



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

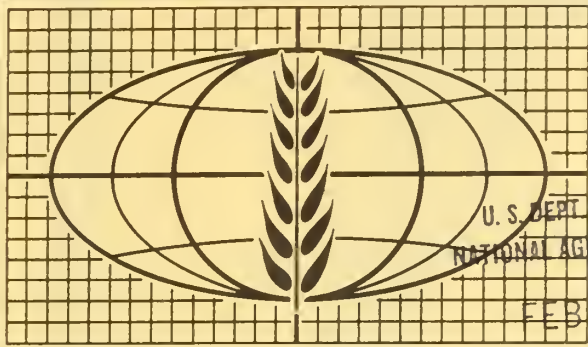
*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



A281.9  
Ag83



U. S. DEPT. OF AGRICULTURE  
NATIONAL AGRICULTURAL LIBRARY

FEB 11 1970

# UPPER VOLTA'S AGRICULTURAL ECONOMY IN BRIEF

By Snider W. Skinner

CURRENT SERIAL RECORDS

ERS-FOREIGN 285

FOREIGN REGIONAL ANALYSIS DIVISION

JANUARY 1970

## SUMMARY

Upper Volta, hindered by lack of rainfall and by its landlocked position in West Africa, nevertheless is showing some signs of economic progress. Livestock production, Upper Volta's chief economic activity, needs modernizing. Cotton production has risen sharply in recent years, but peanut production has remained about the same. Prospects for commercial production of sugar from sugarcane appear bright.

Upper Volta's foreign trade is small and has shown an adverse balance each year since the country became independent from France in 1960. Ivory Coast, Ghana, and France are Upper Volta's chief markets. France and Ivory Coast are the chief suppliers. Trade with the United States is small. Upper Volta is relatively self-sufficient in food. This is a major accomplishment. However, from time to time, Upper Volta suffers from droughts which cause local or widespread famine conditions.

## POPULATION

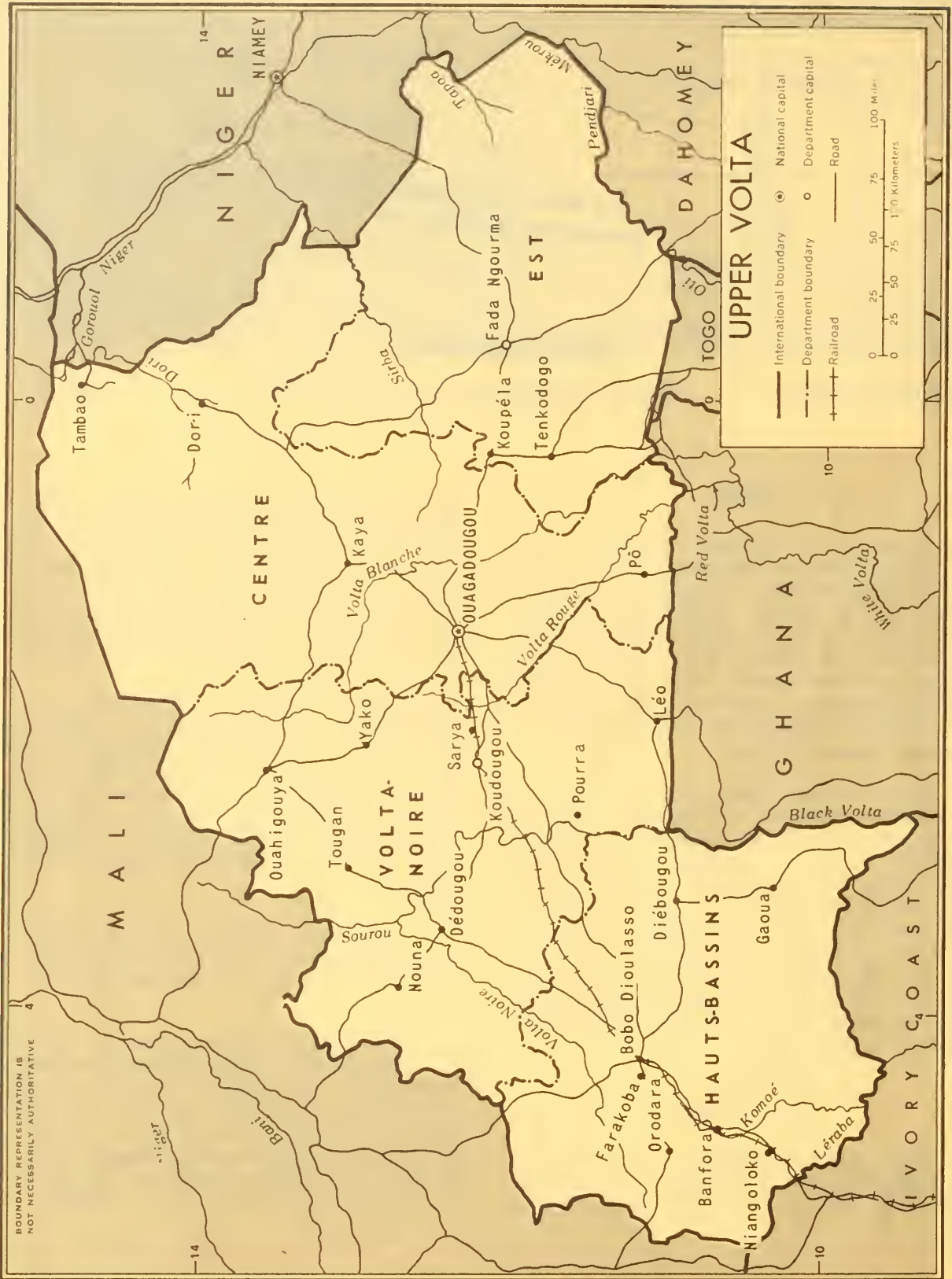
Upper Volta's population, as of 1969, was estimated at 5.3 million. The average population density is 50 persons per square

mile but is unevenly distributed. The central plateau has about one-fourth of the land area and nearly one-half of the population. The north, southeast, and southwest are less heavily populated. Population growth is estimated at 2 percent per year. Approximately 95 percent of the inhabitants live in rural areas.

Upper Volta has no large cities. Ouagadougou, the capital, has a population of 105,000. About 65,000 persons live in Bobo Dioulasso, the largest commercial center. Other urban centers include Koudougou (21,000), Kaya (10,000), Ouahigouya (10,000), and Banfora (5,000). There are 7,000 villages, with an average population of 600.

Almost all of Upper Volta's population is African. Very few inhabitants are from Europe, Asia, or the Americas.

The dominant ethnic group is the Mossi. Many of the other tribes have adopted the customs and language of this influential tribe. Domination by the Mossi predates the coming of the French. In 1950, the French decided to make Ouagadougou the capital of Upper Volta as it was the traditional seat of the Mossi "emperor."



BOUNDARY REPRESENTATION IS NOT NECESSARILY AUTHORITY

NEG. ERS 6949-69(B) ECONOMIC RESEARCH SERVICE

U.S. DEPARTMENT OF AGRICULTURE

Upper Volta has a total land area of 105,839 square miles, slightly larger than Colorado. It is bounded on the north and west by Mali, on the east by Niger, and on the south by Ivory Coast, Ghana, Togo, and Dahomey.

It is located in the Sudanese climatic zone, which is characterized by a 4-month rainy season from July through October and a dry season the other months of the year. Annual rainfall averages 40 inches in the south, gradually decreasing to less than 10 inches in the north.

The most extensive soils in Upper Volta are Ferruginous, iron-rich, tropical soils (Fersiallitic soils), formed from the crystalline acid rock base which still underlies them. These reddish soils are very erodible; annual crops grown on them afford little protection against erosion. Although of low-to-average agricultural value, many of these soils respond well to fertilizer.

The topography of the country can be described as a vast undulating plain interspersed with occasional rocky areas. All of Upper Volta slopes toward the south, except for a portion that drains eastward to the Niger River.

Rainfall in the southern part of Upper Volta is sufficient to produce several rivers. The Volta Blanche, Volta Rouge, and Volta Noire flow southward into Ghana, where they are called the White, Red, and Black Volta Rivers, and ultimately into the Gulf of Guinea. The Leraba, Komoe, and Oti Rivers also flow into the Gulf of Guinea. Even in the drier east, the Sirba River forms and flows northeastward to the Niger River. The small Gorouol and Tapoa Rivers also flow into the Niger.

Upper Volta's rainfall, temperature, and topography are moderately favorable to growing of crops with low rainfall requirements and to grazing of livestock. Agricultural activities are distributed throughout most of Upper Volta, with the exception of the northern area where the harmattan (hot desert wind) adds to the dryness of the region, resulting in sparse human and animal populations.

Livestock herding and subsistence crop production are the chief agricultural pursuits in Upper Volta. Some commercial crops--chiefly peanuts and cotton--are grown. The agricultural pattern is largely determined by the amount of rain that falls. Farms are usually small, and cropland is usually cultivated with hand tools. Because of the short rainy season, quick-maturing crops must be planted.

Herdsmen move with their cattle in search of water and grass, especially in the northeast. Land tenure is based on occupancy rights and is generally regulated by tribal custom and law.

#### PROGRESS IN FARM TECHNOLOGY

Farm technology in Upper Volta is rather primitive but some progress is being made.

Several French organizations have an important part in rural development in the country, channeling French economic and technical assistance to Upper Volta's farmers (including livestock raisers). Their work is detailed in the following paragraphs.

CFDT (Compagnie Francaise pour le Developpement des Fibres Textiles--French Company for the Development of Textile Fibers) was formerly concerned in Upper Volta only with cotton production and marketing. Recently CFDT has been given broader responsibility for agricultural development in two rural development regions.

CFDT's cotton research is conducted in cooperation with IRCT (Institut de Recherches du Coton et des Textiles Exotiques--Research Institute for Cotton and Exotic Textiles). Both CFDT and IRCT are financially supported by FAC (Fonds d'Aide et de Cooperation--Funds for Aid and Cooperation).

In the areas where considerable cotton is grown, CFDT distributes improved seed of the Allen type, fertilizers, and insecticides, and provides training and technical assistance to farmers. In the regions it serves, CFDT buys cotton on a monopoly basis and ships the seed cotton to its gins

which are located in Ouagadougou and Bobo Dioulasso.

In the areas of Upper Volta where peanuts are grown, technical assistance is provided by the French organization, IRHO (Institut de Recherches pour les Huiles et Oleagineaux Tropicaux--Research Institute for Tropical Oils and Oil-bearing Materials). IRHO conducts an agricultural research station at Niangoloko, southwestern Upper Volta.

Technical assistance to small farmers in the Mossi area near Ouagadougou is provided by a French organization, SATEC (Societe d'Assistance Technique et de Credit social Outre-Mer--Society for Overseas Technical Assistance and Social Credit). SATEC has promoted use of fertilizers, establishment of cash crops in subsistence areas, introduction of plowing with animal power, diversification of crops, crop rotation, and introduction of livestock farming in conjunction with crop farming. FAC provides the funds for SATEC. Recently, SATEC was given responsibility for administering two rural development regions.

Two general agricultural experiment stations are maintained by IRAT (Institut de Recherches d'Agronomie Tropicale--Research Institute in Tropical Agronomy). These stations are at Sarya and Farakoba.

SESU (Societe d'Etude Sucriere de haute Volta--Society for Study of Sugar in Upper Volta), supported by FAC, has been conducting sugarcane experiments preparatory to the establishment of a commercial sugar industry at Banfora.

BDPA (Bureau de Developpement de la Production Agricole--Bureau for Development of Agricultural Production) is working to improve Voltan agricultural methods. BDPA is also in charge of a recently established rural development region.

Five proposed rural development regions are still to be organized.

CIDR (Compagnie Internationale de Developpement Rural--International Company for Rural Development) promotes farm diversification in certain rural areas of Upper Volta. It is financed by a French religious organization.

U.S. economic and technical assistance to Upper Volta has been small. In the agricultural field, the main projects have been the institution of a livestock demonstration center and the construction of small dams to supply drinking water for people and livestock.

Project Vanguard rice demonstration plots, organized at three locations in Upper Volta by Nationalist China (Taiwan), have been quite successful.

During 1959 to 1965, Upper Volta received economic and technical assistance totaling \$132 million. Of this amount, France furnished 61 percent; the European Development Fund, 23 percent; Ghana, 4 percent; the United States, 4 percent; the United Nations, 4 percent; the Entente Solidarity Fund, 3 percent; West Germany, 1 percent; and Israel and Nationalist China, smaller percentages.

On a per capita basis, foreign aid to Upper Volta has not been as large as that furnished many other countries in Africa.

#### AGRICULTURAL PRODUCTION

Peanuts and cotton are Upper Volta's main cash crops, but exports of these crops are low in relation to the size and farm population of the country. Sorghum and millet are the dominant food crops grown; others include corn, bambarra groundnuts, cowpeas, rice, cassava, yams, sweetpotatoes, and cocoyams.

A sugar refinery was started at Banfora in January 1969, and maximum production of 15,000 metric tons of sugar is expected by 1977. This refinery will require growing of sugarcane on a scale not previously attempted in Upper Volta.

There was drought in 1968 in the inland countries of Africa; therefore, the 1968 production figures in table 1 are somewhat below those for other recent years.

Raising of cattle, goats, and sheep is an important source of both revenue and food (table 2). This contrasts with the situation in Upper Volta's neighbor countries to the south, which are wetter and more tropical. In these coastal countries,

Table 1.--Upper Volta: Estimated production, major crops, 1959-61 average, annual 1967 and 1968

Crop	Production		
	Average 1959-61	1967	1968
	- - - - - 1,000 metric tons - - - - -		
Millet and sorghum.....	874	950	925
Corn.....	129	150	140
Peanuts, in shell.....	75	109	100
Bambara groundnuts.....	66	70	70
Cowpeas.....	63	65	60
Rice, paddy.....	24	35	35
Cassava (manioc).....	29	30	30
Yams.....	25	25	25
Sweetpotatoes.....	20	20	20
Shea nuts.....	20	20	5
Cottonseed.....	5	9	16
Cotton lint.....	3	5	8
Cocoyams.....	3	3	3
Sesame seed.....	1	3	3

Table 2.--Upper Volta: Estimated livestock numbers, 1966

Kind	Number of livestock
	- - - - - 1,000 head - - - - -
Sheep and goats.....	3,000
Cattle.....	2,400
Donkeys and horses.....	300
Hogs.....	110

infestations by tsetse flies, which transmit the disease trypanosomiasis, make livestock-raising precarious and unprofitable. These countries thus furnish a market for Upper Volta's livestock production.

Large herds of cattle are driven from Mali and Niger, through Upper Volta, on their way to markets in Ivory Coast and Ghana, often spending several months in crossing Upper Volta.

Large numbers of live cattle are shipped by rail from Upper Volta to the Ivory Coast. In 1964, 10,000 tons of cattle were shipped by rail, representing about 60 percent of registered cattle exports that year,

but of course, a much smaller percentage of total cattle exports.

Some meat is also sent to Abidjan from animals slaughtered in Ouagadougou. A new abattoir, to increase these meat exports, is planned.

The southern part of Upper Volta has some tsetse fly infestation; the main cattle breed there is the Ndama, which is tsetse fly resistant. The Ndama are raised on a sedentary basis. Further north and east, where transient herds of Zebu cattle are predominant, Upper Volta is free of the fly.



Development of modern commercial cattle ranching appears to be one of the few opportunities for economic development open to Upper Volta.

#### AGRICULTURAL TRADE

About 90 percent of Upper Volta's total exports are agricultural. Live animals,

chiefly cattle, are the largest single export, making up about three-fifths of all exports (table 3). Most of the live animals are driven across the border and purchased in the neighboring countries of Ivory Coast and Ghana (table 4).

Exports of crops are relatively small. Cotton, peanuts, sesame, and shea nuts are

Table 3.--Upper Volta: Agricultural exports, value and distribution of principal commodities, 1967

Commodity	Value	Percentage of total value of all exports
	<u>1,000 dollars</u>	<u>Percent</u>
Live animals <sup>1/</sup> .....	13,252	60.3
Cotton.....	3,411	15.5
Peanuts.....	1,148	5.2
Meat and fish.....	1,057	4.8
Sesame seeds.....	476	2.2
Hides and skins.....	312	1.4
Shea nuts.....	277	1.3
Shea butter.....	49	.2
Other exports (agricultural and non- agricultural).....	2,012	9.1
Total exports.....	21,994	100.0

<sup>1/</sup> Includes 1 billion CFA francs value of estimated unregistered live animal exports. The CFA franc, Upper Volta's currency, is converted at the rate of 246.853 CFA francs per U.S. dollar.

Table 4.--Upper Volta: Exports by country, value and distribution, 1967

Country	Value	Percentage of total value of all exports
	<u>1,000 dollars</u>	<u>Percent</u>
<u>Registered exports:</u>		
Ivory Coast.....	8,851	49.3
Ghana.....	2,435	13.6
France.....	2,431	13.5
Morocco.....	656	3.7
Italy.....	567	3.2
Japan.....	486	2.7
Mali.....	429	2.4
Niger.....	288	1.6
Dahomey.....	251	1.4
Other countries.....	1,549	8.6
Total.....	17,943	100.0
Estimated unregistered live animal exports..	4,051	
Total exports.....	21,994	

the chief export crops. In recent years, cotton exports have increased greatly.

value, were of kola nuts, sugar, wheat flour, and live animals (table 5).

Although total value is not large (\$36 million in 1967), Upper Volta's imports exceed the country's exports by a considerable margin and thus give the country an adverse balance of trade. Agricultural imports made up about a fourth of imports in 1967. The largest agricultural imports, by

Upper Volta's trade with the United States is small. In 1967, exports to the United States were valued at only \$7,300 and consisted mostly of African art. Upper Volta's imports from the United States in 1967 were valued at \$879,000 (table 6), consisting mainly of Agency for International

Table 5.--Upper Volta: Principal agricultural commodities imported, value and distribution, 1967

Commodity	Value	Percentage
		of total value of all imports
	<u>1,000 dollars</u>	<u>Percent</u>
Kola nuts.....	2,078	5.7
Sugar.....	1,722	4.7
Wheat flour.....	1,507	4.1
Live animals.....	1,394	3.8
Tobacco.....	810	2.2
Rice.....	660	1.8
Dairy products and eggs.....	543	1.5
Fruits and vegetables.....	531	1.5
Other imports (chiefly nonagricultural).....	27,092	74.7
Total imports.....	36,337	100.0

Table 6.--Upper Volta: Imports by country, value and distribution, 1967

Country	Value	Percentage
		of total value of all imports
	<u>1,000 dollars</u>	<u>Percent</u>
France.....	16,321	44.9
Ivory Coast.....	7,616	21.0
Mali.....	2,329	6.4
Senegal.....	1,280	3.5
West Germany.....	1,179	3.2
Italy.....	980	2.7
United States.....	879	2.4
Netherlands.....	725	2.0
Belgium and Luxembourg.....	681	1.9
Ghana.....	579	1.6
United Kingdom.....	344	.9
Japan.....	190	.5
Mainland China.....	138	.4
Other countries.....	3,096	8.6
Total imports.....	36,337	100.0

Development supplies and agricultural commodities furnished under U.S. Public Law 480.

Cents, U.S.

Shelled peanuts.....	4.9
Unshelled peanuts.....	2.9
Shea nuts (karite).....	1.3
Sesame.....	4.9

### GENERAL FOOD SUPPLY SITUATION

The diet of the people of Upper Volta is based on millet and sorghum. Although rather starchy in composition, the diet does include animal products to a greater degree than do those of the inhabitants of most of tropical Africa.

The country is largely self-sufficient in food production, importing only a small amount of sugar, dairy products, wheat flour, and bakery products. Perhaps this relative self-sufficiency in food can be counted as one of Upper Volta's major accomplishments. However, Upper Volta does suffer from recurring food shortages, at the end of the dry season and during the rainy season before crops are mature. The country needs a workable "ever-normal granary" plan.

When these products are delivered to Bobo Dioulasso, purchase prices are slightly higher. For producing areas other than those near Ouagadougou and Bobo Dioulasso, these prices are discounted to reflect transportation differentials.

Subsistence grains were purchased at the following prices per pound:

Cents, U.S.

Grain sorghum.....	1.7
Millet.....	1.7
Corn.....	1.8
Rice.....	2.9 to 4.6

Seed cotton was purchased at 6.2 cents a pound for "Allen" cotton and 5.5 cents for second-quality cotton.

### AGRICULTURAL AND TRADE POLICY

In June 1967, the Government issued the general guidelines for its 1967-70 National Plan. According to these guidelines, the Government will: Stress development in the rural sector (the largest); maintain but not increase government spending in the social sector (health and education); and seek further foreign assistance.

The Plan emphasizes development of the rural sector, which in 1964 accounted for 66 percent of the country's gross national product. It is hoped that an extension agent will be placed in each of the 7,000 Voltan villages to provide assistance to those running the 500,000 farm units. The Government acknowledges that it will take 10 to 15 years for such an extension program to become operative. It may be an ideal difficult of attainment.

Industrial crops are purchased, graded, packaged, and exported through state marketing agencies or agencies designated by the state. At one time, France annually purchased fixed quantities of Upper Volta's cotton and peanuts at prices above those on world markets. Upper Volta has a complex tariff system which favors France, other franc zone countries, and other members of the European Community.

Prices to farmers are fixed by the Government for oil crops, subsistence crops, and cotton. For the 1966/67 season, Government purchase prices per pound for oil crops delivered to Ouagadougou were as follows:

### GENERAL ECONOMIC SITUATION

In general, Upper Volta's economy is at quite a low level, but something of an upward trend has been detected within the past few years. Gross national product in 1967 was estimated at \$253 million, or \$50 per capita.

The Abidjan-Niger railroad is Upper Volta's rail outlet to the Atlantic Ocean. By rail, it is 730 miles from the inland terminus at Ouagadougou to Abidjan, the Ivory Coast's main ocean port. Of this mileage, 341 miles are in Upper Volta. The railroad also passes through Bobo Dioulasso.

The railroad may be extended from Ouagadougou to Dori, a distance of 219 miles, depending upon whether a decision is made to exploit extensive manganese deposits near Tambao. The United Nations has furnished the money to study the feasibility of building the railroad and mining the manganese. The railroad could carry livestock, peanuts, and cotton, as well as manganese, from northeast Upper Volta.

A great need in Upper Volta's infrastructure is improvement of the country's road system. In 1962, only 40 miles of roads, in and near the cities, were paved. An additional 3,708 miles were surfaced with gravel or crushed stone. The remaining 6,632 miles are graded or unimproved. Road maintenance in Upper Volta is woefully inadequate.

With foreign economic assistance, certain important roads in Upper Volta are being improved. These include: Bobo Dioulasso to Mali border (financed by FED--Fonds Europeen de Developpement); Ouagadougou to Ghana border via Po (financed by FED); Ouagadougou to Fada Ngourma, with extensions to Niger, Togo, and Dahomey (feasibility study by FAC); and Ouagadougou to Bobo Dioulasso (feasibility study by FAC).

Air transportation is of minor use to Upper Volta agriculture as little or no use is made of air freight to ship the products

of Voltan fields and grasslands. None of Upper Volta's rivers are navigable to the sea.

Gold had long been mined in Upper Volta, but the small gold mine at Pourra closed in 1966.

Test borings at Tambao, near Dori, in northeastern Upper Volta, indicate manganese deposits of at least 10 million tons, enough to be mined profitably. However, no decision has been made to go ahead.

While manufacturing is not extensive in Upper Volta, the country does have some industry, including: cotton ginning, oil pressing, soap making, rice shelling, animal slaughter, tanning, brewing, bottling of soft drinks, assembling of bicycles, clothing manufacturing, metal working, printing, baking, candymaking, woodworking, and furnitremaking.

The VOLTEX textile plant at Koudougou, funded by the European Development Fund, was scheduled to begin operating in 1969. A shoe factory at Ouagadougou costing between \$245,000 and \$408,000, was scheduled to be in full operation before the end of 1969. Upper Volta's present oil-processing plant will be replaced in late 1971 by a 20,000-ton capacity plant at Bobo Dioulasso. Peanuts, cottonseed, and shea nuts will be crushed.





UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250

---

OFFICIAL BUSINESS



POSTAGE & FEES PAID  
United States Department of Agriculture

4442 UNALCS A422 18121 0001  
USDA NATIONAL AGRICULTURAL  
LIBRARY CURRENT SERIAL RECORD

WASHINGTON DC 20250