

TFS AND ITS ROLE IN GOVERNING THE BIOMASS ENERGY SECTOR: Achievements and Lessons Learnt

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1. INTRODUCTION

- ▶ TFS was established through Government Notice No. 269 of 30th July 2010, which is under the framework of Executive Agencies Act Cap 245 R.E 2009 and; and became operational in the financial year 2011/12.
 - ▶ TFS has been established for the overall purpose of achieving efficient and effective management of national forest and bee resources; promoting the potential for the continuous improvement of its services and improving the quality and value for money of the delivery of public services.
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1. INTRODUCTION

Core functions of TFS

- 1) Establishing and managing central government natural forest and bee reserves;
 - 2) Establishing and managing central government forest plantations and apiaries;
 - 3) Managing forest and bee resources in general land;
 - 4) Enforcing Forest and Beekeeping legislation in areas of TFS jurisdiction;
 - 5) Providing forest and beekeeping extension services in areas of TFS jurisdiction;
 - 6) Developing TFS Human resources;
 - 7) Collecting Forestry and Beekeeping revenue;
 - 8) Safeguarding TFS Assets;
 - 9) Marketing forest and bee products and services
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INTRODUCTION (Cont...)

Core Assets (Forests and bee resources)

455 forest reserves with a total of 14,256,133.03 ha and Forests on general lands (2,732,575 ha); including

- 17 forest plantations 6 declared bee reserves with total area of 31,374 ha and
- 3 proposed bee reserves covering an area of 8,392 ha;
- 11 Nature Reserves with a total area of 305,600 hectares.

2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR

TFS Vision is derived from its mandate to sustainably manage national forest and bee resources through conservation, development and utilization to contribute to the social, economic ecological and cultural needs of present and future generations.

Vision

To be a centre of excellence in sustainable management of forest and bee resources.”

Mission

- To sustainably manage the national forest and bee resources in order to contribute to the social, economic, ecological and cultural needs of present and future generations

2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR cont.....

TFS Strategic Plan I (2011-14) and SP II (2014/15 – 2018/19) have Three core objectives addressing core TFS functions whereas the two deal cross-cutting issues

Three core objectives

- ▶ Institutional Capacity to Deliver Services Strengthened;
- ▶ Forest and Bee Resource Base and Ecosystem Improved; and
- ▶ Utilization of Quality Forest and Bee Products Enhanced.

Two Cross- cutting objectives

- ▶ HIV/AIDS Infections Reduced and Supportive Services to Staff Living with HIV/AIDS Improved;
- ▶ Good Governance and Gender Balance Enhanced;

2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR cont.....

- **Based on core objective**: Utilization of Quality Forest and Bee Products Enhanced, TFS has target specific for woodfuel development.
 - In 2009 the Government of Tanzania, through the Ministry of Natural Resources and Tourism (MNRT)/Forest and Beekeeping Division, developed a National Wood fuel Action Plan (WAP) to address unsustainable supply and demand of charcoal and to a lesser degree firewood in the value-added chain (i.e. production, transportation and consumption).
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2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR cont.....

The planned interventions/ activities include:

- a) Enhance woodland regeneration;
 - b) Establish woodlots to supply wood for charcoal production;
 - c) Establish charcoal production areas;
 - d) Identify charcoal producers and form charcoal production groups/associations at village level and formalization of charcoal groups;
 - e) Provide extension services on efficient charcoal kilns;
 - f) Establish sustainable charcoal selling centres in the villages.
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2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR cont.....

WHAT TFS DOES

- Training materials for extension services available for dissemination at districts level;
- Promote PFM approaches which include adoption of active woodlands management for sustainable woodfuel production;
- promote adoption rates for efficient technologies such as efficient stoves and charcoal kilns; and the use of alternative fuels;
- Inclusive private companies introduced to support growth of the local economy, particularly local trading on improved technologies, sustainable charcoal and alternative fuels;
- Promote IGAs to communities to reduce dependence on charcoal business as source of income

2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR cont.....

During SP I period (2011-14), the following were executed:

- ▶ Total of 101 charcoal collection and selling centers were established along Dar salaam – Morogoro – Segera road, Songea, Namtumbo, Mbinga, Handeni, Korogwe, Biharamulo, Kigoma, Shinyanga. Kilosa, Rufiji, Gairo, Mvomero and Masasi districts;
- ▶ Awareness meetings and training sessions on sustainable charcoal production were conducted to 5 charcoal producing groups in 5 villages of Kazuramimba, Mwamila in Uvinza district and Hingawali, Mnarani and Simana in Lindi District.
- ▶ 30 people in Mbangamawe village in Songea district were trained on efficient charcoal production technique;
- ▶ 120 women from 6 villages from Mbozi, Chunya and Momba districts were trained on making and use of improved fuel wood stove.

2. TFS VISION AND PLAN FOR ADDRESSING THE BIOMASS ENERGY SECTOR cont.....

▶ Other complimentary efforts done include

- About 135,000ha of forest areas were identified and are in the process being included in PFM modalities.
- 163 villages were trained and facilitated on Alternative income generating activities (IGA). These include raising tree seedlings for sale, beekeeping, keeping of dairy goat, fish farming, growing of horticultural crops (reducing dependence of forest products for income generation;
 - Strengthening Forest Law Compliance (e.g. patrols)
- The process of establishing charcoal selling centers is not yet successful because charcoal dealers establish the centers only on temporary basis. Neither charcoal production nor utilization technologies have been effectively adopted. TFS will continue to implement Wood fuel Action Plan in the second Strategic Plan 2014-2019 in collaboration with other MDAs.
- However, these interventions are more less specific to forestry sector

2.TFS VISION AND PLAN (Cont...)

- **Development of comprehensive National Woodfuels Action Plan (WAP) is needed with cross-sectoral vision**

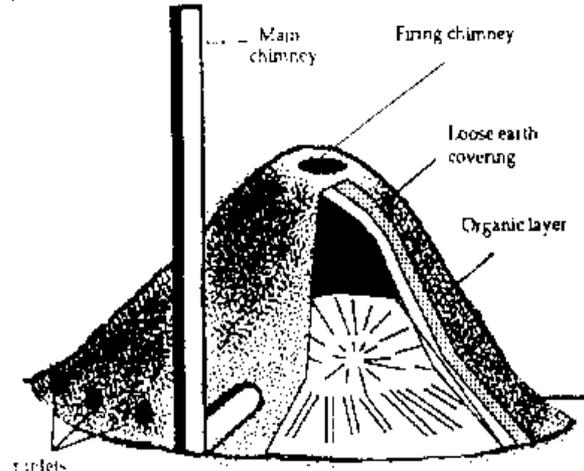
why ?

- The currently unsustainable supply and demand of charcoal has to be critically examined, at each point in the value-added chain (i.e. production, selling transportation and consumption).



2. TFS VISION AND PLAN (Cont...)

- ▶ Main interventions /activities recommended for implementation of comprehensive National Woodfuels Action Plan include:
 - Formulation of specific policy (statements & Directions) and strategies that support sustainable woodfuel production, transportation and utilization,
 - Exempt biomass briquettes, biogas stoves, gas cookers from all forms of tax– as a way of increasing adoption of alternative fuels,
 - Promote sustainable charcoal production and consumption; Promote sustainable firewood supply and utilization,
 - Promote alternative fuels in households and public institutions.



2. TFS VISION AND PLAN (Cont...)

▶ Expected Outputs

- National relevant policies reviewed and woodfuel sector mainstreamed;
- Government agreed to waive taxes for alternative fuels and their appliances waived; and differential tax for charcoal established;
- Local level governance and capacity improved to support sustainable woodlands management through establishment woodlots, sustainable charcoal production, and sustainable firewood supply;
- Certification of sustainable charcoal piloted; and agreed to scale up at the national level based on the successes;
- Charcoal producer associations established and follow sustainable harvest techniques;
- Market based incentives such as certified charcoal that increase profitability of sustainable woodland management identified and applied,
- Communities linked to the voluntary carbon finance market as an incentive to sustain improved woodland management and sustainable charcoal production;
- Extension package for sustainable charcoal (harvesting, processing, packaging, marketing and consumption) available;

3. TFS KEY CHALLENGES TO ADDRESSING THE WOODFUEL SECTOR

- ▶ Woodfuel sector in Tanzania is driven by a variety of actors.
 - government ministries : VPO-DoE, PMO-RALG, MNRT, MEM, MoF
 - development partners; public Institutions; energy related private companies; NGOs/CBOs promoting forest conservation initiatives; local communities.
- Many people in Tanzania still depend on natural resources like forests to sustain their living.
- The rate of electrification and the higher tariffs had not providing alternative means for use of wood fuel for domestic. Hence reliance on wood fuel that is one of the major drivers of deforestation and forest degradation in the country is expected to continue for some years in the future.

3. TFS KEY CHALLENGES (Cont...)

- The charcoal trade is characterized by Low capacity to enforce regulations and effectively collect revenues
- unsustainably harvested within an area that extends up to 200 kilometers from urban energy markets
 - some wood harvested from forest reserves
 - the bulk is harvested in unreserved forest areas
 - village land and farmland being cleared for agriculture.

Significant changes need to be introduced to regularize and legalize the currently informal sector

4. THE ROLE OF TFS IN IMPLEMENTING THE BEST ACTION PLAN

- ▶ **BEST Steering Committee**
 - TFS is a member of the BEST Steering Committee
- ▶ **Village Forest Management Plans (VFMP)**
 - PFM specifically CBFM has been assisting communities to develop landuse plans that incorporate forest management plans.
- ▶ **Organisation and Registration of Charcoal Producers**
 - groups have been trained into appropriate wood harvesting and the use of cassamance kiln
 - 47 charcoal producer groups have been organized and trained in the TFS Northern Zone and Southern Zone.

4. IMPLEMENTING THE BEST ACTION PLAN

▶ **Improve Collection of Wood Energy Fees**

- TFS has improved its capacity in enforce (patrolling hotspot areas).
- more transport and human than used to be--- to the district level
- the registration formalities have been decentralized to now at district level.

▶ **Improved Cook Stoves (ICS)**

▶ TFS is working closely with stakeholders in promoting improved technologies.

- working ARTI energy company in promoting is its Envirofit stove that has efficiency of 60% using newspapers, TV, Radio and exhibitions
- Forwarded ARTI to MoF for tax exemption

▶ **Coal for Cooking**

- TFS through TaFF is promoting the use of coal in collaboration with a NGO that supplies coal and coal stoves to schools, prisons, army and hospitals
- company in requesting the MoF for tax exemptions.

4. IMPLEMENTING THE BEST ACTION PLAN

▶ **Biomass Briquettes**

- TFS has been working with private companies to promote the use of briquettes from saw dusts and rice husks.

▶ **Plantations and Woodlots**

- PFM approaches in natural forests need to be reinforced through developing complementary tree plantations.
- TFS forest plantations for wood fuel including charcoal.
 - The total area 30,000ha for Ruvu and Korogwe Fuel wood Plantations have been earmarked.

5. TFS OPINION ON TRANSFORMING TANZANIA'S CHARCOAL SECTOR PROJECT

- ▶ Project on Transforming Tanzania Charcoal Sector has shown us the best way out of the charcoal production challenges in Tanzania. Even after few years of implementation, the challenges that came up give us space to chart the best way forward.
- ▶ It is a learning experience that, the concerted effort need be forged where key stakeholders have to cooperate and support the project especially in the monitoring of the project. The future of this approach is bright and could save lots of forests that otherwise could be lost.

6. CONCLUSION

- ▶ Woodfuel is an important energy resource in Tanzania. However its supply potential is dwindling fast creating energy scarcity & additional costs to the majority of population.
- ▶ Development of woodfuel programmes is receiving low priority both in the energy and forestry sector
- ▶ The main problem of ensuring sustainable energy supply to the majority of the population in Tanzania arises from lack of a **“comprehensive integrated strategy for developing the different energy sources available in the country”** to compliment each other and provide a foundation for upward fuel switch from traditional fuels to commercial fuels.
- ▶ Need for the comprehensive woodfuel strategy tied with development of other energy resources in Tanzania to enhance integrated energy development.
- ▶ Lessons learnt, indicate that concerted efforts are required by all stakeholders to ensure sustainable woodfuel production and utilisation as a pre requisite for poverty eradication in Tanzania