8 Production and Trade

Timber (Tables 7–10)

General

While production of timber in 1951 was maintained at approximately the 1950 level, it soon became apparent that domestic demands were unlikely to be satisfied unless exports were reduced. Consequently in March an embargo was placed on all exports from the territory with the exception of *Antiaris* logs, shorts and flooring strips. At the same time price control was abolished in the hope that if prices were allowed to find their own level, it would be a stimulus to production. Although the export embargo was introduced as a temporary measure, it was not possible to lift it a year later since accumulated stocks of sawn timber were still very low. Towards the end of the following year, the embargo was removed except for mvule and part of the mahogany production.

There was an increase in production of sawn timber during 1952 and in certain categories, a buyers' market was developing. The expected introduction of preservative treatment plants in Jinja and Kampala in 1953 would permit the utilisation of a much wider range of species and, it was hoped, the release of mvule and mahogany from export control.

Owing to the failure of the suppliers to secure onward shipping space, it was not possible to take full advantage of the promising market in South Africa for *Antiaris* logs and this was aggravated by the high incidence of Ambrosia beetle damage. The filling of orders from the UK for muhimbi (*Cynometra alexandri*) flooring gave great concern during 1952. The successful use of this timber in the flooring of the foyer of the Royal Festival Hall and in other installations in London, gave a valuable impetus to demand but none of the mills was able to maintain an acceptable standard of production. Ambrosia beetle was the principal reason for rejection.

Exports continued to be negligible both in volume and value and mills were almost entirely dependent on the domestic market which showed no signs of weakening. Unless it was possible to obtain export orders for sleepers and a less exacting specification for flooring strips, the immediate prospect of marketing muhimbi in quantity, appeared remote. In 1955 the muhimbi cut increased from 1,000 to 2,000 tons (900 to 1,800 tonnes).

As a result of a recommendation of the East Africa Timber Advisory Board in 1958, accepted by all three territories, saw-logs were measured in cu ft true measure instead of Hoppus foot from 1st July 1958.

The Uganda Timber Sales (UTS), a co-operative marketing association in existence since 1937, was voluntarily wound up at the end of 1959. The company had fallen on hard times and the members felt that their interests would be better served by a return to independent marketing.

The local market was very dull in 1959 and 1960 due to a trade boycott in Buganda and the general fall in agricultural produce prices which also resulted in reduced timber sales.

Some interesting information regarding local markets was revealed by the survey of timber consumption carried out by the FAO mission as a preliminary to forecasting future needs. One major point was the magnitude of the African domestic consumption by which was meant use for doors, windows, shutters and their frames, roofing timbers and furniture in African households. Out of a total present sawn timber consumption of about 3 million cu ft (85,000 m^3) a year, this sector was reckoned to absorb about 2 million (57,000 m^3) and was expected to continue to do so. Compared with this, the Public Works Department's consumption, on which many millers set great store, was modest, absorbing only about a twelfth of the total.

Another point was the large amount of packing case wood that is re-used for African domestic purposes – it was estimated that about a fifth of the African consumption was obtained from this source. Thirdly, the consumption of timber appeared to be closely related to the African income level and closely paralleled the payments to cotton and coffee growers. And lastly, although timber consumption had declined somewhat over the last two or three years, it had held its own well compared with other building materials. These factors indicated the importance of the African domestic market and suggested that in the long term it would repay millers to devote greater attention to it.

The Timber Industry Committee and the Cess Fund were wound up on 2.7.59. The Government's share of the cash balance was £9,677 which was placed in a special fund to be devoted to utilisation research.

There was an increase of about 12½% in the cut of saw and veneer logs in 1960/61, surprising in view of reports that the local market was very depressed. The main increases in harvesting came from Local Government forests and unreserved land in Buganda, Bunyoro and Busoga (mvule).

Sawmilling

The number of mills working in 1961 remained much the same as in the previous two years at about 30. These comprised eight working in or supplied from concessions over CFRs, six from concessions over LFRs and unreserved public land and about 16 working in private woodland. These numbers remained about the same over the next three years.

Industrial mill outputs ranged from a few hundred tons to over 7,000 tons (7,100 tonnes). Most of the mills cutting in CFR concessions produced between 1,000 (1,020 tonnes) and 3,000 tons (3,050 tonnes) but one produced over 7,000 tons (7,100 tonnes). The mills working in private woodland rarely produced more than a few hundred tons and their working was often spasmodic. Their production returns, even if available, were not reliable so with the

aim of improving production statistics, not only from private forests but from all mills, a new form of return which it was hoped would be less ambiguous and more comprehensive was drawn up and agreed with the industry and brought into use with effect from the end of 1961. In spite of the improved form, reliable production figures from private mills and from some concession mills were still lacking.

There was a drop of 400,000 cu ft (11,000 tons), i.e. 12½%, in harvesting in 1961/62 due to the general trade recession and the heavy rains in the last quarter of 1961. Several mills ceased production for several weeks at a time. One mill in the lake-shore podo forests in south Buganda was closed for the whole year because of flooding.

Developments worthy of note were: (1) the completion of a modern steam-electric mill in the Western Province; and (2) the addition to a large established mill, also in the Western Province, of machinery for producing mouldings, floor blocks and strips. In spite of these advances, the power in most mills in Uganda was inadequate for the saws. Steam power continued to be used in the majority of mills but diesel or electric power was becoming more popular in the larger ones. Also extraction was still being carried out by crawler tractors and/or lorries. Only half of the tractors were equipped with winches and very few with logging arches. One new concession was opened in 1963/64 over the Siba/Biisu block of the Budongo Forest. Erection of the mill was almost completed by the end of the year. It was the only mill in Uganda with log-turners and conveyors.

The licensees in the softwood plantations at Lendu and Mafuga/Muko overcame their teething troubles and were able to sell all their production in 1963/64. The Lendu miller was hampered by lack of capital for the purchase of another and larger saw which was needed to cope with the increasing amounts of thinnings available. This was rectified in 1965 when he obtained a loan from the Uganda Development Corporation for the purchase of a new band-saw whereupon production increased from 20 to 41 tons (20 to 41 tonnes) per month. Two McConnel saws purchased by the Department and operated by Ugandans at Kyehara and Bugamba also contributed to the output of softwoods from these plantations.

A Uganda Timber Millers' Association was formed in 1963 with the object *inter alia* of representing and advocating the views and policies of the Association to Government and other authorities and bodies. It comprised ten of the major millers but it was far from being a strong and energetic organisation. The results of a survey of the sawmilling industry were published in *Forest Department Bulletin No 8 – The Uganda Timber Industry.*

Logging

There were indications at the beginning of the period of some improvement in the operation of concessions and sawmills on Crown lands although there was a disappointing reduction by 17% in the cut for the year. Incentive to invest capital was provided by longer terms of tenure and the equipment installed or on order would result, it was hoped, in an increase in production by the end of 1952 but, more importantly, an increase in quality of output. There was still a tendency to indulge in excessively long tractor hauls and a reluctance to build permanent lorry loads. Some improvement was made in the construction of lorry roads in 1952

under the new long-term licences. With one exception, all logs were still ground-skidded by tractors. The following year, it was reported that there was little progress in improvement of logging methods, only two operators using logging arches with highly successful results. There was also some reluctance to install suitable saw-doctoring facilities but equipment was on order.

In the following year, there was some improvement in modernisation of logging equipment. The policy of granting long-term licences (ten years with renewal options for two further ten-year periods) made it possible to insist on modernisation for all mills operating in CFRs. During the last two or three years the industry had invested large amounts of money in rebuilding and re-equipping their mills and it was now essential that a corps of skilled operatives be built up so as to get the best out of the new machines. But there was still no system of apprenticeship or any form of training for young operatives. Later, in 1963/64, the lack of proper technical training of staff at all levels was deplored – the strictures applied not only to milling and logging but also to seasoning and preservation.

Timber Grading and Seasoning

The Timber Grading Officer and his staff graded 3,350 tons (3,400 tonnes) of timber in 1951 but there was still too high a proportion of poor quality timber presented for inspection and the rejection was high in many cases. The only seasoning undertaken in Uganda was by the Uganda Timber Sales but the demand was so heavy that stocks were very low at the end of the year.

In spite of reduction in exports, there was an increase in the demand for graded timber for domestic use in 1952. The TGO and his staff graded 4,295 tons (4,360 tonnes) and in the course of their duties travelled 26,000 miles (42,000 km) by road, rail, canoe, steamer and bicycle. In March, grading charges were introduced – shs 4 per ton of 50 cu ft (1.4 m^3) of round timber and shs 12 per ton of sawn timber. Stocks of seasoned timber were again very low but there was some improvement in 1953 when stocks held by UTS amounted to about 2,500 tons (2,540 tonnes). These stocks were almost solely of mahogany, mvule and podo and the entire production of secondary timbers found its way onto the market unseasoned. There was an increased demand for graded timber for domestic use in 1953 – a total of 5,650 tons (5,740 tonnes) was graded of which 4,385 tons (4,450 tonnes) were passed. Towards the end of the year, the timber trade expressed its willingness to have its own graders and this came about the following year. During 1954, deliveries to the UTS for seasoning increased to 3,300 tons and sales were 3,000 tons. In 1957, it was reported with satisfaction that grading of export timber continued up to standard.

The PWD expanded its storage facilities at Kampala and Jinja and installed excellent modern seasoning sheds which enabled them to increase their own seasoning. Towards the end of 1954, the first commercial seasoning kiln was in course of construction at Jinja and was ready for operation in 1955. Also in that year, the first commercial pressure impregnation plant was in operation also in Jinja, and a second one started operations in Kampala. Three more were on order. The building trade, however, was slow to use impregnated timber

and the treatment plants already installed were not working to full capacity. In spite of this disappointing performance, two more plants were installed in 1957, making the total four. A fifth was added in 1962. One mill used a steam treatment before drawing a vacuum which improved the penetration due to the pre-seasoning of the timber. All the other plants were treating timber which had not been dried sufficiently beforehand. Nevertheless, the PWD gave an invaluable lead in the use of pressure impregnated timber in permanent structures, which practice, it was hoped, would spread. The UTS maintained seasoning depots at Masindi, Jinja and Nsinze and opened a new depot at Kampala, but there were still little or no stocks of properly seasoned and treated timber in the country except those of the Ministry of Works.

New draft East Africa grading rules were approved by the East Africa Timber Advisory Board. Timber imported from Kenya continued to be inspected against *Oemida*.

Plywood

One of the major sawmilling concerns began the installation of a plywood and block-board factory in Jinja and was almost ready to start production at the end of 1958. The eventual aim was 10 million sq ft (900,000 m^2) a year. It made substantial progress in 1959 when about 2.4 million sq ft (0.22 million m^2) of plywood and block-board were produced, a large part of production being tea chests for the EA tea industry. In the following year, the factory increased its production substantially to about 3.7 million sq ft (0.33 million m^2) of plywood and 123,000 sq ft (11,400 m^2) of block-board. Tea chest production was about 300,000 a year. Because of its successful record, expansion of the plant was begun.

Progress continued in 1961/62 when it produced just over 5 million sq ft (450,000 m^2) of plywood and 79,000 sq ft (7,200 m^2) of block-board. This was 35% more than the previous year, the greater part being tea chests (235,000). There was another increase the following year when production of plywood increased to 5.7 million sq ft (0.5 million m^2) but block-board declined to 47,000 sq ft (4,300 m^2). In 1963/64 production of plywood went down to 5.6 million sq ft (0.5 million m^2) and block-board increased to 120,000 sq ft (11,000 m^2).

Pulp and Paper

Plans were announced in the press in 1962/63 for the establishment of a pulp and paper mill and a match factory in Jinja but they appeared to be still at the exploratory stage at the end of the year. No decision was reached about the pulp and paper mill by the end of the following year but a match factory was expected to be completed by the end of 1964. It went into production in 1965 with a capacity of 40 million boxes/year. Several indigenous species and some exotic softwoods were tried and several were found to be satisfactory. The factory standardised on *Maesopsis eminii* for outer and inner plies of boxes; this was also found suitable for matches but its dark colour was not acceptable.

Timber Production (in cubic metres)

	CFRs and Public Land	LFRs	Public Land	Amounts of Mahogany and Mvule Cut on CFRs and Public Land		
				Mvule	*Mahogany*	*Total (5 & (6)*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1951	43,100	–	–	12,200	15,200	27,400
1952	56,900	–	–	13,700	11,000	24,700
1953	57,400	3,100	–	6,600	13,400	20,000
1954	58,300	–	–	9,100	17,700	26,800
1955	71,400	4,900	–	11,400	21,400	32,800
1956	55,900	1,100	8,300	900	21,600	22,500
1957	59,100	210	8,200	700	17,500	18,200
1958	65,300	2,400	15,200	1,800	24,000	25,800
1959 (½ year only)	33,400	3,100	7,700	–	–	–
1959/60	64,600	2,100	16,500	–	–	–
1960/61	67,000	4,300	21,600	4,200	19,000	23,200
1961/62	60,500	1,800	19,500	3,000	19,100	22,100
1962/63	64,700	74,000	11,300	2,300	16,400	18,700
1963/64	80,600	49,000	5,000	800	18,400	19,200
1964/65	87,700	250	14,900	900	23,900	24,800
	925,900	**146,260**	**128,200**	**67,600**	**238,600**	**306,200**

Notes
1. Column 2 refers to public land in districts which have not achieved AFE.
2. Column 4 refers to public land in districts which have achieved AFE.
3. The table is not complete – the blanks are due to the information not being available.

From columns (5) and (6) it can be seen how important a contribution to the out-turn was made by mvule and mahogany from CFRs and public land (column 2). In the early years, it was as high as 45% to 66% but after 1955 when Busoga achieved AFE, and therefore control of cutting on public land there passed to the control of the local government, the amount of mvule decreased considerably. This did not affect the total out-turn which continued throughout the period at over 56,000 m^3 due to two factors.

The first was the surge in output of mahogany which reached peaks of 24,000 m^3 in 1958 and again in 1964/65. The second was the increasing number of timber species which were being harvested. In 1953, the first year in which most of the various species were identified in the records, there were between 35 and 40 and in the following two years, the total was about the same. From then on it rose steadily to between 60 and 65 due to the work of the Utilisation Section in promoting them and to the saw millers responding to the prompting of the Department.

Imports and Exports

	Imports £	Exports £
1951	52,650	67,600
1952	53,070	16,200
1953	44,320	11,610
1954	199,480	20,890
1955	813,480	23,400
1956	–	–
1957	664,860	55,220
1958	770,810	98,550
1959	630,540	159,900
1960	646,000	254,000
1961	631,650	293,150
1962	604,320	250,640
1963	765,500	216,700
1964	1,226,900	189,600
1965	1,683,800	328,500

This table is based on annual returns from the East African Customs and Excise and refers to calendar years. The figures for 1956 are missing.

As can be seen from the table, the figure for imports in 1955 increased four-fold and from 1957 to the end of the period (1963), they were in the region of £600,000 to £770,000, well above the figures for exports, and then jumped to over a million pounds. The reason for these large increases was due to items for pulp and papers of various kinds being included for the first time. From 1955 until 1962 they amounted to between £450,000 and £500,000 per annum and in 1963 were over £553,000.

Before 1955, the main exports included in the returns were timber in the round and sawn, and timber remained the backbone throughout the period. From 1957 onwards when the plywood factory at Jinja came into production, the annual exports were about one million sq ft (91,000 m^2) bringing in a return of approximately £22,000 a year. Almost the whole of the output exported went to Kenya and Tanzania. In the early years, in addition of the timber exports there were only a few smaller items such as flooring strips, builders' woodwork, wooden furniture and fibre boards. By 1963, the list had grown to 22 items covering both imports and exports.

It is interesting to note (Table 11) the countries which did business then with Uganda. On the exports side they were UK, Kenya, Tanzania, Southern Rhodesia (Zimbabwe), Congo, Ruanda, Sudan, India, Pakistan, Aden/Bahrain and Belgium. There is a much longer list for imports – UK, Kenya, Tanzania, Congo, Ruanda, Japan, Finland, Sweden, Norway, Denmark, Netherlands, West Germany, South Africa, Canada, Austria, France, Israel and Czechoslovakia. In addition to these lists, there were probably others which were unspecified because they were for small amounts.

Poles (Table 7B)

From the table of output of poles, it will be seen that production from CFRs went down after 1956 and that from LFRs took its place as the chief provider from 1958. Before those dates, it had been felt that the African Local Governments were supplying an increasing quantity of poles – and firewood – but the extent of their activities was not realised because records were not available until 1958. In the west the principal consumer of poles in 1952 was the Kilembe mine and the Fort Portal plantations continued to supply them at the rate of 1,800 per month.

The following year the demand for poles showed its usual local fluctuation depending on the scale of constructional activities. In Buganda there was some temporary difficulty in meeting the requirements of the Uganda Electricity Board for special-sized transmission-line poles which increased from 830 in 1952 to 2,300 in 1953. In Masaka the demand for smaller poles rose from 12,000 to 20,000. In Toro, sales from the Fort Portal plantations dropped from 10,000 to 3,000 largely because Kilembe mines were able to obtain their requirements elsewhere – on the other hand, production from the Nyamusagani plantations rose from 6,000 to 14,000, mainly owing to the Kazinga Channel Bridge project. In the Eastern Province the demand for poles increased abnormally to 90,000 due partly to extensive building activities and partly to provide temporary shelters for the record 1953 maize crop.

With the steady devolution of responsibility for forest growth outside CFRs to Local Authorities, there was a decline in the quantity of bush poles and fuel recorded by the Forest Department. On the other hand, there was a substantial increase in 1955 in production of plantation-grown poles and fuel. Supply of poles increased from 273,000 to 335,000, much of the increase being due to the surprisingly heavy demands on the Kampala/Entebbe plantations where sales over the last two years were:

	small poles (number)	transmission poles (number)
1954	92,840	4,274
1955	113,350	7,200

There was, however, in spite of the increases, room for considerable expansion in the use of locally grown transmission poles – large numbers of creosoted poles were still being imported for the distribution network supplied by the Owen Falls dam and other generators. Discussions were held with the Posts and Telegraphs Administration and the UEB on the question of additional impregnation plant for transmission poles but no decision was reached by the end of the year. In 1956 the demand for plantation-grown poles increased to 398,000 which included a large number of transmission poles (4,300 in 1954, 7,200 in 1955 and 12,000 in 1956). In the past, many of these poles were obtained partly from Scandinavia and South Africa but normal demands could now be met locally.

There was a large drop in demands for plantation poles in 1957, the number cut being only 252,000 as against 398,000 in 1956, i.e. a drop of 36%. Although there was a reduction

in the cut of plantation poles, the sale of bush poles increased from 5,400 in 1956 to 23,600 in 1957. At the time this was thought to be due to the fact that fees for plantation poles, but not for bush poles, were increased in 1956 but this idea was contradicted the following year when output of plantation poles increased by 7,000 whereas that of bush poles went down by 8,000. Output from LFRs and public land was first recorded in 1958 and over the next two and a half years was generally little below that from CFRs.

	CFRs		LFRs	
	plantation poles	**bush poles**	**plantation poles**	**bush poles**
1958	249,000	1,600	243,500	680
first half of 1959	134,000	–	128,000	–
1959/60	253,000	41,000	220,000	1,000

The first record of softwood poles from thinnings from the Mafuga and West Nile plantations was in 1959/60 when over 47,000 were produced and increases were maintained over the next five years except in 1962/63 when only about 41,000 were produced.

In the year to June 1961, the total output of poles was 447,000, a decrease of 67,000 or 13% on the 1959/60 figure. The main drop was in the Central Government hardwood plantations in all provinces except the EP which remained at much the same level as the previous year. The reason for the fall was probably the general shortage of money due to poor agricultural crop prices and the reduced building activity. There was some resurgence in demand for transmission poles, about 1,800 being harvested, but, nevertheless, it was a far cry from the figures of 10,000 to 11,000 which prevailed four and five years previously, partly because the Uganda Electricity Board had completed the main expansion of their distribution system.

In the year 1961/62, a total of 411,000 poles were harvested, a low figure which was due partly to the lowest output at 110,000 from CFRs for the last ten years. This clearly falling trend pointed the need for an early appraisal of the future for many of these pole and fuel plantations. A welcome new activity was the production of preservative-treated fence posts which were becoming very popular with progressive farmers, cattle ranching schemes etc. A start was made in 1960/61 when 3,000 posts were produced in the EP but sales suffered later on from competition from wattle poles from Kenya. Local production, however, continued and 2,830 posts were sold in 1963/64.

The total consumption of poles in the country was reckoned by the FAO study team who also included poles in the study to be about 23 million cubic feet a year (c. 20 million poles). Of this, all except about half a million came from unreserved woodland. Future requirements were expected to more than double by the end of the century.

Output of Plantation and Bush Poles

Period	CFRs and Public Land				LFRs and Public Land	
	Plantation			Bush	Plantation	Bush
	Hardwood Total Cl.1–4	Hardwood Cl.5–6 (Transmiss.) (no.)	Softwood Cl 1–4 (no.)	Hardwood	Hardwood Cl 1–4 (no.)	Hardwood (no.)
1951	300,000 cu ft			21,050 cu ft		
1952	344,200 cu ft	830		8,300 cu ft		
1953	308,500 no.	2,300		10,100 no.		
1954	273,000 no.	4,300		35,200 no.		
1955	335,000 no.	7,200		34,500 no.		
1956	396,000 no.	12,000		5,400 no.		
1957	242,100 no.	10,000		23,600 no.		
1958	249,000 no.	9,000		15,520 no.	243,500	680
first half of 1959	134,000 no.	1,500		29,000 no.	128,000	
1959/60	253,000 no.	1,500	47,260	41,500 no.	220,000	1,000
1960/61	146,750 no.	1,800	57,750	15,000 no.	226,200	900
1961/62	104,200 no.	5,800	54,300	20,700 no.	221,700	4,000
1962/63	81,900 no.	3,400	40,820	21,020 no.	218,350	5,370
1963/64	100,130 no.	1,850	68,000	7,780 no.	90,820	520
1964/65	135,000 no.		54,600	5,900 no.	142,000	1,080

Notes

(a) Hardwood plantation poles are mainly *Eucalyptus*, with some *Cassia siamea* and other spp.

(b) Pole sizes (from Tech. Note 88/1960). All measurements are at the base of the pole, over bark. Underbark measurements are 10% less. This classification was later changed:

Class		Max. Girth
1	10 in	25 cm
2	20 in	51 cm
3	25 in	63 cm
4	30 in	76 cm
5	36 in	91 cm – electricity transmission line poles
6	48 in	122 cm – electricity transmission line poles

(c) The figures for the first two years are given in cubic feet (numbers of poles are not available); the remainder are in numbers of poles of all sizes. Sales of poles were locally recorded by number and size class; then for central records and annual reports these were converted to volumes in cu ft by factors which were changed several times during these 15 years. To maintain serial compatibility, this table records numbers of poles. An approximation to volume may be obtained by applying a conversion factor of 1 pole = 1.2 cu ft = 0.034 cu m, this being the size of the commonest pole, Cl 2, 15 ft long. For transmission poles, an approximate factor is 1 pole = 10 cu ft = 0.28 cu m.

(d) Before 1959 softwood poles were not recorded; nor were poles from LFRs and public land before 1958.

(e) The figures in the table are for the recorded output only and do not include the very large numbers of bush poles taken by Africans for their own domestic use from unreserved land plus many fewer from their own planted trees, neither of which are recorded, though total consumption was estimated by FAO at 23 million cu ft (c. 650,000 cu m, c. 20 million poles).

Firewood (Table 7B)

While there were local decreases in production of firewood in 1951, total production under Forest Department licences increased by about 10%. One exception was the Kampala fuel plantations which were hit badly by flooding of some of the swamp compartments due to the abnormal rains. In 1963/64 over 1,100 acres (450 ha) were written off because all attempts to improve the drainage had been unsuccessful and the crops had been killed by flooding. Elsewhere township supplies were, in general, adequate though the situation was serious in Mbarara due to lack of foresight in the management of the plantations. At Fort Portal it was difficult to convince the irate inhabitants that the magnificent Eucalyptus plantations proliferating on their very doorsteps were not for their firewood supplies but for the pole and pit-prop requirements of Kilembe mine.

Production of plantation-grown fuel continued in 1954 at much the same level as the previous two years. In Bukedi demands for fuel for the new cement factory were heavy at the beginning of the year and were supplied partly from the West Bugwe LFR and partly from Departmental plantations. Owing to changes in production methods at the factory, no more bush fuel was cut after the middle of the year and the eventual requirements of the factory for fuel were unknown. In Buganda an increase of 6,000 cu yd of plantation fuel from the Kampala plantations was due to purchases by the Railway to feed the wood-burning locomotives in temporary use on the Western Extension of the Railway. This offset to some extent the declining use of domestic wood fuel in the major townships.

Over the next few years, there were fluctuations in the output of firewood as may be seen from the table. The increase in the consumption of bush fuel was due partly because the factories in the Western Province were taking considerable quantities for drying tea. As with pole production, the inclusion of records for firewood production from LFRs and public land from 1958 onwards shows the important contribution which these sources made to the total output.

Charcoal (Table 7B)

A promising development was the start in 1960/61 of production of charcoal from the Tororo plantations for the Uganda Cement Industries. It was begun on a trial basis the previous year and the contractor concerned had got into regular commercial production and was producing 50 to 60 tons (51 to 61 tonnes) a month. It was hoped that production could be expanded and extended to other plantations in the vicinity but the hope was not fulfilled. Production got into difficulties owing to the contractor failing to maintain the quality of the charcoal to the required standard. As a result, no further supplies were accepted by the cement works and the business was at a standstill with consequent disruption of the plantations in the Mbale/Tororo area. Although this attempt to establish a charcoal industry was a failure, the industry made a spectacular comeback from 1963 onwards based on the utilisation of weed trees in the Mengo natural forests.

Output of Plantation and Bush Firewood

	CFRs and Public Land		LFRs and Public Land	
Period	Plantation	Bush	Plantation	Bush
1951	solid cu ft	solid cu ft		
	300,000	21,050		
1952	344,200	8,300		
1953	stacked cu yds	stacked cu yds	stacked cu yds	stacked cu yds
76,750	174,450			
1954	76,100	10,390		
1955	99,380	43,160		
1956	89,910	16,630		
1957	86,140	20,050		
1958	84,105	2,570	19,290	31,000
first half of 1959	39,000	4,000	13,000	78,090
1959/60	87,000	10,000	25,000	66,000
1960/61	81,610	7,020	22,410	78,090
1961/62	82,010	7,990	35,110	50,100
1962/63	63,270	14,390	62,700	56,344
1963/64	76,020	36,630	49,320	29,730
1964/65	66,200	61,500	41,600	11,000

Notes

(a) The figures for 1951 and 1952 are recorded in cubic feet – the remainder in stacked cubic yards (= 0.76 stacked cu m). Solid wood volume, under-bark, is about half of this.

(b) Records for LFRs and public land were started in 1958.

(c) These figures do not include the very large quantities of bush fuel taken by Africans for their own domestic use from unreserved land. These are not recorded but were estimated by the FAO census to be several million cu.m annually.

Minor Forest Produce (Table 7B)

In the early years of the period, the chief products were collection of wild coffee from the Kibale forest, the sale and free issue of seeds and plants, bamboos and canes and to a lesser extent, Christmas trees in urban areas. The most valuable of these was the collection of wild coffee which was carried out under licence on a system whereby the profits were divided between the licensee and Government. The maximum production was achieved in 1958 when 166 tons (169 tonnes) were collected but the highest value was probably in 1951 when over £3,000 was the Government's share. In 1960/61, because of the need to restrict coffee production and the poor quality of the coffee, no further licences were granted. By comparison, although regarded as an agricultural product, the collection of the fruits of the Shea Butter Nut Tree (*Butyrospermum parkii* = *paradoxum*) brought a sum of £34,000 to the collectors in Teso District alone in 1951.

Seeds, chiefly Eucalyptus species, were sold or given free to encourage private planting. During the five-year period beginning in 1957, the average annual issue was nearly 240 lb (104 kg), a huge number of the tiny Eucalyptus seeds, but these figures were eclipsed in 1962/63 when no less than 1,048 lb (456 kg) were sold or issued free. Distribution of plants,

again chiefly Eucalyptus species, was about several thousand annually in the early years but reached over a million in 1959/60.

Bamboos and canes were very popular in the Northern and Western Provinces. The cut ranged annually around half a million except in 1959 when it was estimated to be in the region of a million. The sale of Christmas trees went from 220 annually in the 1950s to over 2,200 in 1963/64.