

# TOGO



\* For legend see page 58

## Forest resources

Togo has a land area of 5.68 million hectares and a population of about 4.6 million people. It lies north of the Gulf of Guinea in West Africa between Ghana in the west and Benin in the east. There is a narrow coastal belt and an extensive inland plateau, rising from 60 m to 450 m towards the north. The Atakorian Mountains stretch from southwest to northeast and cover much of western Togo. The highest peak (Mt Agou) reaches an altitude of 986 m. There is little forest in Togo. FAO (2005a) estimated the forest area at 510,000 hectares in 2000; the government of Togo estimated 1.09 million hectares of forest area<sup>a</sup>, a large part of which is covered by bush and tree savanna. A third estimate (631,000 hectares) can be derived from the data for forest types given below (excluding savanna but including 'secondary forest and agricultural land').

**Forest types.** The scarcity of forest is due to both low precipitation and deforestation. Apart from a few fragments of closed semi-deciduous forests in the southwest, covering around 400 hectares, there are only a few small islands of moist and dry forests in the south and centre and gallery forests along watercourses. The majority of the forest area is savanna, which extends from the Guinean into the Sudanian vegetation zone. On the plateau, dense savanna forests are characterized by *Ceiba pentandra*, *Daniellia oliveri* and *Butyrospermum paradoxum*. Farther north, *Khaya senegalensis* and *Prosopis africana* predominate, along with the palm *Borassus aethiopum*. There are stands of semi-deciduous closed forest in the mountains, with *Antiaris africana* and *Chlorophora excelsa* among the most typical species. Areas of the main forest types are estimated as follows for 2003<sup>c</sup>:

- semi-deciduous forests (*forêts denses semi-décidues*)  
106,400 hectares
- montane forests (*forêts de montagne*)  
46,500 hectares
- closed dry forests (*forêts denses sèches*)  
25,500 hectares
- tree savanna (*savanes arborées*)  
594,000 hectares
- secondary forests and agroforestry land  
453,000 hectares

**Dynamics of forest resource change.** Deforestation is high relative to the total area of forest and is estimated to have been an average 21,000 hectares per year over the past 12 years<sup>a</sup>. The highest deforestation rates have been observed in the more humid area, where forests are important in water-

Table 1 PFE

Estimated total forest area, range (million hectares)	Total closed natural forest ('000 hectares) Source: FAO 2001	PFE ('000 hectares) <sup>d</sup>			
		Production		Protection	Total
		Natural	Planted		
0.51–1.09	272	41	14	313	368

shed protection. The major threats to the scarce remaining dense forests include uncontrolled bush-fires (the main cause of deforestation in non-PFE forested land), excessive fuelwood extraction, shifting cultivation for annual crops, and illegal cutting of the few remaining commercial tree species. Uncotrolled forest fires occur regularly at the end of the drier seasons and cause damage to already degraded forest areas. Over the past 30 years, the frontier of cotton plantations (in particular in the southern zone around the forest of Abdoulaye and in the western Tchilla-Monota forest area) has expanded at the expense of forest. Another reason for larger-scale conversion of forests is the introduction of new varieties of coffee adapted to local conditions.

**Permanent forest estate.** According to the government of Togo, there are 502,000 hectares of PFE, comprising 488,000 hectares of degraded closed natural forests and 14,000 hectares of planted forests<sup>a</sup>. This PFE is mainly located within 83 forest reserves (*forêts classés et forêts sacrées*) with a total area of 773,811 hectares; these are encroached upon by local people to a varied degree<sup>a</sup>. The forest reserves, mostly created in the colonial era (before 1960), now consist of heavily degraded primary forests, open secondary forests, planted forests and human-induced savanna dominated by *Ceiba pentandra*. The estimate in Table 1 is somewhat lower than the official estimate to allow for the additional deforestation that is believed to have taken place<sup>c</sup>.

**Planted forests.** There are about 38,000 hectares of planted forests, 24,000 hectares being outside the PFE<sup>a</sup>. Plantations are often located inside the forest reserves, but privately owned planted forest areas are now being developed.

## Institutional arrangements

**Forest tenure.** There are two types of forest tenure: public forest and private forest. Closed forests and dense tree savanna are generally part of public forest reserves owned by the state. In all forest reserves, user rights for local communities exist according to the colonial forest code of 1938 (articles 12–18). The legal situation, however, remains unclear; because of this, perhaps, most forest reserves are increasingly threatened by conversion under shifting cultivation. Outside the reserves, all trees and plantations belong to local

communities and private citizens, with no strict control from the state, although such off-reserve forests provide most of the forest products sold locally.

**SFM policy framework.** Although Togo participated in the C&I processes of ITTO, Dry-zone Africa and ATO/ITTO, no adequate framework for SFM has yet been developed. No strategic plan or actions are foreseen beyond securing forest reserves from conversion and encroachment.

**Forest policy and legislation.** Forest use is regulated by the 1938 forest code and the environmental code of 1988. The 1938 code has been amended by subsequent regulations, such as Decree 84/86 of April 1984. A new forest code was submitted to the Legislative Assembly but as of the end of 2005 no decision had been taken on its implementation.

A new forest policy was elaborated at the beginning of 2000 and is based on the following principles: the involvement and empowerment of the people, the integration of forestry into rural development, and the rationalization and decentralization of forestry planning. There is a National Forestry Action Program (*Plan d'Action Forestier National – PAFN*) and a National Environmental Action Plan (*Plan National d'Action pour l'Environnement – PNAE*), the latter adopted in 2000. In addition, an environmental management plan derived from the latter includes rules for the management of forest ecosystems and guidelines for the conservation and use of biological diversity.

A law approved in 1998 (Law 98-006) and modified in 2001 stipulates the political commitment of Togo to decentralized management in rural areas. Communes, prefectures and regions have become territorial authorities (*collectivités territoriales*), with legal status and financial independence. These authorities have responsibilities for the management of the state domain and on environmental issues. Communes and prefectures have an important stake in the management of forest reserves. Villages adjacent to forest reserves generally have a forest committee (*Comité villageois de Développement – CVD*), which takes cares of local interests in the use of the forest reserves and is responsible for the management of committed forests. So far, however, overall responsibility for natural resource management has mostly remained with the central Ministry for Environment and Natural Resources

**Table 2 Some commonly harvested species for industrial roundwood<sup>c</sup>**

Timber species	Remarks
<i>Tectona grandis</i> (teak)	From planted forests, production about 40,000 m <sup>3</sup> per year
<i>Khaya grandifoliola</i> (acajou)	From natural forests, less than 1,000 m <sup>3</sup> per year
<i>Chlorophora excelsa</i> (iroko)	From natural forests, less than 1,000 m <sup>3</sup> per year
<i>Antiaris africana</i> (ako)	From natural forests, less than 1,000 m <sup>3</sup> per year
<i>Triplochiton scleroxylon</i> (ayous)	And 12–15 other species, totalling under 40,000 m <sup>3</sup> per year

(*Ministère de l'Environnement et des Ressources Forestières – MERF*).

**Institutions involved in forests.** MERF is in charge of forests. Responsibilities were reorganized in 1996 and new institutional reforms proposed in 2001. According to the new scheme, there are five departments to administer the environment and forests: the Directorate for Administration, Finance and Planning (*Direction de l'Administration, des Finances et de la Planification*); the Directorate for the Environment (*Direction de l'Environnement*), responsible for overall environmental policies; the Directorate for Forests and Water (*Direction des Eaux et Forêts*), responsible for forest policy and law enforcement; the Directorate for Green Space (*Direction des Espaces Verts*), responsible for urban forestry; and the Directorate for Fauna and Hunting (*Direction de la Faune et de la Chasse*). A parastatal organization, the Office for Forest Development and Harvesting (*Office de Développement et d'Exploitation des Forêts – ODEF*), is responsible for the management of forest reserves, forestry extension, harvesting and reforestation activities<sup>a</sup>. The only forestry training institute in the country (INFA in Tové), which has been closed since 1990 because of a shortage of funds, was expected to start forestry classes again in 2004. There is no forest research institute.

In 2002, 937 people were engaged in the forest administration, only eight of them with higher education in forestry and environmental management<sup>a</sup>.

Some small national NGOs are concerned with local forestry development, but their resources are meagre. There has been a general trend towards wider public participation in the management of forests. Communities and NGOs are often involved in forest protection measures such as fire protection

(*brigades de feux de brousse*). There has also been some recent investment by the private sector in teak plantations.

## Status of forest management

### Forest for production

The rural population traditionally depends on forests and trees for fuelwood, fodder, timber and other forest products; this heavy dependence generates great pressure on forests. Most of the 83 remaining forest reserves are now threatened. They can be divided into five classes, as follows:

- (i) Class I: comprises 18 converted forest reserves that have been cleared and this land-use conversion is irreversible. The land will support agriculture or has become degraded;
- (ii) Class II: comprises six heavily degraded reserves that contain secondary forest or urbanized forest reserves;
- (iii) Class III: comprises eight forest reserves with planted areas that are either intact or degraded and heavily degraded natural forests;
- (iv) Class IV: comprises 48 reserves in which the forest is degraded and/or transformed into secondary forest and may also contain planted areas and natural forest; and
- (v) Class V: comprises three sacred forests with more-or-less intact forests<sup>a</sup>.

A number of forest management plans have been prepared to secure the sustainable use of the main forest reserves, mainly through projects supported by international organizations including ITTO. There are no large-scale timber harvesting or forest concession areas. Cutting permits (*permis de*

**Table 3 Management of the production PFE ('000 hectares)**

Total	Natural				Planted		
	Allocated to concessions/ under licence	With management plans	Certified	Sustainably managed	Total	With management plans	Certified
41	41	5.5 <sup>a</sup>	0	5.5	14	1.2 <sup>a</sup>	0

*coupe*) are the only legal basis for small-scale timber harvesting and the cutting of single trees.

**Silviculture and species selection.** The most important commercial tree species is *Tectona grandis* (teak). Teak plantations were introduced in 1910 from Burma by the Germans and have become well adapted to the country. The species regenerates naturally and is widely used in agroforestry plantations, as street trees and in commercial planted forests. A silvicultural system to induce natural regeneration has been developed by ODEF and is practised in some of the older teak stands.

Timber harvesting takes place in some forest reserves, in savanna, in planted forests and among off-forest trees. Apart from teak, no species is used in large quantities. Besides those listed in Table 2, species harvested include: *Azelia africana*, *Lophira alata*, *Terminalia* spp, *Isobertinia doka*, *Daniellia oliveri*, *Dichostachys glomerata*, *Parkia biglobosa*, *Bauhinia* spp, *Pterocarpus erinaceus* and *Anogeissus leiocarpus*. In the future there may be an increased commercial use of trees outside reserves, in particular of *Ceiba pentandra* (fromager), *Cola gigantea* and *Albizia ferruginea*.

**Planted forest and trees outside the forest.** The main planted species is teak (18,000 hectares). The planned planting rate of teak is 300 hectares per year, mainly on agricultural land using the *taungya* system<sup>c</sup>. This planting rate is generally considered inadequate to meet the timber needs of the country; a rate of 2,000 hectares per year of industrial plantations would be needed to meet domestic requirements for construction timber alone<sup>c</sup>. Off-forest trees in the savanna, including teak, limba, ayous, ceiba and cola, are providing more and more of the raw material for local sawmills.

**Forest certification.** No forest has been certified. Teak plantations established by the private sector might have the potential and market prospects to justify certification, but no initiative has been taken yet.

**Estimate of the area of forest sustainably managed for production.** An estimated 17,500 hectares of production forest are covered by management plans, including 10,900 hectares of savanna, 5,500 hectares of dense natural forest and 1,200 hectares of plantations<sup>a</sup>. A total of 4,600 hectares of teak and eucalypt plantations are harvested according to harvesting plans, but only 1,200 hectares of these have full management plans<sup>a</sup>. The area of natural PFE managed sustainably is estimated to be at least 5,500 hectares, comprising the core areas of three forest reserves – Eto, Haho-Baloé and Missahoe – that have been especially enriched and managed with effective support from the local population<sup>c</sup> and from ITTO projects (Table 3).

**Timber production and trade.** Total roundwood production was an estimated 5.85 million m<sup>3</sup> in 2003, of which 5.65 million m<sup>3</sup> was fuelwood (FAO 2005b). Traded fuelwood recently averaged 2 million m<sup>3</sup> per year<sup>a</sup>, to which should be added an estimated informal production<sup>c</sup> of more than 6 million m<sup>3</sup>. Industrial roundwood production amounted to an estimated 208,000 m<sup>3</sup> in 2003, down from 314,000 m<sup>3</sup> in 1999 (ITTO 2004, 2005); most of this wood comes from planted forests. Timber products from neighbouring countries (mainly Ghana) are exported from the free port of Lomé. Private investors have recently developed small-dimension timber-processing units for teak<sup>c</sup>.

**Non-wood forest products.** Wild meat is the most important NWFP from forest reserves. Another considerable source of income, though illegal, has been the collection of reptiles for export. Fruits, roots and medicinal plants are also collected. The remaining forests are heavily degraded and many NWFPs are no longer available in the required quantities or qualities.

At least 18 reptile species are produced in animal farms for export, in particular *Python regius* (royal python), but also chameleons (*Chamaeleo gracilis*

**Table 4 Management of the protection PFE ('000 hectares)**

Total	Attributed to IUCN categories I-IV	Allocated for soil And water	With management plans	Sustainably managed
313	60.9	200	n.d.	n.d.

and *C. senegalensis*), big lizards (*Varanus niloticus* and *V. exanthematicus*), and turtles such as *Kinixys belliana*, *K. erosa* and *K. homeana*.

### Forest for protection

**Soil and water.** An estimated 200,000 hectares of forest are managed primarily for the protection of soil and water<sup>a</sup>. An estimated 5,713 hectares of protection plantations had been established by the end of 2002 in forest reserves – Kara, 362 hectares; Namon, 413 hectares; Asrama, 338 hectares; and Avétnou, 1,100 hectares<sup>a</sup>.

**Biological diversity.** Togo is home to more than 1,450 forest-dependent plant species, more than 600 birds, 146 mammals, 138 reptiles and 42 amphibians<sup>a</sup>. A national strategy for biological diversity was prepared in the late 1990s. It contains a catalogue of rare, endangered and endemic species; tree species listed include *Entandrophragma cylindricum*, *Terminalia superba*, *Terminalia ivorensis*, *Piptadeniastrum africanum*, *Khaya grandifoliola* and *Khaya ivorensis*<sup>a</sup>. Eleven mammals, two birds, three reptiles, three amphibians and ten plants are listed as critically endangered, endangered or vulnerable on the IUCN red list of threatened species; of these, eight mammals and three amphibians are found in forests (IUCN 2004). One plant species is listed in CITES Appendix I and seven in Appendix II (CITES 2005).

**Protective measures in production forests.** Provisions are made in the 1938 forest code and Decree 84/86 to prohibit logging on slopes susceptible to erosion as well as for the protection of streams, springs and watersheds.

**Extent of protected areas.** The government of Togo estimated that the area of forest in IUCN protected-area categories I-IV was 255,640 hectares, 192,000 hectares being semi-deciduous mountain forests and 63,640 hectares savanna<sup>a</sup>. According to UNEP-WCMC (2004), 60,900 hectares of forest are in protected areas conforming to IUCN protected-area categories I-IV; the forest type for

most of this area is unclassified. No information is available on the area of protection PFE covered by management plans or the existence of effective protective measures to secure the areas from encroachment and degradation.

**Estimate of the area of forest sustainably managed for protection.** Insufficient data were available for an estimate to be made on the area of protection PFE under SFM.

### Socioeconomic aspects

**Economic aspects.** Some socioeconomic measures have had negative side-effects on forest management. The devaluation of the regional currency (FCFA) in 1994 has tended to encourage the misuse of resources, while the privatization of profitable enterprises has limited the expansion of forest areas because of the reluctance of private operators to make long-term investments. It is not yet clear what the effects of decentralization and the hoped-for greater transparency will be. Since 2000, there has been some modest private investment in teak plantations on private land. The contribution of the forest sector to national GDP is very small, although the importance of informal activities (especially related to wood energy) is considerable. Private enterprises employ about 1,000 salaried full- and part-time workers. It is estimated that forestry provides about 90,000 jobs in the informal sector, 77% of them for women and children, many in commercial fuelwood collection and charcoal-making.

**Livelihood values.** The few existing forests are often considered by rural people to be under-utilized reserves of land; thus they are heavily encroached upon and claimed for subsistence production. Forest reserves provide an important source of protein for people living in rural areas. Forests also are a place of ritual and spiritual significance for many ethnic groups.

**Social relations.** The participation of local stakeholders in forestry decisions and management is not well developed.



## Summary

The main difficulty in protecting and managing forests in Togo is the heavy pressure on them from an impoverished rural population. Indeed, pressure on the existing forest reserves is already high and the Ministry for Environment and Natural Resources, which is in charge of forests, is unable to secure their integrity. Capacity for forest management is low, and improvement is inhibited by a lack of means. This affects many forestry operations: for example, management plans are confined to a few teak plantations, scarcely 300 hectares of new plantations are established annually, and protection against fire is mostly ineffective. A process of decentralization has been initiated, whereby communes, prefectures and regions have responsibilities for the management of the state domain and on environmental issues, but the effects of this process on forest management are yet to be seen.

## Key points

- Togo has an estimated PFE of 368,000 hectares, comprising 41,000 hectares of natural production forest, 313,000 hectares of protection forest and 14,000 hectares of plantations (and additional private plantations outside the PFE).
- At least 5,500 hectares of natural-forest production PFE are considered to be managed sustainably. Insufficient information was available for an estimate to be made of the area of protection PFE so managed.
- Forest reserves and protected areas are not effectively protected or managed, and many are heavily degraded and subject to uncontrolled encroachment, the illegal gathering of NWFPs, poaching and timber theft.
- Forestry training capacity is very limited, and fewer than ten personnel in the forestry administration have higher education in forestry or environmental management.
- There is a lack of a national SFM framework and of forest management standards for natural forests.
- Privately owned, planted forests are now being developed and will complement the teak and other plantations in the PFE.
- However, planted forests in the PFE are small and generally lack proper planning, monitoring and silvicultural follow-up.
- Many villages adjacent to forest reserves have forest committees to manage local interests in the use of forest reserves.

## References and other sources

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- <sup>c</sup> Information derived from the report of, and discussions with participants at, a training workshop on ITTO criteria and indicators, held 21–24 July 2003, Kpalimé, Togo, attended by 35 people from government, civil society and the private sector.
- <sup>d</sup> ITTO estimate
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