

# Portugal

Raul M. de Alburquerque Sardinha and Michael Richards

## Contents

<b>1.</b>	<b>FOREST HISTORY OF PORTUGAL</b>	293
<b>2.</b>	<b>PORTUGAL'S INVOLVEMENT IN TROPICAL FORESTRY</b>	293
<b>3.</b>	<b>STRUCTURE OF CO-OPERATION DELIVERY</b>	294
3.1	Organisational structure of aid	294
3.2	Actors in aid delivery	297
3.3	Multilateral forestry initiatives	297
<b>4.</b>	<b>STRATEGY OF FORESTRY CO-OPERATION</b>	297
4.1	Sectoral priorities	297
4.2	Tropical forestry 'policy'	297
4.3	Reasons for a low priority for tropical forestry	297
4.4	Geographical priorities	298
<b>5.</b>	<b>PROJECTS FUNDED BY TYPE AND GEOGRAPHICAL DISTRIBUTION</b>	299
<b>6.</b>	<b>RESEARCH AND TRAINING</b>	299
<b>7.</b>	<b>PROJECT CYCLE METHODOLOGY</b>	300
7.1	Project identification and appraisal	300
7.2	Monitoring and evaluation	300
<b>8.</b>	<b>PROJECT REVIEW</b>	300
8.1	Guinea-Bissau Forest Industry Project	300
<b>9.</b>	<b>CONCLUSION</b>	300
	<b>REFERENCES</b>	301
	<b>KEY CONTACTS</b>	301
	<b>ACRONYMS</b>	301
	<b>ACKNOWLEDGEMENTS</b>	302

## 1. FOREST HISTORY OF PORTUGAL

Portugal's forest history revolves round a process of deforestation and reforestation. By the eighteenth century, reclamation of land for agriculture, expansion of animal husbandry and increased demand for wood and timber resulted in the forested area falling to about 5.5% of the total land area. This trend was only reversed in the nineteenth century when tree planting received the necessary scientific and state support. The development of the forest administration, the transition of Crown forest estates to public administration, and the role of the 'commons' are well documented (Baeta Neves, 1978; Devy-Vareta, 1985; Neiva Vieira, 1990; Brouwer, 1993).

Three main historical factors lie behind the development of public forest administration: the royal exercise of hunting rights, the administration of timber during the Portuguese 'seaborne empire', and, in the nineteenth century, the scientific movement which emerged from 'the Enlightenment'. In feudal times, the forests were all on Crown land where kings and noblemen exercised their hunting rights, and until the nineteenth century the granting of hunting rights came under a department of the royal household. The expansion of the Portuguese empire from the early fifteenth century, an empire that literally floated in vessels connecting the coasts of Africa, Asia and Latin America with Lisbon (Boxer, 1969), resulted in such rapid depletion of the royal forests that timber exports were prohibited in 1471, and the Portuguese Navy became dependent on imports of timber from Flanders and the Baltic. This situation led to various attempts to control timber extraction, notably the creation in 1450 of an office to manage the royal Leiria forest, and several laws to stimulate reforestation as in 1565 (Neiva Vieira, 1991). In 1797 responsibility for reforestation of the royal forests was placed under the Navy's Treasury Council.

The third root of public forest administration occurred during the 'Enlightenment' period, when a more scientific approach to agriculture and forestry was developed. Portugal's first professional forester, José Bonifácio de Andrade e Silva, was trained in Germany and, on his return at the beginning of the nineteenth century, emphasised the need for reforestation, improved protection and management of existing forests, and reorganisation of the administration of the royal forests. The Forest Service emerged in 1824, three years after the separation of the king's household from the government. At first the Forest Service was organised on a decentralised basis with 19 regional 'circunscriptions',<sup>1</sup> but in 1872 it was centralised into three divisions (north, centre and south). An 1886 law led to the first major attempt to reforest the commons.

In 1901, a law was passed which explicitly recognised the hydrology, watershed protection and potential climatic impacts of forestry, and defined three types of forestry regime according to the type of land tenure<sup>2</sup>

and the level of state intervention: in the 'total forestry regime' on state land, the Forestry Service was the manager; in the 'partial forestry regime' on communal (parish or municipal) land, management was shared by the Forest Service and the 'owners', and in the 'simple forestry regime' on private land, the owner was the manager. However, a 1903 law obliged the commons and private owners to submit to Forestry Service interventions, permitting the state to stabilise sand dunes in coastal areas, and reforest communal mountain areas without resort to expropriation. In 1918 the Forest Service was again reformed into a central bureau, with 8 circunstrictions, 18 regencies and 121 cantons.

Reafforestation became the main priority in the 1930s, especially through the 'Afforestation Plan of the Commons north of the Tagus River'. This involved the Forestry Service reafforesting some 383,000 ha over a 20-year period from 1935 (Mendonça, 1961), but the programme's momentum tailed off due to a number of problems associated with the state interventions. Recognising that private sector participation in the forestry effort needed to be stepped up, the Forestry Development Fund was created in 1945 to provide tree planting credits and subsidies. At first this had little impact, but following a reorganisation in 1966, some 240,000 ha were afforested up to 1986. Following entry into the EU in 1986, ECU 111 m. were provided to set up the Forestry Action Programme, which aimed to reforest 400,000 ha over a ten year period. Instead, however, there has been a decline in the pine area because of fire and policy problems, and domestic sources are now insufficient to meet industrial demand.

Recently there has been considerable popular criticism (led by NGOs) of plantations on social and ecological grounds, especially of exotics like eucalyptus, and while forest policy has become more socially orientated, weak incentives and lack of R&D have constrained the development of more 'ecological plantations'.

## 2. PORTUGAL'S INVOLVEMENT IN TROPICAL FORESTRY

Portugal's involvement in tropical forestry can be broken down into three main phases: the period of extensive collection of plants by both Portuguese and foreign explorers and sailors, the period of tropical exploitation, and the period of exotic industrial plantations.

The first phase refers initially to a significant two-way transfer of vegetative material between Portugal and the tropics. As stated by João de Barros (1552), 'the Portuguese carry with them all the seeds and plants and other things with which they hope to settle and establish themselves.' Explorers and naturalists made an important contribution to European botanical knowledge. For example, the *Flora Cochinchinensis* by João Loureiro, published in 1790 by the Lisbon Academy of Sciences, was probably the first tropical flora to be published in the world. Systematic flora collections were made from Angola in the eighteenth century, sponsored by the 'philosophical voyages' of the Portuguese Crown to search for 'objects of natural history' for the Royal Cabinet of Ajuda (Mendonça, 1961). However, most of

1. Circunscriptions, regencies and cantons were territorial divisions of the Forest Service.

2. In 1988, of a total forested area of some 306,000 ha, some 85% was under private ownership, 12% on communal land, and 3% on state land.

the initiatives were sponsored either individually or by academic institutions, for example an Angolan collection by the Count of Ficalho (1884).

Reference should also be made to the botanical missions supported by the Cartographic Commission created in 1883, and afterwards by its successor the Colonial Geographic and Research Missions Board. The latter had a mandate 'to launch systematic studies for the scientific knowledge of tropical territories in an organised way in the fields of geology, botany, zoology, anthropology and ethnography.' Its work, mostly since 1940, has been most significant in furthering botanical knowledge, although two important forestry studies were those by Carvalho *et al.* (1956) on Guinea-Bissau and Gomes (1950) on East Timor. Local government initiatives have proved more significant for the advancement of the forest knowledge of the territories, for example studies by Welwitsch (cit. Hiern, 1900), Gomes e Sousa (1926) and Gossweiler (1953). In 1948, it was superseded by the Centre for Botanical Studies.

The second phase refers to the exploitation of tropical forest timber. The Portuguese presence in India resulted in imports of teak from the fifteenth century, while Brazil became an important timber supplier from the seventeenth century. Despite the great demand for ship construction, tropical timber exploitation remained relatively insignificant, with the exception of 'Brazilwood' (*Caesalpinia echinata*), which because of its demand in textile dying became almost extinct by the nineteenth century. However, the Napoleonic occupation of Portugal and transfer of the Portuguese capital to Brazil resulted in the development of a taste for mahogany (*Swetania macrophyllia*) furniture, and, following the Second World War, there was intensive exploitation of the African colonies, especially of the African mahoganies (*Khaya* and *Entandophragma* spp.).

This recognition of the value of tropical, and especially African, timber species led to the creation in 1948 of the Wood Anatomy and Technology Laboratory within the Colonial Geographic and Research Missions Board, and in 1950 of the Tropical Forestry Commission. The latter had a broad mandate, and included a division of forest economy. But lack of funding and staff meant that its activities were limited to a few narrow technical studies. The activities of the Wood Anatomy and Technology Laboratory were more significant and yielded valuable information on tropical wood characteristics (see for example, Ferreirinha, 1955; Orey & Sampayo, 1955–9).

The studies of the colonial administrations were generally disappointing. While legislation instructed them to map forest formations and develop management plans, most of their work was orientated to evaluating wood potential and establishing minimum harvesting diameters leading to selective felling regimes. One reason for this was the lack of university-level tropical forestry training until 1953, when a tropical forestry option was introduced at the Forest Faculty of the Technical University of Lisbon (although the option was dropped in 1983). In the Faculties of Agronomy and Forestry in the Universities of Angola and Mozambique, there was very little research on natural forest management research, most of the work being on exotic plantation species. Other factors included the weakness of the forestry sections (subordinate to

agriculture), the dominance of short-term objectives, and the attitude among settlers that forestry was an obstacle to agricultural expansion. Commercial exploitation of tropical timbers in the African colonies was most intense in the 15 years prior to independence in 1975.

The third phase, involving industrial plantations in the Portuguese colonies, began in the early 1950s, although a big plantation programme in highland Angola and several regional forestry experimental stations date from the 1930s (Queiroz, 1950). For example, the Railway Company of Benguela planted about 55,000 ha (up to 1970) of eucalyptus (*E. camaldulensis* and *E. saligna*) to feed the train boilers. In Angola and Mozambique, regional networks of experimental stations were set up focusing on exotics, especially eucalyptus and tropical pines, and the private sector was active in helping develop a strong timber industry based on the plantations. An exception to this trend was a tropical forestry research station set up in 1953 in a remote humid evergreen forest area of Angola, but this was abandoned in 1960 after some useful research on forest formation and structure by Henriques (1968).

A significant body of colonial legislation affected forestry in the African colonies from the 1930s, particularly the development of research and development institutions. While legislation often stressed sustainable forest management, the allocation of resources was insufficient to support the legal measures. However, colonial legislators had more impact on the wildlife and ecology conservation front; for example, a Coordinating Committee for Nature Protection was created in each colony.

### 3. STRUCTURE OF CO-OPERATION DELIVERY

Portuguese net official development aid amounted to US\$308 m. in 1994 and \$271 m. in 1995, representing 0.35% and 0.27% of GNP respectively (DAC Statistics, 1997). Of this about 30% was multilateral aid. The latter represented a considerable increase on previous years (when it tended to be about 20%), largely due to a rescheduling of foreign debt.

A major characteristic of Portuguese co-operation or, as it appears in the aid statistics, Public Assistance to Development, is its concentration on its five African ex-colonies, the so-called Portuguese-Speaking African Countries (PALOPS). Concern for the needs of the PALOPs has been expressed in policy statements since 1975, and led to the constitution of the 'Portuguese-Speaking Community' in 1996. The PALOPs accounted for 80% of bilateral aid in 1994, and over 90% in previous years.

#### 3.1 Organisational structure of aid

The Portuguese aid structure is characterised by its complexity and the large number of actors. There are essentially three main types of agencies involved in aid delivery. First there is the Ministry of Foreign Affairs, which has overall responsibility for co-operation, and three government or state-supported agencies which deal specifically with co-operation issues:

**Table 1.** Contribution of Ministries to Portugal's co-operation programme 1989–94 (%)

Ministries & Sec. of State	1989	1990	1991	1992	1993	1994
Foreign Affairs	39.3	34.3	27.2	20.6	21.4	16.3
Finance	42.9	5.0	62.3	68.2	65.8	74.3
Justice	0.9	0.4	0.2	0.4	0.4	0.5
Defence and Internal Affairs	0.6	1.3	1.2	1.0	1.9	1.4
Planning & Territorial Administration	0.3	2.8	2.3	3.8	5.1	4.2
Public Works, Transports and Communications	1.7	0.2	1.1	0.1	0.2	—
Industry and Energy	0.3	0.1	—	0.1	0.1	—
Agriculture, Forestry & Fisheries	0.9	1.5	0.9	0.2	0.2	0.1
Employment & Social Security	2.1	1.7	1.3	0.8	0.8	0.6
Education	1.7	1.4	1.2	0.7	0.9	0.1
Health	1.5	1.2	1.1	1.0	0.9	1.0
Trade and Tourism	1.4	0.8	0.6	0.2	0.2	0.4
Environment	0.2	0.3	0.1	0.1	0.3	—
Youth & Social Communication	2.5	2.7	0.2	2.4	0.8	0.1
Culture	0.7	0.7	0.1	0.1	0.4	0.3
Other Ministries & Secretaries of State	0.3	0.6	0.2	0.3	0.6	0.7

(Source: Ministry of Foreign Affairs, 1995)

- the *Comissão Interministerial para a Cooperação* (Interministerial Commission for Co-operation – CIC), which advises the government on co-operation policy, and attempts to coordinate the various ministerial policies and planning efforts, but has no executive powers;
- the *Instituto da Cooperação Portuguesa* (Institute for Portuguese Co-operation – ICP), which is mainly responsible for project selection, financial approval, monitoring and evaluation (although it will often subcontract these functions out to other public agencies or the private sector) and has offices in the main aid partner countries; and
- the Economic Co-operation Fund, an autonomous but largely state-funded institution promoting the involvement of the business sector in the aid programme.

A second set of institutions have a tropical or developing countries' orientation and a significant role in the co-operation programme, but are not exclusively orientated towards it:

- the Camões Institute (IC), which comes under the Ministry of Foreign Affairs and is responsible for the external promotion of Portuguese culture and language;
- the Tropical Health Institute (IMT), which researches tropical diseases, promotes Portugal's health co-operation policy, and strengthens health institutions in the tropics; and
- the *Instituto de Investigação Científica Tropical* (Tropical Scientific Research Institute – IICT). This was created in 1982, absorbing the earlier colonial

research structures. Tropical forestry research comes under the *Centro de Estudos de Tecnologia Florestal* (Tropical Forest Technology Centre – CETF). However its research capacity has been limited by an unclear mandate and a problem of discontinuity as a result of having been under three different Ministries since 1982.

The third set of institutions do not have a specific tropical or co-operation mission, but are involved in the aid programme on an occasional basis. They include all the main Ministries, since each Ministry or State Secretariat allocates a proportion of its budget to co-operation, generally speaking reacting to specific aid requests (see Table 1). For example, the Ministry of Agriculture, Forestry and Fisheries<sup>3</sup> has a Co-operation Division. Within the Ministry, there are two agencies with a significant role in forestry co-operation:

- the General Forestry Directorate officially represents Portugal's forestry co-operation interests, and has been an important implementing agency of tropical forestry projects. It also participates in Mixed Commissions, supports partner country TFAPs, and has represented Portugal on the Commission for Sustainable Development, ITTO, the Desertification Convention, and in the area of Agenda 21 implementation; and
- the *Estação Florestal Nacional* (National Forestry (research) Station – EFN). While its main mandate

3. There have been many changes in the name of the Ministry over the years; for many years it was simply the Ministry of Agriculture (subsuming forestry), as reflected in official aid data.

**Table 2.** Distribution of Portuguese co-operation<sup>a</sup> by sector 1991–94 (%)

	1991	1992	1993	1994
<b>I – Services and social infrastructure</b>	<b>68.8</b>	<b>67.8</b>	<b>63.4</b>	<b>64.0</b>
• Investments in Education	46.07	46.26	35.55	38.19
• Health	7.68	6.76	6.37	3.76
• Public administration	4.47	4.26	16.05	17.46
• Other social services	10.53	10.54	5.44	4.54
<b>II – Services and economic infrastructure</b>	<b>4.2</b>	<b>9.5</b>	<b>5.2</b>	<b>15.1</b>
• Transportation and Communications	3.41	8.62	3.71	12.19
• Energy	0.25	0.63	1.49	1.64
• Other economic infrastructures	0.57	0.27	0.01	0.23
<b>III – Productive sectors</b>	<b>10.2</b>	<b>13.4</b>	<b>13.2</b>	<b>11.3</b>
• Agriculture	3.67	3.41	2.23	2.18
• Industry	1.54	1.06	4.40	2.39
• Construction and building	1.44	0.79	2.58	0.81
• Commerce and Banking services	1.12	6.48	2.05	2.90
• Tourism	2.14	1.56	1.93	3.04
• Other	0.33	0.12	0.00	0.01
<b>IV – Environment</b>	<b>1.0</b>	<b>2.5</b>	<b>0.9</b>	...
<b>V – Emergency food aid</b>	<b>0.1</b>	<b>0.1</b>	<b>8.5</b>	<b>1.6</b>
<b>VI – Other non-specified aid</b>	<b>15.7</b>	<b>6.6</b>	<b>8.8</b>	<b>9.0</b>

<sup>a</sup> Public assistance to development less financial flows.

(Source: Ministry of Foreign Affairs, 1995)

is domestic forestry research, the EFN includes tropical forestry co-operation in its mission statement, and has several staff with appropriate experience gained in the ex-colonies. It has conducted research or made advisory contributions to project missions in such areas as forest and pasture ecology, forest protection and management, species selection and control, and forest dynamics. However, EFN's co-operation activities, particularly in the area of training, have stemmed more from the initiatives of individual staff than as a result of Ministerial level planning.

From Table 1, it can be seen that the Ministry of Finance's share of the aid programme of the Ministry of Finance increased steadily from 43% to 74% in the six years to 1994, while that of the Ministry of Foreign Affairs declined from 39% to 16%. Table 1 also reveals the low aid allocations of the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of the Environment. However, the Ministerial distribution is not a reliable indicator of the sectoral breakdown of the aid programme, since most of the aid comes under the Ministries of Foreign Affairs and Finance. Table 2 shows that the contribution of the Ministry of Education, for example, bears no relation to the sectoral importance of education. Forestry projects have generally come under either Agriculture or Environment in this classification.

Many of the *ad hoc* co-operation activities of the Ministries, particularly in the case of forestry and the environment, are financed from 'current expense' accounts, which makes it difficult to trace the activities and amounts involved. Also, apart from the Ministries, there are a range of other actors like universities, city councils and NGOs with financial autonomy. The aid activities of these organisations are often not included in official statistics. The decentralised (institutionally as opposed to geographically) and administratively complex<sup>4</sup> aid system makes it difficult to establish the true sectoral breakdown.

It is apparent from the legislative history involving the creation and dissolution of various aid institutions, including a Ministry of Co-operation which was created in 1975 but lasted less than a year, that there has been an on-going debate about the relative merits of a more vertical and hierarchical system as opposed to the existing 'horizontal' system. A further change in the aid structure was expected in 1997, when it was thought the state budget would earmark a co-operation budget line for each Ministry. This should improve accounting and coordination.

4. The state accounting system is based on 'expense items' rather than projects, making it difficult to calculate the expenditure per project.

### 3.2 Actors in aid delivery

While there is no official forestry co-operation adviser, considerable expertise is located in the EFN, the IICT and the universities. Of 18 projects identified as having a forestry component (see Section 5) the main Portuguese agencies involved in aid delivery were EFN (involved in 8 projects), the Forestry Directorate (4 projects), the Agronomy Institute of the Technical University of Lisbon (2), the IICT (2), and the ICP, the Nature Conservation Institute, and the Ministry of the Environment (one each). Consultancy companies were not used at all, although they figure in other sectoral co-operation, and Portuguese companies have been involved in some major EU forestry programmes in, for example, Brazil and Guinea-Conakry.

For projects financed by the ICP, project management and monitoring are carried out by in-country desk officers of the Division of Agriculture of the ICP, and for projects financed through the Ministry of Agriculture, Forestry and Fisheries, through the head of the Co-operation Division.

NGOs in Portugal have not had a major role or impact on forestry and environmental aid. There has been relatively limited state encouragement, for example through the provision of grants or subsidies, for them to get involved in tropical forestry. Portuguese NGOs tend to focus on health, education and other social service projects.

### 3.3 Multilateral forestry initiatives

Although Portugal is well represented in various international fora, and contributes regularly to GEF, a UNDP Trust Fund for the PALOPs, SADC, UNESCO, etc., there is no evidence of a specifically forestry commitment, apart from a June 1996 'Expert Meeting on Desertification, Rehabilitation and Reforestation of Degraded Lands' with FAO, Cape Verde and Senegal. This stemmed from the Desertification Convention.

## 4. STRATEGY OF FORESTRY CO-OPERATION

### 4.1 Sectoral priorities

The main aid policy statement (MNE, 1995) lists the main co-operation objectives as follows:

- the promotion of peace and the resolution of conflicts by dialogue;
- the consolidation of democracy, the legal system and respect for human rights;
- the search for sustainable and participatory development;
- the gradual integration of developing countries into the world economy;
- the tackling of poverty, especially in the PALOPs.

These priorities are influenced by Portugal's participation in various multilateral fora, such as the EU Lomé Convention discussions, the DAC and various UN and Bretton Woods institutions.

Particular emphasis is placed on reinforcing the administrative and economic structures or institutional capacity of recipient countries to help them embark on a process of sustainable development. A recent analysis

of Portuguese co-operation (Ribeiro, 1995) found that priority has been given to three main areas: improvement of the human resource basis of sustainable development, 'entrepreneurial' co-operation, and military co-operation.

The priority to supporting the institutional, and especially human resource, basis of development is reflected in the aid statistics. Table 2 showed that co-operation has been dominated by social infrastructure and services, especially education, with relatively little aid going to the 'productive' sector. Within the latter, agriculture, which includes forestry, declined in relative importance over the 1991–4 period from being the most important category in the sector in 1991 with 3.7% of total co-operation, to fourth in 1994 with 2.2%.

### 4.2 Tropical forestry 'policy'

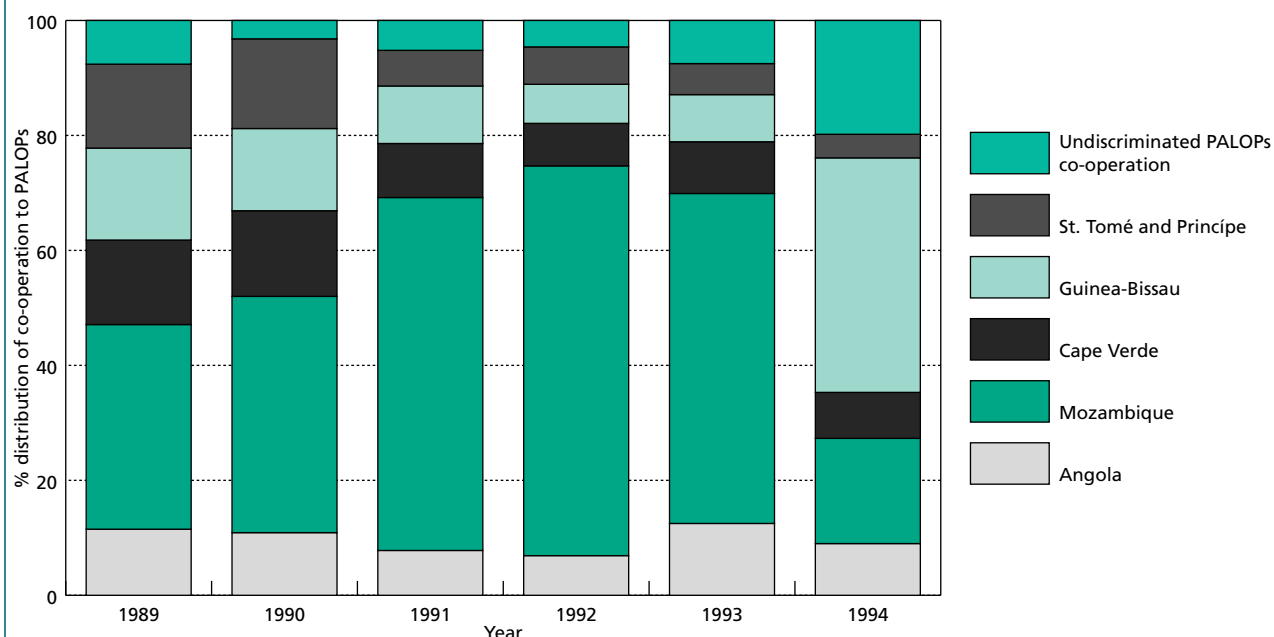
Within the agrarian sector, the priorities have reflected the general co-operation priorities, with most actions orientated towards developing human and institutional capacity, for example an emphasis on training, and technical assistance directed towards the process of institutional consolidation. While in the earlier years of the aid programme the emphasis was on longer-term Portuguese technical co-operation, fears of creating dependency have resulted in a shift to short-term missions and scholarships.

There have been no policy statements specifically on tropical forestry beyond *ad hoc* statements during visits by Portuguese Ministers of Agriculture to Africa. For example, at a meeting of the Ministers of Agriculture of Portugal and the PALOPs, sustainable natural resource management and biodiversity conservation were given great importance, but also that more aid and better planning were needed. Portugal recognised the need for comprehensive and coordinated action with its partners in tropical forestry actions, and committed itself to supporting the national TFAP processes. In order to further consultation and coordination, the Ministers agreed the need for annual meetings and a coordinated approach to implementing the forestry actions in Agenda 21 (Minutes of the First Meeting of Ministers of Portuguese-speaking countries, Luanda, 16–17 March 1994). On a mission to Guinea-Bissau, Portugal's Minister of Agriculture also emphasised the importance of tropical forests, and Portugal's desire to help the Guinea-Bissau Forestry Directorate formulate its TFAP (Minutes of the visit of the Secretary of State for Agriculture to Guinea-Bissau, 6–10 May 1991).

### 4.3 Reasons for a low priority for tropical forestry

According to the data on identifiable tropical forestry projects in section 5, it can be estimated that the annual average commitment to forestry projects between 1989 and 1996 was about \$420,000. This represents an average of only about 0.2% of bilateral co-operation over these years. There are various possible explanations for the relatively *ad hoc* nature of forestry co-operation activities, and the low importance given to forestry in the Portuguese aid programme. These include (in the view of the senior author):

- the tendency to take a short-term policy view as a

**Figure 1. Distribution of co-operation between the PALOPs**

(Source: Ministry of Foreign Affairs, 1995)

result of the country's relatively recent history of economic and political instability;

- the institutional, social and political difficulties of promoting forestry in Portugal's two most important ex-colonies, Angola and Mozambique, because of the prolonged civil wars;
- the relatively recent (from the 1980s) consolidation of political and institutional relationships with the PALOPs;
- a ten-year gap in tropical forestry teaching in Portugal, and lack of appropriate tropical forestry research, including little involvement with such organisations as CIFOR, ITTO, etc.;
- the relatively unimportant amount of trade in tropical timber, although this is increasing;
- the lack of quality information on sectoral problems in the PALOPs to feed into policy formulation;
- the lack of informed debate, stemming from poor information and inadequate policy discussion mechanisms, for example between aid negotiators and institutions in the forest sector.

However, it appears that two factors may have been particularly significant in the disappointing coherence and lack of importance of forestry in Portugal's co-operation policy. First there were a series of influential policy discussions involving aid officials, academics and NGOs in the run-up to the UNCED Conference. At these the 'root causes' of tropical deforestation were discussed. After analysing several case studies,<sup>5</sup> one of the conclusions reached was that deforestation was related more to agricultural problems and weak state institutional capacity, particularly as regards land tenure issues, than to forest sector policies and problems.

This might partly explain the almost complete absence of mainstream forestry activities like sustainable forest management, reforestation, agroforestry or

even 'defensive' biodiversity conservation among the projects supported. Most 'forestry' projects have been concerned with institution building or human resource development, in line with the general trend. At the same time, the early policy-type statements from the above-mentioned meetings in Africa imply an acceptance of the principles enunciated in the TFAPs, such as the need for aid to encourage the environmental and social dimensions of tropical forestry.

The second factor has been the division of domestic sectoral responsibilities: productive forestry comes under the Ministry of Agriculture, Forestry and Fisheries; conservation aspects and national parks under the Ministry of the Environment; and forest fire control under the Ministry of the Interior. The lack of a clear owner of 'forestry' in Portugal has arguably spilled over to the tropical front.

#### 4.4 Geographical priorities

As already stated, there is an overwhelming concentration of Portuguese aid on the 5 PALOPs. The proportion of the aid programme going to other countries, mainly Brazil, China, Tanzania, Morocco, Tunisia and Argentina, has slightly increased in recent years, but was still only 20% of bilateral aid in 1994.

Figure 1 indicates considerable fluidity in the PALOPs' relative importance. For example, Mozambique was easily the most important aid recipient from 1989 to 1993, and from 1991 to 1993 absorbed about 60% or more of total aid to the PALOPs. But in 1994 its share dropped to less than 20%, while Guinea-Bissau, having previously been allocated 15% or less of PALOPs' aid (and in 1993 only about 8%), rose to 40% of the PALOPs' budget.

Within the agrarian sector, however, the picture is rather different, with Angola receiving most aid both in 1993 and 1994, followed closely by Guinea Bissau. Mozambique ranked only fourth in both years. Thus country prioritisation for forestry bears little resemblance to the overall distribution of aid.

5. No report was available from these discussions; the discussion here is based on the memory of the senior author.

## 5. PROJECTS FUNDED BY TYPE AND GEOGRAPHICAL DISTRIBUTION

Because of the complexity of the aid structure, it was difficult to obtain a comprehensive list of projects. Since 1989, only 18 forestry 'projects' could be identified. As can be seen from Table 3, one country, Guinea-Bissau, was a beneficiary of most of the projects, while Mozambique and Angola only benefited from the relatively modest training activities that resulted from personal initiatives on the part of EFN staff.

As can be seen from Table 3, most of the projects involved institutional strengthening through human resource development, in accordance with the overall aid strategy. Other projects were of a cross-sectoral nature, or concerned research, forest industry development and, in one case, biodiversity conservation. Most of the projects entailed very modest costs, in so far as this was possible to estimate, with the exception of a research capacity-building project in Guinea-Bissau. However, the costs shown in Table 3 underestimate the true costs involved. For example, in the case of training, the costs shown are only the direct scholarship costs.

Forestry training conducted by the EFN has covered, among other topics, forest mensuration, beekeeping,

taxation, use of computers in harvest control, principles of forest policy, forest protection, forest statistics, hydrobiology and freshwater management, and isozymes in forest breeding work). Scholarships to study in Portugal are usually provided by the ICP.

## 6. RESEARCH AND TRAINING

Several Portuguese institutions have a forestry research capacity, including staff with tropical experience:

- the EFN (see section 3) conducts research in the areas of forest science, wood science and technology, forest ecology and protection, and natural resources management;
- the CETF (see section 3) specialises in wood technology, particularly wood chemistry and anatomy;
- the Forestry Department of the University of Trás-os-Montes e Alto Douro conducts research in the area of tree breeding and wood qualification, but has no on-going tropical work;
- the Department of Forestry Exploration of the Higher Agrarian School of Coimbra specialises in forest management, forest economics and tax policy;
- the Laboratory of Civil Engineering in Lisbon is well-equipped to conduct research in physical and

**Table 3. Portuguese tropical forestry initiatives 1989–96**

COUNTRY	PROJECT DESCRIPTION	TYPE (EU code)	DURATION	COMMITMENT US\$000
Guinea-Bissau	Analysis of forest industry (part of TFAP)	10	1996	480
Guinea-Bissau	Uniforms to forest guards	10	1995	19
Guinea-Bissau	Lagoon zoning and management	30	1995	32
Guinea-Bissau	Support to EU cashew research project	50	1990–6	69
Guinea-Bissau	Fallow enrichment/soil fertility in farming systems	50	1993–6	77
Guinea-Bissau	Fruit/hortic. research, infrastructure development	60/50	1989–96	> 2244
Guinea-Bissau	Forestry training	60	1995	9.7
Guinea-Bissau	Evaluation of Agrarian Research Institute	60	1996	8.5
Guinea-Bissau	Forestry training	60	1989–96	22
Guinea-Bissau	Forestry training	60	1996	2.7
Mozambique	Forestry training	60	1996	5.8
Mozambique	Forestry training	60	1996	1.1
Mozambique	Forestry personnel exchange/training	60	1997 planned	16
Angola	Forestry training	60	1990	14
Angola	Forestry training	60	1996	2.7
Cape Verde	Agroforestry teaching support	60	1993–6	288
Cape Verde	Mapping and zoning	60/70	1990–3	97
St Tomé & Príncipe	Forestry training	70	1996	5.5

EU Codes: 10 Forest industry  
 30 Conservation and protection of natural resources  
 50 Research projects  
 60 Institutional strengthening  
 70 Transectoral projects

mechanical timber properties, and has co-operated with similar laboratories in the PALOPs.

Portugal has not taken an active part in the CGIAR system, and lack of involvement with CIFOR, for example, may have weakened its knowledge base for effective sectoral interventions.

On the training side, it is evident that training is a priority in Portuguese forestry aid, and the activities of EFN and the General Forestry Directorate have already been mentioned. Other significant actors in forestry training in Portugal include:

- the Forest Department of the Higher Agronomy Institute of the Technical University of Lisbon, which supports the teaching requirements of a BSc in Agroforestry in Cape Verde, and after a 10 year gap, plans to reactivate a course in tropical forestry; and
- the Higher Agrarian School of Coimbra runs a BSc in forest management and, like EFN, has been involved in training African foresters.

## 7. PROJECT CYCLE METHODOLOGY

### 7.1 Project identification and appraisal

Project identification occurs in the PALOPs in the form of demands or requests for projects by state organisations. These are presented to the Mixed Commissions that meet each year under the auspices of the Ministry of Foreign Affairs in each country. These assess requests and convert them into project proposals listing the objectives, justification, and resources required. Project identification is therefore essentially a reactive process with little attempt to influence national policy priorities, at least in the case of forestry. This may be related to the absence of environmental or forestry advisers in the Mixed Commissions.

The project then goes to the Ministry of Foreign Affairs for appraisal. In general, the 'integrated approach' as described in the EC's 1993 Project Cycle Management manual, and including the logical framework, is used to appraise and design projects. In the case of forestry projects, technical advice is called in from the various institutions with tropical forestry expertise, particularly the EFN and the CETF (see section 3), or from others with less specialised knowledge. In the case of requests for forestry training, the EFN looks at the feasibility in terms of the financing needed, evaluation of the trainee and department where the training will take place, etc.

### 7.2 Monitoring and evaluation

Monitoring and evaluation are normally limited to reports from project missions, ICP desk officers or the Co-operation Division of the Ministry of Agriculture, Forestry and Fisheries. Typical comments in reports were 'mission accomplished according to objectives', 'poor support by local institutions', 'insufficient funding', etc. The most common criticisms referred to:

- lack of debriefing following missions;
- weakness of the follow-up after missions (there has

been a tendency that once a report is presented, for example on institutional strengthening, to assume the aid recipient country has the capacity to implement the recommendations).

Only in one case, the fruit and horticultural research institution-building project in Guinea-Bissau, was there reference to an external evaluation.

## 8. PROJECT REVIEW

### 8.1 Guinea-Bissau Forest Industry Project

This two-year project represented Portugal's main contribution to Guinea-Bissau's TFAP, with an estimated commitment (in 1996) of US \$480,000. The counterpart organisations were to be the Ministries of Commerce and Industry, and the Ministry of Rural Development and Agriculture (General Directorate of Forestry and Wildlife). The project aimed to tackle some of Guinea-Bissau's main problems in the forest sector, such as those surrounding the over-exploitation of primary species, the maintenance of sawmilling equipment, and the quality of finished timber products. Its specific objectives were to draw up plans for restructuring viable forest industries and closing those that were not viable; to reduce pressure on primary species by increasing the (processed) value of secondary timber species; to train nationals in sawmill skills; and to set up a professional association of sawmillers and loggers in order to improve the efficiency of the industry as it is modernised and privatised, and for consultation with the government, especially on trade issues.

The main activities were to include financial and technical auditing of all forest industries; tests on the plywood potential of secondary species and other technological studies (to be carried out in Portugal); technical-economic feasibility studies; an export-market study for high value wood products; and sandwich courses in sawmilling and furniture making. The training was to take place in Portugal, Brazil and the partner country. Portuguese technical assistance was to be an important component of the project, with various missions to Guinea-Bissau, a mission to West Africa, market studies, and laboratory analysis of secondary species. The main Guinea-Bissau contribution was to be the provision of a university graduate, who, once trained, would provide technical follow-up.

However the project has been jeopardised because the programmed EU contribution to the project failed to materialise (since Guinea-Bissau did not include the project among its priorities in the Lomé round of negotiations). Consequently Portugal spent only \$48,000 in 1996 in the form of two exploratory problem-identification and design missions, and has only earmarked \$26,000 for the project in 1997.

## 9. CONCLUSION

Portugal's aid programme is orientated mainly to the five African Portuguese-speaking countries, which absorbed 80% of its bilateral aid in 1994. The large number of actors in the aid structure, and the lack of a central coordinating and decision-making body, mean that the system is flexible but may inhibit coordination,

efficiency and evaluation. These factors also make it difficult to develop coherent aid policies. Many aid activities stem from different Ministries. Especially in the areas of agriculture, forestry and the environment, they are of an *ad hoc* nature and are listed under 'current expenses' in their budgets. This makes it difficult to account for the true values involved.

Forestry has had a low priority in the Portuguese aid programme; it can be estimated that forestry aid commitments have represented about 0.2% of average bilateral aid over recent years. One possible reason for this has been the belief that extra-sectoral causes of deforestation are more important than sectoral causes; for example, a meeting in the run-up to the UNCED Conference concluded that efforts to alleviate deforestation would be best directed at farming improvements. Another possible reason has been the lack of a clear institutional 'owner' of forestry on the domestic front.

According to the nature of the projects supported rather than to any policy statements, the main priorities in forestry aid, in accordance with the general aid priorities, have proved to be institution-building and human resource development. There has been negligible action in areas such as forest protection, reforestation and natural forest management.

## REFERENCES

- Barros, João de (1552) *Ásia*. Déc. 1.
- Boxer, C. R., (1969) *The Portuguese Seaborne Empire, 1415 – 1825*. Hutchinson, London.
- Brouwer, R., (1993) *Planting Power. The Afforestation of the Commons and the State Formation in Portugal*. CIP-Gegevens Koninklijke Bibliotheek, The Hague.
- Carvalho, J. A., Tavares de e Nunes, F. J., and Pereira, S.F., (1956) *Contribuição para o Estudo do Problema Florestal da Guiné Portuguesa*. Estudos Ensaios e Documentos XXX. Junta de Investigações do Ultramar, Lisbon.
- Devy-Vareta, N., (1985) Para uma geografia histórica da floresta portuguesa. as matas mediavais e a 'Coutada Velha' do Rei. *Rev. da Fac. de Letras – Geografia*. I Série, Vol. 1: 47–67.
- Ferreirinha, M. P., (1955) Catálogo das Madeiras de Moçambique. *Memórias, Série Botânica I*. JIU, Lisbon.
- Ficalho, conde de (1884) *Plantas Úteis da África Portuguesa*. Imprensa Nacional, Lisbon.
- Gomes e Sousa, A., (1926) A Região Florestal da Ganda. *Boletim dos Serviços de Agricultura de Angola*, Luanda.
- Gomes, Rui Cinatti V. M., (1950) *Reconhecimento Preliminar das Formações Florestais no Timor Português*. Estudos Ensaios e Documentos V. Junta de Investigações do Ultramar, Lisbon.
- Gossweiler, J. (1953). *Flora Exótica de Angola*, Luanda.
- Henriques, Cristóvão José (1968) Acerca da regeneração natural da floresta densa húmida (Maiombe, Angola). Um caso de inventariação. Sua análise. *Garcia de Orta*. Vol. 16, nº 4, Lisbon.
- Hiern, W. P., (1900) *Catalogue of the African plants collected by Dr. Friedrich Welwitsch*
- Mendonça, J. da Costa (1961) *75 Anos de Actividade na Arborização das Serras*. Ministério da Economia, Secretariado de Estado da Agricultura, DGSA, Lisbon.
- MNE (1995) *Portugal. Dez Anos de Política de Cooperação*. Ministério dos Negócios Estrangeiros, Lisbon.
- Neves, C. M. Baeta (1978) *História Florestal, Aquícola e Cinegética*. 5 Vols. Ministério da Agricultura, Lisbon.
- Neiva Vieira, J. A., (1990) Portugal, país de florestas! E que sabemos nós da Nossa História Florestal. *DGF-Informação* 4:23–7.
- Neiva Vieira, J. A., (1991) Arborização e desarborização em Portugal. *Revista da Ordem dos Engenheiros* 55: 4–18.
- Orey, J. D. Sampayo (1955 – 1959) *Essências Florestais da Guiné Portuguesa*. Nº 1 a 18. JIU, Lisbon
- Queiroz, Jorge de Barro R., (1950) Ensaio sobre a cultura dos pinheiros no Planalto da Huila. Sociedade de Ciências Agronómicas de Portugal. Delegação de Angola. Sep. *Agronomia Angolana*.
- Ribeiro, Mário (1995) *Tendências e Novos Protogonismos da Cooperação Portuguesa*, 9 pg. In: Uma Política de Cooperação para o Desenvolvimento. Debate e Propostas. Instituto de Estudos para o Desenvolvimento, Lisbon

## KEY CONTACTS

The main point of contact should be the Portuguese Embassies

Instituto de Cooperação Portuguesa  
Av. da Liberdade, 192–2º  
1250 Lisboa  
Tel: +351 1 356 2031

Secretary of State for Foreign Affairs and Co-operation  
Ministério dos Negócios Estrangeiros  
Palácio das Necessidades  
Largo do Rilvas  
1350 Lisboa  
Tel: +351 1 396 5041

Gabinete de Planeamento e Cooperação para o Desenvolvimento  
Ministério de Agricultura  
Av. R. Padre Antonio Vieira Nº 1  
1070 Lisboa  
Tel: +351 1 3819300  
Fax: +351 1 3876635

Direcção Geral das Florestas  
Av. João Crisóstomo 26–28  
1 000 Lisboa  
Tel: +351 1 315 6132/8  
Fax: +351 1 312 4987

Estação Florestal Nacional (EFN)  
Rua do Borja nº 2  
1 350 Lisboa  
Tel: +351 1 397 601661  
Fax: +351 1 397 3163  
web site: <http://www.imporlivro.pt/efn>

## ACRONYMS

CETF	Centro de Estudos de Tecnologia Florestal (Tropical Forest Technology Centre)
CGIAR	Consultative Group on International Agricultural Research
CIC	Comissão Interministerial para a Cooperação (Inter-Ministerial Commission for Co-operation)
CIFOR	Centre for International Forestry Research
EFN	Estação Florestal Nacional (National Forestry Research Station)
Es	Escudos
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GNP	Gross National Product
IC	Camões Institute
ICP	Instituto da Cooperação Portuguesa (Institute for Portuguese Co-operation)
IICT	Instituto de Investigação Científica Tropical (Tropical Scientific Research Institute)
IMT	Tropical Health Institute
ITTO	International Tropical Timber Organization
MNE	Ministério dos Negócios Estrangeiros
NGO	Non-Governmental Organisation
PALOP	Países Africanos de Língua Oficial Portuguesa (Portuguese-Speaking African Countries)
SADC	Southern African Development Council
TFAP	Tropical Forestry Action Plan
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation

## ACKNOWLEDGEMENTS

This chapter has benefited from discussion with a number of people including the following: Dr. Teresa Quilhó, Centro de Tecnologia Florestal Tropical (CETF), IICT; Eng. Álvaro Soares de Melo, Divisão de Relações Bilaterais, Ministério da Agricultura; Eng. Eugénia Rocha, Professional Training Division, EFN; Eng. Jacinto Carriço, Divisão de Relações Bilaterais, Ministério da Agricultura; Eng. Maria Manuela Pedrosa, Cooperação Bilateral, Direcção Geral dos Serviços Florestais; Eng. Nuno Sousa Costa, Natural Resources Department (Beekeeping), EFN; Prof. Dr. Angelo de Oliveira, Silviculture, Departamento de Engenharia Florestal of the Instituto Superior de Agronomia; Prof. Dr. Augusto Correia, Departamento de Agronomia Tropical, Instituto Superior de Agronomia; Prof. Dr. Belo Moreira, Departamento de Economia Agrária, Instituto Superior de Agronomia; Prof. Dr. Carlos Pacheco Marques, Departamento Florestal, Universidade de Trás os Montes e Alto Douro, Vila Real; Prof. Dr. Fernando Páscoa, Departamento de Exploração Florestal, Escola Superior Agrária, Coimbra; and Prof. Dr. Ilídio Moreira, Centro de Botânica, Instituto de Investigação Tropical, IICT.

Note on currency: on 1 September, 1997, US\$ 1 was equivalent to Es 183.54.