



## CUT AND RUN

### **Illegal Logging and Timber Trade in the Tropics**

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## CHAPTER 4

### *Ghana*

#### *A History of Mismanagement*

More than 90% of Ghana's forests have been logged since the 1940s (Asibey and Owusu 1982, cited in Sayer et al. 1992). Primary forest practically disappeared a decade ago (OFI-TRADA 1991, cited in Rice and Counsell 1993), and the extent of remaining forest cover has been estimated at about 15 000 km<sup>2</sup> (Sayer et al. 1992), which is scattered as small isolated fragments throughout the southern part of the country. During 1981–85 the annual rate of deforestation in Ghana was estimated at 1.3%, but more recent estimates set it at close to 2% (Keeling 1991, cited in Rice and Counsell 1993). Forestry plays an important part in Ghana's economy. In the 1980s, timber was the third-largest export commodity after cocoa and gold, accounting for 5–7% of the total gross domestic product (GDP), and the forestry sector employed some 70 000 people (IIED 1988, cited in Rice and Counsell 1993). Forests also provide 75% of Ghana's energy requirements (Sayer et al. 1992).

The timber industry in Ghana had practically collapsed by the early 1980s, mainly because of the global recession in the late 1970s and early 1980s. A new administration came into power in 1981, but despite the government's efforts to halt the economic crisis, the IMF had to intervene through an SAP. The IMF promoted the expansion of Ghana's exports to enable the country to acquire additional foreign exchange. The timber sector was given special attention through the World Bank's Export Rehabilitation Project of 1983–86. Sawmills were renewed; logging operations, modernized; harbours, rebuilt; and timber exports, increased. The economy improved, but at the expense of Ghana's forests. Additionally, the aid money provided a new source of illegal profits for many companies, and millions of dollars disappeared out of Ghana as a result of corruption and fraud (FoE-EWNI 1992).

Overexploitation of a limited number of species led to a ban on the export of 14 primary species in 1979 and of an additional four species in 1987. This ban resulted in the increased use of secondary species (Friar 1987, cited in Sayer et al. 1992). Exact figures on Ghana's timber exports are difficult to obtain, but the country remains one of the most important African suppliers to the EU (Eurostat 1991, cited in Rice and Counsell 1993). The United Kingdom, from which Ghana obtained

independence in March 1957, imports about 11% of the country's timber (FoE–EWNI 1992). Initiatives to develop long-term sustained yield management include the Ghana forest simulation model, GHAFOSIM, which reviewed current and alternative exploitation practices and recommended a 40-year felling cycle (Ghartey 1990, cited in Sayer et al. 1992).

At the end of the 1980s, the tropical moist forest zone contained 252 forest reserves covering a total area of about 17 000 km<sup>2</sup>. Of this, 12 000 km<sup>2</sup> was designated for timber production, whereas only 5 000 km<sup>2</sup> was allocated as “protective” (sic) forest (FoE–EWNI 1992).

## PROBLEMS

The timber industry comprises some 500 logging companies (including Danish and Dutch firms), which operate through long-term concessions and short-term licences. The International Institute for Environment and Development (1988, cited in Rice and Counsell 1993) reported several problems in the forestry sector: repeated logging of commercially exploited areas without allowing the forest to recover; the very small size of some concessions (in one case, only 2 km<sup>2</sup>), which makes proper management difficult; and a disregard for felling cycles (15 years, instead of the recommended 40 years). In addition, very high levels of waste in timber processing and inefficient extraction methods result in a final lumber volume that is only 25–40% of the total log volume extracted (Chachu 1989, cited in Rice and Counsell 1993).

As an alternative for meeting domestic and industrial demands for wood, plantations have been developed in Ghana as far back as the first decade of this century. Between 1968 and 1977, planting was used to convert some 400 km<sup>2</sup> of natural forest into logged-over forest reserves. As a result of poor management, though, planting has declined to a mere 10–20 km<sup>2</sup> a year, and this is mainly for rehabilitating failed plantations (Owusu et al. 1989, cited in Sayer et al. 1992). In view of their history, industrial plantations do not appear to offer a solution to Ghana's deforestation problem, either for the near future or for the medium term (Rice and Counsell 1993).

The major causes of deforestation have been fires, overlogging, shifting cultivation, and an ever-increasing demand for fuelwood. Fire following the drought in 1982/83 altered the structure and composition of 30% of the forest left in the semideciduous forest zone and led to the loss of 4 million m<sup>3</sup> of high-quality timber. In recent years, fire damage has spread southward, and heavily logged areas are at high risk. Other major causes of deforestation are the following:

- Overlogging is a serious threat: the annual cut is 1.6–2.5 times higher than the optimistically calculated sustainable cut (World Bank 1988, cited in Sayer et al. 1992).
- Shifting cultivation traditionally accounts for up to 70% of deforestation. Fuelwood and charcoal consumption accounts for 75% of all energy consumed in Ghana. The World Bank (1988, cited in Sayer et al. 1992) estimated that in the period 1986–2000, fuelwood consumption would rise about 2.8% per annum, compared with a decline in wood availability of 0.7% per annum. As fuelwood mainly comes from natural ecosystems, wood resources will become scarcer outside protected areas, and pressure for wood within reserves will continue to intensify (Owusu et al. 1989, cited in Sayer et al. 1992).

## IMPACTS

The impacts of deforestation are widespread. Not only are biodiversity, ecological processes, and environmental functions affected, but also the livelihoods of local people. Nontimber forest products are used by a large part of the Ghanaian population. It has been estimated that 75% of the population relies on bushmeat for protein. Apart from subsistence use and local trade, another drain on wildlife species is a lucrative export market. In addition, forest loss results in serious land degradation (soil

erosion, nutrient depletion, and desertification), which is an increasing problem in northern parts of Ghana (Falconer 1990, cited in Sayer et al. 1992).

Because of current unsustainable forest use, Ghana is also losing impressive fauna, ranging from rare and endangered species — such as the forest elephant, the bongo, Ogilby's duiker, the chimpanzee, and the pygmy hippopotamus — to several of West Africa's rarest forest birds, which are important for seed dispersal and forest regeneration. Most of the existing conservation areas in Ghana are too small to maintain populations of animal and plant species in the long term (IUCN 1988b, cited in Sayer et al. 1992), although in the last decade several conservation initiatives have been taken by the Environmental Protection Council, the Department of Game and Wildlife, and the Forestry Department.

In 1989, the 64.6 million USD Forest Resources Management Project was launched by the World Bank, the Food and Agriculture Organization of the United Nations, the Canadian International Development Agency, and the British Overseas Development Administration. The project was designed to review forestry and wildlife sectors, strengthen the present network of conservation areas, and improve game management outside protected areas. Additionally, the Forestry Commission was to revise the national forestry policy, which had been in place since before Ghana's independence (Sayer et al. 1992).

FoE Ghana has initiated a number of tree-planting, environmental-education, and research programs, and a number of villages have expressed interest in establishing agroforestry projects with the help of FoE Ghana.

## MANAGING ILLEGAL LOGGING IN GHANA<sup>1</sup>

Ghana's forest zone, which at the beginning of this century covered 8.2 million ha, has been reduced drastically to about 1.7 million ha. Pressure on the remaining forests has increased because of the large number of wood-processing plants and illegal logging operations. At the current rate of wood consumption in Ghana — be it for the timber industry, illegal timber trade, or fuelwood use — the remaining fragmented forest patches will likely disappear soon unless serious changes are made immediately to combat these threats.

Forestry has traditionally played an important role in Ghana's economy, with timber being the third-largest export commodity after cocoa and gold. During the 1980s, revenues from timber exports contributed 5–7% to GDP, and the timber sector employed about 70 000 people (IIED 1988, cited in Rice and Counsell 1993). Additionally, about 2 million people (14% of the population) gain direct livelihoods from the forest.

The colonial authorities in Ghana did try to control exploitation of the forest resource. In 1907, they established the Timber Protection Ordinance, which banned felling of trees of commercial species before they had grown to a certain diameter. In 1908, they set up a government department to be responsible for forestry activities. Commercial forestry in Ghana, as it was first practiced, was controlled almost entirely by large companies from the United Kingdom. However, under the Nkrumah administration (1951–66), the government successfully promoted small to medium-sized Ghanaian timber enterprises and reduced the number and size of concessions allocated to foreign

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<sup>1</sup> The balance of this chapter presents an executive summary of the report *Managing and Mismanaging the Forest. A Study of Illegal Logging in Ghana*, the Ghana case study in the Chase for Quick Profits project. The original report was written by Friends of the Earth (FoE) Ghana staff, under supervision of Theo Anderson, director of FoE Ghana. The preceding introduction was prepared by FoEI.

firms. Of 102 concessions granted through the Ministry of Lands and Natural Resources between 1961 and 1971, only 2 went to foreign companies.

From 1956 to 1970, the Modified Selection System was the main method of controlling exploitation. This involved stock-mapping of all economic trees; the selective exploitation of mature species, governed by minimum-girth limits; and a 25-year felling cycle. In the early 1980s, the timber sector was dominated by a large number of small to medium-sized companies. By the end of the 1980s, the number of companies claiming to be log exporters had grown from 90 to 300. Most of these companies had no real experience with international trade, which increased their dependence on business deals with foreign and European resident agents and buyers.

The scale of illegal exports of timber became clear to the Ghanaian authorities in 1987, when several shiploads of illegally harvested wood were halted, and fraud involving export documents was revealed.

In July 1990, the authorities introduced forest-improvement levies, aimed at promoting sustainability in the timber industry and forest conservation. By 1994, the export of logs and air-dried timber had ceased.

## LOCAL COMMUNITIES AND ILLEGAL LOGGING

Forest- and land-tenure systems established by decree of the Ghanaian government and executed by concessionaires have led to conflicts with local communities, despite the fact that national legislation relating to land and tree use was mainly intended to reflect the public interest in natural resources.

The customs controlling native land tenure vary to some extent with the practices of the different clans, but all land, including waste and unoccupied land, has an owner under native or customary law. A study of the legal framework for forest reserves in Ghana indicated that most of the reserves are owned by corporate customary stools or clans. In a few of these areas, the communities' interests were not taken into account before the establishment of a protected area, and difficulties have arisen because of this. The government forcefully obtained land from local tribes for three state-owned reserves.

Customary law provides no restriction on destruction or use of trees, and national legislation seeks only to prohibit the destruction or sale of commercial timber trees. Individuals have no right to sell timber trees from their land. Local people do not receive a part of the royalties, and they have no legal right to be informed of or to refuse to allow felling on their land by timber-concession holders.

The Forest Decree of 1974 sets many restrictions on communities' use of forest reserves. This decree imposes criminal sanctions for any violation of the forest laws. Furthermore, people need a permit or written note issued by the Forestry Department to enter a forest reserve. The collection or extraction of nontimber forest products for domestic use, which most communities rely on for their existence, is permitted, but commercial exploitation of these products is not permitted.

An analysis of the procedures related to forest reserves showed that the laws governing them have stifled the local land-tenure systems and given local communities a disincentive to protect reserves. These procedures fail to properly take into account community rights and benefits for villages near the reserves and have alienated local communities. With few or no rights in the reserves, nearby farmers and communities have had no incentives to protect, manage, or invest in the resource.

Outside the reserves, the lack of tree tenure and payments to farmers, together with inadequate compensation by concessionaires for damage to farms, have created not only a disincentive to plant or protect timber trees but also a strong incentive to destroy them before the concessionaire can

harvest them. Many landowners and farmers would rather negotiate secretly with chain-saw operators to have the trees on their land illegally harvested than allow the legitimate concessionaires to harvest the trees and pay token compensation. Until the laws are modified, farmers will continue to collaborate with illegal operators to plunder the forest.

## TIMBER HARVESTING

Timber harvesting is the main cause of deforestation in Ghana. Logging has been increasing outside the forest reserves, mainly because of the lack of effective control. In recent times, logging activities have intensified in the semideciduous zones because of the greater densities of desirable timber species, especially in the Brong Ahafo region. These drier zones are now in critical condition.

The traditional bush-fallow system of cultivation involves the slashing and burning of forests and grasslands. With the increasing population over the last two decades, pressure on forested land has been considerable. Demand for subsistence farming has been compounded by demand for cash crops — such as cocoa, coffee, oil palm, and tobacco — and for urbanization and infrastructural development.

Additionally, fire has been the immediate cause of a large part of forest degradation in the semideciduous zones. About 30% of the forest in these areas has been degraded or destroyed. Bush fires occur annually in the dry season, usually from November to May, and are caused either by natural events or by intentional burning.

Open-cast mining (gold and diamonds), especially by small-scale operators, and large-scale mining (bauxite, manganese, and gold) pose a serious threat to the remaining forests. Gold mining, especially in the wet evergreen zone, threatens some botanically very rich areas; this is particularly so with the large-scale surface mining at the northern edge of Neung North Forest Reserves.

## GOVERNMENT POLICIES

In most cases, government policies have adverse environmental and economic effects. The policies offer a direct incentive for wasteful environmental management, which has led to increased forest degradation. In general, very low fines are imposed on offenders, and in most cases it is more profitable to break the law and pay a fine than to abide by the law.

With the introduction of the SAP, the contribution of Ghana's forest products to the GDP increased significantly, rising from 3–4% of GDP in the 1980s to current levels of 6–8% of GDP and 13% of merchandise export. However, this growth has been achieved by logging the forest at unsustainable rates. At the same time, production is inefficient and its wastage is high; wood is priced below its real market value; and communities that depend on the forest suffer the social and economic costs of overexploitation.

The fines are too low to deter illegal timber harvesting. Until the national task force came into existence, the maximum fine for harvesting logs illegally was 20 000 cedis, far below the price of 1 m<sup>3</sup> of log (in 1988, 2 292 Ghanaian cedis [GHC] = 1 USD). The total loss to the nation from illegal logging operations is about 36.22 billion GHC (28.97 million USD), equivalent to about 2% of the GDP.

A large number of reserves have been threatened by the encroachment of illegally established farms. Again, the penalties are an insufficient deterrent. This continuous illegal encroachment is considered the greatest source of deforestation within the forest reserves. If this situation remains uncontrolled, it will lead to irreversible ecological damage.

In 1994, the Forestry Department estimated that about 34% of logs harvested from forests were illegally harvested. Statistics from the Forestry Department indicate that the level of harvesting has been increasing over the last 5 years.

## CORRUPTION

The main collaborators with illegal chain-saw operators are district forestry officials, district chief executives and assembly people, law enforcement agents, chiefs and village elders, concessionaires, and wood sellers.

In general, the police service has been either lukewarm about environmental issues or uncooperative. They often fail to make arrests or to investigate or prosecute offenders. This attitude of the police, which demoralizes informants and forestry officers, has worked to the advantage of illegal operators, who ignore the forestry laws with impunity.

Confusion surrounds the authority to issue felling permits to chain-saw operators. The Ministry of Lands and Forestry has authorized only the Chief Conservator of Forests to issue permits for felling or processing of trees outside the forest reserves. However, most district chief executives also issue permits, justifying this by invoking provisions of the legislative Act that regulates chain-saw operations. Because the Act has not been revoked, it is unclear who has the authority to allow felling.

In 1993, Ghana's log exports rose by 123% over those of the previous year. The annual allowable cut of timber was exceeded by 30%, and the number of log exporters increased to more than 200 (almost double the 105 of the previous year). The sudden increase in the number of log exporters was mainly due to the speculation in timber felling that characterized the national economy. Of the exporters, the top 10 were timber-processing and -milling companies, and they accounted for more than 32% of total log exports.

The Ministry of Lands and Forestry submitted a memorandum to government to introduce a suspension of log exports for a period of not less than 12 months. This would enable the Forestry Department to introduce measures to bring order and discipline into the forestry sector and reduce the excessive pressure on forest resources.

An analysis of the timber statistics collected by the Forest Products Inspection Bureau and of the Forestry Department's forest inventory revealed that of the 40 main marketable species, 16 are being heavily overcut at unsustainable rates, particularly in forests outside reserves, and 14 are hardly touched. Some have been listed by CITES as critically endangered.

## PRODUCTIVITY LOSS

Forest resources have played a significant role in the provision of food, clothing, shelter, furniture, water-supply sources, bushmeat, and traditional medicine for the local community. The rapid destruction of the forest through excessive logging is therefore of much concern to development planners and policymakers. The degradation of the forest has resulted in field-productivity losses of 0.5–1.5% of gross national product, loss of sustainable logging potential and erosion prevention, loss of watershed stability and carbon sequestration, and loss of potential new drugs as a result of the loss of genetic resources. The people most affected live below the poverty level in environmentally fragile rural areas. These people rely on the forests for their livelihood but have very little legal hold on the resources. The economic activities of these people often intensify the deforestation process and lead to pollution and soil degradation, exposing them to even greater environmental risks.

Factors that make tackling of the problem difficult are the following:

- The lack of an updated and clearly defined forest-policy document spelling out goals, objectives, strategies, and future direction of the timber industry;
- The lack of a clear land-use policy to guide the use of land in the country, without which encroachment on forest reserves occurs;
- Domination of the timber-export trade by round logs that generate low foreign earnings from large volumes of log exports;
- The Forest Department's deficient protection of forests outside reserves under any form of sustainable management, a deficiency that promotes illegal harvesting of logs; and
- The low fines for offences, which stimulates even more malpractice both within and outside reserves.

A new Forest and Wildlife Policy has been formulated and published to replace the Forest Policy of 1948. This new policy was informed by current national-development policies as embodied in the 1992 Constitution, the Environmental Action Plan (1991), and the Forest Resource Management Project (1989–95). It was also informed by “accepted” international principles of resource management and sustainable development as stated by the *ITTO Guidelines for the Sustainable Management of Natural Tropical Forests* (ITTO 1990); The Rio Declaration and The Statement of Forest Principles, both prepared at the 1992 Earth Summit (UNCED 1992); the 1968 African Convention on the Conservation of Nature and Natural Resources (also known as the African Convention) (OAU 1977); and other conventions to which Ghana is a signatory. Before 1992, timber royalties in Ghana were said to be the lowest among the tropical African countries. As a result of this, the Forestry Department has been unable to meet the cost of sustainably managing Ghana's timber resources.

With the Fourth Republic coming into office, the Ministry of Lands and Forestry revised most of the old legislation and proposed new legislation, including new regulations to help mobilize revenue for forest management. The *Trees and Timber (Amendment) Act* (1994) increased the fees for property and provided higher penalties for contravention of forestry laws. The Act also introduced export levies to limit the export of certain timber species, thereby regulating the harvest of endangered and environmentally sensitive timber species. A Collaborative Forest Management Unit has been set up under the Forestry Department to promote community monitoring of timber harvesting in reserves. Furthermore, the Ministry of Lands and Forestry is drafting a 20-year Forestry Development Master Plan for forest resources, forest industries, and wildlife management. The 1994 Forest and Wildlife Policy identified the need to strengthen public participation in forest management.