

African Epidemic Area Was Already Stricken

by Douglas DeGroot

Aug. 25—The three West African nations where the Ebola epidemic is currently centered—Guinea, Sierra Leone, and Liberia—are among the poorest in the world, thanks to the criminal nature of the current world financial system which has kept them undeveloped, and made them prime regions for the virus to create a holocaust. Add to this the civil wars that destroyed the governmental and social institutions of Liberia, Sierra Leone, and the inland part of Guinea near the inland areas of Sierra Leone and Liberia. The following profiles, taken primarily from the World Health Organization (WHO), World by Map, the World Fact Book, and Nations Online, provide an overview.

Figure 1 shows the Centers for Disease Control and Prevention's published epidemiological pattern as of Aug. 14.

Guinea

Population: The total population (2014) is 11,474,000. Approximately 8 million in the rural areas; the largest urban population is in the capital, Conakry, with 1,786,000.

Geographic Area: 245,860 sq km (95,000 sq mi), an area slightly smaller than the state of Oregon. Of this, 11.59% is arable land, and 2.81% of that is in permanent crops.

Economy: 76% of the population works in (mostly subsistence) agriculture, 24% in industry and services. Agriculture makes up only 22.9% of GDP.

The large number for agriculture, despite the limited amount of arable land, is an indication that a significant amount of the food consumed is grown in small plots around houses in villages.

The poverty is extreme. Gross national income per capita per year was \$970 as of

2012. A 2006 estimate put 47% of the population below the poverty line.

The economy is based primarily on the export of bauxite (main source of foreign currency), some alumina refining, gold, diamonds, iron ore, coffee, fish, and agricultural products. As is the case in most of the rest of Africa, the exports are mostly unprocessed, as during the colonial period.

Health: Life expectancy is 57-59 years (Global Health Observatory). Total annual expenditure on health per capita was \$67, in 2012. Total expenditure on health as percent of GDP, in 2012, was 6.3%

Guinea has 10 doctors for every 100,000 people. There are 0.3 hospital beds per 1,000 of population.

18.9% of the population has improved sanitation facilities: 32.7% of the urban population, 11.2% of the rural population.

72% of the population has "improved" sources of

FIGURE 1
Ebola Outbreak 2014



CDC

drinking water (protected from outside contamination, in particular from fecal matter): 92.2% of the urban population, 65% of the rural population.

Guinea has a very high risk of major infectious diseases:

Food or waterborne diseases such as bacterial and protozoal diarrhea, hepatitis A, and typhoid fever;

Vectorborne diseases such as malaria, dengue fever, and yellow fever;

Water-contact diseases such as schistosomiasis;

Aerosolized dust- or soil-contact diseases such as Lassa fever;

Animal-contact diseases such as rabies.

Education: The literacy rate is 41%.

2.5% of GDP was spent on education in 2012.

Power: Electricity production was estimated to be 969 million kWh/year in 2010, or 94 kWh/year per capita. Installed capacity (excluding private generators) was 395,000 kWh, of which 68.4% was from fossil fuels, and 31.6% from hydroelectric plants.

Transportation: Guinea has 16 airports, four with paved runways; 1,185 km of railways: 238 km standard gauge, and 947 narrow gauge.

As of 2003, Guinea had 44,348 km of roads, of which 4,342 km were paved.

Sierra Leone

Population: The population totals 5,979,000, according to WHO: 39.2% urban. The capital, Freetown, had a population of 941,000 in 2011. Urbanization is increasing at a 3.04% annual rate. Almost half of the population lives by means of subsistence agriculture.

The 1991-2002 war between the government and the Revolutionary United Front (RUF) killed tens of thousands, maimed many more, and led to the displacement of 2 million people, a significant number of whom fled to neighboring countries, and are now slowly coming back. The RUF bandits financed themselves by marketing diamonds and gold from alluvial mining.

Geographic Area: The area totals 71,740 sq km or



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Ebola in Guinea, April 6, 2014. The country has 10 doctors for every 100,000 people.

27,698 sq mi, a little smaller than South Carolina. It shares borders with Guinea and Liberia.

15.33% of the land is arable, with 1.88% permanently producing crops.

Economy: Poverty dominates the population. In 2004, 70.2% of the population was living below the poverty line. Gross national income per capita was \$1,340 in 2012. 47.9% of the population works in agriculture, 18.5% in industry, and 33.5% in services, according to a 2013 estimate.

The economy is based on the export of diamonds, rutile, cocoa, coffee, and fish.

Health Care: Life expectancy is 57.39 years.

There were 22 physicians/100,000 population in 2010, and 0.4 hospital beds/1,000 population in 2006.

The expenditure on health per capita in 2012 was \$96, according to a BBC report. Health expenditure was 18% of GDP in 2011.

60.1% of the population had improved drinking water in 2012: 87.1% of the urban population, 42.4% of the rural population. 13% had improved sanitation in 2012: 22.5% of the urban population, 6.8% of the rural population.

There was a high risk of major infectious diseases reported for 2013:

Food or waterborne diseases: bacterial and protozoal diarrhea, hepatitis A, and typhoid fever;

Vectorborne diseases: malaria, dengue fever, and yellow fever;

Water-contact disease: schistosomiasis;

Animal-contact disease: rabies;

Aerosolized dust- or soil-contact disease: Lassa fever.

Education: Literacy rate was 43.3% in 2011. Education expenditure was 2.9% of GDP in 2012.

Power: In 2010, electricity production was 145 million kWh, or 28 mKh per capita per year. Electricity-generating capacity was 145,000 kWh. Installed capacity was 102,000 kWh, of which 46.1% was from fossil fuels, and 52.9% from hydroelectric plants.

Transportation: Sierra Leone has eight airports, one of which has paved runways. There are 11,300 km of roadways, of which 904 km are paved. There are major seaports at Freetown, Pepel, and Sherbro islands.

Liberia

Population: The population was 4,190,000 million in 2012, according to WHO. 48.2% of total population was urban in 2011. The rate of growth of urbanization is 3.43% per year. The capital, Monrovia, had a population of 750,000 in 2011.

Many fled from the countryside to overcrowded conditions in shantytowns in the towns and cities during the wars which raged from the time of the assassination of President William Tolbert, in 1980, and then continued for 14 years, from 1999-2003, waged by the thugs who had in turn killed the coup leader who had overthrown Tolbert. During this 14-year period, the thugs mined and smuggled diamonds and gold to buy arms and perpetuate their activity.

Geographic Area: Liberia has 111,369 sq km (43,000 sq. mi.) of land area, which is slightly larger than Tennessee.

4.04% of its territory is arable land, 1.62% under permanent cultivation. 76.9% of the population works in agriculture (mostly subsistence farming), 5.4% in industry, and 17.7% in services.

48.2% of the population is urban.

Economy: The extractive industrial economy is based on mining (iron ore), rubber processing, palm oil processing, timber, and diamonds. 8% of the labor force is involved in this industrial activity, while the mostly subsistence agriculture occupies 70% of the labor sector. Services account for the other 22%. The unemployment rate was estimated as 85% in 2003.

Extreme poverty prevails: National income in 2012

was \$580; 80% of the population lives below the poverty line.

Health Care: Liberia had 1.4 doctors per 100,000 people, in 2008. The percentage has gone down with the departure of many foreign doctors after the Ebola epidemic flared up. Life expectancy was 60 years in 2012.

There were 0.8 beds/1,000 population in 2010. Total health expenditure per person was \$66 in 2012. As a percentage of GDP, total expenditure on health was 15.5%.

There were six hospitals in Monrovia, and 21 in the rest of the country before the Ebola outbreak, but many closed, as the disease took a devastating toll on nurses and doctors.

Many of the medical resources of Liberia and Sierra Leone were also drained by 1.5 million cases of malaria for a combined population of 10 million.

16.8% of the population has improved sanitation conditions: 28.4% of the urban population, and 5.9% of the rural population.

As for drinking water, 74.6% of the population has improved conditions: 86.8% of the urban population, and 63% of the rural population.

As of 2013, Liberia had a very high risk of major infectious diseases:

Food or waterborne diseases: bacterial and protozoal diarrhea, hepatitis A, and typhoid fever;

Vectorborne diseases: malaria, dengue fever, and yellow fever;

Water-contact disease: schistosomiasis;

Aerosolized dust- or soil-contact disease: Lassa fever; animal contact disease: rabies.

Education: Education expenditures were 2.8% of GDP as of 2012.

Literacy rate is 60.8% of the total population. In 2012, education expenditures were 2.8% of GDP.

Power: 335 million kWh of electricity was produced in 2010, and 311.6 kWh was consumed, or 91 mKh per capita per year. Installed generating capacity was 197,000, 100% of which was from fossil fuels.

Transportation: Liberia has 29 airports, two with paved runways; and a four-kilometer pipeline; 429 km of railway: 345 km with standard gauge, 84 km with 1.067 gauge. Most sections were inoperable because of damage during the wars which took place from 1980 to 2003.

There are 10,600 km of roads, of which 657 km are paved.