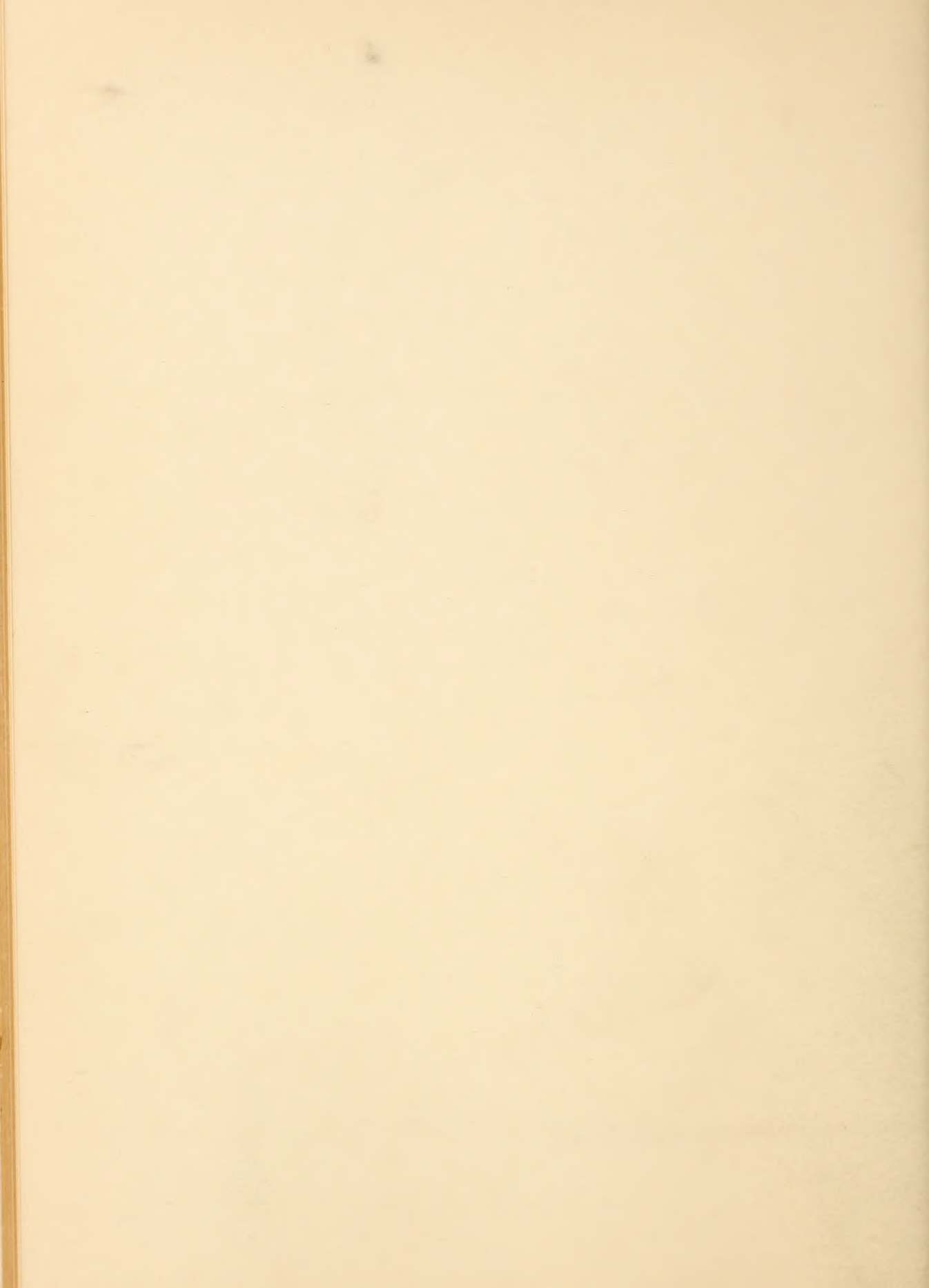


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FOREIGN AGRICULTURE REPORT

OFFICE OF
FOREIGN AGRICULTURAL RELATIONS
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.



**TRENDS IN SOUTH AND EAST AFRICA
AFFECTING
UNITED STATES TRADE IN TOBACCO**

by

GEORGE W. VAN DYNE
Marketing Specialist



FOREWORD

A significant development in Africa during the past decade has been the sharp acceleration in the shift in consumer preference from strong, dark tobacco to lighter, milder types. This was a contributing factor to the decisive increase in imports of flue-cured leaf tobacco from the United States. An important development during the early postwar period was the very substantial rise in the imports of United States blended cigarettes. These changes together with Britain's policy of fostering trade within the Empire led to a phenomenal expansion, particularly in Southern Africa, in the production of United States types of leaf tobacco. This paved the way to higher import duties which, coupled with import restrictions and the shortage of dollar exchange, caused a serious contraction in the movement of United States leaf tobacco and cigarettes.

In an endeavor to expand export outlets for United States tobacco and in order to appraise the trends in production and consumption from the viewpoint of their effect upon United States trade in leaf tobacco and products, George W. Van Dyne, Marketing Specialist, made a first-hand study of the tobacco situation in Africa. The countries visited included Southern Rhodesia, Union of South Africa, Nyasaland, Northern Rhodesia, Mozambique, Tanganyika, Kenya, and Uganda.

The study was based on interviews with farmers, auction sales floor operators, buyers, storage warehousemen, importers, exporters, manufacturers, trade organizations, and government officials. Mr. Van Dyne's observations, supplemented by information compiled in Washington from reports of foreign service officers, Central Africa's Statistical office of Salisbury, Colonial Office and Tobacco Intelligence of London, the Tobacco Industry Control Board of Pretoria, and other sources are summarized in this report.

This study was conducted under the provisions of the Research and Marketing Act of 1946. The possibilities of broadening and maintaining foreign markets for other agricultural commodities also are being studied by this office, and the findings are presented in other circulars and reports that may be obtained, free, from the Office of Foreign Agricultural Relations, United States Department of Agriculture, Washington 25, D. C.



Joseph A. Becker
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U. S. DEPARTMENT OF AGRICULTURE

Figure 1

OFFICE OF FOREIGN AGRICULTURAL RELATIONS

ACKNOWLEDGMENT

The author acknowledges the assistance of the United States foreign service officers in the countries surveyed, who cooperated by making arrangements, supplying data, and otherwise facilitating this study.

He also expresses his appreciation to members of the tobacco trade, the Departments of Agriculture and Customs officials in the British Commonwealth and other countries visited for the very valuable information furnished. In addition he conveys his thanks to Mary L. E. Jones and Clarence E. Pike, of the Office of Foreign Agricultural Relations, for the assistance rendered in the preparation of the statistical data and in the checking and editing of the manuscript.

The map of Southern Rhodesia (Figure 2) was adapted from a map published by the Mashonaland Tobacco Company, Ltd., Salisbury, Southern Rhodesia, and the photographs of Virginia type leaf were furnished by the Public Relations Department of Salisbury.

TRENDS IN SOUTH AND EAST AFRICA AFFECTING UNITED STATES TRADE IN TOBACCO

By George W. Van Dyne, Marketing Specialist

SUMMARY

During the past two decades many countries in Africa successfully expanded production and export of leaf tobacco, much of which is competitive to United States types.

Africa's combined production of all types of leaf tobacco for the (1949-50) season is estimated at 248 million pounds. This is about double the prewar (1935-39) average and 13 percent above the record 1948-49 production.

About 75 percent of Africa's total production of leaf tobacco is in countries located in south and east Africa. These countries are Southern Rhodesia, the Union of South Africa, Nyasaland, Northern Rhodesia, Mozambique, Tanganyika, Kenya, and Uganda.

The 1949-50 production in the eight countries named was unofficially estimated at 197.5 million pounds, which if attained would be almost treble the average during the prewar period and would exceed the 1948-49 all-time high record by 18 percent. Southern Rhodesia produced 50 percent of the total 1948-49 harvest in the countries indicated, the Union of South Africa 27 percent, and Nyasaland 15 percent. The three British East African countries produced the bulk of the remainder.

Types of tobacco grown and exported in the area are flue-cured, fire-cured, air-cured, and sun-cured. Flue-cured is by far the leading type and the one for which production and export have steadily increased. Since World War II production and export of air- and sun-cured leaf have declined, and the situation with respect to fire-cured has not changed materially.

The 1949-50 production of flue-cured leaf in the eight countries is unofficially indicated at 143.5 million pounds. In addition to this type 29 million pounds of sun- and air-cured tobacco together with 25 million pounds of fire-cured are included in the estimate. Further expansion in the production of flue-cured tobacco is planned, particularly in Southern Rhodesia where the 1949-50 harvest of this type is officially estimated at 106.5 million pounds, which if realized would be an all-time record and would represent about 75 percent of the estimated total production of flue-cured tobacco, in south and east Africa. This tobacco is not comparable in quality to United States flue-cured tobacco, but it is being used as a substitute because of trade restrictions and price differentials.

Prices for leaf tobacco appearing in the sections which follow in this report covering Southern Rhodesia, the Union of South Africa, Nyasaland, Northern Rhodesia, Tanganyika, Kenya, and Uganda for the 1948-49 and earlier crops are shown in United States cents per pound converted at the rate of exchange prevailing prior to September 19, 1949, which was \$4.03 per pound sterling. Prices for the 1949-50 crop are shown in United States cents per pound converted at the current rate which is \$2.80 per pound sterling.

Africa's exports of leaf tobacco during 1949 totaled 127.8 million pounds or about double the prewar (1935-39) average of 64.3 million pounds. In 1949 approximately 80 percent of these exports originated in south and east Africa. By far the most important exporting countries are Southern Rhodesia and Nyasaland whose exports represented 53 percent and 20 percent respectively of the 1949 total from the eight countries under review. Of the various types exported from this region flue-cured leaf represented 75 percent and fire-cured about 20 percent. The remainder consisted principally of Turkish and sun-cured tobacco, the quantity of Burley being negligible. The United Kingdom took the major portion of this tobacco, but the Union of South Africa, Australia, and Egypt were outlets for substantial quantities. The outlook for increased exports during the next few years, particularly to the United Kingdom, is very favorable.

Consumption of cigarettes in south and east Africa is now double the prewar level. This increase was brought about principally as a result of improved purchasing power, and an increase in the native and European smoking population. An additional factor was that the shift in consumer preference from strong, dark tobacco products to brighter, milder varieties steadily gained momentum. The consumption of cigarettes has gone ahead at the expense of all other tobacco products including roll and twist tobacco. Most natives in this region satisfy their early cravings for tobacco by consuming strong, dark air-cured leaf which they fashion by hand into the form of roll or twist for use in pipe smoking, chewing, or for snuff purposes. Although outturn of this leaf is known to be great, no production estimates are available because the products made from it by natives are not taxed. When natives can afford to do so they change over from these crude products principally to cigarettes. In the region under review British influence on smoking habits and preferences predominate. Most consumers of medium and better class cigarettes therefore prefer the English straight Virginia type, but the demand for United

States blended cigarettes increased substantially during early postwar years.

Leading manufacturers catered to the changes in the pattern of consumption by making and marketing cheap machine-made cigarettes for the native trade and brands containing blends resembling the popular imported products for the better class trade. The latter includes attractively packaged cigarettes manufactured entirely of United States flue-cured tobacco as well as blended type cigarettes made of United States flue-cured and Burley mixed with Oriental tobacco. A great number of these products received very favorable consumer acceptance with the result that exports of leaf tobacco from the United States to south and east Africa expanded sharply.

However, dollar exchange shortages and import restrictions subsequently caused a sudden decline in this promising trade. Tables 1 and 2 reflect the trend in leaf tobacco and cigarettes exported from the United States to the Union of South Africa, British East Africa, and Mozambique, which are the greatest potential markets for United States leaf tobacco and products in the eight countries.

Exports of leaf consisted almost entirely of flue-cured while the products were principally blended type cigarettes. The sharp drop in exports of leaf to the Union of South Africa resulted from the import embargo of June 1949, imposed chiefly because of the short dollar exchange situation. The interruption in the exports of cigarettes to British East Africa was due to greatly increased import duties.

Imports into south and east Africa from other overseas sources are negligible with the exception of cigarettes and smoking mixtures manufactured in England for the luxury trade. These products are made of blends consisting entirely of United States leaf tobacco or a very high percentage of it.

TABLE 1.--United States: Exports of leaf tobacco to Union of South Africa, British East Africa and Mozambique. average 1934-38, annual 1947-1949.

Country of destination	Average 1934-38	1947	1948	1949
	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>
Union of South Africa	21	1,318	1,238	467
British East Africa	176	1,458	701	1,186
Mozambique	12	50	37	81
Total	209	2,826	1,976	1,734

Source: Compiled from records of the Department of Commerce, Bureau of the Census.

TABLE 2.--United States: Exports of cigarettes to Union of South Africa, British East Africa and Mozambique, average 1934-38, annual 1947-1949.

Country of destination	Average 1934-38	1947	1948	1949
	<u>1,000 pieces</u>	<u>1,000 pieces</u>	<u>1,000 pieces</u>	<u>1,000 pieces</u>
Union of South Africa	3,475	150,809	175,596	3,558
British East Africa	1,670	-	-	-
Mozambique	270	8,750	5,280	8,960
Total	5,415	159,559	180,876	12,518

Source: Compiled from records of the Department of Commerce, Bureau of the Census.

A strong potential demand exists for United States leaf tobacco and cigarettes in the countries shown in tables 1 and 2, but the effective demand of course will depend principally upon the dollar situation. However, the Union of South Africa has now substantially improved its trade deficit and reserve position. Therefore, the embargo on imports of tobacco from the United States may be eased, particularly since the demand for United States tobacco has been definitely established with manufacturers and consumers. In British East Africa and Mozambique several manufacturers have accelerated their special trade agreements program aimed at increased imports of leaf tobacco and products, and there is recent evidence of some improvement in their dollar position.

THE TOBACCO SITUATION IN SOUTHERN RHODESIA

The British Colony of Southern Rhodesia is the largest producer and exporter of leaf tobacco in Africa. It is a land-locked country located in the central part of southern Africa. Beira, in Mozambique, 200 miles east from the Rhodesian border, is its principal outlet to the sea. Southern Rhodesia lies wholly within the tropics, but altitude considerably modifies the climate. Most of the country is a high plateau with an altitude of from 3,000 to 4,000 feet above sea level. It is an ideal agricultural country endowed with many useful rivers. Its area is 150,000 square miles, about the same as California. About 25 percent of the country is set aside as a native reserve, and approximately 7 million acres are native purchase areas. It is bounded on the north by the Zambezi River and the British Protectorate of Northern Rhodesia, on the south by the Limpopo River and the Union of South Africa, on the west by Bechuanaland, a British administrated Protectorate, and on the east by Mozambique. The population of this vigorously growing Colony is about 2,200,000, of which approximately 120,000 are Europeans. The European population has quadrupled and the native population doubled during the past 2-1/2 decades. Salisbury, the capital and center of the tobacco industry, has a population of approximately 80,000, of which about 20,000 are Europeans.

The first tobacco harvested by a white settler in Southern Rhodesia was at Umtali in 1894. During the next two decades progress in the production of tobacco was slow, and the trend fluctuated greatly. However, commercial acreage attained considerable importance in 1913 when the Colony's tobacco crop totaled about 3 million pounds. Due to adverse growing conditions, production failed to reach this figure again until the harvest of 1921. However, during the 1927-28 season, production expanded sharply to 25 million pounds. This was due to good growing conditions, perseverance on the part of the old growers, and an influx of settlers, who, encouraged by the brighter export outlook brought about by the upward revision of the British Imperial Preference, became new producers of tobacco. Surplus stocks and unfavorable prices were largely responsible for a contraction in production to 6 million pounds during the 1929-30 season. Since that date, due to continuous hard work, increased productive know-how, and generally favorable growing conditions, the progress of the industry has been phenomenal.

Total production of leaf tobacco which, during the five prewar seasons, 1934-35 through 1938-39, averaged 23.2 million pounds, increased to an average of 38 million pounds for the next five seasons and expanded to an average of nearly 65 million for the five seasons through 1948-49. An all-time high of 83.6 million pounds was grown during the 1948-49 season and a further increase of about 25 percent is estimated for the 1949-50 harvest.

Area under cultivation for all types of tobacco rose from an average of about 47,000 acres during the five seasons, 1934-35 through 1938-39, to an average of approximately 70,000 acres for the next five seasons. An increase to an average of 104,000 acres was achieved during the five seasons ending 1948-49. The 154,000 acres planted to tobacco during the 1949-50 season established an all time high in Southern Rhodesia.

Types of tobacco grown are flue-cured, fire-cured, and Oriental. Flue-cured is by far the most important of these. This type was first produced on a commercial scale in Southern Rhodesia just prior to World War I. At that time there were about 75 growers. At the start of World War II the number of growers had increased to 638. It is estimated that there were at least 2,100 growers of flue-cured leaf during the 1949-50 season. The most extensive leaf tobacco production districts in the Colony, named in their order of importance, are Lomagundi, Salisbury, Mazoe, Makoni, Marandellas, Hartley and Umtali. Climate and soil over the greater part of the country are believed to be suitable for the culture of tobacco, particularly the flue-cured type. In the culture of this type the most popular seed varieties are White-stem Orinoco, Bonanza, Jamaica and Golden Dollar. The tobacco is harvested by the single leaf (priming) method and is cultivated under rainfall conditions. Average season precipitation in the Colony ranges from 25 to 30 inches.

The extent of the average farm today is about 2,500 acres, of which approximately one-fourth comprises arable land. The average area planted to flue-cured tobacco per farm is about 80 acres. An analysis of the 1947-48 crop shows that 19.5 percent of the growers cultivated over 100 acres, 21.2 percent cultivated from 71 to 100 acres, 39.7 percent from 31 to 70 acres and 19.6 percent cultivated 30 or less. It further reveals that the average yield per acre for this type was 669 pounds, and that 4.1 percent of the growers obtained a yield of 1,000 pounds or more per acre, 31.7 percent obtained from 700 to 1,000 pounds, 49.1 percent from 400 to 700 pounds, and 15.1 percent obtained a yield under 400 pounds.

The curing methods are similar to those in the United States, but the flue-curing barns are generally built of burnt brick with roof of corrugated iron or aluminum sheeting. The dimensions of a small single-furnace barn are 12' x 12' x 16', and the large two-furnace barn is 16' x 16' x 20'. The popular type furnace is the "Gundry" built outside the barn to conserve space. During the 1947-48 season 11,287 flue-curing barns were in use and consumed 237,860 tons of wood and 9,507 tons of coal.

LOCATION OF TOBACCO PRODUCTION IN SOUTHERN RHODESIA



Adapted from a map published by
Mashonaland Tobacco Company, Ltd., Salisbury.

Figure 2

The flue-cured leaf somewhat resembles the United States product in appearance but generally is shorter and thinner, and when smoked has a peppery taste. Further, as may be seen from Tables 3 and 4, the Southern Rhodesian flue-cured tobacco crop does not possess as large a proportion of high quality leaf as do crops of that type produced in the United States. The classifications shown in these tables cover the last three seasons and show percentages of the Colony's crop make-up by groups and colors. The 1946-47 crop was produced during a moderately good season and the other two in seasons of drought conditions.

TABLE 3.--Southern Rhodesia: Comparative percentages of flue-cured leaf, 1946-47 - through 1948-49 crops.

Season	Wrappers	Leaf	Leaf Sub-grade	Cutters	Lugs	Strips	Scrap and nondescript
1946-47 -----	.44	44.27	3.72	5.80	14.72	.34	30.71
1947-48 -----	.74	49.53	2.11	21.07	11.13	1.06	14.36
1948-49 -----	.33	48.30	2.19	15.44	9.22	1.57	22.95

Source: Southern Rhodesia Tobacco Marketing Board.

TABLE 4.--Southern Rhodesia: Comparative percentages of flue-cured leaf by colors.

Year	Lemon	Orange	Red	Dark Mahogany	Light Mahogany	Dark	Green	Nondescript
1946-47 -----	10.67	25.48	9.88	13.53		5.19	7.36	27.89
1947-48 -----	22.94	31.83	1.51	5.23	14.29	2.10	8.92	13.18
1948-49 -----	15.07	25.45	.98	5.54	18.40	1.80	11.35	21.41

Source: Southern Rhodesia Tobacco Marketing Board.

Southern Rhodesia's tobacco is sold on the auction sales floors at Salisbury, which is one of the largest and best operated tobacco markets in the world. The American auction system was first adopted during the 1935-36 season. The auction sales warehouses are built from blueprints prepared in the United States. Tobacco is sold in bales, the gross weight of which on the auction sales floor averaged 175 pounds during the 1948-49 season and 181 pounds the previous season. The initial selling rate is about 2,500 bales per day of 5 hours. This rate is gradually stepped up to 4 or 5,000 bales as the season advances and two sets of buyers get into operation. Auction sales floor charges during the 1948-49 season were the equivalent of 10.07 U. S. cents per pound for weighing; 10.07 cents per pound auction fee, plus 2 1/2 percent commission.¹

Southern Rhodesia's tobacco, particularly the flue-cured type, is of paramount importance to its economy. Auction sales value of this type has increased from a prewar 5-year, 1935-39 average, of the equivalent of 3 million U. S. dollars to an average of 30 million U. S. dollars during the 5 years ending the 1948-49 season. The auction sales value of the 1948-49 crop was the equivalent of 43.7 million U. S. dollars. Furthermore, tobacco is the Colony's only crop which can absorb the cost of stumping, clearing, and plowing virgin land.

A study of the 1948-49 season's high and low auction sales prices classified by groups revealed the following averages based on sales from April 29 through September 5: Leaf, high, 90.5 U. S. cents, low, 33.5; cutters, high, 92.0; low, 57.1; and lugs, high, 57.8; low, 29.3.

Auction sales for the 1949-50 season opened in Salisbury on April 12 and are expected to continue until November. Sales through August 23 totaled 67.9 million pounds at an average price of 44.73 U. S. cents per pound. This contrasts with the 1948-49 crop average of 53.41 U. S. cents per pound. Although this season's crop is reported to be one of the best for many years, prices, if they follow the usual pattern, are expected to decline further as the season progresses.

¹Prices for leaf tobacco appearing in this section and in the sections which follow in this report covering the Union of South Africa, Nyasaland, Northern Rhodesia, Tanganyika, Kenya, and Uganda for the 1948-49 and earlier crops are shown in United States cents per pound converted at the rate of exchange prevailing prior to September 19, 1949, which was \$4.03 per pound sterling. Prices for the 1949-50 crop are shown in United States cents per pound converted at the current rate which is \$2.80 per pound sterling.

Each of the well-known tobacco manufacturing companies which operate in the United Kingdom either owns a redrying plant in Salisbury or has an agent who owns one in that town. The tobacco establishments are constructed along American lines, and most of the machinery and equipment are of United States manufacture. It is believed that about 150 million pounds of leaf per season could be redried and packed in Salisbury with the present equipment. Additional American machinery is being imported. A number of experienced American tobacco men of high caliber are employed in these plants and also on the auction sales floors.

Although the Colony's manufacture of tobacco products has steadily increased it is still small but adequate. Factory output currently is about 4 million pounds per year, of which about 75 percent is cigarettes.

Southern Rhodesia's imports of tobacco are negligible since the country has attained self-sufficiency in the production of this commodity both as regards leaf and manufactured products.

Exports of Southern Rhodesia's leaf tobacco, principally flue-cured, during 1949 totaled about 68 million pounds, being more than treble the prewar level. The United Kingdom took 65 percent of the leaf exports last year, while the Union of South Africa and Australia each received about 4 million pounds. Egypt, Denmark, and the Netherlands were the next most important outlets. Since World War II, production and export of Oriental tobacco have declined, and the situation with respect to fire-cured tobacco has not changed materially.

Export control of Southern Rhodesia's flue-cured tobacco has been extended to cover the 1949-50 crop. Allocations of export permit quotas to buyers are in terms of percentages of the total weight of tobacco, as sold on the auction sales floors. Allocations for the 1949-50 crop are as follows:

United Kingdom	66.7 percent
Salisbury local manufacturers.	5.1 "
Australia	6.5 "
Union of South Africa	3.0 "
Other preferential markets	9.3 "
Non-preferential markets	9.4 "

Technical advice and assistance required by the tobacco industry since its inception have been furnished by the Government through a staff of well-trained, knowledgeable specialists in the Department of Agriculture. In the initial stages of the industry, tobacco-growing experiments were conducted on a cooperative basis between the Department of Agriculture and private growers. The first fully equipped, and properly organized tobacco experimental station in Southern Rhodesia was established at Hillside on Salisbury Town Commonage in 1924. The station's program included giving practical training in tobacco culture, and general farming during a 2-year course after which its students were qualified to take up farming on their own, or become assistants or farm managers. The experimental work at this station formed the foundation on which tobacco research was established. The first tobacco research station was started at Marandelles during 1930; others were established at Trelawney in 1934 and at Karoi and Chipinga in 1946 and 1949, respectively. Various tobacco groups have from time to time had full direction and control of the Colony's tobacco research work but during 1948 this reverted to the Department of Agriculture which had recently been reorganized with the result that the tempo of research accelerated greatly.

The London Tobacco Agreement of 1947, under the terms of which the Tobacco Advisory Committee on behalf of the United Kingdom tobacco manufacturers agreed to purchase over the 5 years (1949-1953) two-thirds of the Southern Rhodesian flue-cured tobacco production up to a 120 million pound crop, has been revised. The principal revision insures Southern Rhodesia a market in the United Kingdom for its flue-cured tobacco for the years 1950 to 1954 of up to 93 million pounds per annum or two-thirds of the crop, whichever is the less.

In order to give the Southern Rhodesian tobacco growers an additional sense of security, enabling them to plan 7 years ahead instead of 5 it was further agreed that, subject to the usual price and quality qualifications, the United Kingdom manufacturers would undertake to purchase a minimum of 75 million pounds in each of the 2 extra years, 1955 and 1956.

The growth of the Colony's flue-cured tobacco industry since the mid-1930's has been tremendous. Production during the five prewar seasons, 1934-35/1938-39, averaged 21.6 million pounds compared with an average of 35.6 million pounds for the next five seasons, and an annual average of 61 million pounds for the five seasons through 1948-49. An all-time high of 83.3 million pounds from 125,968 acres was established during the 1948-49 season. The latest official estimate for the 1949-50 crop forecasts a 25-percent increase and reports are that the 1953-54 goal is for 140 million pounds.

Turkish type tobacco was first produced in Southern Rhodesia on a commercial scale during the 1917-18 season when a crop of 288,000 pounds was harvested. Under the capable direction of the Turkish Tobacco Cooperative Company and with the assistance of the Government, steady progress was made. Production during the 5 years, 1934-35/1938-39, increased to an annual average of 688,000 pounds, the bulk of which was sold to manufacturers in the

Union of South Africa. Not only did the Cooperative Company succeed in satisfying requirements in the Union, but it developed markets in countries overseas. Production was therefore stepped up, and during the 5 years, 1939-40/1943-44, increased to an average of 1,609,000 pounds. Progress continued and an all-time record was achieved during the 1945-46 season with the production of 4,859,000 pounds.

However, a slump in prices and adverse weather conditions for growing Turkish tobacco, together with bright prospects for exceptionally high prices for flue-cured tobacco, caused growers to switch their activities to the more profitable type. The change-over to flue-cured tobacco was so general that production of Turkish tobacco dropped to about 320,000 pounds for the 1948-49 season.

The Colony's most popular varieties of Turkish type tobacco are Soulouk and Kavalla. These are harvested by the single-leaf method and sun-cured. The major part of the crop is produced in the Lomagundi district, of which Darwendale is the center and also the headquarters of the Turkish Tobacco Cooperative Company. This type is graded and manipulated by the Cooperative Company and sold under the auction system at Darwendale. It is likely that the Government and the Cooperative Company will formulate plans and make attempts to revive this industry because Southern Rhodesian Turkish tobacco has proven its merit in competition with Oriental type tobacco in many countries and is a potential dollar earner. Furthermore, it is a good economic unit on the farm since (1) with other crops it would enable planters to utilize labor throughout the year, and (2) it could well be a "saver" if the planter incurred a set-back with other crops.

Dark fire-cured tobacco was first produced on a commercial scale in Southern Rhodesia during the early 1920's. The varieties grown for fire-curing are known as "Western" and "Little Crittenden" and probably originated in Nyasaland. Production is confined principally to the maize belt in the Mazoe district near Salisbury. Harvesting by the single-leaf method has now been generally adopted.

Production passed the 1 million pound mark during the 1930-31 season and reached its peak during the 1931-32 season, when 1.7 million pounds were harvested. Shortly after that crop, many of the older planters ceased producing this type due to the drop in prices resulting from competition with native growers in adjacent countries. Production which during the five seasons, 1934-35/1938-39, averaged 841,000 pounds, dropped to an average of 733,500 pounds the next five seasons. The average for the five seasons, 1944-45/1948-49, was 783,500 pounds. Future production is not expected to greatly exceed the 1948-49 crop of 851,000 pounds. Expansion is mainly a matter of economics, not of climatic and soil conditions.

Production of other types of tobacco in Southern Rhodesia is insignificant, being currently comprised of a total of about 10,000 pounds of sun-cured and air-cured leaf per year.

Southern Rhodesia's total imports of unmanufactured and manufactured tobacco averaged 361,000 pounds during the 5 prewar years, 1935-39, but rose to an average of 548,000 pounds for the 5 years ending 1944. Imports during 1947 and 1948 increased to 1.1 million pounds and 1.4 million respectively.

Imports of unmanufactured tobacco comprised the bulk of this trade and averaged 327,000 pounds during the 1935-39 period compared with an average of 508,000 pounds for the next 5 years, and 1 million pounds and 1.3 million pounds, respectively, for 1947 and 1948. Practically all of this leaf tobacco was from Northern Rhodesia and was shipped to Salisbury primarily for processing and reexport.

The imports of manufactured tobacco were made up chiefly of cigarettes and pipe tobacco mainly from the United Kingdom and the Union of South Africa. Small quantities of cigars were imported from Cuba and the Union of South Africa. During the 5-year prewar period imports of tobacco products averaged 34,000 pounds compared with an average of 40,000 pounds for the next 5 years. During 1947 and 1948 imports of tobacco products totaled 67,000 pounds and 73,000 pounds, respectively. These imports were principally highgrade brands for the luxury trade. The increase was due largely to the influx of British settlers who have taken up residence in the Colony since World War II. Recently, migration has been greatly accelerated and this trade is expected to increase.

The manufacture of tobacco products in Southern Rhodesia is centered in Salisbury. Factory output is small but is steadily increasing. During 1938 and 1939 production of cigarettes and pipe tobacco averaged 1.2 million pounds, compared with 2.9 million pounds in 1948 and about 4 million pounds for 1949. The bulk of factory output is cigarettes made entirely of domestic tobacco. The most popular better grade brands are made from blends of Rhodesian light, flue-cured leaf. These cigarettes are packed chiefly in 50's flat cardboard boxes, the prices of which range from 63.7 United States cents to 75.6 United States cents compared with 107.5 United States cents for English imported Straight Virginia cigarettes sold in boxes or tins containing 50 cigarettes. Cheap brands for the native trade are put up in paper packets, each containing eight cigarettes which sell as low as 1.7 U.S. cents per packet. The pipe tobaccos are made of flue-cured leaf or mixtures of flue-cured and fire-cured leaf. The trend is



FIGURE 3.--Flue-cured Virginia type seedlings in Southern Rhodesia near Salisbury. The seedlings are being watered after being exposed to the sun to strengthen the young plants. Seeds sown early in the season produce seedlings ready for transplanting in about 60 days. The usual time for sowing flue-cured Virginia type seedbeds in this district is September-October. This enables the grower to produce seedlings for transplanting in November-December. Seedlings are planted when about 6 inches in height. Normally the crop will start to ripen approximately 90 days after date of transplanting.



FIGURE 4.--A field in Southern Rhodesia of flue-cured Virginia type leaf tobacco which has been topped and is nearly ready for harvesting. Note selected plants in upper right corner with flower heads covered with paper bags to prevent crossing. The advantage of selecting good seed plants is lost if crossing with other types is allowed to take place.



FIGURE 5.--Loading flue-cured Virginia type leaf tobacco which has just been brought in from the field where it has been harvested by the removal of individual leaves from the plant or "priming" rather than by the "stalk cutting" or whole plant method. Usually the number of pickings required to complete the harvest is from three to six, depending on the growth of the plants.



FIGURE 6.--Tying flue-cured Virginia type picked leaves in Southern Rhodesia in preparation for curing. Curing is an essential and important phase in the production of tobacco and is the descriptive term applied to the process by which the newly harvested leaf is first colored and then dried. This type of leaf ordinarily loses about 75 percent of its green weight during the curing process. Most of this loss by far is in water.

TABLE 5.--Southern Rhodesia: Acreage Production Yield and Prices of Tobacco, Average 1934-35 Through 1938-39 and 1939-40 Through 1943-44, Annual 1944-45 Through 1948/49 (Farm Weights).

FLUE-CURED

Crop year	Acreage planted	Production	Average yield per acre	Average price per pound
	Acres	<u>1,000</u> pounds	Pounds	U. S. cents
Average:				
1934-35 through 1938-39-----	43,540	21,633	495	15.12
1939-40 through 1943-44-----	64,166	35,652	556	27.21
Annual:				
1944-45-----	71,047	46,805	657	33.58
1945-46-----	74,420	41,740	560	54.32
1946-47-----	90,757	57,918	638	48.96
1947-48-----	112,605	75,385	669	54.67
1948-49-----	125,968	83,389	661	53.51

TURKISH

Average:				
1934-35 through 1938-39-----	1,790	688	385	15.95
1939-40 through 1943-44-----	4,026	1,609	403	25.35
Annual:				
1944-45-----	9,863	4,471	453	38.62
1945-46-----	10,632	4,852	457	36.43
1946-47-----	11,811	4,769	406	25.61
1947-48-----	4,650	1,687	363	33.52
1948-49-----	1,151	302	252	---

FIRE-CURED

Average:				
1934-35 through 1938-39-----	1,655	841	508	8.98
1939-40 through 1943-44-----	1,360	733	540	15.19
Annual:				
1944-45-----	1,062	718	676	14.88
1945-46-----	1,019	587	576	28.46
1946-47-----	1,385	925	663	24.43
1947-48-----	1,316	837	635	30.84
1948-49-----	1,524	851	553	29.43

Source: Central African Statistical Office, Southern Rhodesia.

toward bright, mild Virginia type cigarettes, the consumption of which is expected to increase with the rise in population and in smokers purchasing power.

Southern Rhodesia's exports of leaf tobacco during 1949 totaled 67.9 million pounds, compared with 67.7 million pounds for 1948 and an annual average of 19.2 million pounds for the 5 prewar years (1935-39).

The United Kingdom takes about two-thirds of the Colony's total leaf exports. The Union of South Africa, Australia, and Egypt are the principal outlets for the remainder, although Denmark and the Netherlands took important quantities as may be seen from table 6.

Table 7 shows exports of leaf tobacco by types. Flue-cured leaf totaled 65.5 million pounds during 1949, compared with 64 million pounds in 1948 and an average of 18.6 million pounds for the prewar period. A substantial increase in the exportation of this type is expected because of the London Tobacco Agreement.

TABLE 6.--Southern Rhodesia: Exports of unmanufactured tobacco, redried weight, by countries of destination. average 1935-1939 and 1940-44, annual 1947-49

Country of destination	Average 1935-39	Average 1940-44	1947	1948	1949
	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>
United Kingdom-----	15,273	21,696	28,126	44,161	46,772
Australia-----	(1)	1,100	3,081	6,489	4,313
Egypt-----	(1)	(2)	3,256	5,177	3,314
Union of South Africa-----	2,497	4,707	4,906	1,795	3,685
Denmark-----	(1)	-	453	3,152	2,707
Netherlands-----	121	-	873	2,174	400
United States-----	(1)	-	1,716	923	190
All Others-----	1,275	1,946	4,246	3,789	6,556
Total-----	19,166	29,449	46,657	67,660	67,937

¹ If any, included with "Other."

Source: The Annual Trade of Southern Rhodesia

² Less than 500 pounds

TABLE 7.--Southern Rhodesia: Exports of unmanufactured tobacco, redried weight, by types, average April-March 1934-35 through 1938-39 and 1939-40 through 1943-44, annual 1944-49

Period	Flue-cured	Fire-cured	Turkish	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Average				
1934-35 through 1938-39-----	18,598	495	616	19,709
1939-40 through 1943-44-----	27,239	365	1,842	29,446
Annual				
1945-----	37,394	298	2,474	40,166
1946-----	35,904	270	4,480	40,654
1947-----	42,154	337	4,165	46,657
1948-----	64,041	384	3,236	67,661
1949-----	65,474	531	1,928	67,933

Source: Economic and Statistical Bulletin of Southern Rhodesia

Exports of Turkish leaf have dropped from 4.5 million pounds during 1946 to just under 2 million pounds in 1949. The United Kingdom and the United States took the bulk of this leaf. Other countries taking substantial quantities were Australia, Denmark, and Egypt. The Colony's most important outlets for its fire-cured leaf were the United Kingdom, Bechuanaland, and Egypt.

Southern Rhodesia's exports of manufactured tobacco products totaled 1.1 million pounds during 1948, compared with 1.0 million pounds in 1947 and an average of 283,000 pounds during the 1935-39 prewar period. The bulk of these products were cigarettes shipped to Northern Rhodesia, the Belgian Congo, and Bechuanaland. The increase in this trade is expected to be maintained.

THE TOBACCO SITUATION IN THE UNION OF SOUTH AFRICA

The Union of South Africa covers an area of 472,550 square miles, being about one-sixth the size of the United States. The population is about 11,500,000, of which about 2,385,000 are Europeans. It is a self-governing Dominion and a member of the British Commonwealth of Nations.

The country is composed of four provinces. In the order of their population and commercial importance they are: The Transvaal, the Cape of Good Hope, Natal, and the Orange Free State. Tobacco is grown in each of these provinces. The principal producing districts are located in the Transvaal and Cape Provinces.

The most important types of tobacco are flue-cured, air-cured, and Turkish. Production of bright flue-cured leaf has expanded sharply due mainly to the steady increase in the consumption of domestically manufactured English Straight Virginia type cigarettes. Total production of leaf tobacco and consumption of cigarettes are now more than double prewar level. Although the preferred cigarette is the Virginia type, there is definite evidence of a growing demand for the United States blended type.

Manufacturers in the Union endeavored to cater to this new trade by making and marketing cigarettes made from a blend of United States flue-cured and Burley tobacco mixed with Oriental. However, their efforts to develop this business, and continue the manufacture of cigarettes made from 100 percent flue-cured tobacco imported from the United States have been curbed by the import embargo of June 1949 placed on United States tobacco.

The Union's present major source of supply for imported flue-cured tobacco is Southern Rhodesia. Its principal export markets for its domestic leaf tobacco and products are the United Kingdom and West Africa.

Production of leaf tobacco in the Union of South Africa dates back as far as 1845. Natives grew it then, as many do today around their "Kraal" in small patches scattered throughout the country. This tobacco was a strong, heavy, dark sun- and air-cured type probably produced from seed brought in by Portuguese traders. It was a species of Nicotiana tabacum. In harvesting, the plants were cut near the ground (stalk cut). The leaves were cured on the stalk and consumed in pipe smoking, chewing, and for snuff purposes.

Another early but very different type of tobacco, Nicotiana rustica, was grown and crudely cultivated by the natives in small quantities in the border districts and in the Transkei. These plants were also stalk-cut and air-cured. The cured product was used principally as a smoking tobacco. It was exceptionally strong, as compared with other tobacco produced in the Union, and possessed a more pungent aroma and a higher nicotine content. This species, of unknown origin, was later crossed with varieties grown from seed imported from Syria and Hungary with a view to raising a different sort of tobacco for blending purposes and as a possible source of tobacco extract. This type proved to be too strong for general smoking, but small quantities are still grown for native consumption and for the making of tobacco extract for domestic use.

Until about 1882 most tobacco growers stemmed and fashioned practically all of their tobacco by hand into the form of roll or twist. Tobacco surplus to the producers' personal requirements was used in barter transactions.

The largest quantities and best qualities of this leaf tobacco were produced in Oudtshoorn, in the Cape Province. In 1886 the first attempt to manufacture roll tobacco by machine was successfully undertaken at Oudtshoorn by the Congo Tobacco Factory which also manufactured cut tobacco. Soon other mechanically equipped tobacco factories were constructed and put into operation. Several of these companies selected light, mild grades and blended them into roll and cut tobacco. Some of these products met with favorable consumer acceptance. To cater to this change in smokers' preference, manufacturers and the Government encouraged the production of a lighter, milder type of tobacco from seed originating in South America. Much of this leaf was blended with a small percentage of dark leaf and marketed as cut-tobacco. This product also met with an encouraging reception from pipe smokers and consumers of roll-your-own type cigarettes.

In an endeavor to accelerate the demand for cigarettes, Turkish seed of the Soulouk variety was imported and production was attempted in 1904, but this type has never attained much popularity.

Just prior to World War I, total production of leaf tobacco in the Union reached about 15 million pounds. The bulk of this was dark air-cured tobacco grown by Europeans using native labor. Due to unfavorable growing conditions, production was retarded until the 1925-26 season when 16.5 million pounds, including about 5 million pounds of light air-cured and approximately 1 million pounds of Turkish, were harvested. Practically all of this tobacco was grown in the Transvaal and Cape Provinces and consumed principally in pipes or in the form of cigarettes. There was a sharp increase during the 1927-28 season when the Union's crop totaled 23 million pounds including approximately 8 million pounds of light air-cured tobacco and about 1 million

pounds of Turkish. However, production during the next few years was restricted to domestic requirements because of the difficulty in finding export markets for the surplus.

In an effort to expand the industry and cater further to the trend toward brighter, milder products, the production of flue-cured tobacco from seed of North American origin was attempted, and 88,000 pounds of this type were produced during the 1930-31 season when the Union's crop totaled 16.5 million pounds of which 1.7 million pounds were Turkish. During the next decade the bright trend was more pronounced, and the demand for cigarettes manufactured from flue-cured tobacco became definitely established. Almost uninterrupted expansion in the production of this type of tobacco has since characterized the industry. The annual average during the five prewar seasons (1934-35 through 1938-39) was 3.3 million pounds, which increased to an average of 10 million pounds for the 5 year 1939-40 through 1943-44 and 18.4 million pounds for the 5 seasons 1944-45 through 1948-49. Production of flue-cured tobacco during the 1948-49 season exceeded air-cured varieties for the first time, the quantities being 23.2 million pounds and 21.6 million pounds respectively. Flue-cured tobacco grown in the Union of South Africa is similar in appearance to some of our eastern and middle belt tobacco, but it is not comparable in quality as the Union's leaf is lacking in body, oil, and taste. Due to these deficiencies this flue-cured leaf is not likely to compete seriously with United States flue-cured leaf in international trade.

Air-cured tobacco, the bulk of which is used for pipe smoking and cigarette blending, increased from a prewar (1934-35 through 1938-39) average of 15.7 million pounds to an average of 18.1 million pounds for the 5 seasons 1939-40 through 1943-44. This compares with an annual average of 20.3 million pounds for the five seasons 1944-45 through 1948-49. Production of this long-established type reached its peak during the 1947-48 season when 26.7 million pounds were harvested.

Production of Turkish tobacco, used principally for cigarettes, declined from an average of 800,000 pounds during the five seasons 1934-35 through 1938-39 to an average of 469,800 pounds for the five seasons 1939-40 through 1943-44. During the five seasons 1944-45 through 1948-49 production increased to an average of 756,500 pounds.

Fire-cured and Burley tobacco have never been produced in the Union on a commercial scale.

As shown in table 8 the Union of South Africa's total production of leaf tobacco during the five prewar seasons 1934-35 through 1938-39 averaged 19 million pounds compared with an average of 28.6 million pounds for the five seasons 1939-40 through 1943-44. During the five seasons 1944-45 through 1948-49 production showed a further substantial gain, the average being 39.4 million pounds per year. Production during the 1947-48 season reached an all-time high when 49.6 million pounds were harvested.

The latest estimate for the Union of South Africa's 1949-50 tobacco crop is 41.7 million pounds contrasted with 45.6 million pounds harvested during the 1948-49 season when the yield in pounds per acre was unofficially estimated at 900 for air-cured tobacco, 710 flue-cured, and 600 Turkish. Total stocks on April 1, 1950, when stocks are normally at their lowest, were 45.2 million pounds. This compares with 39.7 million pounds and 27.8 million pounds for the corresponding date in 1949 and 1948, respectively.

TABLE 8.--Union of South Africa: Leaf production by types, average 1934-35 through 1938-39 and 1939-40 through 1943-44, annual 1944-45 through 1948-49

Crop year	Air-cured (light and dark)	Flue-cured	Turkish	Total
<u>Average</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>
1934-35/1938-39 ---	15,715	3,315	801	19,831
1939-40/1943-44 ---	18,125	10,046	469	28,640
<u>Annual</u>				
1944-45 -----	18,034	13,774	786	32,594
1945-46 -----	16,127	12,982	547	29,656
1946-47 -----	19,080	19,723	912	39,715
1947-48 -----	26,722	22,045	868	49,635
1948-49 -----	21,577	23,263	669	45,509

Source: Tobacco Industry Control Board, Pretoria.



3 4 5 6 7 8 9 10

FIGURE 7.--Roll tobacco. Roll tobacco is made in each country of south and east Africa. The bulk of it is handmade by natives, but substantial quantities are manufactured mechanically by numerous large tobacco companies. The leaf from which it is processed is generally a heavy dark air- and sun-cured type although production of lighter, similarly cured types is increasing. The product is used principally by natives in smoking or chewing, but significant quantities are consumed as snuff. Although production of this leaf is known to be substantial, no accurate production estimates are available since products made from it by natives are not taxed.

With the exception of Turkish tobacco, which is produced under natural precipitation the major portion of the Union's tobacco is now grown with irrigation. Government enterprise in extending irrigation systems is largely responsible for the substantial increase in production since World War II. The trend towards lighter, milder tobacco, particularly flue-cured, is expected to continue although the rate of increase in the total production of all types may not be maintained.

The largest leaf tobacco producing centers in the Union of South Africa are in the Transvaal districts of Brits and Rustenburg where the bulk of the Union's flue-cured and air-cured tobacco is grown. The major portion of this tobacco is used for cigarettes but substantial quantities of fine quality leaf for pipe smoking are also produced in this Province in the Magaliesberg area northwest of Pretoria. Important quantities of the Union's leading types are grown in the Cape Provinces around Oudtshoorn, Uniondale, and Gamtoos. Turkish leaf tobacco is produced mainly in the Western Cape Province in the Stellenbosch, Somerset West, and Paarl districts. Tobacco used in the manufacture of cheroots and cigars is grown chiefly in the Province of Natal. There are 17,000 tobacco growers in the Union, the majority of whom are Europeans with small holdings.

About 95 percent of the Union's leaf tobacco is produced by persons who are members of tobacco cooperative societies. There are 10 of these societies located throughout the Union in the most important tobacco producing districts. Each society is affiliated with the Central Co-operative Tobacco Company of South Africa Ltd. at Rustenberg, which acts in an administrative capacity for the group and also operates a large modern tobacco establishment. These societies receive the tobacco direct from the farms, weigh, grade, and appraise it upon arrival, later redry, pack, and market it for the growers under the direction of the Tobacco Industry Control Board. Producers usually receive an advance of 75 percent of the appraised value of their tobacco upon delivery. At the end of the season, after the crop has been disposed of, the net proceeds, after deductions of various charges, are divided among the producers on the basis of the appraised value. The cooperatives, with the active and capable assistance of the Department of Agriculture, have done much to improve tobacco production and marketing conditions.

Minimum selling prices are determined annually by the Tobacco Industry Control Board, subject to the approval of the Minister of the Department of Agriculture. These prices are, as far as possible, fixed in relation to the cost of production.

TABLE 9.--Union of South Africa: Average selling price per pound of each type of leaf tobacco obtained by the cooperative societies acting as agents for the Tobacco Industry Control Board, average 1940-41 through 1944-45, annual 1945-46 through 1948-49.

Season	Air-cured		Flue-cured	Turkish
	Light	Dark		
	<u>U. S. cents</u>	<u>U. S. cents</u>	<u>U. S. cents</u>	<u>U. S. cents</u>
<u>Average</u>				
1940-41/1944-45	28.86	16.92	40.56	47.16
<u>Annual</u>				
1945-46 -----	39.74	22.11	46.84	63.47
1946-47 -----	40.73	23.74	54.37	65.70
1947-48 -----	49.23	30.34	57.54	64.83
1948-49 -----	44.33	28.21	57.22	63.89

Source: Tobacco Industry Control Board, Pretoria.

Most of the Union of South Africa's imports of leaf tobacco are flue-cured Virginia types usually obtained from the Rhodesias and the United States. Small lots of dark air-cured tobacco are regularly imported from Swaziland, and lesser quantities of Turkish are obtained from the Rhodesias. Imports of leaf tobacco from other sources are insignificant.

The Union has duty-free flue-cured tobacco import quota arrangements with Northern and Southern Rhodesia. In the case of Northern Rhodesia there is a standing duty-free quota of 400,000 pounds per year. The arrangement with Southern Rhodesia is based on the stock position of the Union's domestic light tobaccos. During the 1947-48 and 1948-49 seasons no duty-free quotas for Southern Rhodesia tobacco were determined for the Union. It is significant, however, that manufacturers in the Union, regardless of a reportedly surplus stock position, found it necessary to import large quantities of Southern Rhodesian tobacco during these two seasons, on which they paid duty.

TABLE 10.--Union of South Africa: Imports of leaf tobacco by principal types, average 1935-39 and 1940-44, annual 1945 through 1948.

Years	Flue-cured	Air-cured	Others	Total
	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>	<u>1,000 pounds</u>
<u>Average</u>				
1935-39 -----	2,853	221	25	3,099
1940-44 -----	4,823	407	2	5,232
<u>Annual</u>				
1945 -----	1,351	367	450	2,168
1946 -----	5,669	324	-----	5,993
1947 -----	6,118	345	1	6,464
1948 -----	3,139	402	21	3,562

Source: Tobacco Industry Control Board, Pretoria.

Imports of tobacco products are small but increased from an average of 287,500 pounds during the 5 years 1935-39 to an average of 526,500 pounds during the 1940-44 period. This compares with 289,000 pounds and 1 million pounds for 1945 and 1946 respectively. More recent figures are not available, but according to the trade the 1946 volume was maintained until the imports of tobacco products from the United States was stopped by the embargo which became operative June 30, 1949.

The bulk of the imported tobacco products consisted of cigarettes, which increased from a prewar (1935-39) average of 208,000 pounds to an average of 450,000 pounds during the 5 years 1940-44. Imports for 1945 were 189,000 pounds compared with 774,000 pounds for 1946. The major portion of these cigarettes came from the United Kingdom. The United States was the next most important source, and small shipments were also received from Southern Rhodesia and Egypt.

Cuba and the Netherlands were the chief suppliers of cigars, imports of which averaged 49,000 pounds during the 1935-39 period compared with 34,000 pounds in 1945 and 192,000 pounds in 1946. Manufactured tobacco for pipe smoking made up the principal part of the remaining imports for which Southern Rhodesia was the major source. Small lots of high grade brands were received from the United Kingdom and the United States.

The general outlook for imports of leaf and tobacco products is not favorable because of the present restrictions on shipments from the United States.

The Union of South Africa's largest mechanized factories producing cigarettes and pipe tobacco are located at Cape Town, Rustenberg, Durban, and Johannesburg, but there are also important tobacco factories at Paarl, Oudtshoorn, and other towns in the Cape Province. The manufacture of tobacco products during 1949 was expected to exceed the record production of 35.3 million pounds, achieved in 1948, and be about double the annual average of 18.5 million pounds for the 5 prewar years (1935-39).

Cigarette production reached the record level of 19.1 million pounds in 1948. This compares with 18.6 million pounds in 1947 and an annual average of 9.2 million pounds during the 1935-39 period. The 1948 output of pipe tobacco totaled 14.4 million pounds, as compared with 13.2 million pounds in 1947 and an annual average of 8.3 million pounds in the prewar period. In addition to cigarettes and pipe tobacco, the Union in 1948 produced 1.7 million pounds of roll tobacco, 55,000 pounds of cigars, and 63,000 pounds of snuff.

Manufacturers' confidence in the continued growth of the industry is indicated by the construction of new tobacco factories which are now nearing completion at Johannesburg, Bloemfontein, and Durban.

The Union of South Africa's small export of leaf and manufactured tobacco products has long been disappointing to the Government and tobacco interests in the Union who have worked diligently to develop markets overseas.

Substantial factors such as the British Imperial Preference, and the export bounty paid by the Union's Tobacco Industry Control Board since the 1935-36 season have been of little avail in establishing a market even in the United Kingdom. Plans are to persevere, and in an endeavor to improve the quality of tobacco it has been proposed to establish a Tobacco Research Institute, and that its work be carried out at the Department of Agriculture Station at Rustenberg which the Institute is to take over on a long-lease basis.

Total exports of leaf tobacco and products from the Union during the 5 years 1935-39 were 1.1 million pounds, compared with 2.9 million pounds for the 5-year 1940-44 period. During

TABLE 11.--Union of South Africa output of manufactured tobacco products by categories, 1939 through 1948.

Year	Cigarettes	Pipe tobacco	Roll tobacco	Cigars	Snuff	Total
	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>
1939	10,250	10,500	1,200	65	55	22,070
1940	11,100	11,500	1,200	65	55	23,920
1941	12,500	13,100	1,400	70	60	27,130
1942	14,800	13,600	1,500	80	65	30,045
1943	17,000	11,400	1,500	95	67	30,062
1944	17,200	10,900	1,700	120	82	30,002
1945	18,000	11,900	1,800	115	52	31,867
1946	18,500	13,500	1,900	80	58	34,038
1947	18,600	13,200	1,600	50	59	33,509
1948	19,100	14,400	1,700	55	63	35,318

Compiled from trade sources.

1945 exports increased to 5.2 million pounds but declined to 2.1 million pounds in 1946. A series of later figures is not available, but the Tobacco Control Board reported that 1.7 million pounds were exported during the year ended April 1949. Included in this quantity was 1.6 million pounds on which a bounty equivalent to 60,000 U. S. dollars was paid. It is believed that this tobacco was light flue-cured Virginia type leaf shipped to the United Kingdom and that this lot was the only substantial export shipment made during the past few years.

Exports of leaf tobacco during the 5 years 1935-39 totaled 635,000 pounds, compared with 392,000 pounds for the 5-year 1940-44 period. During 1945 and 1946 leaf exports were 987,000 pounds and 780,000 pounds respectively. The bulk of this tobacco was exported to the United Kingdom. Southwest Africa was the next most important country of destination. Belgium, West Africa, Denmark, and Sweden were the principal outlets for most of the small remaining quantity.

Exports of manufactured products during the 5 years 1935-39 totaled 504,500 pounds compared with 2.5 million pounds for the 5 years, 1940-44, 4.2 million pounds for 1945 and 1.3 million in 1946. The bulk of these products were cigarettes for Southwest Africa. Southern Rhodesia, Mozambique, and Australia were outlets for practically all of the remaining quantity. Southwest Africa was the most important export market for the Union's manufactured tobacco and cigars with the Rhodesias' being the next largest outlets for these products. Prospects for increased export trade in the Union's cigarettes in adjacent countries is deemed to be good, and it is believed that exports of cut-tobacco for pipe-smoking and roll-your-own type cigarettes will remain steady.

THE TOBACCO SITUATION IN NYASALAND

Nyasaland is a small British Protectorate in southeastern tropical Africa. It extends over 47,949 square miles, about the same area as the State of Mississippi. A striking topographical feature of the country is Lake Nyasa which covers nearly 25 percent of the Protectorate, and for the greater part of its length forms the eastern boundary of Nyasaland, which is bounded on the west by Northern Rhodesia, on the north and northeast by Tanganyika Territory, and on the south by Mozambique through whose port of Beira the bulk of Nyasaland's tobacco is exported. Most of Nyasaland has an altitude of more than 3,000 feet. Rainfall is unevenly distributed and precipitation varies from 30 to 85 inches. The population of the country is estimated at 2,430,000 of which about 2,200 are Europeans. Most of the land and cultivation of crops is in the hands of natives.

The domestic manufacture of tobacco products is limited almost entirely to local requirements. There is practically no export of products, and imports are negligible.

The area of land in Nyasaland suitable for the growing of tobacco greatly exceeds that now under cultivation, and plans are to step up production. For many decades the tobacco industry has been greatly assisted by the Government and an English company which established a factory at Limbe in 1908 where it now operates one of the largest and most comprehensive tobacco leaf establishments in the world.

Nyasaland is the fourth largest producer of leaf tobacco in Africa, being surpassed only by Southern Rhodesia, Algeria, and the Union of South Africa. The principal types produced are fire-cured, sun-cured, and flue-cured. Most of the production is exported. Tobacco is Nyasaland's principal export commodity. The United Kingdom, which first imported leaf tobacco from Nyasaland in 1893, has always been its most important outlet.

Various United States dark fire-cured types of tobacco were introduced into Nyasaland a few years after the country was taken over by the British Government as a Protectorate in 1891. At the beginning of the present century, European tobacco growers in the Protectorate catered to the increasing demand in the United Kingdom for milder, brighter tobacco by introducing flue-cured Virginia types of leaf.

The Imperial Preference since 1919 has given additional encouragement to the European growers, who until then had produced all the country's flue-cured tobacco. Shortly after 1919 the Europeans began teaching the natives how to grow and cure heavy dark types. The leaf was both fire-cured and sun-cured. By 1926-27 production in Nyasaland reached a total of 18 million pounds, of which 9.1 million pounds were flue-cured, 8.9 million pounds were fire-cured, and 24,000 pounds air-cured. After this bumper crop, production of flue-cured leaf decreased rapidly, as a result of curtailed purchases by United Kingdom buyers. By the end of World War II, 1945-46, production of flue-cured leaf had fallen below 2 million pounds, but production of fire-cured leaf had risen to 15.1 million pounds, sun-cured to 3.5 million pounds, and total production to 20.6 million pounds, of which native growers produced 18.4 million pounds. The production of Canadian Burley types is gaining slightly, and further expansion is planned.

Nyasaland's most important tobacco producing districts are in the Central Province around the towns of Lilongwe and Dowa, and in the Southern Province near Blantyre, Cholo, Fort Johnson, Mlanje and Zomba. There are many other districts suitable for the production of tobacco. One of the most promising is the Kasungu district about 80 miles north of Lilongwe. The Government has carried out experimental work there during the past 3 years. Trial plantings of flue-cured types in this district have proved successful, and commercial production was started during the 1949-50 season.

TABLE 12.- Nyasaland: Production by types, 1946-47 through 1948-49

Type	1948-49	1947-48	1946-47
	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>
Flue-cured-----	2,903	2,650	2,424
Fire-cured-----	18,177	21,500	19,440
Sun-cured-----	3,109	4,250	3,385
Burley-----	1,051	1,000	1,158
Turkish-----	-	-	?
Total-----	25,240	29,400	26,410

Source: Department of Agriculture, Zomba.

Total leaf tobacco production during the 1948-49 season was 25,240,000 pounds, compared with 29,400,000 pounds for the 1947-48 season and an annual average of 16,311,000 pounds for the 5 years, 1935-39. The decrease in 1948-49 was due to the severe drought as acreage was expanded. The latest estimate for Nyasaland's 1949-50 tobacco crop is 33 million pounds, which if realized would constitute an all-time record. Total auction sales at Limbe through August 10 reached 21.4 million pounds. Average prices for all types, excepting flue-cured which showed an increase of about 10 percent, are about 20 percent lower than those obtained during a comparable period in the 1948-49 season. The quality of the crop is generally inferior to that harvested during the previous year because of excessive rainfall.

The American auction system which was started in Nyasaland in 1938 was made compulsory beginning with the 1948-49 season. The auction sales floors are located at Limbe where the most important English tobacco companies have their redrying and exporting establishments.

TABLE 13.--Nyasaland: Average auction prices for leaf tobacco at Limbe, 1948-49 and 1947-48.

Type	1948-49	1947-48
	<u>United States</u> <u>cents per</u> <u>pound</u>	<u>United States</u> <u>cents per</u> <u>pound</u>
Flue-cured-----	43.42	43.59
Fire-cured-----	33.77	26.34
Sun-cured-----	49.72	34.00
Burley-----	44.80	38.42

Source: The Tobacco Control Commission, Limbe.

Total imports of manufactured and unmanufactured tobacco during 1948 were only 14,989 pounds compared with 20,094 pounds in 1947. Most of this was flue-cured leaf from Southern Rhodesia. Imports of leaf tobacco during prewar years were also negligible.

Imports of tobacco products are confined almost entirely to small quantities of cigarettes, the bulk of which were from the United Kingdom. Cigarette imports totaled only 2,558 pounds in 1948 and 2,731 pounds in 1947. During the 5 years, 1935-39, they averaged 4,663 pounds annually.

Very little change is anticipated in imports of leaf and products in the near or distant future, since the country is practically self-sufficient as regards its tobacco requirements.

The center of Nyasaland's tobacco manufacturing industry is at Blantyre, which is the administrative headquarters of the Southern Province. A modern well-equipped factory in this town now produces all of the Protectorate's domestically manufactured tobacco products. Another factory which is being built at Limbe will start production in 1950.

Production of factory-made products in 1949 has been estimated at 630,000 pounds compared with 560,000 pounds in 1948, and an annual average of about 188,000 pounds during the 5 prewar years 1935-39. The output of cigarettes, although small, is at present adequate and production during 1949 has been estimated at 275,000 pounds, compared with 252,000 pounds in 1948. Straight Virginia-type cigarettes are produced for the European trade, and brands made from darker, stronger tobacco are produced for the natives. It is expected that the increase in the the production of cigarettes will be maintained. Cut tobacco is the only other factory-made product. Production of hand-twisted or rolled tobacco by natives for their own use for chewing and smoking is comparatively small and is expected to decrease.

Nyasaland's exports of leaf tobacco during 1950 are expected to be about double the prewar level. The United Kingdom is by far its oldest and largest market, but Egypt, the Belgian Congo, and Sierra Leone take substantial quantities. The Protectorate's leaf tobacco is also currently shipped to 20 other countries including Sweden, Denmark, Belgium, the Netherlands, British East Africa, and Southern Rhodesia. The short and long-term outlooks for Nyasaland's exports are favorable.

Exports of leaf tobacco during 1948 totaled 23.9 million pounds compared with 20 million pounds in 1947 and an annual average for the 5 prewar years 1935-39 of 12.8 million pounds.

TABLE 14.--Nyasaland: Exports of unmanufactured tobacco by countries of destination for the calendar years 1946, 1947 and 1948:

Countries	1948	1947	1946
	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>	<u>1,000</u> <u>pounds</u>
United Kingdom-----	12,760	11,715	11,121
Sierra Leone-----	1,214	1,115	1,473
Algeria-----	150	-----	-----
Belgian Congo-----	1,411	775	786
Belgium-----	106	514	689
Denmark-----	493	298	1,366
Egypt-----	1,983	2,676	858
Southern Rhodesia-----	168	719	(²)
Sweden-----	256	124	316
Others-----	5,305	2,072	1,123
Total-----	23,846	20,008	17,732

¹ Complete figures for 1949 showing exports by countries of destination are not available. However, it is reported that they totaled 25.5 million pounds of which 18 million pounds were shipped to the United Kingdom.

² Less than 500 pounds.

Source: Customs Department, Limbe.

Nyasaland's dark fired leaf and strips represent the bulk of its production and exports. Exports of this type are increasing and the principal destinations are the United Kingdom, Egypt, Sierra Leone, Belgian Congo, and the Netherlands, followed by northern Ireland, France, Uganda, and Southern Rhodesia. Exports of sun-cured leaf and strips are also rising and have taken second place from flue-cured. The Protectorate's main markets for sun-cured leaf are the United Kingdom, Egypt, and Denmark, with Belgium, the Belgian Congo, and Uganda taking substantial quantities. Nyasaland's chief markets for flue-cured are the United Kingdom and Sweden followed by Egypt, and Uganda. The Protectorate's Burley tobacco, which in the past has gone exclusively to the United Kingdom, was in 1949 also shipped to Egypt and the Belgian Congo.

TABLE 15.--Nyasaland exports of unmanufactured tobacco and prices per pound, f.o.b. Limbe, by principal types for 1947 and 1948 ¹

Type	1948		1947	Price range
	<u>1,000</u> <u>pounds</u>	<u>United</u> <u>States</u> <u>cents</u>	<u>1,000</u> <u>pounds</u>	
Leaf				<u>United States</u> <u>cents</u>
Dark-fired-----	12,995	30.22	9,818	25.19 to 30.22
Flue-cured-----	1,503	52.89	1,593	35.26 to 47.02
Sun-cured-----	2,015	44.50	1,714	25.19 to 30.22
Strips				
Dark-fired-----	4,763	43.66	3,586	30.22 to 33.58
Flue-cured-----	572	67.17	600	45.34 to 55.41
Sun-cured-----	1,189	48.70	2,414	30.22 to 33.58

¹It is reported that exports by types during 1949 included 14 million pounds of dark-fired leaf and 5 million pounds of dark-fired strips; 2 million pounds of sun-cured leaf and 1 million pounds of sun-cured strips; 1.8 million pounds of flue-cured leaf and 500 thousand pounds of flue-cured strips; and also 1 million pounds of Burley.

Source: Customs Department, Limbe.

Nyasaland's exports of cigarettes and cut tobacco are, and have always been, negligible. Total exports during 1948 were only 485 pounds compared with 842 pounds for 1947. The United Kingdom took the bulk of these, but plans are to develop markets in adjacent African countries where prospects are believed to be very good.

THE TOBACCO SITUATION IN NORTHERN RHODESIA

The British Protectorate of Northern Rhodesia is situated in South Central Africa. It is bounded on the north by Belgian Congo and Tanganyika, on the east and southeast by Nyasaland and Mozambique, on the south by Southern Rhodesia and Bechuanaland, and on the west by Angola. Its area is 287,640 square miles, about the size of Texas, Maryland, and Vermont combined. The population is about 1,700,000 which includes approximately 21,000 Europeans. Lusaka, its capital, is centrally located on the railway between Ndola and Livingstone. Much of the country consists of high plateau, with the Congo-Zambezi watershed rising in places to 5,000 feet making it suitable for farming.

The Protectorate's principal leaf tobacco producing areas are in the northeastern and northwestern Provinces. The bulk of the leaf is flue-cured. This type was first produced just prior to World War I, and the greater part of the crop has in the past been grown in the northeastern part of the country around Fort Jameson near the Nyasaland border. However, substantial quantities were produced during the 1949-50 season in northwestern Rhodesia, particularly along the railway belt from Broken-Hill southward through Lusaka and Choma. The flue-cured tobacco grown in Northern Rhodesia resembles Southern Rhodesian, and generally is equal in color and better bodied. Turkish leaf, the only other type of commercial importance, is produced in the northwestern part of the Protectorate along the railway from Lusaka southward to Kalomo. In addition to flue-cured and Turkish leaf, Burley tobacco is being grown on a small scale in the Petanke district of the Eastern Province. Production of other types of leaf tobacco are negligible.

Fort Jameson is the principal tobacco center in Northern Rhodesia, and the American auction system has been in use there since 1939. Tobacco grown in the northeastern district is marketed at Fort Jameson. Leaf produced in the northwestern district, however, is sent to the Northern Rhodesian Tobacco Cooperative, Ltd., at Livingstone, near Victoria Falls, for manipulation, baling, and shipment to Southern Rhodesia for sale at the auctions in Salisbury.

The total quantity of leaf tobacco harvested during the 1948-49 season was 6 million pounds, compared with 5 million for 1947-48 which was a record crop and double the average quantity produced during the five seasons ending with 1943-44. It is estimated that the 1949-50 crop totaled 7.7 million pounds.

The Government and tobacco industry in Northern Rhodesia plans to further expand production, and many observers believe that a crop of 20 million pounds could be produced by 1952-53. Since flue-cured production has doubled during the past 5 years, when growing conditions were not very favorable, it is probable that production of this type could again be doubled during the next 5 years. However, present prospects for Turkish leaf do not indicate a substantial increase, and Burley will probably continue for several years to be produced primarily on an experimental basis. Therefore, the possibility of a 20 million pound crop by 1952-53 appears to be overoptimistic although it is reported that an offer of a tobacco purchase agreement has been received from the United Kingdom similar to that made with Southern Rhodesia in 1947. Under the proposed agreement, tobacco manufacturers in the United Kingdom would guarantee to take a minimum of $66\frac{2}{3}$ percent of the Northern Rhodesian flue-cured crops, so long as a crop does not exceed 16 million pounds. This offer is being held in abeyance, apparently while the question of prices and grades is being further discussed. The over-all average price per pound for Northern Rhodesia's 1948-49 crop was 54.37 U.S. cents, compared with 51.63 U.S. cents the previous season.

Northern Rhodesia's imports of tobacco which currently are treble prewar level consist almost entirely of cigarettes and pipe tobacco manufactured from African grown leaf. All of these imports originated in Southern Rhodesia and the Union of South Africa.

Northern Rhodesia has an agreement with the Union of South Africa whereby a quantity of leaf not exceeding 400,000 pounds annually may be imported from the Protectorate duty free. An arrangement is also in effect whereby manufacturers in Southern Rhodesia purchase from the Protectorate each year a quantity of leaf tobacco equal to the weight of leaf used in the manufacture of Southern Rhodesian tobacco products that are imported by Northern Rhodesia.

As there are no tobacco manufacturing establishments in the Protectorate, exports of leaf tobacco approximate the country's total leaf production. During 1949 exports slightly exceeded 6 million pounds, and were over 1 million pounds greater than the preceding year and four times the prewar (1935-39) average.

Northern Rhodesia's total production of leaf tobacco during the 1948-49 season established an all-time high of 5.9 million pounds. This compares with 5 million pounds for the 1947-48 crop and an average of 1.6 million pounds for the 5-year 1934-35 through 1938-39 period. The 1948-49 crop was harvested from 13,090 acres and the 1947-48 crop from 13,950 acres. The average area harvested during the 5 prewar years was about 4,000 acres.

Of the total quantity produced from the 1948-49 crop, 5.7 million pounds was flue-cured. The remainder consisted of small lots of Oriental, Burley, and fire-cured. The 1947-48 crop consisted of 4.3 million pounds of flue-cured, nearly 600,000 pounds of Turkish, 171,000 pounds of Burley, and a small quantity of fire-cured leaf.

In the northwestern district the 1949-50 harvest of flue-cured leaf is estimated at about 3 million pounds from 6,000 acres. In the northeastern district the estimate is for 4 million pounds of this type from 11,500 acres. The forecast for Burley production is about 300,000 pounds. Auction sale prices for flue-cured tobacco from the 1948-49 crop in the northwestern district averaged 53.27 U.S. cents per pound compared with 54.53 U.S. cents per pound in the northeastern district. The average prices for the Protectorate's Burley tobacco, which was sold at auction in Darwendale near Salisbury, Southern Rhodesia, was 50.71 U.S. cents for the 1948-49 crop compared with 48.89 U.S. cents for the 1947-48 tobacco. Volume and prices are reported to be up thus far this season (1949-50) over a comparable period last year. The outlook for continued expansion in the production of tobacco in this country is very bright.

Northern Rhodesia imported a total of 853,628 pounds of manufactured tobacco products during 1948 compared with 715,503 pounds in the preceding year, and an average of 250,908 pounds for the 5 years 1935-39.

During the calendar year 1948, imports of cigarettes totaled 537,012 pounds. This compares with 432,205 pounds in 1947 and an annual average of 126,558 pounds for the 5 years 1935-39. Imports of other manufactured products, principally pipe tobacco, totaled 316,616 pounds in 1948, compared with 283,298 pounds in 1947 and an annual average of 124,350 pounds during the prewar period.

Since the smoking population is increasing and its purchasing power is rising, the increase in imports is expected to continue unless the manufacture of tobacco products in the Protectorate is successfully undertaken.

Northern Rhodesia's exports of tobacco have always consisted principally of flue-cured leaf tobacco which during 1949 amounted to 5.3 million pounds out of a total export of 6 million pounds. The remainder was chiefly Turkish leaf; exports of Burley and fire-cured were insignificant. As may be seen from table 16 exports have shown a steady and substantial increase during the past decade. The major share of the exports to Southern Rhodesia have always been reexported to the United Kingdom which remains the Protectorate's most important market. The next most important outlet is the Union of South Africa. The United States took small quantities of Turkish leaf. Other export outlets were the Belgian Congo, Argentina, and Egypt. Future prospects for this trade, particularly with the United Kingdom, are considered to be favorable.

TABLE 16.-- Northern Rhodesia: Exports of unmanufactured tobacco by countries of destination, annual 1937-38 and 1944 through 1949 (thousand pounds, dry weight)

Year	To United Kingdom	To Southern Rhodesia	To Union of South Africa	Total (including other destinations)
1937-----	351	272	398	1,021
1938-----	1,085	293	423	1,801
1944-----	1,178	530	626	2,466
1945-----	1,362	919	298	2,687
1946-----	1,359	1,920	326	3,833
1947-----	1,930	999	371	3,335
1948-----	2,348	1,273	556	4,826
1949-----	1,789	3,913	62	6,075

Source: Statistical and Economic Bulletin.

THE TOBACCO SITUATION IN MOZAMBIQUE

Mozambique, formerly Portuguese East Africa, is preeminently an agricultural country. It is 297,731 square miles in area, about the size of Texas and South Carolina combined. Its principal rivers are the Limpopo in the south, and the Zambezi which divides the country in half. On the east the Colony is bounded by the Indian Ocean, on the west by the Rhodesias, on the north by Nyasaland and Tanganyika, and on south and southwest by the Union of South Africa. The population is estimated at 5.5 million, of which about 35,000 are Europeans. Its most important ports are its capital, Lourenco Marques, and Beira, through which the bulk of leaf tobacco exported from the Rhodesias and Nyasaland is shipped.

Tobacco was grown in Mozambique by natives before the arrival of the Portuguese colonists in the early 1500's. It was a heavy, dark air-cured type much of which was subjected, as some is today, to smoke by the natives in their huts while they fashioned it into rolls or twist for use in pipe smoking, chewing, and for snuff purposes. Since the early part of this century most of the dark air-cured tobacco in the Colony has been grown by Europeans and utilized chiefly in the manufacture of cigarettes for native consumption. However, important quantities of this strong dark type are still produced by natives who process it into roll for their personal consumption or for barter transactions as is done in many countries in Africa.

During the last decade Mozambique's European population has increased considerably, and this has influenced the introduction of light flue-cured Virginia varieties of leaf tobacco. Experiments proved that flue-cured varieties from Rhodesian seed could be successfully grown, and since World War II emphasis has been placed on the production of this type. Cultural methods analogous to those followed in adjacent countries were adopted, and tobacco similar in general appearance and quality to that grown in the Rhodesias was produced. This type is used mainly for blending purposes in domestic cigarettes and cut-tobacco.

There exists in the Colony a plentiful and convenient supply of water and much suitable land on which tobacco could be grown. Plans are to expand production of flue-cured varieties and to experiment with Burley and Turkish types because the shift in consumer preference from strong, dark cigarettes to the lighter Virginia and United States blended types is becoming very pronounced and is expected to gain momentum.

Mozambique's tobacco industry is completely controlled by the Government, which has contributed greatly to the success achieved in the production of leaf tobacco and products. Current production of leaf tobacco is five-times greater than prewar, and consumption of cigarettes is treble prewar.

Lourenco Marques is the center of Mozambique's tobacco manufacturing industry. Four of its six factories are located there. The other two are at Beira and Mozambique Island. These factories are partially mechanized and each company is interested in manufacturing United States blended type cigarettes. Output from these factories satisfies the major part of the domestic demand but imports of United States blended type cigarettes are required to cater properly to the Colony's better class cigarette clientele. Furthermore, although Mozambique is a surplus tobacco producing country, its manufactures need United States leaf tobacco for blending purposes to improve the quality of their medium and better class products.

It is estimated that there was a 10 percent increase in production of leaf tobacco during the 1949-50 season. Production for the 1948-49 season was reported at 1,916,000 pounds compared with the prewar (1934-35/1938-39) annual average of only 375,000 pounds. The 1948-49 crop consisted of 1,535,000 pounds of flue-cured leaf and 381,000 pounds of air-cured. The yield for flue-cured was estimated at 545 pounds per acre compared with about 285 pounds during the prewar period.

The most important flue-cured growing areas are in Nampula, the Lake districts in the Province of Nyasa, and in the district of Quelimane in the Province of Zambezia. The bulk of this this type of the Colony's tobacco is grown without irrigation by Europeans. Most of the better grade dark air-cured leaf is grown under irrigation in the Lourenco Marques district, also principally by Europeans, who favor seed produced in the Union of South Africa for this type. Natives in the Inhambane district in Sul du Save and around Beira grow small quantities of this dark air-cured tobacco. Flue-cured and air-cured leaf are the only types at present produced in the Colony on a commercial basis.

Imports of leaf tobacco, which are double prewar, have a postwar average of about 450,000 pounds. The 1948 imports consisted of 266,000 pounds of dark air-cured and 186,000 pounds of flue-cured. Practically all of the air-cured leaf came from the Portuguese Colony of Angola, and the bulk of the flue-cured imports from Southern Rhodesia and the United States. Exports of leaf to the Colony from the United States during 1949 were 81,000 pounds compared with 37,000 pounds in 1948. In addition to the leaf tobacco a considerable quantity of cigarettes was imported. Pipe tobacco and cigar imports were negligible. The most important sources of supply for the cigarettes were the United Kingdom, the Union of South Africa, Southern Rhodesia, and the United States. Exports of cigarettes to the Colony from the United States during 1949 totaled

TABLE 17.--Mozambique: Prices for flue-cured and air-cured tobacco expressed in United States cents per pound, 1941-42 and 1945-46 through 1948-49.

Flue-cured	1941/42	1945/46	1946/47, 1947/48, 1948/49 ¹
SE-1-----	28.18	32.72	41.81
SE-2-----	23.64	29.09	38.18
SE-3-----	18.18	22.70	29.09
SE-4-----	14.54	19.09	25.45
SE-5-----	10.91	14.54	18.18
SE-6-----	9.99	10.91	12.73
Air-cured			
SA-1-----	11.82	15.45	19.09
SA-2-----	9.99	12.73	16.36

¹ Same each season, no change.

Note: One United States dollar equals 24.95 escudos.

Source: Department of Agriculture, Lourenco Marques.

8,960,000 pieces compared with 5,280,000 pieces in 1948 and an annual average of only 270,000 pieces for the 1934-38 period. This increase is significant because this trade has been hampered by import restriction and the short dollar position.

The factory output of tobacco products in Mozambique during 1949 was estimated at 1,373,000 pounds, compared with 1,306,000 in 1948 and an annual average of 588,000 during the 5 years, 1935-39.

TABLE 18.--Mozambique: Production of tobacco products by categories, annual 1945-49.

Year	Cigarettes	Cut Tobacco	Total
	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>
1945-----	962	32	994
1946-----	1,010	19	1,029
1947-----	1,252	7	1,259
1948-----	1,293	13	1,306
1949-----	1,358	15	1,373

Source: Trade and official.

Leading manufacturers recently marketed brands put up in attractive American style, 20's cup packets containing cigarettes made from blends somewhat resembling those in the United States. The trade predicts an expansion in the consumption and production of this type of cigarette when adequate supplies of United States leaf are available.

Unmanufactured tobacco exports, principally flue-cured leaf, totaled 373,000 pounds in 1948, about 331,000 pounds in 1947 and 95,000 pounds in 1946. The prewar, 1935-1939 average was 35,627 pounds. Practically all leaf exports went to Portugal and Angola.

Cigarettes, which comprise practically all of Mozambique's exports of tobacco products, have declined in recent years. Only about 6,000 pounds were exported in 1948, compared with 18,900 pounds in 1947 and 26,420 pounds in 1946. The 5-year 1935-39 average was 51,836 pounds. The principal export outlets for cigarettes are ships stores and Macau. The Government plans to expand the export trade in both leaf tobacco and products and deems the long-term outlook to be favorable.

THE TOBACCO SITUATION IN BRITISH EAST AFRICA

British East Africa which is located in equatorial Africa is composed of the Crown Colony of Kenya, Uganda Protectorate, and Tanganyika Territory.

Kenya has an area of 224,960 square miles and a population of about 5,180,000 which includes approximately 35,000 Europeans. Its capital is Nairobi, which has a population of about 65,000. Uganda has an area of 93,972 square miles and a population of about 5,000,000 including approximately 3,500 Europeans. Its capital is Entebbe. Mombasa is the port for both Uganda and Kenya. Tanganyika has an area of 362,706 square miles and a population of 7,080,000 including 17,000 Europeans. Its capital is the port of Dar es Salaam which has a population of about 75,000.

The principal tobacco growing countries are Tanganyika and Uganda. The most important production districts are Songea and Iringa in Tanganyika and Bunyora in Uganda. The most popular types of tobacco are dark fire-cured and flue-cured.

Production of leaf tobacco in these two countries has almost trebled since the prewar years (1935-39). Two-thirds of the production is dark fire-cured, and the bulk of the remainder is flue-cured. In addition to these types, several air-cured tobaccos, including Nicotiana rustica, are grown. Flue-cured is the type which increased most rapidly since the prewar period and the one for which greatest expansion is planned. Most of the production of all types during the past two decades has been used for domestic consumption, but since World War II substantial quantities of fire-cured and flue-cured have been exported, principally to the United Kingdom. A further increase in domestic consumption is anticipated, but it is believed that production will increase more rapidly than consumption. Consequently, exports are expected to expand.

Despite the area's production of flue-cured leaf, manufacturers and consumers of medium and better class cigarettes continue to prefer United States flue-cured. During the past 10 years relatively large quantities of this type have been imported from the United States, but as a result of exchange difficulties, imports have been restricted and are expected to continue at a low level until this situation improves.

Excluding tax-free air-cured tobacco, for which production figures are not available, production of leaf tobacco in the three East African countries (Tanganyika, Uganda, and Kenya) during 1949 was reported at 6.7 million pounds, compared with 6.3 million pounds in 1948 and an annual average of 2.5 million pounds during the 5 prewar years (1935-39). The area planted in tobacco in 1949 was approximately 24,000 acres, or about 10 percent greater than the 1948 acreage. A substantial increase is expected in the 1950 plantings.

Production of dark-fired tobacco in 1949 was reported at 4.4 million pounds, compared with 4 million pounds in 1948 and an annual average of 2.2 million pounds during the prewar period.

The production of flue-cured leaf has expanded rapidly since prewar years. The 1949 crop totaled about 2.1 million pounds, compared with the previous record crop of 2 million pounds in 1948 and an annual average of only 34,000 pounds for the 1935-39 period.

It is estimated that 225,000 pounds of air-cured leaf was produced in 1949, compared with 170,000 pounds in 1948 and an annual average of 206,000 pounds during the 5 years 1935-39.

Experiments with the cultivation of Turkish types of tobacco have been discontinued but attempts to produce Burley leaf which were begun several years ago are being continued.

The major portion of East Africa's dark fire-cured and practically all of its flue-cured leaf tobacco are now grown in Tanganyika Territory where production of these two types during 1949 was 2.3 million pounds and 1.7 million pounds, respectively. The combined 1949 production was about five times as great as the average during the 5 prewar years and approximately 13 percent over 1948. Dark fire-cured leaf was originally produced in Tanganyika in 1928 from seed brought from Nyasaland. The bulk of the crop now resembles Virginia fire-cured in general appearance, and although it is not comparable in quality it is being used as a substitute.

The chief center for the production of this type is in the Southern Province in the Songea district. Substantial quantities are also grown in adjacent areas extending from the Matengo Highlands to the Tunduru district, 120 miles eastward. Recent experiments with fire-cured leaf at Kilosa in the Eastern Province and at Biharamullo in Bukoba Province resulted in the production of small lots of leaf of exceptional appearance and quality for Africa. Plans are for increased production in these districts.

Tanganyika's most important flue-cured tobacco producing area is in the Iringa district of the Southern Highlands where this type was first grown just before World War II by Germans from seed originating in the Union of South Africa. It is now being grown by Greek and Indian settlers, who have crossed the original stock with other African flue-cured varieties. Much of the leaf is bright in color and satisfactory in body and general appearance, but has an off-type taste. Trial plantings of flue-cured are being made in other districts, and it is planned to increase production substantially for both domestic and export requirements.

In addition to Tanganyika's fire-cured and flue-cured tobacco, strong, dark, air-cured leaf of mixed types is grown in many districts scattered all over the Territory. Although production of this leaf is known to be substantial, no accurate production estimates are available as the products made from it are not taxed. The bulk of this leaf is made into roll or twist for smoking or chewing, and significant quantities are consumed as snuff-paste. These products are made and consumed almost exclusively by natives. The roll or twist tobacco is processed similarly to that in Nyasaland and Mozambique.

Uganda's tobacco industry is extremely important to its economy. Not only are substantial quantities of leaf tobacco produced in the Protectorate but there are two large mechanized tobacco factories -- one at Kampala and the other at nearby Jinja on Lake Victoria -- each of which relies on domestic leaf for the major part of its output.

Types of leaf tobacco produced are fire-cured, flue-cured, and species of *Nicotiana rustica*. Commercial production of dark fire-cured tobacco was first attempted in Uganda in the Northern Province at Hoima in 1928. Large-scale production was later developed in Buganda Province, and in the West Province, particularly in the Bunyora district, where, in 1943, a record crop of 3.8 million pounds was produced. The leaf resembles Nyasaland dark-fired types and is very popular in the native cigarette and shag tobacco trade. Successful trial plantings of this type have recently been made in several localities in the West Nile and Buganda Provinces, where it is believed that the climate and soil are suitable for substantial expansion.

Air-cured tobacco was first produced in Uganda in 1932 in the West Nile Province. Production has increased in this district, particularly around Arua and Terego where quality has steadily improved. The leaf is lighter than the sort that is fire-cured and is suitable for use in cigarettes and smoking tobacco.

Successful experiments have also been made with flue-cured tobacco in the Arua District, and around Gulu, in the Northern Province, where leaf of splendid quality for Africa was harvested during 1949. Greatly increased production over a long period is planned for these districts. The leaf resembles Rhodesian flue-cured in general appearance, has better body and flavor, and is suitable for blending with United States flue-cured for cigarettes.

During the past few years, trial plantings of flue-cured tobacco were made in Kenya Colony at Kitui and Sagana in the Central Province. In these districts during 1949 two crops were produced, one during the short rainy season early in the year and one during the long rainy season in the fall. Rhodesian flue-cured seed was used, and the leaf produced was similar in general appearance but had better body and flavor. It is reported to be the best quality, flue-cured leaf yet grown in East Africa. The 1949 crop was estimated at 250,000 pounds. Plans are to step up production as rapidly as possible since this type is useful for blending in domestically manufactured cigarettes. In connection with expansion plans, and as insurance against drought, experiments with irrigation from rivers in the districts are being conducted by the leading tobacco manufacturer.

It is also planned to continue attempts to establish commercial production of tobacco in the Kitale district of Kenya, where experiments with the growing of flue-cured and fire-cured tobacco date back to shortly after World War I. Competition from other crops in this district has so far prevented a significant production.

Imports of leaf tobacco and products into East Africa in 1949, including intershipments among the three separate countries, are reported at 4.8 million pounds, compared with the 1948 total of 4.5 million pounds. Imports in 1947 totaled 4.2 million pounds, and the annual average for the years 1935-39 was 2.2 million pounds.

Imports consisted mainly of leaf tobacco for factories in Uganda. During 1949 imports of leaf into the East African countries totaled 4.4 million pounds, compared with 3.2 million pounds in 1948 and 3.1 million pounds in 1947. Imports during the prewar years (1935-39), which included small quantities for Tanganyika factories averaged 740,000 pounds. Tanganyika was the principal source of supply, but, of the above totals, the United States provided 1.2 million pounds in 1949, 797,000 pounds in 1948, 1.2 million pounds in 1947, and an annual average of 176,000 pounds during the 1935-39 period. Other countries of origin were Nyasaland and India.

East Africa's imports of tobacco products currently consist chiefly of small lots of high-grade straight Virginia cigarettes and pipe tobacco, principally from the United Kingdom. Small quantities of cigars and cheroots are received from India and the Netherlands. However, during the prewar years (1934-38) and in 1946 substantial quantities of United States blended cigarettes were imported, but tariff increases and shortage of dollar exchange has interrupted this trade. However, one of the popular United States brands, now also made in England, is being imported in an attempt to supply the demand for United States blended type cigarettes. These cigarettes are put up in standard United States 20's

cup packets which bear the same brand name and mark as its American contemporary. The blend is good and the sales price the same as for popular imported English Straight Virginia cigarettes. Indications are that the brand will be a success.

East Africa's tobacco manufacturing industry is located in the Uganda Protectorate at Kampala and Jinja. Consumption of tobacco products has been rising steadily, chiefly as a result of increased population and improved purchasing power. Factory production will be further stepped up during 1950 upon the completion of an extension to the factory at Jinja which will make this plant one of the most modern and best equipped in Africa.

The output of tobacco products during 1949 was estimated at 6.7 million pounds, compared with 6.4 million pounds during 1948 and an annual average of 5 million pounds for the 5 years 1935-39.

The products manufactured consist chiefly of Virginia type and dark (Kali) cigarettes, together with dark (Kali) shag tobacco. The output of pipe tobacco and cigars is small, and no snuff is manufactured.

During the past two decades the consumption of bright Virginia type cigarettes has increased substantially at the expense of dark cigarettes and dark shag tobacco.

This decisive shift in consumer preference is being catered to by the manufacture and sale of attractively packaged brands of bright, mild cigarettes and pipe tobacco. Some of the Virginia type cigarettes contain a blend made entirely from United States flue-cured tobacco, and others are blends containing varying percentages of United States flue-cured leaf mixed with flue-cured from domestic production and imported from sources other than the United States.

In 1949 exports of tobacco leaf and products from the three East African countries including intershipments among the countries totaled 5 million pounds, compared with 5.3 million pounds in 1948, 3.5 million pounds in 1947, and an annual average of 1.3 million pounds during the 5 years 1935-39. Of these totals, exports of leaf amounted to 4.4 million pounds in 1949, 3.4 million pounds in 1948, 1.8 million pounds during 1947, and an annual average of 888,000 pounds during the 1935-39 period. Tanganyika exported about 3 million pounds of leaf tobacco in 1949 and 3.2 million pounds in 1948, compared with 1.5 million pounds for 1947 and a prewar annual average of only 560,000 pounds. The principal destinations were Uganda and the United Kingdom. Other outlets were Zanzibar, Somalia, and Egypt.

Export statistics by types of leaf are not available, but it is known that until 1946 exports consisted almost entirely of fire-cured leaf. Since that year exports of flue-cured have increased. In 1948 exports of this type totaled 2 million pounds compared with 1 million pounds for 1949. Exports of fire-cured during 1948 and 1949 were 720,000 pounds and 2.3 million pounds respectively. Exports of other unmanufactured tobacco were mainly stems and scrap.

Exports of tobacco products from British East African countries during 1949 totaled 685,000 pounds. This compares with 1.9 million pounds for 1948, 1.8 million pounds in 1947, and an annual average of 432,000 pounds during the 1935-39 period. Uganda was the country of origin for practically all of these products which consisted principally of cigarettes. Exports of these during 1949 totaled 623,904 pounds, compared with 1.8 million pounds in 1948 and 1.7 million pounds in 1947. The annual average during the 5 years 1935-39 was 296,000 pounds. The principal destinations were the Belgian Congo, Kenya, and Tanganyika Territory. Other outlets were Somalia and Zanzibar. A small but steady increase in this trade is expected next year and the long-term outlook is for continued expansion.

