

The physical Features of South Sudan

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Abstract

The study wanted to discuss the background of South Sudan. It also aimed to describe the location of South Sudan, climate, soil, and natural vegetation. In the same time, the paper concentrate on population of South Sudan, their economic activities. Nevertheless, the study would like to discuss the physical features of South Sudan, official language use in the country. In addition, the study aimed to determine the states of South Sudan. Also, determine the national parks in South Sudan. The study used primary and secondary source to obtain data collection. Also, the qualitative and quantitative descriptive methods was employed for a finding of the physical features of South Sudan. On the same way, the study recommended to the researchers to focus on availing complete information about South Sudan as new nation to the entire global population.

Key words: *physical, features, South Sudan.*

1. INTRODUCTION

The Southern Sudan autonomous region was an autonomous region that existed in South Sudan Between 1972 to 1983. It was established by Addis Ababa Agreement which ended the first Sudanese civil war. The region was abolished on 5 June 1983 by the administration of Sudanese late former president Gaafer Nimeiry. Revocation of Southern Sudan Autonomy was one of the causes of the second Sudanese civil war which would continue until the signing comprehensive peace between the government of Sudan and late Dr. John Garang in 2005 (en.m.wikipedia).

South Sudan officially known as republic of South Sudan. Later on South Sudan became an independent State on 9 July 2011, as the result of a referendum that passed with of the 98.83% votes. South Sudan is a land lock country in east/ central Africa, with a border stretched of 4.797 km. the country bordered by Ethiopia to the East, Kenya to the south east, Uganda to the south, and the Democratic Republic of Congo to the southwest, Central African Republic to the west and Republic of Sudan to the north (Yor.A.O. (2020).

The official language of South Sudan is English as well as Arabic. In the country, there are over 64 indigenous languages, most classified under the Nilo-Saharan language family; collectively, they represent two of the first order divisions of Nile Sudanic and Central Sudanic. The country is divided into ten states formerly, which correspond to three historical regions: G.Bahr el Ghazal, G. Equatoria and Greater Upper Nile. South Sudan became the United Nations member as well as African Union member, and governmental Authority on development (IGAD), and signed the Geneva conventions in July 2012 (Yor.A.O. 2020).

2. STATEMENT OF THE PROBLEM

The study aimed at discussing the background of South Sudan, the location, climate, soil and natural vegetation. It also focused on examining the population, their economic activities in the country. Moreover, the study wanted determine the states of South Sudan. This study is conducted to answer the following questions:

- 2.1. Discuss the background of South Sudan?
- 2.2. State the physical features of South Sudan?
- 2.3. Examine the population and their economic activities of South Sudan?
- 2.4. What is the official language in South Sudan?
- 2.5. Determine the States of South Sudan?
- 2.6. Explore the National Parks of South Sudan?

3. OBJECTS OF THE STUDY

The objectives of this study are:

- 3.1. To discuss the background of South Sudan.
- 3.2. To identify the physical features of South Sudan.
- 3.3. To Sort ought population and their economic activities in South Sudan.
- 3.4. To state the official language of South Sudan.
- 3.5. To determine the states of South Sudan.
- 3.6. To Explore the National Parks of South Sudan.

4. MATERIALS

Materials involve the following:

4.1. Map showing location of South Sudan



4.2. AREA OF THE STUDY

South Sudan is located on the African map between latitudes 3. 13°n and longitudes 24. 36°E. The country covers the area of 619,745km² and 42nd (239,285 sq. million) (Sophie and Max, 2013).

The country located on the continent of Africa in the north eastern Africa. The territories of modern South Sudan and the Republic of Sudan previously were part of Egypt under Muhammed Ali Dynasty, and later governed as an Anglo-Egyptian condominium until Sudanese independence was achieved in 1956. Following the first Sudanese civil war the Southern Sudan Autonomous Region was formed in 1972, and lasted until 1983. The second Sudanese civil war soon developed and ended with the comprehensive peace agreement of 2005. South Sudan’s protected area of Bandingilo National park hosts the second-largest wildlife migration in the world. Though diminished wildlife populations still exist and that astonishingly, the huge migration of 1.3 million antelopes in the Southeast is substantially intact. White Nile passed through the country from the South to the North part. It includes the vast swamp region of the Sudd, formed by the white and known locally as Bahr el Jabal. The national currency of the country is South Sudanese pounds (ssp). The current capital of the nation is Juba (Fred. O. 1998):

5. PHYSICAL FEATURES

The physical features of South Sudan can be categorize as follow:

5.1. CLIMATE

South Sudan has a tropical climate, characterized by rainy season of high humidity and larger amount of rainfall followed by a drier season. The temperature on average is always high, and July is the coolest month with an average temperatures falling between 20 to 30°c (68 and 86° F) and March is warmest month with average temperatures ranging from 23 to 37°c (73 to 98°F). The most rainfall months is between May which is the wettest and October, but rainy season can commence in April and extend until November. The May is the wettest month in the country.

5.2. SOIL

South Sudan mostly covered by tropical forest, swamps and grassland, and most of the lands are fertile fitted for crops farming.

5.3. VEGETATION

Habitats vegetation’s in the country include grassland, high- altitude plateaus, escarpments, wooded, grassy savannas, flood plains, and wetlands. It also include Boma landscape region, Boma National Park, broad pastureland, as well as the Sudd, a vast area of swamp and seasonally flooded grasslands such as zeraf wildlife reserve. On the same path, the country has encompassed these natural vegetation:

5.3.1. Montane Forest

These are found on the mountains of Imatong, Dongotona, Greenland Lotii, Didinga and Jebel Gumbiri to the southeast in Eastern Equatoria state. The montane forests of South Sudan are part of the Eastern Afro-montane ecosystem.

5.3.2. Woodland Savannah

Woodland savannah makes up the largest ecological region in South Sudan, it is divided into two regions, namely, the low rainfall woodland savannah, which is mainly found in Upper Nile State and the high rainfall savannah woodlands. Low rainfall savannah covers about 2.9% of the total land area of the country while the high rainfall savannah occupies 52.6%.

5.3.3. The Sudd Wetland

The Sudd wetland, with an estimated area of approximately 57,000 km² represents one of the largest freshwater ecosystems in the world. The extent of the Sudd wetlands is highly variable; it depends largely on the seasons and years respectively. In the wet season, the size of the wetland increases up to 90,000 km² and gradually decreases to about 42,000 km², depending on high seasonal flood. It is sustained by the flow of the White Nile or Bahr el Jebel which coming from Lake Victoria in Uganda, and by rainfall runoff from its surrounding areas.

Figure 5.3.3.1: Show the Sudd Wetland in South Sudan



6. POPULATION

According to the 2008 population census, the population of South Sudan is about 8,260,490 million people. The actual density of population is 13.33/km² (214th), (34.52 sq. million). It has also a population of about 11.8 million people in the mid of 2016. According to the most recent estimations the world population review affirmed that population of South Sudan is 12,785,459 people in 2021. This population is equivalent to 0.17% of the total world population. The population density in South Sudan is 22 per km² (56 people per million²). 20.2% of population is in urban estimated 2,675,717 people in 2019. The median age in South Sudan is 18.7 years. The majority of South Sudanese live in rural space, which is classified as “low density” (population less than 10 per km²) and “medium to high density” (population more than 10 per km²) areas. The population density in South Sudan is very low compared to elsewhere in the region. Average population density is estimated at 13 people per km². Population density of Western Bahr el Ghazal is 3 per km², and Western Equatoria is 8 per km². Upper Nile has a population density of 13 per km². Warrap, Northern Bahr el Ghazal, and Central Equatoria, have a population density over 20 per km². The population of South Sudan constituted of African origin and heritage and they have 64 ethnic groups in the Country. These ethnic groups can be further classified into three major groups namely; The Sudanic, Nilo Hamito-Semitic and Bantu language groups (Yor.A.O. 2020).

7. ECONOMIC ACTIVITIES

Economic activities are predominantly rural and relies chiefly on subsistence farming such as sorghum, corn, and tomatoes. They also practice fishing, rearing cattle, and hunting animals such as antelopes for meats. The urban population engaged in private business working in shops, hotels and government institutions.

Figure 1: show man drying sorghum. Figure 2: rearing cattle. Figure 3: Fishing method



Figure 4: showiing fisherman in White Nile



8. METHODS

Methods used in this study for data collection involves

8.1. PRIMARY DATA COLLECTION

This study used a personal interview, discussions and questionnaires method for the purposes of data collection of physical features of South Sudan. Data was collected from the after giving them a brief description of the purposes and procedures of the study local government of South Sudan after ensuring that the study for the scientific research only before beginning of an interview. Also, the method of observation was used in this research to establish solution to the research problem and meeting inclusive. The internet services were also used to generate data.

8.2. SECONDARY DATA COLLECTION

There were no specific methods of secondary data collection, although secondary source data varied, and included: information from references, public records, organizational records, census data, previous studies, friends & colleagues, surveys and competitive websites as well as electronic media/ Government and NGOs reports. Wikipedia or internet was used to obtain the data information.

8.3. DATA COLLECTION INSTRUMENTS

The main instrument which was used in this study to obtain relevant data from respondents was the questionnaire, which was administered to the selected sample population.

8.4. ETHICAL CONSIDERATIONS

This study used a primary data analysis of survey. In order to protect the anonymity and confidentiality of the information regarding respondents, names and house numbers were not identified in the Questionnaire and in the data set. Permission to carry out the study was obtained from the local stakeholders of the County (Yor. A.O. 2021).

8.5. DATA ANALYSIS METHODS

In analysis of data sets, descriptive statistical method was employed for the purpose of getting the background of minorities in Boma County, Greater Pibor administrative area, using frequencies, percentages and distribution Tables

9. DISCUSSION AND RESULTS

The discussion of the study are:

9.1. Determine the natural physical features of South Sudan?

The natural physical features of South Sudan involves the following:

9.1.1. Plains

Plains are large and continuous stretches of comparatively flat land, not rising much above the sea level. Many extensive plains are a result of down warping of the Earth. Examples include Northern upper Nile and Pibor.

9.1.2. Plateaus

Major Plateau regions in South Sudan include the **Boma Plateau** in the eastern part of Jonglei, and is one of the few places in the world where wild coffee Arabica grows. The country also has **Lomareng Plateau** of an elevation of 444 meters. It is located in southwest of Moru Urun, Eyata Moru and Apaiyaputh. Other plateau is **Ironstone Plateau** in the south and west of South Sudan. Its soils are often thin and may be unsuitable for agriculture, except in the Green Belt in the extreme southwest of Western Equatoria and around Okire and Odire mountain ranges in Magwi county, Eastern Equatoria states. The **Imatong Mountains** are mainly located in Imatong state in south eastern, and extend into the Eastern Region of Uganda. **Mount Kinyeti** is the highest mountain of the range at 3,187 meters (10,456 feet.) and The Imatong Mountain is located in the Southeast Eastern Equatoria state, and extend into Northern region of Uganda. The mountains are highest in the Southeast where a group of peaks reach about 3,000 meters. It also involve **Mount Lotuka** which is located in Eastern Equatoria, the second highest mountain after Mount Kinyeti, and has elevation of 2795 meters above the sea level.

Moreover, South Sudan plateau includes also Dongotona Mountain in southwest of Emogadong, north of Aripewi and Toghogha with an elevation of 2,213 meters above the sea level. **Mont Jebel Kujur** located on the suburbs of Juba Town to the west, standing at an altitude of 1,684 meters above the sea level. Other mountains in include Jebel Rejaf, Jebel Ladu, Mount Itibol, Mount Garia, Mount Kamia, Mount Isubhak, and Mount Konoro.

Figure 5: show Jebel Kujur Mountains in South Sudan



9.1.3. The hills

The country involves the **Didinga Hills** an upland area in Eastern Equatoria State, and lying mainly in Budi County. The area around hills is rich and fertile soil fitted for cultivation of tobacco, potatoes, maize, and Dura.

Figure 6: show Didinga Hills in Torit district, Eastern Equatoria State



It also consist of Lopit hills which located in Torit district in Eastern Equatoria state. The area around the hills is rich and fertile suited for cultivation of sorghum, bulrush, millet, pumpkin; groundnuts, simsim, and okra.

Figure 7: The Lopit hills in Torit, Eastern Equatoria state



9.1.4. Basins

A basin is a form of natural or artificial depression (hollow) varying in size in the Earth’s surface, wholly or partly surrounded by higher land. Basins usually take thousands of years to form. In South Sudan basins include **the Muglad Basin** is a large rift basin in Northern Africa and is located in southern Sudan and Northwest of South Sudan. It covers an area of approximately 120,000 km² across the two nations. The country covers **Melut Basin which** is situated in Upper Nile in the north part of the state in the east side of the river Nile. The basin contains several hydrocarbon accumulations due to oil exploration, in the area.

9.1.5. Rivers

The permanent Rivers in South Sudan include **the White Nile** the main tributaries of the River Nile. It is eventually makes its way to Lake No, where the Nile meets with Bahr el Ghazal. The Nile continues northwards into Sudan meet with the Blue Nile. Also it include **Aswa River** originates from Uganda in eastern Africa and flows through the northern central part of the country and northeastern highlands, before crossing the border into South Sudan where it joins the White Nile. **Kinyeti River** flows northward from the Imatong Mountains in the Imatong State of South Sudan, eventually dispersing into the Badigeru swamp. Other river is **Yei River** which originates from Morobo area, Southwest of Yei Town and flows through

Moruland pouring its water into the Sudd; and **Atepi River** originates from Kinyeti hills near Lobone in Eastern Equatoria and flows through Palwar, Pajok and Owinykibul before joining Aswa River at Aswa village, about 600m east of Aswa bridge on Juba Nimule Highway. Nevertheless, it is also involve Unyama River which originates from Northern Uganda and enters into South Sudan through the Nimule border in Eastern Equatoria state and joins the River Nile at Western part of Nimule. The country also have **Seasonal Rivers** such as **Luri River and this river** originates from Lainya hills in central Equatoria state and flows Northeastwards before joining the Nile River. **Ibba River** originates from Democratic Republic of Congo (DRC) boarder and flows Northwards into East of Yambio town, towards Tonj and enters Jue/Sue in western Bahr el Ghazal in South Sudan also involve **Ayii River which** originates from Lotii Mountain Ranges (Greenland Lotii) in Obbo, Eastern Equatoria state and flows through Obbo, Magwi, Panyikwara and Owing kibil before joining the Nile River. Hereafter, other river is **Kimoru River that** originates from Imurok hills near Torit, Eastern Equatoria state and flows through Magwi where it joins Ayii River. **Singata River** originates from Didinga hills in Eastern Equatoria and flows through Kapoeta into the Western plain.

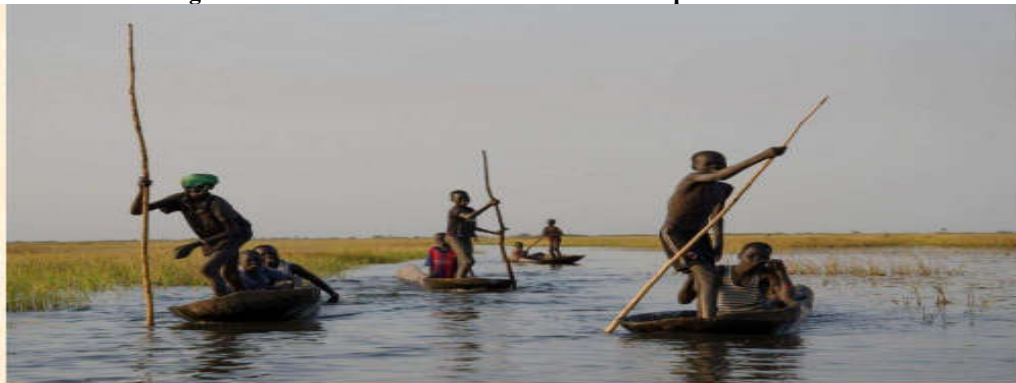
Figure 8: Show White Nile in South Sudan



9.1.6. Lakes

A lake is a hollow in the Earth's surface in which water collects. It is formed when some surface runoff or running water accumulates into a depression or hollow on the Earth's surface forming a lake. In South Sudan Lakes include **Lake No and** located just north of the vast swamp of the Sudd, at the convergence of the Bahr al Jabal and Bahr el Ghazal rivers. It marks the transition between Bahr al Jabal and White Nile proper.

Figure 9: show Lake No north of the vast swamp of the Sudd



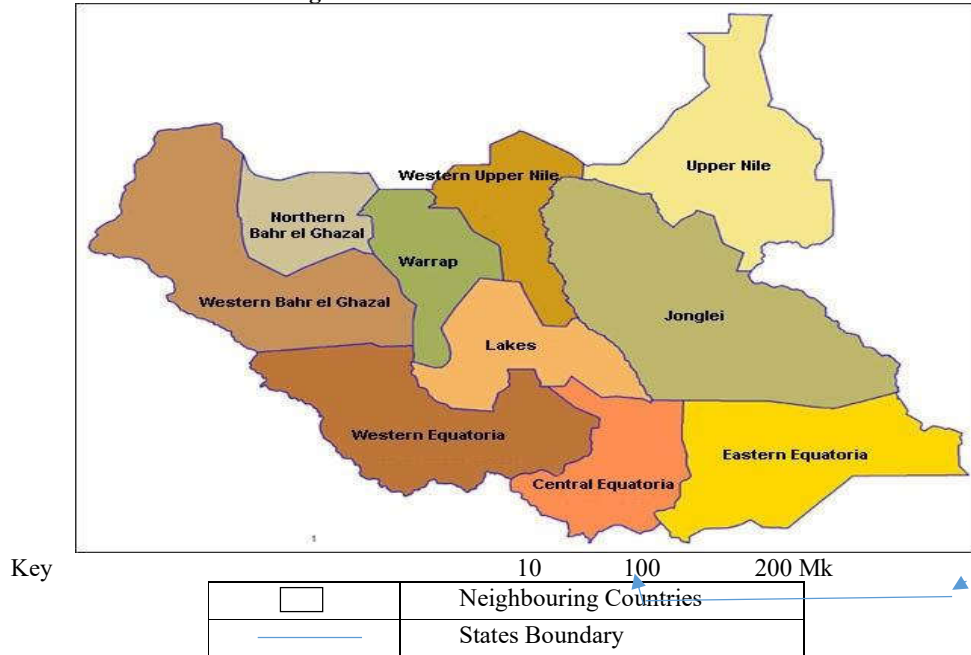
Other Lake is Lake Ambadi which located in Bahr el Ghazal with a natural conservation area covering 1,500 square kilometers and forms the world's largest wetlands.

9.2. What are the states of South Sudan?

South Sudan as country consist of (10) ten states:

- 9.2.1. Upper Nile State/ Malakal
- 9.2.2. Jonglei State/Bor
- 9.2.3. Unity State/Bentiu
- 9.2.4. Central Equatoria State/ Juba
- 9.2. 5. Western Equatoria State/Yambio
- 9.2.6. Eastern Equatoria State/Torit
- 9.2.7. Western Bhar al- Ghazal State/Wau
- 9.2.8. Northern Bhar al-Ghazal State/Awiel
- 9.2.9. Warrap State/ Warrap
- 9.2.10. Lakes State/Rumbek

Figure 10: show 10 states of South Sudan



9.3. Explore the National parks in South Sudan?

South Sudan as the new nation has the following National parks:

Figure 9.3.1. Show Nimule National park



The Nimule Park is one of the national parks in South Sudan that has African elephants herding. This promote the country to be one of the beautiful tourist destination with vast diversity of wildlife and attractive landscapes, diverse culture, historical sites and variable climate. It has wonderful wetlands which are inhabited all year round with thousands of bird's species including some migratory birds and animals.

Figure 9.3.2: show some of the wild animals found in Boma National Park



Boma National park is the park located in eastern part of the country in Boma County, Pibor Administrative Area. It is the natural park which content various types of wildlife such as elephants and antelopes as well as

zebras. The park is the vast park in the country for it attracted the visitors from the neighbour countries as well as the tourist from the advanced world.

9.4. What are the energy resources of South Sudan?

Table 9.4.1: showing Energy resources of South Sudan

Response	No of respondents	Percentage
Petroleum	35	35%
Hydro development	20	20%
The sun	25	25%
Wind	5	5%
Biomass	10	10%
Geo-thermal	5	5%
Total	100	100%

The figure 9.2.1.show the energy resources of South Sudan. 35% of respondents stated that the energy resources of South Sudan consist of petroleum, and 20% said it is of hydro development. Whereas, 25% of them affirmed as the sun, and 5% answered that it composed of wind, beside 10% of respondents conformed that the energy resources of South Sudan is from Biomass, and others said is from geo-thermal energy.

10. CONCLUSION

In conclusion, the study encompassed the physical features of South Sudan the back ground of South Sudan which is significant to be addressed to the entire learners of the world to equip them with the knowledge about South Sudan. On the other hand, the study explain the population and economic activities of the people in South Sudan. On the same occasion, the study tried to determine the 10 states of South Sudan as well as energy resources of South Sudan in particular. Furthermore, the study tried to explore the national parks in South Sudan. The descriptive analysis was employed in this study.

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