THE PROCEEDINGS OF SPECIAL FARM FORESTRY STAKEHOLDERS' WORKSHOP HELD AT CHEPKOILEL CAMPUS, MOI UNIVERSITY ON 5<sup>TH</sup> APRIL, 2005.



SPONSORED BY KENYA FORESTRY RESEARCH INSTITUTE, LONDIANI REGIONAL RESEARCH CENTRE AND MOI UNIVERSITY, DEPARTMENT OF FORESTYRY RESOURCES, CHEPKOILEL CAMPUS

Joshua K. Cheboiwo and David Langat. Kenya Forestry Research Institute, Londiani Regional Research Centre MAY 2005

# FARM FORESTRY SPECIAL STAKEHOLDERS' WORKSHOP CHEPKOILEL CAMPUS SPONSORED BY KENYA FORESTRY RESEARCH INSTITUTE AND MOI UNIVERSITY

1.0 SESSION I: INTRODUCTION OPENING SPEECH AND PRESENTATIONS

CHAIRMAN: Dr. Erick Koech HOD, Department of Forestry, Moi University.

Dr.Eric Koech started by giving an overview wood products situation in the country. He mentioned challenges facing the forestry sector and the need to promote farm forestry as a source of raw material for the industry.



Photo 2: Farmers and Industry discussions

OPENING REMARKS BY DR. P.K. KONUCHE DIRECTOR KEFRI, ON THE OPENING OF THE WORKSHOP ON WESTERN KENYA FARM FORESTRY DEVELOPMENT CONSORTIUM SPECIAL STAKEHOLDERS WORKSHOP, HELD AT MOI UNIVERSITY, CHEPKOILEL CAMPUS ON 5<sup>TH</sup> APRIL 2005.

Read by Joshua K. Cheboiwo, Centre Director, Londiani RRC on behalf of Director KEFRI Ladies and Gentlemen

Farm Forestry can be defined in simple terms as the practice growing trees on privately owned farmlands for household use and sale to local users. Farmers in Western Kenya grow many species on their farms to include the following Cuppressus lusitanica (cypress), Gravillea robusta, Eucalyptus ssp, Maesopsis eminii, Markhamia lutea, Acacia mearnsii (black wattle), Casuarina equisitifolia, Pinus patula and many others. Trees planted on farmlands have evolved from ornamental and service purposes to production of several utility products such as sawnwood, poles, fuelwood, posts, fuelwood, medicinal and bark. Farm forestry apart from provision of the above utility products also provide essential environmental goods and services such as shelter belts, shade, river bank protection, aesthetics, soil and water conservation.

According Kenya Forestry Master Plan (KFMP, 1994) trees on farms and settlements are on the increase that contrasts to public forests that is experiencing a decline. Most policy analysts are in agreement that the future of trees in Kenya will be on farms. This is because farmers in medium and high potential zones own over 10 million hectares and more in lower potential zones coupled with tree planting culture in place.

Most of us are aware that our forestry industrial sector is among the leading and well developed in the region but many have closed or closing due to the shortage of material wood. The shortage of roundwood has not only led to the collapse of hundreds of wood based industries in the country but has also caused severe shortage of forestry products to vital economic sectors such as construction and artisanal enterprises that employ millions of people in primary and secondary processing sectors. The loss of past industrial forestry technological gains and expertise in the sector is so real now to be ignored. The sector's contribution to the government policy on industrialization by 2020 will not be significant if reliance on public forest materials remain at current levels.

It is estimated that farmers own approximately one million hectares of land under some form of farm forestry with an estimated output of 16-million m<sup>3</sup> worth over Ksh.18 billion. This is not a simple feat but an important sector and hence KEFRI's determined efforts to inject some resources to realize its huge potential.

KEFRI its 1<sup>st</sup> Strategic Plan 1997-2004 ranked farm forestry No 1 activity and a lot of activities were initiated to boost farm forestry development to include documentation of existing farm forestry technologies, introduction of superior germplasm and market studies. National Stakeholders Workshop held in September, 2003 proposed several action plans to include documentation of existing and potential market segments for farm forestry products, facilitate formation of tree producers association and provide framework for linking tree producers to major industrial markets.

KEFRI has linked up with various stakeholders to develop models farm forestry into a vibrant sector that can support struggling forest enterprises. It has been working closely for a long time with Pan Paper and private tea estates in germplasm development. Recently some discussion with ITT-Eatec and KTDA have identified some areas of common interest especially framework to link them to tree growers in their respective regions. KEFRI has worked closely with FD in technical and germplasm development for many years and still remain an important partner in the promotion of farm forestry. KEFRI has been consulting with Moi University for the initiation a Farm Forestry Resource Development Centre to act as central depository of farm forestry data base and research centre in collaboration with other stakeholders in the country.

It is KEFRI's expressed position that the future of commercial tree growing will not only depend on the environmental concerns but its ability to generate incomes or substitute forestry goods purchases from the markets. KEFRI has identified some key issues that may need to be addressed if commercialization of farm forestry activities is to take place to include imperfect market conditions, existing policies on trade in farm forestry products and failure of local enterprise to embrace farm forestry as a reliable supplier of roundwood thus leaving it exposed unpredictable market conditions that has hindered investment in the sector.

Farm forestry sector has made some progress in penetrating some key roundwood and allied product markets such as construction poles, firewood sawnwood and charcoal especially after the moratorium on harvesting in public forests was pronounced. However, its share in most of them is still disproportionably small as compared to its potential capacity. This is more so in the short rotation crops such as poles, pulpwood and firewood that farmers can easily enter into as compared to longer rotation crops such as peeler and saw logs. For example, currently Pan Paper Ltd is estimated to experience a roundwood deficit of over 150,000m³/year mostly Eucalyptus. KPLC and TELKOM are estimated to be experiencing a shortage of about 85,000 transmission poles per year

that has resulted in some importation from South Africa. KTDA factories are currently converting its energy source from furnace oil to firewood thus further creating market opportunities to smallholder tree growers currently estimated at over Ksh 1.5 billion.

There are some challenges that this workshop and follow up action plans should address in order to make farm forestry a major player in dwindling opportunities in the forestry sector to include the following:

- 1. Development of strong partnership structures at various levels to spearhead development of farm forestry in Western Kenya
- 2. Development of a comprehensive plan to influence policy and legal structures in favour of farm forestry development.
- 3. Development of structural and legal framework to link farmers to stable industrial roundwood consumers.
- 4. Delivery of high quality materials and skill to farmers.
- 5. Development of contract tree farming and provision of credit facilities to tree growers.
- 6. Enhancement of remunerative pricing mechanisms that provide fair compensation to farmer's efforts.

The above actions though not exhaustive may provide the necessary impetus to transform farm forestry from the current outfit into an important engine for growth in the forestry sector. It will be for the interest of the stakeholders to forge a strong partnership with a common vision especially so with farmers and wood based enterprises. I would be very grateful if the stakeholders present here provide an efficient model of farm forestry development that can be replicated in other regions for you have all the necessary resources for successful implementation. That will be possible if good will from all the stakeholders represented here is forthcoming.

At this juncture I must thank the organizers, Farm Forestry Programme and Moi University for committing their budgetary resources to organize such a unique workshop which I think is first of its kind in the country and the region and its outcome may play a crucial in the future of farm forestry in the country. I thank you participants and your sponsors for investing your time and resources in this very important workshop. KEFRI will continue to use its limited resources to carry out R&D in collaboration with other stakeholders to ensure the success of farm forestry and in general the forestry sector in the country.

I wish you a fruitful discussions and recommendations in today's workshop.

Karibu and Thank You.

## 2.0 EXISTING AND POTENTIAL MARKETS FOR FARM FORESTRY PRODUCTS IN WESTERN KENYA: Joshua Cheboiwo<sup>1</sup>

The market segments that farm forestry already have commanding lead or have high potential to enter in western Kenya were presented as follows:

## 2.1. Industrial Firewood Markets in Textile and Food Processing Enterprises

Table 2.1: Industrial Firewood Demand by Textile and Food Processing Enterprises

| Name                | Distances* | Intake in tonnes | Unit price in Ksh | Total cost in Ksh |
|---------------------|------------|------------------|-------------------|-------------------|
| Rupa Mills          | 120        | 2000             | 800               | 1,600,000         |
| KenKnit             | 100        | 1700             | 1000              | 170,000           |
| Corn Products       | 120        | 18200            | 1250              | 22,750,000        |
| Lessos creameries   | 100        | 4700             | 1500              | 7,050,000         |
| Arkay Industries    | 120        | 600              | 1100              | 660,000           |
| Mudete Tea Factory  | 100        | 14400            | 950               | 13,680,000        |
| Kabras Mills        | 100        | 1000             | 1300              | 1,300,000         |
| Western Sugar Mills | 160        | 15840            | 1300              | 20,592,000        |
| Total               |            | 52440            | 1000              | 69,332, 000       |

<sup>\*</sup>Distances is measured in two way travel in kilometres

## 2.2 Industrial Firewood Demand by KTDA affiliated Tea Processing Factories.

Table 2.2:Potential industrial firewood demand by factories in the Western Kenya Zone

| ZONES   | Factories  | Annual Green<br>tea intake Kgs <sup>2</sup> | Annual made<br>tea (kgs) | Annual<br>wood/m3 <sup>3</sup> | Value in<br>Ksh <sup>4</sup> |
|---------|------------|---|--------------------------|--------------------------------|------------------------------|
| Zone 8  | Tegat      | 15260463                                    | 3327144                  | 61041.852                      | 61041852                     |
|         | Momul      | 15877428                                    | 3757717.5                | 63509.712                      | 63509712                     |
|         | Litein     | 14095752                                    | 3310735.5                | 56383.008                      | 56383008                     |
|         | Kapkatet   | 12315709.5                                  | 2956542                  | 49262.838                      | 49262838                     |
| ZONE 9  | Kapset     | 14016369                                    | 3327049.5                | 56065.476                      | 56065476                     |
|         | Kapkoros   | 18921510                                    | 4827049.5                | 75686.04                       | 75686040                     |
|         | Mogogosiek | 19447531.5                                  | 4712043                  | 77790.126                      | 77790126                     |
| Zone 10 | Sanganyi   | 16035574.5                                  | 3860955                  | 64142.298                      | 64142298                     |
|         | Nyansiongo | 11460010.5                                  | 2832304,5                | 45840.042                      | 45840042                     |
|         | Kebiriko   | 9338086.5                                   | 2231890.5                | 37352.346                      | 37352346                     |
|         | Tombe      | 10933170                                    | 3355477.5                | 43732.68                       | 43732680                     |
|         | Nyankoba   | 10933170                                    | 2617336.5                | 43732.68                       | 43732680                     |
| Zone 11 | Ogembo     | 17518831.5                                  | 4214509.5                | 70,075.326                     | 70,075,326                   |
|         | Nyamache   | 18060775.5                                  | 4468650                  | 72243.102                      | 72243102                     |
|         | Kiamokoma  | 12591637.5                                  | 3026703                  | 50366.55                       | 50366550                     |
| Zone 12 | Chebut     | 13958281.5                                  | 3267904.5                | 55833.126                      | 55833126                     |
|         | Mudete     | 12198888                                    | 2943631.5                | 48795.552                      | 48795552                     |

<sup>&</sup>lt;sup>1</sup> Centre Director, Londiani Regional Research Centre, Thematic Leader, Markets and Marketing of Farm Forestry , P.O. Box 382, Londaini, Tel 052-64082, Email: Kefri-ln@africaonline.co. ke

|       | Kapsara | 340021.5  | 50121      | 1360.086 | 1360086     |
|-------|---------|-----------|------------|----------|-------------|
| Total |         | 243303210 | 59087764.5 | 993212   | 929,296,840 |
|       |         |           |            |          |             |

<sup>2</sup>This is based on the estimates for the 2004 year. The annual data was based on KTDA half year report(Jan-Jun) and multiplied by a factor of 1.5 to account for less production in the last half period

<sup>3</sup> 1m<sup>3</sup> is used to convert green into 250 kilograms of ready made tea.

## 2.3. Roundwood Demand by Pulp and Paper Enterprise Markets

Table 2.3: Industrial Fuelwood Demand by Pulp and Paper Industries

| Industry                | Capacity in m <sup>3</sup> | Factory gate price Ksh | Total Cost in Ksh/yr |
|-------------------------|----------------------------|------------------------|----------------------|
| Highland Paper Mill     | 4000                       | 950                    | 3,800,000            |
| Pan African Paper Mills | 250,000                    | 1200                   | 300,000,000          |
| Total                   |                            |                        | 303,800,000          |

### 2.4. Sawlog Demand by selected Saw Mills

Table 2.4: Roundwood intake before 1999 for selected Saw Mills.

| Name     | District | Capacity m <sup>3</sup> yr | Farmer's intake (%) | Location |
|----------|----------|----------------------------|---------------------|----------|
| Rai Ply  | UG       | 54000                      | 5                   | Eldoret  |
| Sajama   | UG       | 8000                       | 15                  | Eldoret  |
| Alkanoor | UG       | 4500                       | 8                   | Eldoret  |
| Wareng   | UG       | 9500                       | 50                  | Eldoret  |
| Savanna  | UG       | 1800                       | 10                  | Kaptagat |
| Kaimosi  | Vihiga   | 1650                       | 40                  | Kaimosi  |
| Rapogi   | Vihiga   | 1200                       | 20                  | Rapogi   |
| Total    |          | 806,500                    |                     |          |

### 2.5. Construction Polewood Stocks in Kisumu, Largest Regional Market.

Table 2.5: Monthly polewood Stocks and Sales in Kondele and Nyalenda Markets in Kisumu

| Market   | Number of merchants | Monthly stock in pieces | Estimate stock value in Kshs | Market share(%) | Annual<br>turnover Ksh |
|----------|---------------------|-------------------------|------------------------------|-----------------|------------------------|
| Kondele  | 9                   | 25,200                  | 1,400,000                    | 60              | 16,800,000             |
| Nyalenda | 2                   | 12600                   | 567,000                      | 30              | 6,804,000              |
| Others   | -                   | 4200                    | 189,000                      | 10              | 2,268,000              |
| Total    |                     |                         |                              |                 | 25,872,000             |

<sup>&</sup>lt;sup>4</sup> The total value is based on average price of Kshs 1000/m3

## 2.6 Annual Demand for Transmission Polewood by Local Enterprises

Table 2.6: Annual demand and value of Transmission Polewood by Selected Enterprises.

| Enterprise | Location | Annual Capacity | Unit price | Est. value in Ksh       |
|------------|----------|-----------------|------------|-------------------------|
| ITT-EATEC  | Eldoret  | 100,000         | 800        | 80,000,000              |
| ITT-EATEC  | Londiani | 40,000          | 800        | 32,000,000 <sup>2</sup> |
| TELKOM-GTI | Gilgil   | 72,000          | 800        | 57,600,000              |
| Total      |          | 212,000         |            | 169,600,000             |

## 3.0 PRESENTATIONS OF EXPERIENCES BY LOCAL INDUSTRIES AND STAKEHOLDERS.

## 3.1 Demands for Industrial Firewood by Corn Products Thomas Rwengo<sup>3</sup>.

The Corn Products Kenya Ltd is an affiliate of Corn Products International Inc., one of the largest corn refineries in the world and leading producer of Dextrose. It is located in Eldoret Town and It uses maize to manufacture a range of products that include modified and unmodified starches, glucose syrups and speciality products. Its main customers are in food and beverage, pharmaceutical, paper products, textile, brewing and animal feeds sectors. It uses firewood to run its boilers and currently uses 63 tonnes per day. Formerly, its supplies were from former EATEC plantations but since its closure it shifted Forest Department mostly scavenging remains after harvesting that account for 50% of its requirement with the balance from merchants and farmers. It has been experiencing shortages in the recent past as the competitions for the dwindling supplies intensified. Its major competitors include Rupa Textiles, Ken Knit, Timber Treatment International (TTI-EATEC), Lessos Dairies and sugar industries.

Its pricing mechanism has been responsive to competition from other buyers and availability of the firewood. It specification include length of 7.5 cm and players Market based pricing –are responsive to changes in market with the competitors and availability. It gate price offer range from 1000 to 1250 per tonne of dry firewood.

The wood supplied to the mills should be 3ft in length and 8" diameter.

<sup>2</sup> This is not yet operational –but it is potential consumer in future

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Some of the strategies undertaken by Corn Products include partnership with Forest Department in conservation of natural forests and establishment of plantations in Kaptagat. It supports a tree nursery that supplies seedlings to Forest Department and farmers around Kaptagat and its vicinity.

## 3.2. Homaline Company Ltd

Homaline Company Ltd is involved in limestone mining and agribusiness. Limestone mining consumes a lot of firewood for processing of lime products – the consumption currently stands at 75 cubit feet per day. These mostly obtained from the farmers from Kericho, Nandi and parts of Nakuru. Due to growing scarcity of wood –the company has adopted a number of strategic decisions which it hopes to attain self sufficiency in wood products. The company is founder of the Nyando Valley Development Trust-which is involved with other stakeholders in promoting tree growing within the valley catchments.

Through this arrangements the company is contracting farmers to plant trees on their farms and the company guarantees to buy the trees at the end of the rotation-the company also provides technical back up to tree growers. Its also supports model nurseries run by groups and individual farmers by providing the inputs and technical know-how within Nyando area. The company faces a lot of problems in getting firewood from farms because of cumbersome procedures put in place by the provincial administration that must be fulfilled. This is compounded by farmer's ignorance of their rights that the provincial administration takes advantage to frustrate them from harvesting their trees.

## 3.3 Timber Treatment International (TTI-EATEC).

TTI-EATEC formerly EATEC is a Kenyan company that deals with treatment of poles and a range of other products in its premises in Eldoret Town. It is currently undergoing some restructuring to meet the growing demand and competition in its core business of transmission treatment of poles for various uses. It reported that plans are at an advanced stage to introduce more value adding timber processing to target emerging timber markets. Its current demand forecast include 150,000 transmission poles, 1100 pieces of railway sleepers, 35,000 fencing poles, 32,000 boundary poles(electric fences), 1000 sawlog trees and 3 million pieces of trooper (wattle). The main species targeted by the company include *E. grandis/saligna*, *A. mearnsii*, *Pimus patula*, *C. lusitanica*. In 2005/2006, it projects that demand for transmission poles will expand to 350,000 poles mostly from local and regional markets and 10,000 railway sleepers for refurbishment of debilitated rail systems in the region. It intends to diversify into saw milling business it anticipates to purchase up

to 5000 sawlog trees per year it is operational. It reported that there is chronic shortage of roundwood materials in all the above categories especially in the medium term as demand is expected to peak in all the above product categories

To meet its demand apart from starting a nucleus woodlot plantation it is willing to partner with farmers who are willing to produce raw materials that meet their specification within a radius of 100 kilometers from its factory. It is not aware of legal framework for contract partnerships and hope that such framework can be developed through discussion and dialogue such as the current meeting. TTI expect high demand for its products in Kenya and East and Central Africa region given the expected economic revival initiatives and strategies fronted by various institutions such NEPAD, MDG, AGOA etc. However, its expectation may be handicapped by shortage of roundwood materials for its range of products. It proposed that KEFRI and FD can facilitate farmers to start growing alternative species such as *E. paniculata* for railway sleepers and *E. nitens* for sawnwood.

## 3.4 Sotik Tea company Kamau

Sotik Tea Company has incorporated forestry into its core income generating enterprises after fulfilling its initial focus of self-sufficiency. It currently harvests approximately 28,000 m³ per year from its plantations for its tea processing and allied operations. It currently has surplus roundwood for sale as sawlog and transmission poles. It has 5,000 poles for sale as transmission poles and planning to install a saw milling units for processing Eucalyptus sawnwood for export. It has received some inquiries from as far as Costa Rica in Central America.

## 3.5 James Finlay Tea Company

It was reported that James Finlay has been expanding its forestry division through acquisition of more land and planting trees in Londiani Division in anticipation of emerging markets for roundwood materials in the future.

4.0 POTENTIAL FOR COMMERCIAL FARM FORESTRY IN WESTERN KENYA. Eliud Kireger<sup>4</sup>

#### 4.1 Introduction

Farm forestry has a range of potential benefits including positive economic and environmental outcomes. In Western Kenya, favourable climatic conditions and abundance of suitable land make commercial tree farming an attractive option.

This study examined the possibilities of commercial wood supply from large-scale farmers in the districts which are within a distance of 100km from the Panafrican Paper Mills (PPM) at Webuye. Industrial wood has traditionally been coming from Gazetted forest areas. However, the Forest Plantation areas have significantly reduced from 160,000 hectares in 1980ha to about 80,000 hectares by 2004. In addition to the reduction, the remaining plantations are not well stocked resulting and have lower than normal roundwood materials. Many wood-based industries in the region are working below capacity or have closed down due to shortage of roundood materials. Among the industries likely to be affected by the chronic roundwood shortage is the PPM with an annual demand of over 450,000m<sup>3</sup>.

## 4.2.0 Overall Objectives

The overall objective of this study was to gather information on availability of land and willingness of large-scale farmers to engage in commercial tree growing for sale industries.

### 4. 2.1 Specific objectives were:

- To identify location and size of suitable land
- Find out the area of land farmers are willing to grow commercial trees
- Current marketing and pricing practices
- Existing constraints and barrier to tree growing

## 4.3. Methodology:

A farm survey was done in the study districts using s structured questionnaire. A total of 95 large-scale farmers were randomly sampled. The information extracted were size of land, area under trees, area farmers were willing to plant trees, and location. Marketing and pricing data was also collected.

<sup>&</sup>lt;sup>4</sup> Department of Forestry, Chepkoilel Campus, Moi University, P.O. Box P.O. Box 1125, Eldoret, Kenya; E. Mail: <a href="mailto:limorotuk@yahoo.co.uk">limorotuk@yahoo.co.uk</a>.

#### 4.4 Results:

## Summary of the findings:

- 1. Farmers are willing to put 14% of their lands under trees and already 7 % of land is under trees.
- 2. Major tree species encountered were Eucalyptus, Pines, Cypress, Grevillea robusta and Acacia mearnsii.
- Rotation age differed considerably depending on the end use. For rafters and small wood, rotation was around 3 to 5 years; for Acacia mearnsii and for eucalyptus for charcoal and small building material, rotation was 5-10 years
- 4. Unlike agricultural crops, there is no organized market for the wood in the area. There are however middlemen who scout for wood and sell it to industries in Eldoret. For sawn timber, processed wood from farms are sold to Nairobi and Mombasa, distances of 300 and 800 km from the farms.
- Prevailing prices of stacked wood for firewood or other small material indicated a net price of around Ksh 500 per ton at the farm gate.
- 6. Eucalyptus with a diameter greater than 40 cm fetched between Ksh 1,000 3,000 per tree
- 7. Prices paid by Eldoret industries per tonne were: Highland Paper paid Ksh 1,200; Ken-knit for wool Ksh 1,000; and Corn Products Company Ksh 1,350. These were prices of air-dry wood. For wet wood, prices were reduced by Ksh 100 per tonne.
- 8. Acacia mearnsii was sold at between Ksh 5-50 per pole. Woodlots were sold between Ksh 40,000 and 70,000 per acre which translates to Ksh 679 per tonne at farm gate. Cypress trees were sold between Ksh 500 and 1,500.

## 4.5. Existing constraints and barriers to tree planting on farms

- 1. Lack of high quality (genetically) appropriate species, and timely seedlings supply.
- 2. Lack of technical knowledge on species selection and tree planting and management techniques.
- 3. Lack of market information and therefore market assurance.
- Lack of capital for switching to farm forestry including (and preparation, buy seedlings and to pay for labour to plant.
- 5. Ineffective extension and follow-up due to low extension to farmer ratio.

- Policy and legislation issues: Permit requirement to cut and to transport wood grown in farms and fears that regulations may prevent future harvests is a major disincentive to growing of trees in farms.
- 7. Long gestation period for most trees make farmers wait longer to receive financial returns.

#### 4.6 Conclusions

There is a substantial amount of good quality land available for commercial tree planting in the districts surveyed.

Farmers are willing to engage in commercial tree farming and need to be motivated by among other the following:

- 1. Assured market for their produce especially if the moratorium on harvesting in public forests is lifted.
- 2. Provided with technical information on tree planting and management
- 3. Provided with high quality planting material,
- 4. Put in place a farmer friendly legal and policy conditions that facilitate rather than hinder harvesting and marketing of wood products from private farms.

#### 4.7 Recommendations

The following recommendations were put forward:

- ➤ Organize like- minded farmers into tree growing association for purposes of sharing experience and efficiency in commercial wood production.
- > Review and modify the procedure of acquiring permits to move wood products from farms.
- ➤ Promote centralized tree nurseries for supply of high quality seedlings and at affordable prices rather than farmer based tree nurseries.
- > Intensify specialized forestry extension in target areas for wood production for industrial purposes
- > Facilitate forestry and agricultural extension officers in order to support farmers with technical information on wood resources management, marketing and pricing.
- Arrange to make long term credit facilities available to farmers who are unable to provide capital for inputs.
- > Arrange for short training on tree planting and tending for interested farmers

## 4.8. Way forward:

To urgently find ways and means to remove the identified constraints in order to initiate successful commercial tree planting in farms.

## 5.0 QUESTION AND ANSWER SESSIONS

General Questions, Observation and Suggestions and Recommendations

The following questions, observations, suggestions and recommendations were made during the Question and Answer Sessions. The following were some of the crucial issues raised by attendants or answered by the presenters:

- The structure on the permit system and the number of authorities to be consulted and the role of the provincial administration and police in the process.
- Since the permits systems seem to have failed or ineffective in controlling tree felling why can't it be abandoned or changed to reduce time taken in processing it.
- Trees to be planted in rocky marshy and poor quality land. It was however, pointed that tree grown on such sites may not attain the desired growth rates and produce good quality products.
- Industrial firewood users were urged to employ innovations that that improve their efficiencies and thus use less firewood.
- Suggestions were made on the possibility of promoting fast growing bamboo for industrial firewood use and other uses. KEFRI informed the meeting that plans to promote planting and domestic and industrial use bamboo at advanced stage through a consortium of various agencies, KEFRI, ICRAF, FD, FAN and MOA among others with technical support from UNIDO. This is a regional project covering among other countries Ethiopia and Uganda.
- Farmers who have planted trees on commercial premise were worried on the long process in the disposal (permit system, scouting for buyers, price bargains etc) and lack of robust competitive profitable markets for their products.
- Some commercial farmers suggested that there general lack of information on the returns from various farm forestry enterprises and thus it is difficult for them to make informed decisions on the viability of trees planting versus other land use mostly agricultural enterpriser. KEFRI informed the forum that it has committed itself in 2005/2006 financial

- year to produce a brochure outlining cost and benefit flow for various farm forestry enterprises and it will be circulated to various stakeholders.
- Most farmer were worried that their initial assessment show that returns to farmers from farm forestry enterprise were likely to be very low if the offer by Pan Paper is anything to go by and tree farming may not compete with agricultural crops on profitability and returns to investment.
- There were worries that at current level of information and market conditions many farmers may enter into commercial tree planting but plant trees for subsistence use unless better markets such as good prices are offered for their trees.
- ❖ It was reported Forest Action Network (FAN) has assisted farmers in western province to form an umbrella organization Western Kenya Tree Planters Association (WTPA) to grow trees for Pan Paper and other markets in the region. It was reported that membership is open to farmers in 6 districts Busia, Lugari, Teso, Kakamega and Bungoma and Trans Nzoia on conditions that one has to set aside land for tree planting atleast one acre, pay membership fee of Ksh 1000. Some of the handicaps so far identified include high cost of inputs, the registration fee is high for many farmers to register and farmers don't have sufficient information on commercial tree growing.

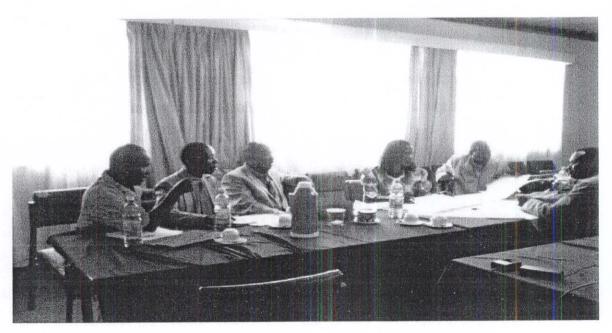


Photo 2: Group Discussions.

6.0 POTENTIAL PARTNERSHIPS FOR FARM FORESTRY DEVELOPMENT IN WESTERN KENYA. Joshua K. Cheboiwo and David Langat<sup>5</sup>

6.1.0 Partnerships Between Smallholder Tree Growers and Large Industrial Markets

#### 6.1.1 Out-Grower Schemes

- Partnership in which growers are largely responsible for production, with the company assurance that the final crop is purchased at maturity: Examples from South Africa include South African wattle growers association which contracts 600 farmers to supply bark and Mondi and Sappi that contracts over 200,000 out growers for pulpwood materials.
- Partnerships where farmers enter into elaborate technical and financial support agreements
  that may involve provision of high quality seedlings, establishment costs, maintenance costs,
  front payments and assurance for purchase of the final crops either in single or combinations
  of the above. The support costs are recovered after the sale of the crop. This is common in
  Australia, New Zealand and South Africa.
- Partnership in which the company or government agency is largely responsible for production, paying land owners market prices for their wood allocation minus the production costs: Common in EU countries.
- Land lease agreements in which landowners are paid for use of their land and have little involvement in management but may be entitled to some proportion of the final profits: Common in the USA and some EU countries.

## 6.1.2 The Advantages of Out-grower Schemes

The following are some advantages of the out growers schemes

- 1. The firms can access the materials at competitive costs
- 2. Cheap access to land in cases of leases
- 3. Diversification of supply of raw materials
- 4. Greater acceptance of the company because of perceived social responsibility (social branding opportunity).

## **6.2 Investment Partnerships**

The buyers of forest products and industry separately or in partnerships can help finance local tree enterprises to improve operations through investment partnerships. Companies bring:

- Investment resources,
- Management expertise
- Market linkages to smallholder farmers
- Guarantee markets access
- Provide remunerative prices

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## 6.3 Principles of Viable Farmer-Industry Partnerships

mutual trusts of partners legitimate aims

Fair negotiation process

Learning approach- allowing for learning process and experimentation and treating deals as learning process

Long term commitment from partners

Equitably shared risks and well spelt out at the initiation of the contract.

Sound business principles- no exploitative relationship, or relationships based on insincere objectives e.g. use of contracts for public relation exercises.

The partnership should contribute positively to each development

## 6.4 Capacity building and networking for producer associations

- Training of producers on the technical side of the business-tree growing and management
- · Negotiation and bargaining skills with the consumers improving on the social capital

Networking of the producers.

- Encourage voluntary association with developed sets of rules and regulations to avoid the state bureaucracy that in most cases is an impediment to business growth.
- Defining the role and responsibilities of associations. These roles could be in providing market information, legal advice, financial analysis, linkages to lobbyists and political supporters, mobilization of financial resources through organizing credits and assistance in forest planning

## 6.5 Critical Elements of Successful Partnership Associations

- Development and sustenance of a shared vision
- Locating and partnering together by people of the shared vision
- Development of a monitoring system so as to respond to dynamics of the markets and social environment

## 6.6 Financing Options for Partnerships

- Self- through saving or mobilizing own resources from members
- Bank credit-long term loans from commercial banks or financial institutions
- Micro-finance institutions
- Joint ventures with the consumers of forest products.
- Development Trust Funds examples include EU CDTF
- International Funding Facilities examples include Carbon Credit, Green Environment

#### 7.0 SESSION II: DISCUSSIONS AND WAY FORWARD

The session involved formation of groups to tackle several issues such as responsibilities of consortium members, zonation of farmer association into group of districts, election of interim offices and officials for three tier groupings. The Western Kenya Farm Forestry Development Consortium, The Western Kenya Wood Industries Association and The Western Kenya Tree Planters Association.

## 7.1.0 ROLES AND RESPONSIBILITIES OF CONSORTIUM AFFILIATES MEMBERS IN FARM FORESTRY DEVELOPMENT IN WESTERN KENYA

## 7.1.1 Western Kenya Farm Forestry Development Consortium (WFFDC)

- (a) Vision of the consortium options:
  - (i) Commitment to providing leadership model in profitable tree planting on farms through strong partnerships
  - (ii) Poverty eradication through sustainable farm forestry
  - (iii) Poverty eradication through sustainable farm forestry and environmental conservation.

## (b) Role of WFFDC

- (i) Provide a forum and leadership for the stakeholders to articulate issues pertaining to farm forestry in the region
- (ii) Form linkage with other development agencies for the promotion of farm forestry
- (iii) Lobby for favorable policy legal structures to enhance development of farm forestry and allied sectors and viable enterprises.
- (iv) Seek viable working frameworks between partners in respect to funding development activities, technical support services, payment modes and other issues of mutual interest.
- (v) Explore investment opportunities for partners in production, processing and marketing sectors

#### 7.1.2 Tree Planters Associations

- Grow and plant trees for commercial purposes.
- 2. Grouping and registering strong force farmers association.

- Capacity building for sharing and sourcing information as a data base (resource valuation)
- 4. Bargaining power price /marketing to avoid exploitation
- 5. Endowment facility financing assistance /technical assistance.
- 6. To link the members to industry and technical support.
- A voice of farm forestry against external influences e.g. water policy, agricultural polity, etc (protection).
- 8. Promoting tree growing as a viable land use.
- 9. To coerce government for better extension services.
- 10. Lobbying for favourable policy legislation e.g. pricing, marketing and movement permit.
- To act as an EYE for emerging opportunities e.g. (CDM) clean development mechanism
   carbon trading.
- 12. Clearing house for farmers and rounwood processing industry contracts.
- 13. Enhance good health amongst members by planting fruits trees.

#### 7.1.3 Wood Based Industries

- (i) Form partnership with other wood based industries to lobby for government support.
  - Policies Importation, Felling licenses
  - germplasm to be obtained in partnership
- (ii) Develop a working relationship with farmers associations to identifying farmers within their supply areas.
  - To encourage farmers to form groups
  - Develop a working framework between industry and farmers groups
- (iii) Supply high quality seedlings to farmers in collaboration with tree growers association.
  - To be done in partnership.
- (iv) Develop contract agreement with tree growing associations and farmers on guaranteed markets within their supply zones.
  - Market contracts between the TGA and the industry.
- (v) Negotiate with TGA on pricing mechanisms and projected trends for informed investment decisions.
  - Pricing contracts depending on the prevailing prices at the time of supply

- (vi) Develop harvesting and transportation framework in collaboration with TGA
  - Financing of the transport and harvesting operations.
  - The timing to avoid storage costs.
- (vii) Participate in regular consortium partnership meetings aimed at promoting farm forestry sector in the region.
- Hold meetings at least once per year to review on the contentious issues between the suppliers and the industries.

#### 7.2 Zonation Tree Planters Associations.

- 7.2.1 Western Kenya trees planters Association will comprise the following districts:
  - Teso
  - Bungoma
  - Transzoia
  - Butere Mumias
  - Kakamega
  - Lugari
  - Mt. Elgon
- 7.2.2 North Rift Tree planters Association will comprise the following districts:
  - Marakwet
  - Keiyo
  - Uasin Gishu
  - Nandi (North)
  - West Pokot
- 7.2.3 Central Rift Tree Planters Associations will comprise the following districts:
  - Nakuru
  - Koibatek
  - Kericho
  - Bureti
  - Nyamira
  - S. Nandi
  - Nyando
- 7.2.4. South Rift Tree Planters Associations will comprise the following districts:
  - Narok
  - Transmara
  - Bomet
  - Kisii

#### 7.3.0 Interim office

7.3.1 Secretatariate: Moi University, HODs Office

#### 7.3.2 Industries

- EATEC (Chair): Jonah Kimani
- Homeline (Secretary); Okeyo Ouko
- Pan Paper/Rupa/Ken Knit, Rai Ply, Highlands Paper Mill (treasury): Chairman to discuss and have them nominate.

#### 7.5.3 Consortium

Chairman:

Moi University: H.O.D, Department of Forestry

Secretary:

KEFRI: Centre Director, Londiani Regional Research Centre

Treasurer:

Farmer: Mr. Peter Boit

#### 7.5.4 Members

- LVEMP
- FD (DFO U.G Keiyo)
- Industries (EATEC/TTI, KAM)
- Chairmen (4 farmers Association).

#### 7.5.5 North Rift Tree Planters Association

Peter Boit: Chairman

Dr. Kireger Sec

Burer: Treasurer

#### 7.5.6 Central Rift/South Tree Planters Associations

## Langat - To assist to identity the groups

## 7.5.7 Meeting program

**Farmers** 

Twice / year

Consortium

Twice / year

Industrialist

Twice /year

### 7.5.8 Funding

All the groups to address funding issues individually for the initial meeting while awaiting consortium further directives.

#### 7.6.0 Consortium Members

- KEFRI
- Moi University
- F.D
- KVDA
- LVEMP
- Industries
- KAM (Kenya Association Manufacturers )
- Farmers.

### 7.7 Way forward

Chairman to form the tree planters association in there respective zones.

- The consortium to facilitate a meeting
- Chairman and secretary of consortium
- Legal status of farmers association, consortium and industrialist to be established.
- Establish a database of contacts of all stakeholders (postal address, E. mails, phone etc)
- Centre of operation to be at Moi University Forestry department (HOD) office.
- KFS to be enlisted as a member
- Assess other potential members



**Photo 3: Way Forward Deliberations** 

#### 8.0 SESSION III: CLOSING CEREMONY

**8.1 Closing remarks by the Principal of Chepkoilel Campus: Read on his behalf by Dr. Koech** The Kenyan Forestry sector is going through a crisis as the demand for wood far exceeds the supply from the government forest estate.

This is a national crisis and development agencies like the universities and KEFRI cannot sit back and watch the situation move from bad to worse. They must provide some leadership towards alleviating the problem.

I believe today's meeting effort is a step in this direction.

In solving this crisis farmers will continue to play a central role as they have obviously high capacity (Land technical know-how, motivation etc) to supplement tree growing by the government. However, well thought out partnerships between farmers, research institutions and wood consumers especially the industries need to be put in place to effectively deal with any constraints that may emerge and maximize benefits to every stakeholder. I believe you have come up with solid resolutions or suggestions that will establish such a partnership in this rift valley/Western Kenya region.

The rest of Kenya is watching and I hope you will provide the right model for others to follow.

The success of this meeting will not be judged from the minutes but on the number and quality of trees that will eventually be planted on the farms as a result of ideas, motivation of facilitation originating form this meeting.

## 9.0 List of Participants who attended the Special Stakeholders Meeting $5^{\mathrm{th}}$ April 2005

| No. | Name              | Organization   |  |
|-----|-------------------|--|--|
| 1   | Joshua Cheboiwo   | Centre Director Londiani KEFRI                                       |  |
| 2   | Japheth Olual     | TTI-EATEC Plant Manager Box 31661 Eldoret                            |  |
| 3   | Thomas Rwengo     | Operation Manager Corn Products International Box 1012 30100 Eldoret |  |
| 4   | Dr. Njunge        | Moi University Box 1125 Eldoret                                      |  |
| 5   | Dr. Eliud Kireger | Moi University Box 1125 Eldoret                                      |  |
| 6   | Dr. Senelwa       | Moi University Box 1125 Eldoret                                      |  |
| 7   | Julius Kamau      | Sotik Tea Company Private Bag  |  |
| 8   | David Langat      | KEFRI Londiani Box 382, LDI  |  |
| 9   | Lawrence Etyang   | Western Kenya Tree Planters Box 171 Amukura                          |  |
| 10  | Grace Shigoli     | WETPA: 07201478062   |  |
| 11  | Ezekiel Okeyo     | Homaline Co. Ltd   |  |
| 12  | Moses Burer       | Uasin – Gishu Farmers Association                                    |  |
| 13  | Hitimana Joseph   | Moi University Box 1125 Eldoret                                      |  |
| 14  | Dr. Eric Koech    | Moi University Box 1125 Eldoret                                      |  |
| 15  | Erik Kimani       | Moi University Box 1125 Eldoret                                      |  |
| 16  | Pauline Kibingi   | Moi University Box 1125 Eldoret                                      |  |
| 17  | Mary Mbange       | EAWLS  |  |
| 18  | J. Kimani         | TTI-EATEC  |  |
| 19  | Isack Leting      | Chepkolel Sergoit, Farmer  |  |
| 20  | Masinde Kisimba   | Standard   |  |
| 21  | Peter Ochieng     | Standard   |  |
| 22  | Noah Kikoech      | Standard   |  |
| 23  | Erik Chemulei     | KVDA: Forester   |  |
| 24  | Chales Masanga    | Sotik Tea Company  |  |
| 25  | Bartuiyot Elijah  | Sirgwet, Farmer  |  |
| 26  | Ezekiel Kurgat    | Kuinet, Farmer   |  |
| 27  | Gichuru Thomas    | Moi University Box 1125 Eldoret                                      |  |
| 28  | Ndiema P.M        | Moi University Box 1125 Eldoret                                      |  |
| 29  | Mr. Kioko         | KEFRI Turbo Box 5 Lugari   |  |
| 30  | Mr. D. Korir      | Turbo Box 5 Lugari, Farmer   |  |
| 31  | Mr. P. Boit       | Turbo Box 5 Lugari, Farmer   |  |
| 32  | J. Korir          | Moi University Box 1125 Eldoret.                                     |  |