

# Côte d'Ivoire

Total population (July 2000 estimate): 15,981,000

Area: 322,460 km<sup>2</sup>

Annual population growth rate (2000): 2.58%

Life expectancy at birth (1998): 46.9 years

People not expected to survive to age 40 (1998): 37% of total population

GDP per capita (1998): US \$1,598



Geographically and climatically, the Côte d'Ivoire (Ivory Coast) consists of at least three major zones. Low-lying land and lagoons with an equatorial tropical climate are found in the southern zone adjacent to the Atlantic Ocean. Tropical forest zone lies north of the lagoonal zone, and a wooded savanna zone with sparse vegetation and dry climate exists in the north of the country.

The economy of Côte d'Ivoire is largely export-driven. The main exports are agrarian and forestry products, specifically cocoa, coffee, rubber-based latex, and timber. Agriculture accounts for approximately 26% of Côte d'Ivoire's GDP and an estimated 70% of the country's export earnings. Roughly 70% of the labour force is involved in the agricultural sector. The main food crops are yams, cassava, plantains, rice and maize. Other crops include sugar cane, and export commodities such as cocoa beans, cocoa paste, coffee, cotton and pineapple.

So far, the mining industry plays only a minor role in the development of the Côte d'Ivoire. Mineral exploration has focused on gold and lateritic nickel and relatively small amounts of oil were produced from offshore sources between 1978 and 1988. Recent exploration has confirmed the existence of additional oil and natural gas resources offshore.

### **Geological outline**

The oldest rocks of Côte d'Ivoire are part of the Archean West Africa craton and occur in the west of the country. Undifferentiated granites and gneisses as well as Paleoproterozoic north-northeast striking rock sequences of the Birimian with predominantly metasediments (conglomerates, sandstones and shales) and subordinate metavolcanics (Wright *et al.* 1985) underlie most of the country. No Neoproterozoic rocks or Paleozoic rocks occur in Côte d'Ivoire. Sandy-clayey sediments of the Cretaceous and Quaternary were deposited along a narrow, east - west striking coastal strip, the Ivory Coast Basin.

## **AGROMINERALS**

### **Phosphates**

During a reconnaissance survey in the coastal Tertiary sediments of Côte d'Ivoire, small occurrences of phosphatic sediments were identified by Dian (1977). The phosphates occur as nodules in unconsolidated Paleocene to Eocene sediments near Eboinda in eastern coastal Côte d'Ivoire. The phosphatic sediments occur at depths of 3.50-9 m. Maximum phosphate content in one of the pits was 30% P<sub>2</sub>O<sub>5</sub>. However, the grade is commonly much lower. Tagini and Gobert (1981) report not only apatite from this location but also wavellite, crandallite and variscite, all typical phosphates of the weathering environment. This occurrence seems to be of small volume and extent and no further work has been reported.

### **Other agrominerals**

#### **Limestone/dolomite**

There are only very few limestone or dolomitic limestone resources in Côte d'Ivoire (Tagini and Gobert 1981). Most of them occur along the coastal strip in Cretaceous to Tertiary sediments at Ebocco, Nzida, Yakoboue and Fresco, some of them under considerable soil cover. Only a few metamorphosed limestones were identified in the Precambrian rocks of Côte d'Ivoire, northwest and southeast of Man and south of Yamoussoukro (Lorenz 1996).

Dolomitic limestones have been tested successfully in oil palm plantations in the south of the country.

## **Glauconite**

During the exploration for phosphates, Dian (1977) reports on glauconitic sediments in the coastal sediments of Côte d'Ivoire.

## **Agromineral potential**

The potential of developing agrominerals in the Côte d'Ivoire is low. It is limited to the narrow coastal strip with its Tertiary sediments, which include small phosphatic lenses, limestones and glauconitic sediments. Precambrian limestone and dolomite resources for amelioration of acid soils seem to be very limited.

### *References:*

- Dian KW 1977. Note sur les indices de phosphates d'Eboinda, Octobre 1976 - Mars 1977. Report No. 419, SODEMI.
- Lorenz W. 1996. Ivory Coast. In: Bosse H-R, Gwosdz W, Lorenz W, Markwich, Roth W and F Wolff (eds.) Limestone and dolomite resources of Africa. Geol. Jb., D, 176-179.
- Tagini B and M Gobert 1981. Carte au 1/4 000 000 et catalogue des gîtes et principaux indices minéraux de la Côte d'Ivoire. Société pour le Développement Minier de la Côte d'Ivoire (SODEMI), Abidjan, 22pp.
- Wright JB, Hastings DA, Jones WB and HR Williams 1985. Geology and mineral resources of West Africa. Allen and Unwin, London, UK, 187pp.