

The Economic and Political Development of the Sudan

**Francis A. Lees
and
Hugh C. Brooks**



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To the people who are working to develop a new Sudan



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Preface

The purpose of this volume is to focus attention on the economic and political development of the Sudan, to describe the progress and problems encountered in this development process, and to bring into a single book a comprehensive consideration of the situation in the Sudan. In terms of land area the Sudan is the largest nation in Africa, and one of the most sparsely populated countries in Africa. The Sudan enjoys a strategic location, commanding part of the Red Sea approach to the Suez Canal, and lying in close proximity to the rapidly growing Middle Eastern markets. Complementary aspects of food supply in the Sudan and the Middle East – the Sudan with its potential surplus – the Middle East with its needs – suggest a dynamic export growth pattern in the future.

Our actual research into the Sudan's development progress has more than confirmed early suspicions concerning lack of published information, data gaps and inadequacies, and outright contradictions in statistical information. Consequently, a considerable part of our work has been directed at piecing together semi-isolated fragments of data, analysing the why and how of statistical irreconcilables and ferreting out unpublished 'semi-official' information.

Given the paucity of published statistics and other information on the Sudan we are deeply indebted to the many Sudanese government officials and businessmen who were most generous with their time and knowledge during our travels through the Sudan. We would especially like to thank the following members of the Sudan government and civil service:

Sir Sid Ahmen, Ministry of Information; Ellayeb Almardi, Commissioner for Northern Darfur; Suleiman Abu Damis, Ministry of Industry and Mining; Saad Elizeirig, Director of the Department of Taxation; Modawi Eltiraifi, Ministry of Transportation and Communication; Abdez Rahman Yousif Haidoub, Assistant Commissioner of Labour Affairs, Kordofan Province;

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Finally, gratitude must be expressed to Margaret Willaum and Kay Pellman, who suffered through the various drafts and typings while keeping up with their other tasks and maintaining their good spirits.

We hope that all the people who have helped us will feel that their efforts and time were worthwhile and that the results will be of use to their departments and to others interested in the development of the modern Sudan. A large portion of the insights of this book have been derived through their help and any shortcomings must be assumed by the authors.

September 1976

F.A.L.
H.C.B.

1 Introduction

When Allah made the Sudan, Allah laughed

Geography and history have not treated the Sudan kindly. Years ago when the Turks, and later the Egyptians and the British governed the area, few of them disagreed – nor did the majority of the local inhabitants – that the Sudan was a strange place in which to live. Mostly arid, conquered by many, it is only recently that the Sudan has begun to offer a better life to its people. Today, most of its leaders are working to develop the country into a nation. How well they succeed will affect the fortunes of not only the seventeen million Sudanese but perhaps over one hundred million residents of Africa and the Middle East.

A nation is born in time and place – geography is its mother and history its father. The Sudan was really not born until the nineteenth century and even then it faced several handicaps. Only recently have its advantages begun to be realised.

Several thousand years ago the climate of the Sudan was moist and its soil fertile. Over the past five thousand years the climate has changed and the people have had to adjust to desert conditions. Water is still the key to agricultural development and while the Nile is not as important to the Sudan as it is to Egypt, most of the people depend upon it for their livelihood.

A GEOGRAPHY

The Sudan is the largest country in Africa – just under one million square miles or nearly the size of the US east of the Mississippi. Stretching more than 1200 miles from north to south, and one thousand miles east and west, the country contains many different climatic, vegetation and physical regions, and includes people from very different ways of life, religions and cultures. The task of the modern nation-builder is to utilise these resources and cultivate these regions and people for optimum development.

Located mostly in the Sahara Desert, one is apt to think of the country in terms of a vast area of sand dunes. Yet, these occur only in the extreme north-west. From its adverse terrain, man has lived throughout the area from its earliest periods. Caucasoid stock in the north has mixed with negro stock of the south. Hemitic and Semitic people have passed through and Nilotic groups have developed within the area. After the birth of Christ, most of the area was nominally Christian but after the seventh century Islam forces began their penetration of the Nile Valley. Today, the Arabic culture, language and religion dominates the entire country except for the extreme south.¹

Physically, the country may be thought of as a huge amphitheatre opening to the north and drained by the Nile River. Most of the Nile basin is underlined by crystalline rocks. While parts of the rim are also composed of this rock, they are also the result of continental uplift and its resulting folding, faulting and volcanic activity. They have some potential for metallic minerals and already copper is being extracted. In the south of the basin the basement rock is covered by more recent deposits of sandstone and limestone. These deposits are the result of weathering under arid conditions and, in places, form alluvial deposits from the Nile River system. The nubian sandstone, which is over 1000 ft. thick in certain areas, covers about 25 per cent of the country. The sandstone is aquiferous and is helpful in conveying the water from the wetter south to the drier north where it is extracted through wells.²

The Nile River dominates the draining of the basin and consists of two major tributaries – the White Nile, issuing from Lake Victoria in Uganda, and the Blue Nile, flowing from Lake Tana in Ethiopia. As Lake Victoria lies astride the Equator, it receives rains the year round and hence its discharge is relatively stable in all seasons. After leaving the Lake, the river drops off the East African highlands in a series of lakes, rapids and waterfalls but, upon entering the basin, it creates a vast swamp called the Sudd (Arabic for ‘obstacle’). It is estimated that about 50 per cent of the White Nile’s water is lost through evaporation in the Sudd’s 1000,000 sq. miles – probably the largest swamp in the world.³ The swamp area performs an important function in that it evens out the flow of the river by acting as a reservoir, storing water in the drier months. After about 500 miles, the river is joined by the Bhar El Ghazal which drains the rim mountains of the south-west, which form the watershed between the Nile and the Congo Rivers. A short distance later it is joined by the Sabat pouring out of south-west Ethiopia where the river drops 3000 ft. within some 45 miles. The Sabat also creates a swamp – not as large as the Sudd – but stretching some 200 miles on either side of the river near the Ethiopian

border. River transportation on these rivers is possible, especially during the flood months from June to December. Together these rivers form the White Nile system which contributes some 16 per cent of the Nile's water.

From Lake Tana in Ethiopia the Blue Nile winds its way through the mountains before entering the basin. The river, which in flood carries the volcanic soil of Ethiopia, deposits this soil in its valley. For centuries the Nile has brought fresh, rich soil which makes the valley so incredibly fertile. The river flows north-west, in places almost parallel to the White Nile before the two join at Khartoum. Between the two rivers, near the junction, is the famous Gezira (Arabic for 'island'). Here the government has developed what they claim is the world's largest farm—the two million-acre Gezira cotton-growing project.

The Blue Nile contributed 63 per cent of river system water in its seasonal flood. While it is perennial during peak flood periods between August and September, its volume is fifty times its low-water level.

The Atbara also flows from Ethiopian territory and joins the Nile some 200 miles north of Khartoum. While it contributes some 21 per cent of the system's water it is not as important to the Sudan as the White and Blue tributaries. After reaching even a greater flood stage than the Blue Nile, it diminishes to a series of isolated pools in the winter.

The government has developed these tributaries for irrigation and hydro-electric power. The amount of water that the Sudan can take from the Nile River system is limited to 20 million cubic metres yearly, as most of the water is reserved under international treaty for Egypt. Hence, there is a limit to the Sudan's development of farming by irrigation.

North of the junction of the White and Blue Nile at Khartoum the rivers become the Nile River proper. The Nile continues northward cutting through the nubian sandstone and limestone deposits and, in places, cuts into the crystalline rock. When this occurs, a series of rapids or cataracts result. The Nile has six cataracts—the most famous of which is at Aswan in Egypt, but four other cataracts are in the Sudan. All are barriers to transportation and have served throughout history as borders, defence positions or trading cities. Between the cataracts the river's gradient is very gentle but river transportation through the cataracts is still difficult.

The Nile basin, as its name implies, has generally little relief and its topography is relatively uniform. Khartoum is some 1200 ft. above sea level. Vast undulating clay plains cover most of the basin, giving way in equivalent portions to sand dunes. The mountainous rim, of course, has higher relief, especially in the isolated mountains

of the west where Jebel Marra attains an elevation of 10,131 ft. or in the mountains near the Red Sea where Jebel Eiba attains an elevation of 7274.

B CLIMATE

While lying wholly in the tropics, the Sudan does have several distinctive climatic regions. In the northern section temperatures are high and rainfall is sparse and seasonal, while in the south rainfall is heavy and distributed throughout the year. During the northern winter the Inter-Tropical Convergent (ITC) is over the southern region, and dry northerly winds dominate almost the entire country. They bring relatively cool, dry air to all but the extreme south. This season is very pleasant with Khartoum averaging 72 degrees in December. During the northern summer the ITC moves northward to about the centre of the country and brings with it moist, southerly winds. These bring the summer rains that reach their maximum in August. In fact, much of the Sudan receives over 50 per cent of its total annual rainfall in this one month. These continental conditions dominate all but the Red Sea area where winter rains occur. As there are few climatic barriers, climatic conditions change gradually with the latitude. Associated with the rainy season, the temperatures increase during the summer with Khartoum averaging 92 degrees in June.⁴

In the extreme south rainfall is equatorial, averaging 50–60 inches annually. Some sections of the south have a short dry season in December and June. Temperatures are not excessively high, averaging about 80 degrees, but humidity tends to be high. As one progresses northward temperatures tend to increase while rainfall and humidity decrease. At Khartoum rainfall averages less than five inches while at the Egyptian border it is under one inch. Throughout most of the country, except in the south, evaporation exceeds precipitation and hence, only limited areas can be farmed.

North of Khartoum arid conditions are dominant as rainfall becomes even more scant and even more irregular. Many areas are rainless for years at a time and then a thunderstorm may drop 2, 3, or 4 inches—often causing more damage than good. These freak storms may wash out roads and railways for miles and create havoc with transportation.

Just before the rainy season and when the vegetation is at its sparsest, winds pick up the dry soil and blow it over vast areas called 'haboobs'. This occurs over much of the land area of the Sudan. These winds are severe enough almost to block the sunlight and periodically close the international airport at Khartoum for days at a time. Generally the surface winds help to moderate the temperature, and especially at night breezes make conditions more bearable.

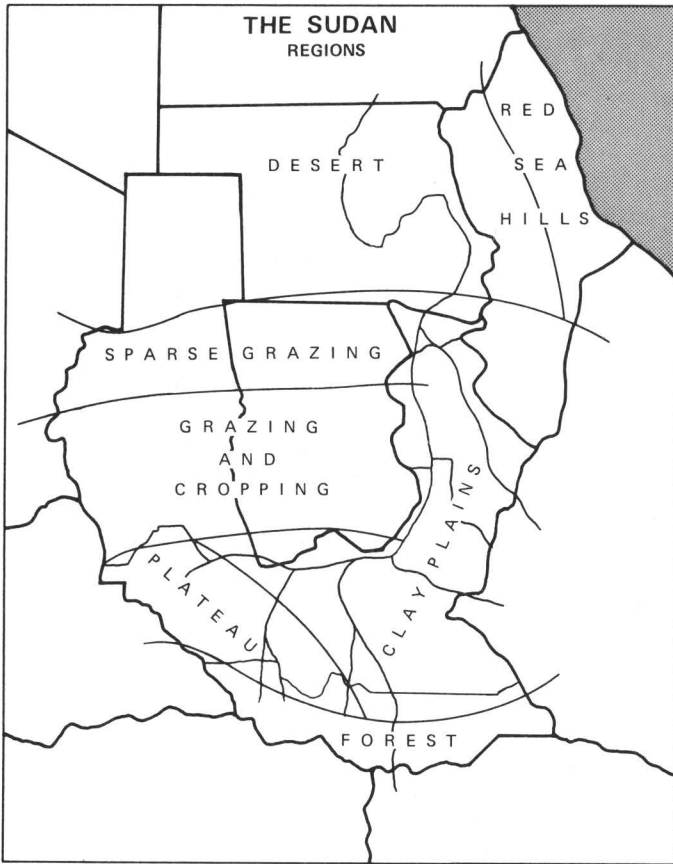
Overall the climatic factor is not a positive one for the Sudan. The heat can be cruel, especially in the summer months when temperatures over 100 degrees are common. Fortunately, most of the area gets summer rainfall which helps moderate the temperature and is a great help to agriculture and grazing. Lack of rainfall is a problem, especially in the central region. Variations of between 25 and 45 per cent of normal are common. This keeps large tracts of land out of rain cultivation and forces man to rely upon pastoral activity or irrigation.

Vegetation responds closely to climate and topography. Generally, as the rainfall decreases northward or the dry season gets longer, trees become sparse and grasses become dominant, forming a savannah. These grasses attain a height of five to six feet in the south but decrease in height and density as one moves northward where there is less rainfall.

In the north, where rainfall averages under five inches, the vegetation is sparse. Grasses and swamp vegetation occur in the more favoured areas, especially in the Red Sea and Nubian Mountains; while in the drier north-west ergs, living sand-dunes stretch into Egypt and Libya and the area is almost devoid of plant growth. Southward, at about 16 degrees north, the rainfall increases to over 15 inches and the landscape is covered by scattered trees, scrub woodlands and grasses. All vegetation species exhibit the ability to store water, having deep roots and losing little of their moisture through transpiration.

Above the 20-inch rainfall line grasses dominate with arcadia trees in the better watered areas. These grasses and even some of the bushes in the central Sudan are generally sweet and make good grazing for the livestock that plays such an important role in the Sudanese economy.

In the extreme south, evergreen trees form a small area of tropical forest. Here, with rainfall taking place throughout the year, trees are the dominant form of vegetation. Tropical hardwoods or tropical crops can be utilised to help the country diversify its economic base. This then is the geographic base upon which the new Sudan has to build. (See Map 1-1, p. 16.) Overall the climate is harsh; with insufficient rainfall over most of the country, and too much rainfall in the remaining sectors. Very little of the land area of the Sudan can be considered prime agricultural land. Geologically, there are some minerals and of course new ones and new deposits will be discovered; but it is unlikely that the government can look forward to a major contribution from minerals. Climatically, most of the Sudan suffers from excessive heat and low rainfall – desert or semi-arid conditions. In short, nature has not blessed the Sudan with a rich base on which to build. Nevertheless, in the past, kingdoms



MAP 1-1

and relatively prosperous social systems have developed, lived and passed away. The Sudan's history is still being written, as is most of Africa's.

C HISTORY AND POLITICS

Most of the known early history of the Sudan is similar to Egypt's, tied to the Nile Valley area. Some 250,000 years ago early man lived near what is now Khartoum. Archaeologists have traced the Chellan culture, which gave way to the Meheulian, which in turn developed into Niholithic. These cultural stages in the evolution of man seem to have entered the area through the north via Egypt, and