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THE TRADE STATISTICS OF THE COUNTRIES OF  
EAST AFRICA 1945-1964

and

AFRICAN POPULATION ESTIMATES: BACK  
PROJECTIONS OF RECENT CENSUS RESULTS

by

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THE TRADE STATISTICS OF THE COUNTRIES OF  
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Introduction

As a result of a tripartite Customs Agreement in 1927 customs barriers between Kenya, Uganda and Tanganyika were virtually removed and a system of recording interterritorial transfers of goods was introduced which enabled the duty on imported items to be assigned to the country of final consumption. Not until 1949, however, when the Kenya/Uganda Customs Department and the Tanganyika Customs Department were merged, was there a single united Customs Department. The trade statistics for the years 1945-1948 were therefore recorded in two parts, one relating to Kenya and Uganda combined and the other relating to Tanganyika; trade between the two areas was recorded as foreign trade.

Since the formation of the East African Customs & Excise Department in 1949 trade statistics have been recorded primarily on an East African basis; imports and exports are valued c.i.f. or f.o.b. at the East African port of entry or exit. The origin of exported items is shown according to the country of production. The destination of imported goods is shown according to the country to which they are consigned, adjustments being made for subsequent recorded interterritorial transfers, to give each country's net imports. Items which are produced in one East African country and consumed in another are recorded separately as interterritorial trade.

The interterritorial trade figures given in the Annual Trade Reports prior to 1959 include, however, excise duties on excisable commodities and customs duties on some imported materials used in local manufacture.

This article records an attempt to produce a consistent series of trade statistics for Kenya, Uganda and Tanganyika, including interterritorial trade, for the period 1945-1964. Throughout this period the trade statistics of Zanzibar were compiled and published separately and the references are therefore to Tanganyika and not to Tanzania. For a number of reasons, some of which are given below, the resulting series are still not as consistent as one would wish but it is thought they are an improvement on the series of unadjusted totals.

As indicated above, the two principal adjustments needed are due to the separate statistics for Kenya/Uganda and Tanganyika from 1945 to 1948 and the inclusion of duties in the recorded figures of interterritorial trade prior to 1959. For the period 1945-1948 a good deal of information regarding trade flows, in addition to the principal trade figures, is given in the Annual Trade Reports. In the Kenya/Uganda Annual Trade Reports for those years exports are apportioned to each country and an approximate assessment made of their respective share of imports; in addition trade between Kenya and Uganda in locally produced items is recorded. Trade between Kenya/Uganda and Tanganyika is also analysed in some detail, showing movements of locally produced goods for consumption within East Africa, as well as goods imported into Kenya/Uganda for subsequent re-export to Tanganyika and items of Tanganyika production exported to Kenya/Uganda for transshipment or re-export out of East Africa. In the Tanganyika Annual Trade Reports for 1945 to 1948 an attempt is made to estimate the value of the main items of Kenya/Uganda produce imported into Tanganyika for local consumption as distinct from re-export, and the values of the main items of Tanganyika produce consumed in Kenya/Uganda;

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the values of ships' stores are also shown in separate tables. In many cases, however, these figures are only estimates and in some cases comparable items as recorded in the Kenya/Uganda Trade Reports and the Tanganyika Trade Reports do not agree; the details of how this information has been used to adjust the 1945 to 1948 figures are given below.

For the calculations of the value of interterritorial trade excluding duty elements, the principal sources of information were the official estimates of the adjusted figures for the years 1958 and 1959, "The External Trade of Uganda 1950-1960" prepared by the Statistics Branch of the Uganda Government in 1962, the figures of Customs and Excise duty published in the Annual Trade Reports, and the known rates of duty for specific items.

#### Principal Adjustments for the Years 1945-1948

In order to obtain figures for each country on a comparable basis to the figures used in subsequent years, it is necessary to:

- (a) decide which of the alternative valuations given in the two Trade Reports to adopt.
- (b) decide what part of the goods moving between the three East African countries was re-exported by the receiving country. Such goods have to be deleted from interterritorial trade and re-allocated as a domestic export of the originating country. The re-export figures also need adjusting.
- (c) remove double counting of re-exports within East Africa of goods imported from outside East Africa; and, in Tanganyika, to bring in ships' stores.

As mentioned above re-exports between Kenya/Uganda and Tanganyika are available in the Trade Reports for the years 1945 to 1948 and also the value of ships' stores which need to be included. Item (c) therefore requires only straightforward adjustments based on the published figures. In the following discussions of (a) and (b) K./U.T.R. stands for the Kenya/Uganda Trade Report and T.T.R. for the Tanganyika Trade Report.

#### (i) Kenya and Uganda Produce to Tanganyika.

The figures in the two Trade Reports for the value of goods produced in Kenya and Uganda moving to Tanganyika are (in £'000):

	Kenya/Uganda Exports to Tanganyika (K./U.T.R.)	Tanganyika Imports from Kenya/Uganda (T.T.R.)
1945	1,213	1,228
1946	1,646	1,641
1947	1,604	1,504
1948	2,095	2,095

These figures agree fairly well except for 1947. An examination of the figures for individual commodities in that year shows that half the total differences is due to differences in the entries for cigarettes and sugar. Since these commodities are subject to excise and customs duties one would not expect to find errors in the entries for either of these items. In the absence of further information, or of any indication that "leads and lags" account for the difference, it was decided to adopt the K./U.T.R. figures. These are, in any case, the more useful since they can be divided satisfactorily into Kenya produce and Uganda produce.

How far was Kenya and Uganda produce re-exported after it reached Tanganyika? An attempt is made in the T.T.R. to estimate the quantities of the main items "which were imported into Tanganyika for consumption, as distinct (from those) for re-export". These estimates, compared with the T.T.R. figures, are (in £'000):

	Tanganyika Imports from Kenya/Uganda (T.T.R.)	Significant Items of Kenya/Uganda produce imported into Tanganyika for consumption (T.T.R.)	Difference (Re-exports)
1945	1,228	1,105	123
1946	1,641	1,455 (*)	186
1947	1,504	1,295 (*)	209
1948	2,095	1,861	234

(\*Revised figures published in subsequent year's Report.)

The differences imply a sizeable and growing re-export. The estimate of consumption covers main items only, however, and a detailed examination of the commodity figures suggests that the only product systematically re-exported from Kenya/Uganda through Tanganyika at this time was hides and skins. The value involved is relatively small and it was finally decided not to attempt any adjustments in respect of it.

(ii) *Tanganyika Produce to Kenya and Uganda*

The differences between figures in the two reports for this flow are much higher. The entries are (in £'000):

	Kenya/Uganda Imports from Tanganyika (K./U.T.R.)	Tanganyika Exports to Kenya/Uganda (T.T.R.)
1945	1,600	1,792
1946	1,344	1,516
1947	2,061	2,160
1948	2,571	2,578

The detailed commodity figures in the T.T.R. show movements of cattle in 1945 and 1946 (£157,000 and £87,000), not shown in the K./U.T.R; and a movement of sisal in 1947 (about £240,000) which appears in the K./U.T.R. only in the section dealing with Tanganyika produce transhipped directly from wharf to foreign destinations. It was decided to use the T.T.R. figures in this analysis.

Whereas practically all Kenya and Uganda produce exported to Tanganyika was consumed there, most of the Tanganyika produce imported into Kenya was re-exported; in some cases,

after some processing. Two estimates of the values of the re-exports can be obtained from each of the Trade Reports. These estimates are (in £'000):

	<u>T.T.R.</u>		<u>K./U.T.R.</u>	
	(a)	(b)	(c)	(d)
1945	1,115	1,022	1,215	1,370
1946	1,013	922	1,050	1,172
1947	1,605	1,488	1,536	1,615
1948	1,738	1,401	n.a.	2,421

- Where (a) is the value of Tanganyika's exports to Kenya/Uganda less the significant items of Tanganyika produce estimated to have been consumed in Kenya/Uganda;
- (b) is the value of the six main items destined "for exportation overseas" exported from Tanganyika to Kenya/Uganda;
- (c) is the value of imports into Kenya/Uganda from Tanganyika less those intended mainly for consumption in Kenya/Uganda (excluding bullion);
- (d) is the value of re-exports from Kenya/Uganda of Tanganyika produce.

Since estimate (b) covers "main items only" it is inferior to estimate (a), which does not differ too much from estimate (c). Estimate (d) is much larger than any of the others, but this is to be expected since its valuation is at Mombasa instead of at the Kenya/Tanganyika border, and also after any processing in Kenya has taken place. It must be remembered, however, that this extra amount would, after 1948, be included in the value of Tanganyika's domestic exports. The procedure adopted for dealing with these figures may be illustrated by the following extracts from the working sheet for 1945 for Tanganyika (in £'000):

1. Exports as in T.T.R. (excluding specie but including goods to Kenya and Uganda):		8,163
2. Plus correction for valuation at Mombasa:		
(i) Column (d) above	1,370	
(ii) Less column (a) above	<u>1,115</u>	
	255	+ 255
3. Less Exports to Kenya and Uganda consumed there:		
(i) T.T.R. value of all goods to Kenya and Uganda	1,792	
(ii) Less estimated value of these goods re-exported (column (a) above)	<u>1,115</u>	
(iii) Estimate of interterritorial trade	677	<u>-677</u>
4. Estimate of domestic exports consistent with later figures:		<u>7,741</u>
5. Interterritorial trade:		
(i) Transfer from 3 (iii) above	677	
(ii) Less duty	<u>9</u>	
	668	<u>668</u>
6. Total exports (excluding specie)		<u>8,409</u>

An additional adjustment is needed for 1947 to take account of the £240,000 of sisal mentioned above (it is assumed that the Cattle movements in 1945 and 1946 – unrecorded in the K./U.T.R. – were for local consumption). The correction factor for 1948 is particularly large, but this may be due to rapid fluctuations in the coffee market.

#### Adjustments to interterritorial trade figures for associated transfers of Customs and Excise duties

##### (i) Years 1945 – 1949

These have been estimated from the information on Customs and Excise revenues in the two series of Trade Reports for 1945–1948, and in the E.A. Trade Report for 1949. The figures involving Uganda differ from those given in Appendix XXI of “The External Trade of Uganda 1950–60” as it has since been found that the adjustment for sugar previously used was incorrect.

##### (ii) Years 1950 – 1957

The flows involving Uganda have been taken from “The External Trade of Uganda 1950–1960”. The adjustments for Kenya–Tanganyika trade have been made as far as possible on the same basis as in the Uganda calculations\*: that is, “by considering the quantities moving from one territory to another, the proportion of imported materials in the goods, and the relevant rates of excise and import duties.” The problem of imported materials is significant, particularly for cigarettes, but the adjustments required for Kenya and Tanganyika trade flows are not large until 1956. After considering the figures of detailed adjustments in 1959 available from Customs, it was decided to adjust 1956 and 1957 by calculating the excise due (from quantity and rate figures) and to estimate customs duties transferred at 20% of the calculated excise. Before 1956 the adjustments were equal to the calculation of the excise plus 10%, since the cigarettes moving then were on an average of a different quality. This method of estimation is not as satisfactory as that used in “The External Trade of Uganda 1950–60” and the margin of error is therefore larger than the figures of £10,000 given there. The error is not likely to be more than £50,000, however, and this is relatively small against the total adjustments which for the Kenya to Tanganyika flow are £729,000 in 1956 and £942,000 in 1957. (The official adjustment in 1958 was £1,044,000.) In other words, although the margin of error is large absolutely, it is not much more than 5% relatively. In this situation the approximate adjustments are well worth making.

#### Country Trade Figures

A study of the figures of net imports and domestic exports is useful for many purposes, but such figures need supplementing by those of interterritorial trade if a more correct impression of the trading position of any of the three countries is to be obtained. In particular, the addition of interterritorial trade makes a considerable difference to the pattern of the balance of trade. Even the balances of trade so adjusted can be misleading. The totals for Uganda and Tanganyika do not represent the true visible balances of trade since most of Uganda's and some of Tanganyika's imports and exports are respectively valued c.i.f. and f.o.b. Mombasa instead of c.i.f. and f.o.b. Uganda or Tanganyika. The balances of trade for Uganda and Tanganyika should be

\*I am much indebted to Miss M.A. Findlay of the Uganda Statistics Division for assistance here.

reduced to allow for the costs of transport and handling of such of their imports and exports that cross Kenya, and the amount of the reduction should be credited to the "invisibles" in Kenya's balance of payments\*. No attempt to estimate these latter adjustments is made here.

A series of country figures for 1945-64 is however, presented, incorporating the estimates obtained in the manner described in the earlier part of this article. Notes to Tables 3 to 8 appear after Table 8.

TABLE 1: ESTIMATES FOR INTERTERRITORIAL TRADE 1945-57  
ADJUSTED FOR TRANSFERS OF CUSTOMS AND EXCISE DUTIES

£'000

	Direction of Flow					
	K-T	K-U	T-K	T-U	U-K	U-T
1945	577	494	555	113	878	327
1946	854	649	394	102	1,163	422
1947	832	723	437	110	1,387	411
1948	1,067	774	664	169	1,585	645
1949	2,033	1,084	779	140	1,271	645
1950	2,355	1,211	727	170	1,553	847
1951	1,959	1,740	895	246	1,541	901
1952	2,261	1,963	678	256	2,418	1,182
1953	2,419	2,686	819	401	2,621	1,948
1954	2,630	2,889	810	233	3,175	1,972
1955	2,365	3,360	1,202	475	3,112	1,642
1956	3,678	3,706	1,490	567	1,725	975
1957	4,451	4,820	1,507	505	2,554	1,440

TABLE 2: ESTIMATES OF IMPORTS, EXPORTS, AND RE-EXPORTS BY COUNTRY, 1945-48

£'000

	Kenya			Tanganyika			Uganda		
	Imports	Exports	Re-exports	Imports	Exports	Re-exports	Imports	Exports	Re-exports
1945	8,036	5,210	1,028	5,396	7,741	240	3,188	9,308	23
1946	14,024	6,227	1,289	6,287	8,536	213	5,214	8,879	161
1947	20,365	8,771	1,602	12,031	10,845	245	6,834	10,691	262
1948	29,410	10,236	2,249	20,105	16,103	320	9,503	13,501	403

Note: Excludes specie.

\* This point has frequently been made, but it is worth repeating as it is so often overlooked.



TABLE 3: KENYA IMPORTS 1945-64

£'000

	Total	Specie	Excluding Specie					
			Total	I/T.	Excluding I/T			Other plus I/T
					Total	Govt.	Other	
1945	9,823	354	9,469	1,433	8,036	613	7,423	8,856
1946	16,359	778	15,581	1,557	14,024	1,232	12,792	14,349
1947	22,229	40	22,189	1,824	20,365	1,558	18,807	20,631
1948	32,068	409	31,659	2,249	29,410	2,367	27,043	29,292
1949	40,994	1,628	39,366	2,050	37,316	3,644	33,672	35,722
1950	36,358	2,356	34,002	2,280	31,722	3,754	27,968	30,248
1951	56,303	—	56,303	2,436	53,867	4,674	49,193	51,629
1952	62,395	103	62,292	3,096	59,196	5,807	53,389	56,485
1953	55,158	214	54,944	3,440	51,504	8,167	43,337	46,777
1954	64,314	43	64,271	3,985	60,286	11,273	49,013	52,998
1955	75,837	93	75,744	4,314	71,430	13,971	57,459	61,773
1956	73,038	160	72,878	3,215	69,663	7,872	61,791	65,006
1957	76,064	76	75,988	4,061	71,927	7,061	64,866	68,927
1958	65,746	129	65,617	4,877	60,740	4,394	56,346	61,223
1959	66,996	58	66,938	5,488	61,450	3,723	57,727	63,215
1960	77,063	27	77,036	6,995	70,041	5,019	65,022	72,017
1961	75,933	39	75,894	6,996	68,898	6,910	61,988	68,984
1962	76,834	66	76,768	7,340	69,428	5,628	63,800	71,140
1963	82,851	51	82,800	9,163	73,637	3,387	70,250	79,413
1964	87,949	189	87,760	11,354	76,406	8,382	68,024	79,378

TABLE 4: KENYA EXPORTS, RE-EXPORTS &amp; BALANCES OF TRADE 1945-64

£'000

	Exp. & Re-exp.		Exports			Re-exports		Balance of Trade		
	Total	Excl. specie	Total	I/T.	Other	Total	Excl. specie	Total	Total excl. specie & I/T.	I/T.
1945	7,309	7,309	6,281	1,071	5,210	1,028	1,028	- 2,514	- 1,798	- 362
1946	9,019	9,011	7,730	1,503	6,227	1,289	1,281	- 7,340	- 6,516	- 54
1947	11,928	11,917	10,326	1,555	8,771	1,602	1,591	-10,301	-10,003	- 269
1948	14,326	14,245	12,077	1,841	10,236	2,249	2,168	-17,742	-17,006	- 408
1949	17,111	16,403	14,081	3,117	10,964	3,030	2,322	-23,883	-24,020	1,067
1950	24,303	23,280	20,748	3,566	17,182	3,555	2,532	-12,055	-12,008	1,286
1951	31,061	31,061	27,767	3,699	24,068	3,294	3,294	-25,242	-26,505	1,263
1952	33,928	33,927	30,016	4,224	25,792	3,912	3,911	-28,467	-29,493	1,128
1953	28,043	27,976	24,626	5,105	19,521	3,417	3,350	-27,115	-28,633	1,665
1954	28,288	28,171	25,779	5,519	20,260	2,509	2,392	-36,026	-37,634	1,534
1955	33,742	33,736	31,392	5,725	25,667	2,350	2,344	-42,095	-43,419	1,411
1956	40,418	40,306	36,367	7,384	28,983	4,051	3,939	-32,620	-36,741	4,169
1957	40,525	40,522	35,638	9,277	26,361	4,887	4,884	-35,539	-40,682	5,216
1958	43,969	43,893	40,045	10,745	29,300	3,924	3,848	-21,777	-27,592	5,868
1959	50,682	50,652	45,603	12,297	33,306	5,079	5,049	-16,314	-23,095	6,809
1960	53,968	53,896	48,962	13,771	35,191	5,006	4,934	-23,095	-29,916	6,776
1961	57,692	57,563	51,274	15,948	35,326	6,418	6,289	-18,241	-27,283	8,952
1962	62,468	62,323	55,233	17,320	37,913	7,235	7,090	-14,366	-24,425	9,980
1963	70,769	70,769	63,622	19,790	43,832	7,147	7,147	-12,082	-22,658	10,627
1964	79,429	79,416	72,995	25,880	47,115	6,434	6,421	- 8,520	-22,870	14,526

TABLE 5: TANGANYIKA IMPORTS 1945-64

£'000

	Total	Specie	Excluding specie					
			Total	I/T.	Excluding I/T.			Other plus I/T.
					Total	Govt.	Other	
1945	6,417	117	6,300	904	5,396	700	4,696	5,600
1946	7,568	5	7,563	1,276	6,287	618	5,669	6,945
1947	13,406	132	13,274	1,243	12,031	882	11,149	12,392
1948	21,628	-189	21,817	1,712	20,105	1,513	18,592	20,304
1949	29,313	1,112	28,201	2,678	25,523	2,155	23,368	26,046
1950	27,202	-173	27,375	3,202	24,173	2,941	21,232	24,434
1951	30,981	-	30,981	2,860	28,121	2,886	25,235	28,095
1952	40,938	85	40,853	3,443	37,410	4,849	32,561	36,004
1953	32,794	79	32,715	4,367	28,348	3,856	24,492	28,859
1954	36,564	20	36,544	4,602	31,942	4,060	27,882	32,484
1955	47,538	50	47,488	4,007	43,481	5,251	38,230	42,237
1956	40,538	34	40,504	4,653	35,851	5,012	30,839	35,492
1957	45,166	45	45,121	5,891	39,230	3,547	35,683	41,574
1958	40,677	69	40,608	7,109	33,499	2,901	30,598	37,707
1959	42,556	47	42,509	8,100	34,409	3,179	31,230	39,330
1960	45,999	24	45,975	9,182	36,793	2,566	34,227	43,409
1961	50,291	53	50,238	10,605	39,633	5,801	33,832	44,437
1962	51,503	32	51,471	11,686	39,785	4,695	35,090	46,776
1963	52,776	17	52,759	12,358	40,401	2,653	37,748	50,106
1964	59,676	138	59,538	15,702	43,836	3,506	40,330	56,032

TABLE 6: TANGANYIKA EXPORTS, RE-EXPORTS &amp; BALANCES OF TRADE 1945-64

£'000

	Exp. & Re-exp.		Exports			Re-exports		Balance of Trade		
	Total	Excl. specie	Total	I/T.	Other	Total	Excl. specie	Total	Total excl. specie & I/T.	I/T.
1945	8,649	8,649	8,409	668	7,741	240	240	2,232	2,585	- 236
1946	9,251	9,245	9,032	496	8,536	219	213	1,683	2,462	- 780
1947	11,638	11,637	11,392	547	10,845	246	245	-1,768	-941	- 696
1948	17,256	17,256	16,936	833	16,103	320	320	-4,372	-3,682	- 879
1949	21,419	21,343	20,868	919	19,949	551	475	-7,894	-5,099	- 1,759
1950	26,617	26,519	25,331	897	24,434	1,286	1,188	- 585	1,449	- 2,305
1951	41,487	41,487	40,484	1,141	39,343	1,003	1,003	10,506	12,225	- 1,719
1952	48,347	48,346	47,393	934	46,459	954	953	7,409	10,002	- 2,509
1953	36,830	36,772	35,431	1,220	34,211	1,399	1,341	4,036	7,204	- 3,147
1954	38,817	38,752	37,272	1,043	36,229	1,545	1,480	2,253	5,767	- 3,559
1955	39,090	39,040	37,876	1,677	36,199	1,214	1,164	-8,448	-6,118	- 2,330
1956	48,364	48,285	46,941	2,057	44,884	1,423	1,344	7,828	10,377	- 2,596
1957	43,057	43,054	41,443	2,012	39,431	1,614	1,611	-2,109	1,812	- 3,879
1958	46,420	46,383	44,322	2,592	41,730	2,098	2,061	5,743	10,292	- 4,517
1959	49,791	49,716	47,860	2,574	45,286	1,931	1,856	7,235	12,733	- 5,526
1960	58,895	58,869	57,148	2,325	54,823	1,747	1,721	12,896	19,751	- 6,857
1961	52,852	52,768	50,901	2,234	48,667	1,951	1,867	2,561	10,901	- 8,371
1962	55,943	55,857	53,609	2,391	51,218	2,334	2,248	4,440	13,681	- 9,295
1963	68,561	68,561	66,976	3,423	63,553	1,585	1,585	15,785	24,737	- 8,935
1964	76,546	76,546	75,243	5,131	70,112	1,303	1,303	16,870	27,579	-10,571

TABLE 7: UGANDA IMPORTS 1945-64

£'000

	Total	Specie	Excluding specie					Other plus I/T.
			Total	I/T.	Excluding I/T.			
					Total	Govt.	Other	
1945	4,019	224	3,795	607	3,188	175	3,013	3,620
1946	6,035	70	5,965	751	5,214	247	4,967	5,718
1947	7,687	20	7,667	833	6,834	293	6,541	7,374
1948	10,666	220	10,446	943	9,503	576	8,927	9,870
1949	13,771	203	13,568	1,224	12,344	719	11,625	12,849
1950	16,783	25	16,758	1,381	15,377	1,152	14,225	15,606
1951	24,124	—	24,124	1,986	22,138	1,384	20,754	22,740
1952	26,516	110	26,406	2,219	24,187	1,485	22,702	24,921
1953	28,776	83	28,693	3,087	25,606	1,792	23,814	26,901
1954	28,320	30	28,290	3,122	25,168	1,365	23,803	26,925
1955	37,810	60	37,750	3,835	33,915	1,680	32,235	36,070
1956	32,379	52	32,327	4,274	28,053	1,653	26,400	30,674
1957	34,201	4	34,197	5,331	28,866	1,812	27,054	32,385
1958	33,179	33	33,146	6,177	26,969	1,785	25,184	31,361
1959	32,044	116	31,928	6,510	25,418	1,605	23,813	30,343
1960	32,643	4	32,639	6,613	26,026	1,244	24,782	31,395
1961	33,983	29	33,954	7,437	26,517	1,550	24,967	32,404
1962	33,946	13	33,933	7,740	26,193	1,559	24,634	32,374
1963	40,855	60	40,795	9,933	30,862	1,740	29,122	39,055
1964	46,409	105	46,304	13,602	32,702	2,709	29,993	43,595

TABLE 8: UGANDA EXPORTS, RE-EXPORTS &amp; BALANCES OF TRADE 1945-64

£'000

	Exp. & Re-exp.		Exports			Re-exports		Balance of Trade		
	Total	Excl. specie	Total	I/T.	Other	Total	Excl. specie	Total	Total excl. specie & I/T.	I/T.
1945	10,536	10,536	10,513	1,205	9,308	23	23	6,517	6,143	598
1946	10,625	10,625	10,464	1,585	8,879	161	161	4,590	3,826	834
1947	12,751	12,751	12,489	1,798	10,691	262	262	5,064	4,119	965
1948	16,134	16,134	15,731	2,230	13,501	403	403	5,468	4,401	1,287
1949	25,450	25,450	25,349	1,916	23,433	101	101	11,679	11,190	692
1950	31,279	31,279	31,069	2,400	28,669	210	210	14,496	13,502	1,019
1951	49,885	49,885	49,639	2,442	47,197	246	246	25,761	25,305	456
1952	51,305	51,305	50,823	3,600	47,223	482	482	24,789	23,518	1,381
1953	38,206	38,185	37,948	4,569	33,379	258	237	9,430	8,010	1,482
1954	46,175	46,128	45,722	5,147	40,575	453	406	17,855	15,813	2,025
1955	47,059	47,041	46,656	4,754	41,902	403	385	9,248	8,372	919
1956	44,207	43,935	43,117	2,699	40,418	1,090	818	11,828	13,183	-1,575
1957	50,828	50,794	49,853	3,995	45,858	975	941	16,627	17,933	-1,336
1958	51,215	51,215	50,235	4,826	45,409	980	980	18,036	19,420	-1,351
1959	48,456	48,456	47,319	5,228	42,091	1,137	1,137	16,412	17,810	-1,282
1960	49,621	49,478	48,283	6,694	41,589	1,338	1,195	16,978	16,758	81
1961	48,113	48,078	46,051	6,856	39,195	2,062	2,027	14,130	14,705	- 581
1962	48,006	48,006	44,689	7,055	37,634	3,317	3,317	14,060	14,758	- 685
1963	62,739	62,739	59,716	8,241	51,475	3,023	3,023	21,884	23,636	-1,692
1964	76,093	76,093	74,078	9,648	64,430	2,015	2,015	29,684	33,743	-3,954

## Notes:

1. *Rounding*

Unfortunately this has not been consistent. Recent extractions from the Trade Reports were rounded to thousands on extraction and then manipulated. Earlier work – e.g. “The External Trade of Uganda 1950–60” – was carried out with more refinement. This accounts for the occasional differences in last digits.

2. *Specie*

“Prior to 2nd October 1950, currency notes were not included in the statistics but specie was included at its monetary value: thereafter they have been included on their intrinsic value as base metal and paper respectively.” (1950 A.T.R.) Specie in the tables is shown at the valuation used in the Trade Reports and currency notes are included for those years for which information is given.

3. *Import values*

The following extracts indicate the minor changes that have occurred.

- (a) “Imports are valued as they lie at the port of entry, such values included freight, insurance, the value of the packages containing the goods and any commission paid”. (K./U.T.R. 1945).
- (b) Add at end “except buying commission up to 5 per cent”. (K./U.T.R. 1946).
- (c) Add at end “and any charges for primage”. (E.A.T.R. 1950).
- (d) Delete (c) and substitute “and any landing charges payable within East Africa” (E.A.T.R. 1952).
- (e) E.A.T.R. for 1952 includes in addition to (d) “In Tanganyika landing charges were excluded from 1st October 1952”. This appears to conflict with (d), but is probably meant to indicate that the method previously in use in Tanganyika had been discontinued, and all countries were now consistent in this respect (i.e. (d) applies throughout).

4. *Expeditionary Forces Institute's imports*

These were excluded until 1950 from when imports on which duty was collected were included.

5. *Parcel post*

The method of classification changed over the period, but for total figures the main point is that private importations by parcel post were excluded in 1950.

6. *Railway & Harbour Imports 1945–48*

Included in Kenya figures (c.f. treatment in 1949 E.A.T.R.)

7. *East African Disposals Board*

During 1946 to 1954 about £5 million of goods which had not passed through the trade statistics were sold by the East African Disposals Board. Nearly £1 million of these goods were re-exported: probably about £500,000 of these goods went to Uganda and about £100,000 of them to Tanganyika.

## Acknowledgments

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**AFRICAN POPULATION ESTIMATES : BACK PROJECTIONS OF  
RECENT CENSUS RESULTS**

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Dr. Kuczynski made a detailed study in the 1940's of the information existing about the African population of East Africa<sup>1</sup>. His conclusion was that:

"If one wanted to summarize the demographic position of British East Africa in recent times all that one could say would be : Practically nothing is known of the population trend in any of the seven Dependencies\* or in the whole of British East Africa; there is no reason to assume that the total population in 1940 was any larger than in 1895 or that the total population in 1895 was much smaller than in 1875." (p. 124/5).

For the countries nowadays generally referred to as East Africa, Dr. Kuczynski suggested the following probable limits for African populations at the end of 1939. (p. 98/9):

Kenya	:	between	2,900,000	and	3,700,000
Tanganyika	:	"	4,600,000	and	5,500,000
Uganda	:	"	3,500,000	and	4,050,000
Zanzibar	:	"	210,000	and	260,000

Adding these figures we obtain a minimum estimate for the area as a whole of 11,200,000 and a maximum estimate of 13,500,000. Later, when discussing estimates for the area he referred to as East Africa, Dr. Kuczynski suggested that the margin of error to the official estimates was not more than "+6/-9 per cent" (p. 99). If we apply these margins to the official estimates for the area referred to in this article as East Africa we obtain a range of 11,500,000 to 13,400,000.

Further consideration of the sources handled by Dr. Kuczynski is not likely to provide us with any particular grounds for disagreeing with his conclusions. But we now have the results of two relatively reliable post war censuses, and can thus re-assess the position with this later information.

The relevant results of the 1948 Censuses are given in columns 2 and 4 of Table 1.

TABLE 1 AFRICAN POPULATIONS AND RATES OF NATURAL INCREASE ACCORDING  
TO POST-WAR CENSUSES

Country	Population ('000)		Rate of natural increase (% p.a.)	
	1948	2nd post-war census <sup>+</sup>	1948	2nd post-war census
Kenya .. .. .	5,251	8,366	2.5	3.0
Tanganyika .. .. .	7,410	8,665	1.5	2.1
Uganda .. .. .	4,918	6,450	1.7	2.2
Zanzibar .. .. .	264	299	N/A	1.4 <sup>++</sup>

Notes: <sup>+</sup>The second post-war censuses were held as follows:  
1957 - Tanganyika  
1958 - Zanzibar  
1959 - Uganda  
1962 - Kenya

<sup>++</sup>Obtained by weighting the rates of increase in Table XVI. 17 of the 1958 Census Report with the 1948 populations in Table XII. 10.

Sources: Kenya Statistical Abstract, 1964; Tanganyika African Census Report 1957; Uganda Census 1959: African Population; Kenya Statistical Digest, September, 1963.

C.J. Martin : Some Estimates of the General Age Distribution, Fertility and Rate of Natural Increase of the African Population Studies, Vol. VII, No. 2, November, 1953.

Report on the Census of the Population of Zanzibar Protectorate 1958.

\*Kenya, Uganda, Tanganyika, N. Rhodesia, Nyasaland, Somaliland, Zanzibar.

But before decumulating from the 1948 figures we need to consider whether they, and the rates at which we are to decumulate, need adjusting in the light of the results of the second post-war censuses (columns 3 and 5 of Table 1).

If we consider Tanganyika first we note that if we decumulate the 1957 population total by the rate of natural increase\* we arrive at a figure of 7,158,000 – that is about 250,000 less than the 1948 figure. In the absence of any indication of net emigration of this order we must conclude that either the standards of enumeration of the two censuses differed, or the rate of natural increase has been over-estimated. There is some indication that the latter may be true; and the most likely source of error is the estimate of the crude death rate<sup>2</sup>, which was 25. In order to reduce the annual rate of natural increase from 2.1 per cent to 1.75 per cent (the rate of intercensal growth obtained from the two census figures) by a change in the crude death rate, the latter would have to be raised to 28.5. This would be a possible figure: the Census Report states (p. 93) that the crude death rate “could have been as high as 30 per thousand and still be within the confidence limits of the estimates.” If we accept this explanation the 1948 figure can stand as a base from which to decumulate.

By implication, however, we accept 1.75 per cent as the annual rate of natural increase from 1948 to 1957 in place of the figure of 2.1 per cent calculated from the sample fertility and mortality data: and this figure has to be compared with the suggested rate of 1.5 per cent for the pre-1948 period. There is some evidence that infant mortality was higher during 1948–57 than in the preceding period, but it has been suggested that this is due to the fact that “the mortality represented by the 1948 data for Tanganyika was too low”<sup>3</sup>. It would be expected that the resuscitation of the medical services after the war and the relatively more prosperous situation of the people would have reduced mortality and raised the rate of natural increase. Further, during the early 1940’s there were food shortages and famines, and these were probably more serious in total than shortages occurring between 1948 and 1957. The figure of 1.5 per cent may therefore be on the high side, but there is insufficient data for preferring any other.

Comparison of the two census figures for Uganda indicates an average annual increase of 2.5 per cent – 0.3 per cent greater than the estimate of natural increase. This difference is accounted for by net immigration and the 1948 and 1957 totals are therefore easily reconciled. The difference between the two rates of natural increase in Table 1 – 1.7 and 2.2 per cent – can be attributed to the decline in mortality, in particular, the decline in infant mortality. An appropriate rate of natural increase for a backward projection from 1948 to 1939 would therefore be 1.7 per cent but an allowance has also to be made for migration. Information about this period is vague<sup>4</sup>, but it is probable that migration was considerably less in the war and immediate post war period than after 1948. A figure of 1.8 per cent has therefore been adopted for decumulation.

The actual rate of increase in Zanzibar between the two Censuses in 1948 and 1958 was 1.2 per cent. An estimate of the rate of natural increase for Zanzibar as a whole is not given in the 1958 Census Report, but if the community rates are weighted by the appropriate 1948 Census figures, a figure of 1.4 per cent is obtained. This is, of course, a fairly unreliable figure, and in the absence of other information the actual census figure may be retained.

The Kenya situation is more complicated. Fortunately for our purpose here the Census Report will include some decumulations using survival rates from U.N. Model Life Tables. This gives 5,270,000 for 1948 in Kenya excluding Northern Province<sup>5</sup>. This calculation reconciles the intercensal change with the calculated rate of increase and enables us to use the rate of natural increase of 2.5 per cent calculated from the 1948 data for the calculation back to 1939.

\*We must note here that part of the information taken into account in the estimation of natural increase goes back several years into the past. The rate of natural increase refers to an average over an indefinite period, not to the Census Year. It is therefore reasonable to use it as the average indicator over a recent past period.

By using these figures it is simple to calculate the estimated populations in 1939, and the results are given in Table II.

TABLE II ESTIMATED AFRICAN POPULATION, 1939

Country	1948 Estimate '000	Rate of decumulation %	1939 Estimate '000	Kuczynski's "official" range '000
Kenya .. ..	5,721	2.5	4,790	2,900 - 3,700
Tanganyika .. ..	7,410	1.5	6,468	4,600 - 5,500
Uganda .. ..	4,918	1.8	4,176	3,500 - 4,050
Zanzibar .. ..	264	0.7	248	210 - 260
Total .. ..	18,313		15,682	11,200 - 13,500

New 1939 estimate as percentage of previous estimate : 116%

We now consider a decumulation to 1931 and 1921; (we shall not consider earlier dates since uncertainties about the effects of 1914-18 war and the succeeding influenza epidemic, when added to the very approximate nature of the procedure we shall use to get back to 1921, discourage even "educated guesses"). The U.N. have suggested that population projections for under-developed countries could be made using a reduction in mortality equivalent to an annual gain of 0.5 years in the expectation of life at birth.<sup>6</sup> This implies a fall in the death rate of about 0.5 per 1000 per year. If we take this change in rate and work backwards with it to 1931 and 1921 we get the following rates of decumulation to apply: (Table III)

TABLE III FINAL ESTIMATES OF RATES FOR DECUMULATION TO 1921 AND 1931

Country	Rates of decumulation (% p.a.)	
	1931 - 1939	1921 - 1931
Kenya .. ..	1.90	1.16
Tanganyika .. ..	0.92	0.20
Uganda .. ..	1.23	0.52

These death rates fit in reasonably well with the arguments of Kuczynski (p. 123/5) and would be consonant with infant mortality rates of about 300 per 1000 in the earlier period.

The rates of decumulation suggested in Table III take account of a likely change in death rates, but make no allowance for a change in the birth rate. The sample studies cited by Kuczynski suggest that birth rates were high during this period and most observers were of this opinion. On the other hand it may well be that the birth rate was somewhat below that of the 1940's and the 1950's. Even if conceptions occurred at the same rate, the proportion of still births may well have been higher. It is obvious that any figure taken is conjectural. Suppose the assumption made is that the average birth rate fell by 4 per cent in the first period and 5 per cent in the second. Then rates of decumulation would be: Table IV

TABLE IV FIRST ESTIMATES OF RATES FOR DECUMULATION TO 1921 AND 1931

Country	Rates of decumulation (% p.a.)		Average death rates (per 1000)	
	1931 - 1939	1921 - 1931	1931 - 1939	1921 - 1931
Kenya .. ..	2.1	1.6	29	34
Tanganyika .. ..	1.1	0.6	34	39
Uganda .. ..	1.4	0.9	29	34

The average birth rates in the earlier period on this assumption range from 39.2 (Uganda to 45.6 (Kenya) per 1000, and are therefore still relatively high.

There are two other points to take into account. First, transfers of territory : (a) N. Turkhana or Rudolf Province from Uganda to Kenya in 1926 – the population involved was negligible in relation to likely errors in the present calculations so far as the Kenya estimate for 1931 is concerned, but 150,000 were included for it in the 1921 Uganda estimate (b) the cession of Jubaland to Italy by Kenya in 1925 – the population involved was of the order of 100,000. The second factor is net migration. This appears to be significant only for the immigration from Ruanda-Urundi into Uganda. Powesland suggests (4) that 1923–24 was the period when migration began to develop on a large scale, and the 1931 census for Uganda gave 76,844 as the number then counted. In order to calculate the Uganda figure below, these immigrant tribes are excluded from the 1939 estimate and the resulting figure decumulated : estimates for immigrants are then added back as follows, 1931: 80,000; 1921: 20,000.

Estimates for 1921 and 1931 on this basis together with the official estimates taken from Kuczynski are given in Table V.

TABLE V OFFICIAL AND REVISED ESTIMATES OF AFRICAN POPULATION, 1921 AND 1931  
'000

Country	1921		1931	
	Official	Revised	Official	Revised
Kenya .. .. .	2,483	3,786	2,967	4,109
Tanganyika .. .. .	4,107	5,887	5,023	5,999
Uganda .. .. .	2,914 <sup>+</sup>	3,363 <sup>+</sup>	3,536	3,602

<sup>+</sup>Excluding 150,000 included in Census total for Rudolf Province or any allowance therefor.

The 1931 Uganda Census was generally considered to be the best pre-1948 estimate in African population statistics in the region, and the agreement here is good.\*

For Zanzibar, the census figures would appear to be adequate. The results of this exercise may therefore be summed up in Table VI.

TABLE VI ESTIMATES OF AFRICAN POPULATION, 1921–63

Country	'000				
	1921	1931	1939	1948	1963 <sup>+</sup>
Kenya .. .. .	3,786	4,109	4,790	5,721	8,847
Tanganyika .. .. .	5,887	5,999	6,468	7,410	9,798
Uganda .. .. .	3,363	3,602	4,176	4,918	7,190
Zanzibar .. .. .	217	235	248	264	319
East Africa .. .. .	13,253	13,945	15,682	18,313	26,154

<sup>+</sup>Latest date for which estimates for all areas are available.

It will be clear that it is not thought that these new estimates for 1921–39 are accurate to the degree shown, and the figures are best quoted to the nearest 100,000 – e.g. Kenya, 1921 as 3.8 million, and so on. All that can be said is that they form a consistent series with the later census figures. It is thought that within a range of 5 per cent they may be of the same order of accuracy as the 1948 and later censuses.

\*Some readers may think this to be “too good” and I should perhaps emphasise that the assumptions were made before the revised estimates were calculated. I should also mention that Martin<sup>7</sup> wrote “it would appear that the African population census of Uganda in 1931 gave results which were about 10% too low.”



## REFERENCES

- (1) R.R. Kuczynski: Demographic Survey of the British Colonial Empire, Vol. II. London 1949.
- (2) See Section X of the "African Census Report 1957," G.P. Dar es Salaam 1963, and T.E. Smith & J.G.C. Blacker, "Population Characteristics of the Commonwealth Countries of Tropical Africa," London 1963, p.72.
- (3) "African Census Report 1957" p.91.
- (4) A.I. Richards (ed.). Economic Development & Tribal Change, Cambridge (Eng.).
- (5) Provisional figure, quoted here by permission of Mr. A.T. Brough (Chief Statistician Kenya) and Dr. J.G.C. Blacker.
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