

Mauritania

Total population (July 2000 estimate): 2,668,000

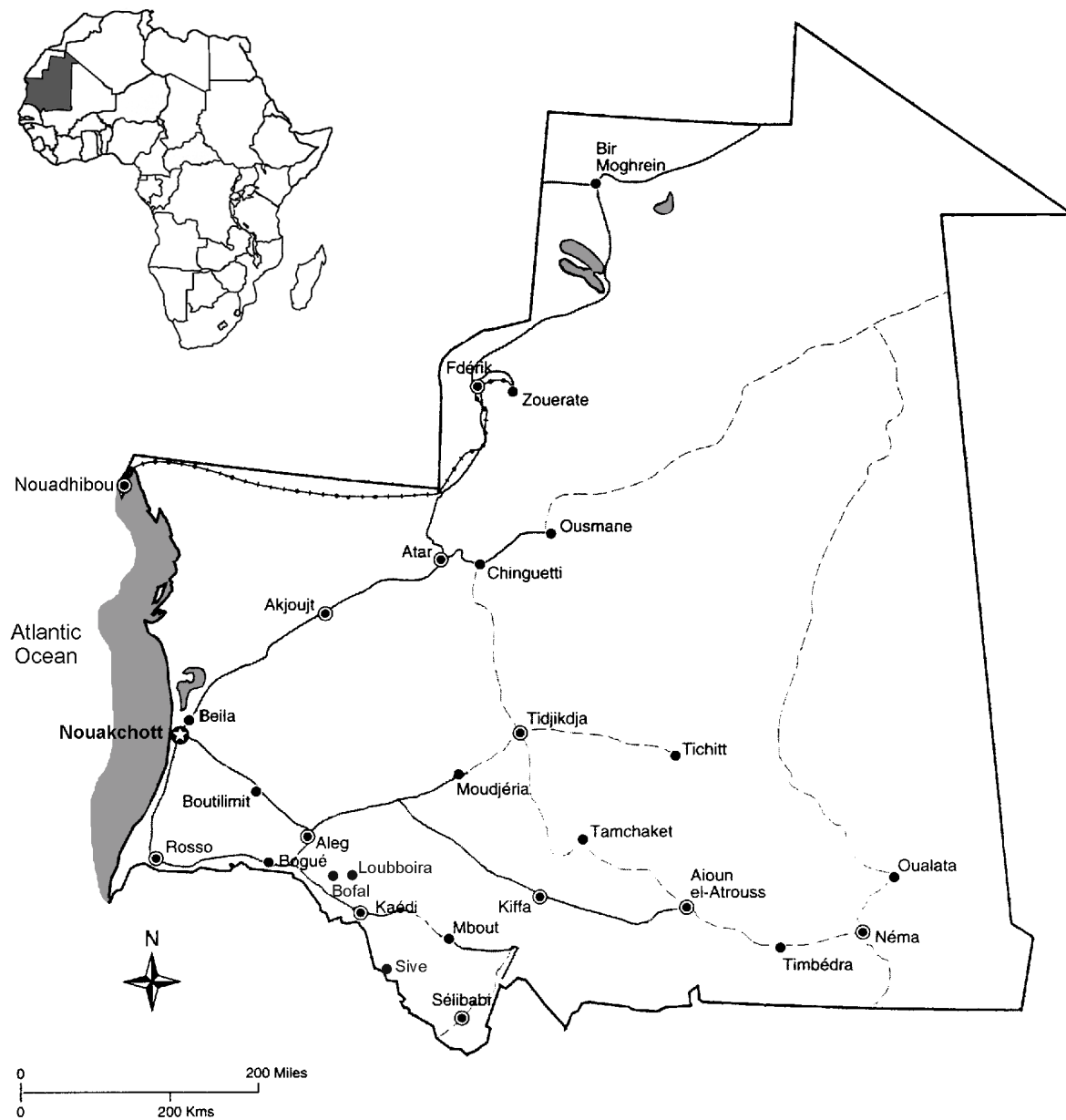
Area: 1,030,700 km²

Annual population growth rate (2000): 2.94%

Life expectancy at birth (1998): 53.9 years

People not expected to survive to age 40 (1998): 28.7% of the total population

GDP per capita (1998): US \$1,563



Mauritania is an arid country in West Africa with 750 km of Atlantic coastline. Vast areas to the north of the Senegal River are occupied by extensive sand dune plains of the Sahara Desert. Mountainous areas occur in the northeastern part of the country. Most of the country receives less than 200 mm of precipitation per year. The only agricultural area with productive soils lies along the Senegal River valley at the border with Senegal.

Mauritania's harsh physical and climatic conditions constrain its agricultural potential. Only a few areas are suitable for crop production and these are mainly located in the narrow strip along the Senegal River and scattered oases. Crops produced are rice, sorghum and millet.

The mineral sector produces iron ore and gypsum. The iron ore industry is the main source of foreign exchange accounting for 12% of the GDP and some 40% of all exports in 1999.

Agricultural production of cereals, as well as livestock and fish, make up approximately one third of Mauritania's GDP. The main agricultural export products of Mauritania are fish and fish products.

Geological outline

Geologically, Mauritania can be divided into four major domains:

- The Archean Reguibat Shield in the north of the country, which strikes into Western Sahara and Algeria,
- The north-south striking Mauritanide Belt, folded and thrust during the Variscan orogeny,
- The Taoudeni Basin with predominantly continental sediments of Neoproterozoic to Phanerozoic age, covering most of central and southern Mauritania,
- The Senegal Basin with mainly marine sediments of Jurassic to Tertiary age.

AGROMINERALS

Phosphates

Several phosphate deposits and occurrences are known from Mauritania. Relatively small Paleozoic (Cambrian and Devonian) nodular deposits occur in remote areas of the north, in the Zemmour Noir area near Bir Moghrein. Phosphorites of greater extent and volume are found in Eocene deposits near the Senegal River (McClellan and Notholt 1986). The economically most important phosphorites are the transgressive Eocene deposits of Bofal and Loubboira, west of Kaedi (Boujo and Jiddu 1989). The Sive, Bofal and Loubboira phosphates form a continuation of the phosphates of Matam on the Senegalese side of the border. At Bofal and Loubboira the almost horizontal phosphate beds are 1.7-2.0 m thick, have an average grade of 22% P₂O₅, are highly siliceous and contain bone fragments, fish teeth and coprolites (Boujo and Jiddu 1989). The mineable phosphate beds are free of carbonates. These phosphorites, overlain by dolomites and yellow clays followed by sandstones, could be mined by open-cast methods. However, the stripping ratio of waste to ore is relatively high at 6.6:1.

Probable reserves of the deposits of Bofal and Loubboira are: 70 million tonnes at Bofal, and 24 million tonnes at Loubboira. Memady (1997) estimated the phosphate resources of the whole area as exceeding 135 million tonnes. The trace element concentrations of uranium and cadmium are low (U = 80 ppm, Cd = 12 ppm) (Boujo and Jiddu 1989).

Other agrominerals

Limestone/dolomite

There are several extensive limestone and dolomite resources in Mauritania (Wolff 1996). Thick stromatolitic limestones and dolomitic limestones occur at the northern margin of the Taoudenni Basin. One of the carbonate horizons overlies the Neoproterozoic tillite horizon that has been identified throughout large parts of the Taoudenni Basin as part of the 'triad' (Wright *et al.* 1985). Quaternary and sub-Recent carbonate deposits and shell occurrences have been investigated around the capital Nouakchott with reserves of 5.3-8.4 million tonnes (Wolff 1996). However, these resources are of little practical agronomic importance for a country with low agricultural production and Mauritania's soil characteristics.

Gypsum

Large gypsum deposits occur at Sebkhia N'Dremcha, approximately 50 km northeast of Nouakchott. Here, several hundred million tonnes of gypsum occur and are extracted at a rate of several thousand tonnes per year by the Arab Company for Inchiri Mines (SAMIN) for plaster production (Memady 1997).

Agromineral potential

Mauritania is endowed with large volume, good grade sedimentary phosphate rocks. Rapid development of phosphates or gypsum for domestic agricultural production is, at present, unlikely, partially due to climatic constraints and the remote location of the resources.

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