provide technical support for awareness creation and facilitation of customers in raising seedlings from seed supplied by TTSA.
- ♣ To maintain a well managed and financially self-sustaining Agency.

OBJECTIVES

TTSA was established with the following objectives

- ♣ Identify, establish and manage good quality tree seed sources.
- ♣ Ensure proper seed handling process for at least 130 tree species.
- ♣ Conduct extension services to all TTSA major customers on proper use of tree seed.
- ♣ Prepare and distribute relevant technical information about TTSA products to all major and small customers.

SALE OF SEEDS AND SEEDLINGS

TTSA harvests and supplies about 10 tons of seeds per year from more than 150 tree species to more than 500 customers within Tanzania and abroad. TTSA customers include government departments, research organisations, private companies, NGO's,

aid organisations and farmers. Species include trees for fuel, timber, poles, agro forestry, shade, medicine, fruits, and ornamental purposes.

Seed assortment includes valuable indigenous timber species such as East Africa Cordia (*Cordia africana*), Pod mahogany (*Azelia quanzensis*), African black wood (*Dalbergia melanoxylon*), Pencil cedar (*Juniperus procera*), Mvule/Iroko, (*Milicia excelsa*) East African camphor (*Ocotea usambarensis*), Blood wood (*Pterocarpus angolensis*) and Podo (*Podocarpus usambarensis*) and Red African mahogany (*Khaya anthotheca*).

The programme sales the best teak seed (*Tectona grandis*) in the world. In Longuza an International provenance trial on 12 *Tectona grandis* provenances from local land races including some from West Africa, Indonesia, India and Caribbean, has shown that Kihuhwi provenance in Tanzania ranks second in the world, while Mtibwa (another Tanzanian provenance has a leading position.

The agency sales seedlings of various species including ornamental, medicinal fruits.

SHORT COURSES

TTSA conducts short courses on forest nursery, forest botany field identification, and safe tree climbing. TTSA is a good Training Centre in Tree Seed Technology and has a virtual monopoly on safe tree climbing courses for Eastern and Southern Africa, which makes it one of the three best Tree Seed Programmes in Africa.

CONSULTANCIES

TTSA conducts consultancies in various fields of forest disciplines such as nursery establishment, Ethnobotany, Botanical surveys, Landscaping and selection of tree species for afforestation programmes.

ORGANIZATION OF THE AGENCY

The size of the country and the variation in environmental conditions call for a decentralized approach with a number of independently operating seed stations and a Headquarter coordinate, plan and supervise activities. The overall in charge of the Agency is The Chief Executive. There is a Headquarter and Zonal centres. The headquarter is comprised of four units:

- (i) *Marketing and sales unit*,
- (ii) *Finance unit*
- (iii) *Support unit*
- (iv) *Technical unit.*

Each unit is manned by a Manager who is answerable to the Agency's Chief Executive. TTSA headquarter covers an area of 3,500 square meters, which comprises offices, laboratory, conference rooms, seed storage facilities, and staff houses. The following activities are done in the Headquarters:

- **DOCUMENTATION** of the seed requirements arising from the combined afforestation and tree planting activities in Tanzania, in order to provide the necessary data for the planning of zonal seed centre seed procurement activities.

- **IDENTIFICATION**, selection, registration and management of appropriate seed sources in collaboration with the national, regional and district forest staff, in order to ensure a sufficient supply of seed from the country's priority species for tree planting and afforestation. More than 400 sources have been identified. Reference for over 500 species is available in herbarium.
- **DISTRIBUTION** of lists, specified to ecological zones, of seed and seed sources available, and dissemination to identified seed consumers in Tanzania and overseas.
- **PROMOTION** of indigenous tree planting. In view of recent developments within tropical forestry, it is logical that emphasis is placed on the promotion of indigenous species and or multi-purpose species for use in combination with agriculture. To meet the huge demand of indigenous and multi-purpose tree species the Agency has established seed sources of *Milicia excelsa*, *Pterocarpus angolensis*, *Khaya anthotheca*, *Cassuarina equisetifolia* (horsetail tree), *Acacia mangium* (Australia acacia), *Azadirachta indica* (neem tree), *Gliricidia sepium* (quick stick), *Bixa orellana* (antho) and *Caliandra calothyrsus*, (Caliandra) However, with more than 80,000 hectares of plantations in Tanzania, the majority of which is established with exotics, it is implicit that introduced tree species continue to have an important role to play in forestry in Tanzania. The Agency has so far established improved seed orchards for *Eucalyptus tereticornis*, *E. camaldulensis* and *Tectona grandis*
- **ESTABLISHMENT** of seed orchards. With current deforestation trend the aspect of conserving and existing gene resources for future use becomes ever more important and must form a natural part of any long-term commitment within seed procurement. The Agency has established seed sources of *Khaya anthotheca*, *Milicia excelsa*, and *Pterocarpus angolensis*. These seed sources are for seed collection while at the same time acts as ex-situ gene conservation stands.
- **SPECIAL COLLECTION** of research quantities of seed in collaboration with research organizations in Tanzania and abroad
- **PRODUCTION** of an annual TTSA newsletter to be distributed to forestry staff working in the regions and districts, to foresters working in forestry programme, to foresters working with NGO's and to other relevant seed consumers in Tanzania. The newsletter will bring news of TTSA as well as contributions from the field and cuttings from a selection of forestry journals.
- **LONG TERM STORAGE** is done through cold rooms storage for seeds of selected priority species. The seeds in the cold rooms acts as buffer seed stocks which is held as an insurance against poor seed years.
- **IMPORT** On behalf of seed consumers in Tanzania, TTSA is responsible for importing seeds of species and provenances that are not available in Tanzania.
- **EXPORT** Ensure enough stock for export. The export of seed is possible to any customer anywhere in the world. However It is not possible to store all seeds which are in the seed list but whenever customer emerge with a need of such seeds, they are harvested and supplied as soon as possible. Seed export provides foreign exchange income that is needed to sustain TTSA.
- **CERTIFICATION** of seed quality, to international (ISTA) standards, of seed that is exported from Tanzania.

- **TRAINING & EXTENSION** at cost recovery of non-TTSA staff in Nursery practices, Seed collection/tree climbing, Botany field identification courses are conducted as prerequisite by different applicants.
- **CONSULTANCIES** directed at all level to impart knowledge of the importance of using the correct planting material for any given planting purpose and of how to obtain the best possible planting material.
- **APPLIED RESEARCH** into problems of seed handling, storage conditions, pre-germination treatments, etc.), flowering phenology, basic seed improvement and others.
- **PUBLICATION** TTSA publicize different technical notes, research notes, manuals, seed leaflets and annual reports on all aspects of seed procurement, applied tree improvement and gene resource conservation and for varying academic levels. More than 50 publications are available .

ZONAL CENTERS

TTSA have three Zonal Seed Centres and each of them is manned by a Manager who is also answerable to the Chief Executive. The Zonal Manager is the overall in charge of seed collection, processing, storage, testing, packing and dispatch in his respective zone. Collection and subsequent dispatch are taking place within the service zone of the individual zonal seed centres. These service zones have been delineated with a view to ecological conditions paired with existing road and railway nets. The centres are furnished with all necessary equipment and materials, and sufficient means of transportation have been provided. TTSA has also three zonal centers located in Morogoro, Iringa and Lushoto. They are all furnished with modern equipment and machines to carry out daily activities.

HOW TO CONTACT TTSA

Customers are welcome to visit TTSA centres, get advice, buy seeds or place orders. Customers are advised to place orders well in advance to give enough time to prepare the seeds. Information available on request include a detailed Seed Catalogue, TTSA General Brochure, a List of TTSA Publications, a Teak Seed Pamphlet, and Seed Issue Notes that give advice on how to store and germinate tree seeds. Customers requiring more information on TTSA or wishing to buy seed or other services from TTSA can contact us using the following addresses:

Tanzania Tree Seed Agency and Morogoro Zonal Seed Centre

P.O.Box 373, Morogoro, Tanzania

Tel: 023 260 3192/3903 Fax: 023 260 3275

E-mail: ttsa@ttsa.co.tz and ttsa@morogoro.net

Website: [http:// www.ttsa.co.tz](http://www.ttsa.co.tz)

Iringa Zonal Tree Seed Centre

P.O.Box 1121, Iringa

Tel: 0262 725029 Fax: 0262 725146

e- mail: lztsc@ttsa.co.tz

Lushoto Zonal Tree Seed Centre

P.O.Box 258 Lushoto

Tel: 027 26 4186 Fax: 027 2640187

E. mail: lztsc@ttsa.co.tz