Technical Note No. 55

(i) WOOD FROM *EUCALYPTUS CAMALDULENSIS* SHELTERBELTS ON A FARM

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In 1980 in the farm of a progressive farmer in Mirpur Khas district of Sind, shelterbelts of Eucalyptus were planted with a view to assessing the effect of trees on crop yields as well as to find out quantity of wood available to the farmers over a period of time. A rectangular piece of land measuring 1,000 m x 630 m was selected for planting of shelterbelts. 9-month old plants of *Eucalyptus camaldulensis* in polythene tubes were planted in 3 rows comprising one belt, 2 m row to row and one m plant to plant distance, staggering plants in adjoining rows. In all 4 such belts spaced at 181 to 196 m and 630 in length were planted. The farmer has been planting wheat, cotton, maize and some other crops in-between the shelterbelts. The farm is canal irrigated. However, in case of canal closure the area can be irrigated through lift pumps.

Eucalyputs grew faster than expected. To reduce the competition, first thinning became necessary just after 3 years of planting. In 1982 alternate trees in the belts were removed, yielding about 5000 posts to the farmer which he sold as poles and fuelwood in the market. He used some of it for purpose of hutments and sheds for the cattle.

Since the trees started depressing the agricultural crops and competition for water was observed, in October, 1985 one entire row in each belt falling on the northern side was removed which yielded about 170 m^3 of wood. Average height and diameter of the trees at that time was as under:

Table: Height (m) and dia (cm) of 5 year old *E. comaldulensis* shelterbelts

Belt Nos.	Row-I		Row-II		Row-III		Average	
	Ht.	Dia	Ht.	Dia	Ht.	Dia	Ht.	Dia
I.	18.0	19.7	14.5	16.0	15.2	17.3	15.9	17.7
II.	14.5	17.5	13.7	14.3	13.7	14.5	14.0	15.4
III.	10.7	13.2	11.3	12.2	11.3	13.0	11.11	12.8
IV.	12.8	15.1	11.9	12.0	13.1	15.0	12.6	14.0
Average	14.0	16.4	12.9	13.6	13.3	15.0		

The farmer is negotiating the sale of the wood with different end users. In all, the farmer harvested 136000 Kg of wood 170 x 800 (1 m^3 = 800 Kg) Market price of fuel in Mirpur Khas district is about Rs. 40 per quintal (100 kg). It means that the farmer got an additional gross

income of Rs. 104400 over a period of 6 years as under:

Description of salable material		Amount Rs.
1.	Sale of 5000 poles @ Rs. 10 per pole in 1983	= 5000
2.	Sale of 170 m^3 (1360 quintals) of wood in 1985 @ Rs. 40 per quintal	= 54400
		104400

Even if half the amount is used up in cutting, coversion and carriage to the market for sale, and to compensate for crop depression still the farmer managed to collect an additional amount of Rs. 50,000 in about six years time.