

Friends of the Mau Watershed (Fomawa)

Note No: 6:- Selling Gum Trees for Poles, Timber, and Firewood.

1. Poles

In 2007 KPL used 450,000 poles. They got 70,000 from within Kenya and imported the rest at huge cost from as far as Finland and Chile. With the plans to take power to rural areas it is anticipated that demand for poles will increase rather than diminish.

One hectare of well planted gums should produce 800 trees which meet the specification for poles after ten years. That is 80 poles/ha/yr. So to supply KPL with what they need around 5,600 hectares will have to be planted. If it can be assumed that the Tea Plantation Companies and Kakuzi will continue to supply around 70,000/yr then the balance will have to come from private farmers requiring around 4700 hectares. Fomawa is not aware of anyone outside the area which it covers who are growing gums-for-poles, and Tree Biotech at Karura, which is selling clonal gums, is doing so with the primary objective of the farmer having the firewood he needs. There is therefore scope for much more planting than exists at present.

2. Prices.

KPL have stated that they want to get their requirements within Kenya, and therefore want the farmer to get a price that makes it attractive for him to grow gums for poles. Currently the companies which treat poles, Timsales, Cabro etc, will pay Kshs. 2, 500/pole ex farm, loading for their account. This is for a pole with a min girth at breast height of 70cms, 10 metres long. That is a price which makes growing gums-for-poles an attractive proposition, though there should be room for more. **DO NOT SELL YOUR GUMS WHICH MEET THIS SPECIFICATION FOR LESS THAN THIS.**

Comment: - A 'standard' pole weighs about 250kgs, so a price of Kshs. 2, 500 gives a value of sh10/kg.

3. Timber

Only applicable to trees with a girth of more than 150cms at chest height as trees of lesser girth are not worth converting to timber.

In the past the requirement for timber has been met from the Government's pine and cypress plantations. But these are becoming exhausted and the gap between demand and supply is widening. There are many old trees which are too big for poles, and the aim should be to convert to timber either in existing mills, though the largest trees are too big for the mills to handle, or on site, though the snag with the latter is that the circular saws run off the up to of tractors are fairly inefficient, and using chain saws results in huge wastage. Fomawa's Swivel Saw is ideal, but is fully committed for the time being on trees

at Rongai bought from the Railways.. Landed cost of the saw from South Africa about Kshs. 1.35 million.

There continues to be a resistance to gum timber which is harder and heavier than what has traditionally been used. It is also more inclined to warp, and therefore very careful curing is needed. It is therefore sensible to aim for a price somewhat less than pine and cypress, and sh40/board foot is realistic. (One board foot is 144 cubic inches. ***Thus if the timber is 6" by 2" = 12, then a piece 12" long is one board foot.*** There appears to be a demand for wooden flooring, (boards and blocks/parquet) for upmarket housing. Using gum for flooring blocks has the advantage that the pieces are so small that warping is not a problem. Weight is not a consideration, and nailing is not necessary. Thus far G3's attempt to market Gum Timber for this purpose has met with limited success, and there is a need to broaden the marketing efforts in Nairobi.

If new planting is to be done with timber in mind, then thinning must be done even more severely than is the practice with cypress and pine. Otherwise the trees will not have sufficient girth. With an initial spacing of 3m by 3m (1100 stems/ha) thinning should be done in the ninth year, or thereabouts, by removing every other tree and selling those which meet the spec for poles, the rest for firewood. Trees/ha now 550. Further thinning by taking out another 50% to be done in the twelfth year, leaving 275 stems/ha. Final clear felling after fifteen years, though it might be worth delaying that.

COMMENT:- It is acknowledged that gums have never been grown in Kenya with the objective of producing timber, and the recommendations given are based on findings in Australia and South Africa. It may be that pine and cypress will be the most profitable for timber, but the ability to sell some of the gums for poles may give them an edge in profits/returns. There is still much to be learned, and for the time being G3 is hesitant to recommend that planting is done with timber in mind.

4. Firewood

There will be gums which do not meet the specification for poles, (too large, not straight etc) or timber, and there is a big demand for firewood. Finlays in Kericho are paying sh1250/cubic metre, delivered and stacked at their factories, and the KTDA factories are paying much the same. One cubic metre of stacked firewood weighs about 380kgs, so the price is Kshs./3.3kg, or sh3300/tonne. Njoro Cannery pay sh1500/tonne, loading and transport for their account. It is said that the commercial users of firewood could pay in excess of Kshs. 20,000/tonne at the factory, (Kshs. 8, 000/stacked cubic metre) before it is preferable for them to use oil. While it would be unrealistic to expect a price almost the equal of oil there must be room for a getting considerably more. Prices currently being paid give the buyer a good deal, but do not give the grower sufficient to persuade him that investing in gums-for-firewood is worthwhile.. Therefore it must make sense for the buyers to pay more NOW. This will give the growers, whose land is close to a commercial user, the

incentive to plant, and will ensure that firewood is available well into the future. It is said that the KTDA factories in Kericho, Kisii etc are buying far more trees than are being planted and the supply will soon be exhausted, and factories will then have to revert to oil.

The commercial buyers of firewood around Nakuru tend to use their firewood inefficiently, ie wet and too large, and it may be that there could be improvements in how their furnaces are run. G3 has arranged for Finlays to show some of the Nakuru buyers what constitutes 'best practice', and if they then use less firewood they should be willing to pay more for it.

SO THE FUNDAMENTAL MESSAGE TO ALL GROWERS WITH GUMS TO SELL IS TO STICK OUT FOR A DECENT PRICE. SOMEONE WILL MAKE MONEY FROM GUMS AND IT IS IMPORTANT THAT THE GROWER DOES SO. An initial target might be Kshs. 4,000/tonne ex farm. If in doubt about an offer get in touch with Fomawa