INTRODUCTION

This newsletter summarises FDT’s progress during the nine-month period from March to December 2017. It also covers the results of a strategy revision process undertaken in the past year, whereby the Trust has revisited the status and needs of the commercial forestry sector and adjusted focus of efforts accordingly. Importantly, this newsletter presents preliminary recommendations from the external annual review conducted in October by Gatsby Africa and DFID.

OVERVIEW OF STRATEGY

The Tanzanian forestry sector faced a supply deficit, but has the clear potential for transformation:

<table>
<thead>
<tr>
<th>Competitive</th>
<th>Inclusive</th>
<th>Resilient</th>
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<td>• Good factors of production in available land, altitude and climate</td>
<td>• Small growers are agents of change - an important and growing source of supply: c170,000 hectares (68% of total area)</td>
<td>• Research to develop and disseminate improved, diverse seed varieties is crucial to mitigate pest and disease risks, and reach new markets</td>
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<td>• Some small international firms operating in a growing wood processing industry</td>
<td>• Forestry serves as investment instrument for the unbanked, secures land tenure and diversifies income, with opportunity to increase access to advice, inputs and markets, leading to higher incomes</td>
<td>• Opportunity to support stronger policy, regulatory environment and institutional capacity to secure long-term conditions for growth</td>
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<td>• Growing local demand for wood products currently being filled by imports.</td>
<td>• Potentially high impacts of value creation, e.g. 34% productivity gains of improved seed, 53% MAI gains from better plantation management, 10% processing recovery gains, 27% price premium for quality timber.</td>
<td>• Wood processing and service industry employs large numbers.</td>
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Realising the potential of the commercial forestry sector requires changes across five key areas:

• Collaborative and commercially-orientated tree improvement R&D that improves the quality, productivity and options for market end-use of planting material in Tanzania, with coordinated and sustainably funded research activities, and information dissemination on issues such as species potential, pest and disease risk, and technology options.

• Access to quality planting material suited to high potential market objectives must be made available to growers of all scales through a network of commercial nurseries operating with best practice standards. Initially improved planting material may be imported, but over time investments will be made in seed orchards and breeding populations to produce seed locally.
Effective plantation establishment and management by growers of all scales must be supported through a range of service models including inclusive out-grower arrangements, contractor service providers, and grower associations and networks.

Raw material supply chain operations, processing and marketing channels need to operate inclusively to incentivise continued production by tree-growers, adopt efficient value addition and end-use technologies, and orientate towards high value timber product markets.

Institutional arrangements are required to ensure effective implementation of policy and sector development planning, access to land, finance modalities, and ensure partnership arrangements are structured to draw on the respective strengths of public and private sector.

Programme design

In terms of programme delivery, FDT believes that achieving sustainable changes to market functions and services needed to achieve the above five areas can be best achieved by facilitating permanent actors, both private and public. The Trust avoids sustained ‘direct delivery’ of activities which are normally unsustainable in the long-term and therefore detrimental to development efforts.

The Trust currently employs 34 staff comprising expertise in sector development, commercial forestry, market facilitation and operations.

The current programme structure reflects the focus on driving productivity gains in the sector and primarily through small growers who make up a significant proportion of the planted hectares in the Southern Highlands - 54% (UNIQUE 2017). The Trust is comprised of four programmatic components:

- **Genetic Resources (component 1)** focuses on a long-term collaborative R&D initiative for tree improvement, seeking to conduct research on new species as well clonal hybrids of both Eucalyptus and pine species, disseminate information between stakeholders timely, and enable the domestic production and sale of improved planting material. **Tree Grower Services (component 2)** focuses on service provision to small-scale tree growers – specifically tree nurseries, seed suppliers, contractor services and the provision of advisory with the aim of driving woodlot productivity and quality gains.
- **Markets (component 3)** focuses on increasing the value that growers receive at harvest, facilitating upstream improvements in value chains and catalysing the development of new value chains. **Policy (component 4)** straddles other components to drive a conducive policy and enabling environment.

**KEY DEVELOPMENTS IN 2017**

**Genetic Resources (component 1)**

*Collaborative, applied science*

Tree breeding activities have continued with private and public partners. While FDT has played a de-risking and technical role to ensure high quality standards, focus of all new research infrastructure has been on leveraging partner contributions and ownership in the form of land, labour and inputs. Establishment of trials were expanded geographically and with more genera (e.g. Casuarina and acacias) for production of high value end products and fuelwood in warmer, drier areas. Diversification of tree species is critical to building a competitive and resilient sector; one that can ensure high quality planting material for different sites, builds resilience to pests and diseases, and enables the industry to take advantage of emerging market opportunities. Collectively, the R&D trials represent >90 types on 14 sites ranging in altitude from 200-2400 m. Further, breeding populations as well as seedling seed orchards of *Pinus patula* and *Eucalyptus grandis* were each established with TFS and TANWAT.
Tree improvement research currently involves nine partners contributing resources, including government (TFS). Adhering has been central to ensuring the trials produce useful results. In line with rising interest as trial results emerge, new actors have requested to join the Tree Improvement Research Working Group (TIRWG), while others have requested cost sharing for further trials.

Subsequent growth results taken in 2017 serve to reinforce the clear promise shown by a range of planting material that are directly relevant to smallholder needs, including material well suited to shorter rotations, have greater disease resistance and the ability to grow in drier areas.

**Sustainability and institutional strengthening**

Standard Operation Procedures (SOPs) were developed with TIRWG and await approval, to guide implementation of research infrastructure across the country. Establishment of infrastructure with partners has entailed capacity building (building on TFS-funded TI training provided earlier by FDT), the SOPs will enable a structured way to deliver and measure the building of institutional capability.

FDT, through the TIRWG, previously produced the Tree Improvement Strategy for the Southern Highlands. MNRT requested assistance to formulate a national-level tree improvement strategy, building on the experience in the Southern Highlands. Ongoing efforts have been placed on assessing different long-term institutional arrangements for the delivery of a sustainable and inclusive tree improvement. Four revised options were ranked against sustainability criteria - private-led, government-led, institutional partnership and social enterprise - with the latter two ranking highest.

**Inclusive seed and clonal production**

Efforts continued to progress the seedling seed orchards for *P. patula* and *E. grandis* with TFS and TANWAT, both showing willingness for cost sharing and mechanisms for small holders to benefit. FDT collaborated with PFP in providing technical assistance on site selection and seed sourcing for the planned establishment of seedling seed orchards (other than *P. patula* and *E. grandis*) with TGAs, also involving TTSA. Some uncertainty remains in terms of arrangements to ensure sustainability. Meanwhile, grafting operations (CSO) for *P. patula* and *E. grandis* continued and which will be utilised in establishing clonal seed orchards and conservation of genetic material for future research purposes.

**Tree Grower Services (component 2)**

**Beneficiaries profile and adoption**

In-depth surveys have been undertaken to understand the nature of tree growers and the impact of FDT’s work. Almost two-thirds of FDT beneficiary households are living in poverty (below WB-defined ‘moderate’ poverty line of $3.1/day), of which around half are considered to be in ‘extreme poverty’ (below $1.9/day). Greater insight was obtained on poorer tree growers’ constraints to adoption. Collectively, the results provided evidence in support of FDT’s differentiated approach to developing sustainable tree grower services for each grower segment, and nuanced strategies for consideration.

**Seed distribution**

Progress has continued to be seen with the Tanzanian private seed company Jambe Agro entering the improved tree seed market, now sourcing and purchasing improved seeds without any external assistance. As a key demand centre, Jambe has identified small tree growers as the key growth market for improved tree seeds, both within and outside the Southern Highlands. FDT supported a Jambe-designed promotion campaign in villages where so far, no FDT or PFP intervention have taken place. The result was encouraging with Jambe selling some 300 one-acre-packs directly and over 500 packs stocked and sold through TFA outlets. In addition to village-based sales, Jambe introduced nursery signage, radio announcements and the development of a Mbeya-based demonstration site.
Increasing focus is now being turned to TTSA, to determine how best to support their strategies in support of increasing demand for, and sustainable supply of, improved planting material and support to tree growers and nurseries. The Trust has also continued to provide advice and support the need for private and public roles with respect to seed production, distribution and quality control.

*Nurseries*

A decline in demand for improved tree seeds among private nurseries revealed lower confidence in tree growers’ willingness to pay extra for improved seedlings, with nurseries therefore reluctant to invest in the cost for imported improved seeds. In addition, tree growers’ doubts over the authenticity of improved seedlings further increases the barrier to adoption of improved planting material. After initially resuming a temporarily direct delivery role in the capacity building of NOPs, FDT is now facilitating two potential training providers to tailor training products to meet the demand from NOPs.

*Advisory services*

Knowledge on the potential and availability of improved planting material and good silviculture practices, and access to silviculture advisory services, have been identified as key drivers for strengthening support services, increasing the quality of raw materials, asset value and incomes. Surveys have revealed the key understanding in sources of influence and peer-learning. For example, tree growers are peer learning (and adopting good practice) from early adopters on a 1 to 1 ratio, while for nurseries is an encouraging 1 to 5 ratio.

TFS and PFP have both reproduced FDT-developed learning materials in large quantities, developed from the popular ‘Technical guidelines for plantations and woodlot management’ produced by MNRT. Work is ongoing to influence various sustainable channels for tree growers to access knowledge as oppose to providing direct training. This includes government extension (FDT facilitated a largely TFS-funded training in commercial forestry for >190 government extension officers, and made a follow-up survey of effectiveness and constraints) and input suppliers (e.g. Jambe Agro, TTSA, nurseries).

*Medium scale growers*

It has been an active period of exploration to scope interventions relevant to influencing medium-scale growers, many of whom are urban investors, since it has been established that lead farmers can have a strong influence (‘pull’) effect on other growers and are among the buyers of improved germplasm. This has included work on the development of standards (tree seeds, and nursery and contractor services), developing an ICT-based communication forum to engage with urban forestry investors, and analysing the impact of commercial tree planting on land tenure issues.

*Integrated fire management*

At the request of MNRT, the Trust supported ongoing work to develop national guidelines for integrated fire management and the identification of suitable, practical interventions.

**Component 3: Markets**

*Market insight and sector planning*

A wood market study of the Southern Highlands was completed by UNIQUE that generated up-to-date forecasts for the overall supply/demand picture in Tanzania of a variety of wood products, and in-depth analysis on the sawn timber, eucalyptus pole and veneer value chains. Key to success of the market study was the use of FDT’s remote sensing work that allowed the UNIQUE team to incorporate the full scale of private (primarily small) grower planting into their supply forecasts. Previously the proportion of supply attributed to private growers had been underestimated and the results will help to when increasing their share of voice in the sector.
Improving the negotiation position of small growers at harvest

Three functions were identified that would be able to improve small growers’ negotiation position: a valuation service, providing information on credible buyers to growers, and aggregation of growers. After further scoping and the completion of a pre-feasibility study, work is ongoing to pilot the provision of marketing services to growers (woodlot valuation, buyer sourcing and negotiation at sale) by three potential partners (who currently offer contractor services).

Increasing the use of improved processing technology for sawn timber

In light of the impact of poor quality processing on recovery and quality of products, further work was undertaken to understand both the opportunity for growers to play a greater role in the value chain (i.e. contract harvesting and processing and sell finished planks) and also the current barriers to investment in new technology (with a focus on mobile bandsaws). Work is underway to complete demonstration pilots of improved technology that will play the dual purpose of increasing knowledge and benefits of the technology as well as providing valuable data on the economics of improved technology that can support future finance applications for investors. Results from a recent investor survey will be used in conjunction with the demonstration to inform the interventions that FDT will pursue to catalyse investment, most likely working with finance providers.

Promotion of veneer/plywood investment

Veneer/plywood potentially provides a beneficial market for growers as it can reduce rotation length and provide short-term cash flow to growers (in five years) as well as provide an offtake market for trees that aren’t suitable for poles. Scoping work was initiated to explore how to provide information investment decision-making, and if required look at removing any barriers identified to investment.

Component 4: Policy

Regulatory environment – National Forest Policy

FDT initiated a process to increase the level of participation of commercial forestry stakeholders in the government-led process of reviewing the Forest Policy. The Trust facilitated policy review workshops with key stakeholder groups (small-scale and medium-scale wood enterprises, wooden pole enterprises, integrated forestry companies, Tree Growers Associations, medium scale tree growers, tree grower service providers, timber traders and transporters), which identified priority policy issues alongside supporting in-country evidence and experience from other countries. A number of industry actors have since used the material to engage with the policy review process.

In addition to highlighting the need for greater recognition of commercial forestry and private actors, a resultant policy paper endorsed by the industry actors included issues specific to forest plantation development (land availability, acquisition and tax; fire, pests and disease; tree improvement and planting material; information, extension and outreach), forest industry development issues (raw material supply; industrial output and efficiency; wood trade and markets; and improving business environment); and industry-wide enabling conditions (private sector coordination and dialogue; financial mechanisms and incentives; rural infrastructure; forestry research, training and education).

Industry coordination and organisation – Wooden pole industry

TANESCO has recently taken a strong lead in convening industry players to revisit issues of quality, with FDT acting as a source of technical expertise in all key steps. This has included the preparation of an issues paper which was presented at a TANESCO-organised workshop attended by over 100 participants from five countries, and subsequent technical inputs to following up on resolutions concerning treatment, specifications and quality management.
PRELIMINARY 2017 ANNUAL REVIEW RECOMMENDATIONS

The following prioritised recommendations have been drafted following the Gatsby-DFID joint external 2017 annual review (the review will be finalised by February):

- Further develop the medium-to-long term sector vision and programme strategy, including definition of competitiveness for specific wood product value chains, both within and outside Southern Highlands, and emphasis on domestic and regional demands.
- Clarify the strategy and influence the options for tree improvement institutional arrangements, whilst maintaining momentum on the existing tree improvement work that FDT undertakes with partners including geographic expansion of trials.
- Further work to understand and respond to the constraints to, and the drivers of, adopting improved planting material (seeds and seedlings) by different grower segments, addressing issues of trust, quality, and access.
- Further work to assess and pilot options for the sustainable provision of advice and information to different grower segments, in order to drive changes in silviculture practices.
- Improve understanding of urban investors (medium-scale growers) and use this to develop a clear intervention strategy including work underway to develop the private contractor/service providers and address investment risks and trust.
- Continue with pilot market intervention around facilitating uptake of improved processing technologies, with attention paid to clarifying strategy (including comparison with all processing alternatives) and pilot evaluation, and improving utilisation of existing mobile circular saws that are already widely dispersed.
- Continue with pilot market intermediary intervention around improving grower negotiation on standing trees, with attention paid to clarifying commercial feasibility and scalability of focus on different grower segments, strategy, monitoring dynamics of trust, and pilot evaluation.
- Build FDT’s ability to facilitate plantation investment in support of improved productivity and quality, through development of a coherent strategy for each grower segment and clear plan on how information can be aggregated, analysed and disseminated.
- Review policy and institutional strengthening strategy to consider FDT’s direct role and/or building the capacity of others, and greater prioritisation of interventions and resourcing.
- Undertake further analysis to assess if the extent of additional indirect beneficiaries, such as labour opportunities from different grower segments and across value chains.
- Increase frequency of tracking progress on (and updating) intervention results chains as decision-making tools and further development of the results measurement framework which includes the broader economic contribution of commercial forestry.

Various documents can be found on the Resources section of the Trust website.

www.forestry-trust.org