Netherlands

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Contents

1. HISTORY OF FORESTRY IN THE NETHERLANDS

1.1 Temperate forest history

In the country which is now known as the Netherlands, the human influence on the landscape has long been intense. It was not always so. The two most westerly provinces of the Netherlands derive their name from their once heavily wooded character (wood is *'holt'* in old Dutch, hence *'holt-land'* – Holland). However, records show that even by the time of Charlemagne (742–814) most of the natural forest had been lost. By the thirteenth century, shortage of forest resources was severe, particularly in the north.

Much of the timber loss in this period can be attributed to the use of wood as a fuel for iron smelting. The implications for rural populations were considerable. Forests provided a range of resources of general value, including firewood, timber for construction, leaf litter and peat (for maintaining soil fertility), as well as hunting areas and grazing lands (Corten, 1997). The extent of pressure on the resource encouraged local communities very early on to demarcate their forests and invest in their management (Buis, 1993; Corten, 1997). Local management associations were established in the late Middle Ages to regulate the use of forests and common lands, and to prevent encroachment by outsiders. These associations – *'marken'* in Dutch – reflected the prevailing patterns of land ownership, for voting rights were linked to the possession of agricultural land.

So was established the profile of the small-scale land management systems which came to characterise natural resource management in the Netherlands. These developed over the centuries into a system of regulations for tree planting and replanting, for cattle grazing, and for fencing of common and private lands, and they led also to the rise of shelter systems for the intensive management of cattle and other livestock. Under the influence of rising population pressure, much of the Netherlands' forest gave way to the heath moorlands which are still much in evidence in many parts of the country. Continued peat extraction led to heavy erosion of these moors, and drifting sand became a hazard to agriculture (Buis, 1985).

There is no history of large scale forestry or timber industry in the Netherlands, and today, as in the past, forest activities remain largely oriented to the support of other sectors such as agriculture and industry. High population pressure (the Netherlands is one of the most densely populated countries in the world[1]) has led to a widespread public awareness of the impact of humans on the forests. It is perhaps unsurprising that community forestry has come to occupy a particularly important place in Dutch development aid.

1.1.1 The Public Forest Service in the Netherlands

The State Forest Service, SBB (*Staatsbosbeheer*), was founded in 1899, and initially managed only 13,000 ha. of forests, dunes and drifting sands. Nowadays it is responsible for over 180,000 ha. of public lands, half of them forests, the other half comprising grasslands, moors, peat bogs, marshlands and recreational areas. SBB, a Directorate of the Ministry of Agriculture, Nature Management and Fisheries, has primary responsibilities for the management and development of forests, and for 'nature management'. In line with the overall policy of the Ministry (which is committed to public participation in planning activities), the service is regionalised, with 14 regional offices, each subdivided into districts. The regions are chosen for their ecological integrity, and do not necessarily correspond to administrative areas.

1.2 The international timber trade

The Netherlands has been a major importer of wood since as early as the Middle Ages (8–13th centuries). It was in the seventeenth century, however, that timber imports developed a real importance, mainly due to the growth of the Dutch shipbuilding industry. Nearly all the wood necessary for this industry was imported into the country from elsewhere (Buis, 1985). Much of the early imports of timber passed down the River Rhine into the Netherlands from its eastern neighbours. Gradually, the centres of trade shifted to the tropics, particularly the West and East Indian colonies.

Before the turn of the present century, imports of tropical timber were restricted to a few specialised hardwoods. Between the two World Wars, annual imports from the tropics grew steadily to between 50,000 and 100,000 cubic metres roundwood equivalent. After the Second World War, and particularly from the early 1960s, these imports rose significantly, and by 1987 had reached more than 1.5 million cubic metres roundwood equivalent (von Meijenfeldt, 1989). Species composition has gradually changed as the most coveted species (ebony, teak, mahogany and demerara greenheart) have been priced out of the market, to be replaced by more utilitarian species such as red meranti, merbau, azobé and ramin (*ibid*). In terms of its origins, the Dutch tropical timber trade closely resembles the pattern of world trade: around 80% comes from South-east Asia, 18% from Africa, and less than 2% from South America.

2. FORESTRY IN THE COLONIAL PERIOD

2.1 The colonial expansion

The Netherlands had an early interest in tropical forests, and the reasons for this (in addition to the rapid depletion of its own temperate timber resources) can be found in its colonial history. In the early seventeenth century, the Dutch led the world in trade, science and the arts, and it was in this period that the colonial empire was established. In 1619, the Dutch East India Company took Jakarta on the northern shore of West Java, and renamed it Batavia. Initially, Dutch influence was restricted to certain trading centres, but by the late eighteenth century control of the territory was complete. The Indonesian islands were proclaimed a Dutch colony in 1816. Surinam in South America was established as an English colony in 1650, and became

1. Almost 16 million people living in a total area of only 30,000 km^2 (over 500 per km^2)

Dutch Guyana in 1667. The Dutch Antilles were also colonised in the seventeenth century, and remained a colony until they became a fully autonomous island group of the Netherlands in 1954.

By far the most important of these possessions was the Netherlands East Indies (Indonesia), where the Dutch retained a presence for over three centuries until 1949, when the country was proclaimed an independent state. Indonesia was also the most important of the Dutch colonies from the perspective of tropical forestry.

According to Kartasubrata and Wiersum (1993), three phases can be distinguished in Indonesia's forest management up to the end of the colonial period:

- the pre-colonial period with a large variety of indigenous management systems, about which little is known;
- the teak era which started around 1800 in which forest management concentrated on sustained teak production;
- the forest plantation era, starting around 1930, in which the main focus of forest management was on establishing new plantations for purposes of both industry and watershed protection.

It was the importance of the Javan teak forests to the metropolitan naval industries (and thus to the whole economy) that led to early Dutch attempts at tropical forest management. The first regulations on forest management in Indonesia were laid down in 1808 by the colonial governor Daendels, but these failed to prevent the over-exploitation of the resource (Smiet, 1990). In 1849, the first professional foresters were appointed, with a brief to develop improved cultivation practices of the teak forest estate (Boomgaard, 1992). By this time, the principle of public responsibility for the management of the resource in the interests of the metropolitan government, as laid down by Governor Daendels, had become firmly established in forestry policy. The principle that forest conservation was best assured by state stewardship over forest lands led logically to the establishment of a professional forestry service, with responsibilities for control of forest lands, tree species development and management practices (Peluso, 1991).

Initially, the Netherlands, like so many of its European neighbours, depended on Germany to develop its expertise in tropical forestry. Following the lessons of their German teachers, the Dutch foresters focused their attention on the attempt to achieve sustainable yields. This was technically and economically feasible for teak in Javanese conditions, despite long rotations, as the timber commanded a high price and labour was very cheap (de Graaf and Hendrison, 1993).

The Indonesian experience was crucial to the development of Dutch tropical forestry expertise, and many professional foresters were later to transfer the knowledge they had gained in Indonesia to younger generations from the Netherlands, its colonies and elsewhere.

The same can be said, albeit to a lesser degree, of the second most important of the Dutch colonies, Dutch Guyana (Surinam). Surinam was a Dutch colony continuously from 1667 to its independence in 1975, and its successive forest policies reflect its colonial past. The arrival of the Dutch completely changed the functions of Surinam's forests which had hitherto been used by the indigenous population only for slash and burn cultivation and associated hunting and fishing activities. The high demand in the Netherlands for construction timber (again the naval industry was a central and strategic concern) reoriented the Surinam forests to the interests of the metropolis, and forest management became subordinated to the needs of trade. Timber was floated down the navigable rivers of the colony to the coast, from where it was transported to the Netherlands. Paradoxically, sawn wood was imported into Surinam from Europe, as sugar merchants back-loaded otherwise empty ships returning to the colony (Hendrison, 1990).

Around the turn of the present century, balata *(Manilkara bidenta)* experienced a boom in demand (its latex is used for a variety of culinary and industrial purposes), and thousands of tappers sought their fortunes as rubber prospectors in the interior. This led to concern in official circles as to the sustainability of the resource. Silvicultural experiments failed to stimulate natural regeneration of balata trees, and so felling was prohibited by law, an ordinance which is still in force (de Graaf and Hendrison, 1993). In 1904, the first Forest Service was established in Surinam, only to be abolished in 1925 following the failure of silvicultural experiments (such as the balata project) to generate a profit for the state.

With the economic upturn that followed the Second World War, the Surinam Forest Service was revived, under the name of *Dienst Lands Bosbeheer (LBB)*. Under the direction of LBB, hundreds of kilometres of all-weather trucking roads were constructed to open up the interior to the timber trade, and silvicultural experiments involving both planting and natural regeneration were commenced. Wood technology research focused on plantations of *Pinus caribaea* and on enrichment planting, though the latter met with many difficulties. On a more positive front, in 1964 Dutch and Surinamese researchers at the CELOS Research Institute began testing possibilities of monocyclic and polycyclic methods for natural regeneration and forest management. The 'CELOS model' which resulted from these efforts has developed into a complete management system for natural forests in Surinam, incorporating silvicultural, exploitation and logging aspects (see Box 1) and this made an important contribution to the development of sustainable forest management on a global scale (de Graaf and Hendrison, 1993).

The Netherlands' long colonial history resulted in the development of an extensive interest in, knowledge of, and capacity for, tropical forestry (DGIS, 1996b). Before the First World War, efforts were concentrated mainly on the exploitation of natural forests in Indonesia and Surinam, the development of silvicultural practices (relating primarily to teak plantations) and the establishment of forest management and research institutions. Academic forestry education in the Netherlands originated in this period.

2.2 Post-colonial interest in tropical timbers

Tropical forests have retained their importance to the Netherlands in terms of commerce and trade through-

out the post-colonial period, providing another justification for Dutch interest in the discipline of forestry. Of all the industrial tropical hardwoods exploited globally in the 1980s, 35–40% were traded internationally and about 3.5% of these were destined for the Netherlands. The five most important suppliers, together covering 95% of Dutch needs, were Malaysia, Indonesia, Cameroon, Côte d'Ivoire and Gabon. Almost all of this wood originated from natural forests, mostly in the rain forest zones (von Meijenfeldt, 1989).[2]

3. THE STRUCTURE OF NETHERLANDS' AID TO TROPICAL FORESTRY

3.1 Levels of official development assistance

The Netherlands has long shown a high level of commitment to international aid.[3] Along with Denmark, the Netherlands was the first to define specific budgetary targets for aid. In 1967, the country pledged to increase its aid to 1% of net national income within four years, and in 1976, this was increased to 1.5%. The Netherlands reached the UN target of 0.7% of GNP for official development assistance in 1975, and since that time, it has remained among the leading DAC donors. Although official development assistance has declined somewhat in recent years, the country's aid volume remains high. The oda/GNP ratio declined from a high of 0.99% in 1986/7 to 0.81% in 1993, though this still represents an outlay of $2.5 billion (OECD, 1994).

Bendix (1996) attributes this commitment to a number of factors. The Netherlands is a small country with a turbulent history, highly populated and heavily dependent on international trade. The country's own colonial history and, in the past, the high level of migration to the colonies (and the traumatic experience of decolonisation) have all served to foster a climate of cosmopolitanism. Its international trading activities also created a large and prosperous middle class that continues to act as its 'determining social force' (Bendix, 1996:24). One consequence of this history has been a high degree of national consensus in favour of public philanthropy and development aid, through the interventions of both state and civil society.

3.2 The organisation of Dutch development aid

3.2.1 Official Aid

Dutch official bilateral aid is organised in an unusual way. Since 1965, there has been a Minister for Development Co-operation of Cabinet rank, but this Minister operates without a Ministry. The Minister's influence is exerted primarily through the Ministry of Foreign Affairs, though the Minister also has influence in other associated Ministries, such as Economic Affairs, Defence, etc. The position of Minister for Development Co-operation permits some degree of centralisation of donor assistance, but without the need for an independent structure of aid administration (Melkert, 1986). Prior to the administrative reorganisation of January, 1997, the Minister depended largely on the staff of the Directorate-General for International Co-operation (DGIS[4]) within the Ministry of Foreign Affairs, for the planning, management and much of the implementation of development co-operation activities. Since January, 1997, Country Desks have been transferred out of the DGIS into other parts of the Ministry of Foreign Affairs. This is intended to make it easier to integrate international co-operation with Foreign Affairs, though its effect has been a significant reduction in the size and compass of the DGIS.

Aid policy is coordinated by two interministerial bodies under the control of the Minister for Development Co-operation. The interministerial Co-ordination Committee for Development Co-operation (COCOS) is chaired by the Director-General of DGIS. The committee's mandate covers the whole range of aid policy and budgeting matters. In the event of irreconcilable differences of views within COCOS, decision-making is passed to the Council for Development Co-operation (ROS), a ministerial sub-committee chaired by the Prime Minister (OECD, 1994;10).

The Ministry of Foreign Affairs through its Directorate-General for International Co-operation bears primary responsibility for development co-operation and controls the budget for its implementation, including co-operation in tropical forestry. For 1997, the overall budget was set at 6,413 million Guilders.[5] A number of other ministries are also involved in matters relating to tropical forestry. The Ministry of Agriculture, Nature Management and Fisheries (*Ministerie van Landbouw, Natuurbeheer en Visserij* or 'LNV') is responsible for policy development in international agricultural, forestry and nature management. The Ministry of Economic Affairs and the Ministry of Housing, Spatial Planning and Environment also have competences which impinge on international forestry.[6] Another unusual feature of the Dutch system is the institute, *IKC-Natuurbeheer* ('IKC-N', the National Reference Centre for Nature Management) of the Ministry of Agriculture, which exists to secure the flow of information to policy makers and also acts as the Ministry's institutional memory. IKC-N has three departments, Nature Management, Landscape and Forestry, the last of which has a section for International Co-operation. The main activities of this section of IKC-N are advisory work on field projects (project identification,

2. These five countries exported 80% of their exploited industrial wood. The remaining 20% was used domestically. For present purposes, Singapore's trade in timber is included in the figures for Malaysia.

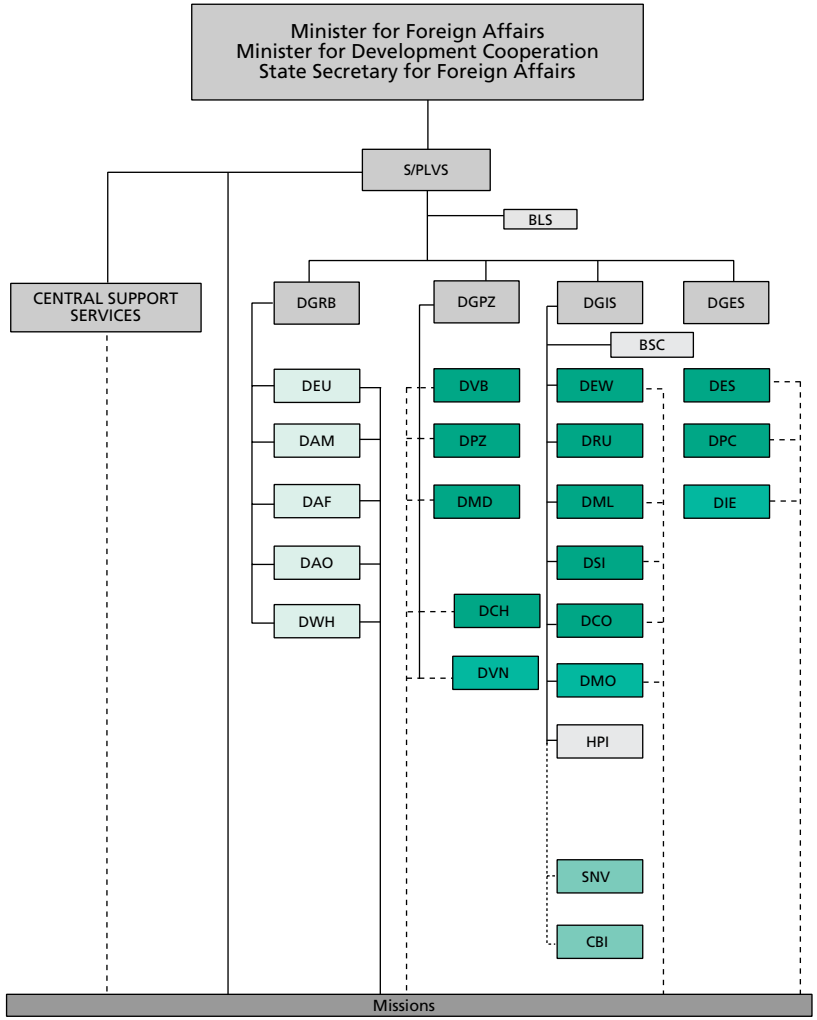
3. There is a preference in the Netherlands for the expression 'development co-operation' rather than 'aid'. The intention is to emphasise the importance of partnership in development. For the sake of brevity, the shorter term is often used in this chapter, though this is not to diminish the collaborative spirit.

4. *Directoraat-Generaal Internationale Samenwerking*, widely known as DGIS (*'D-jis'* to rhyme with 'aegis').

5. Approximately US$3.3 billion.

6. The complexity of the system of forestry aid management is not without its critics. Kolk (1996) indicates problems of coordination arising out of the differing priorities of the four ministries involved.

Figure 1: Organogram of the Ministry for Foreign Affairs



Ministers, State Secretary and senior civil servants

S/PLVS	Secretary-General/Deputy Secretary-General
DGRB	Director-General for Bilateral Relations
DGPZ	Director-General for Political Affairs
DGIS	Director-General for International Co-operation
DGES	Director-General for European Co-operation

Bilateral Relations departments

DEU	European Affairs Department
DAM	North Africa and Middle East Department
DAF	Sub-Saharan Department
DAO	Asia and Oceania Department
DWH	Western Hemisphere Department

Policy theme departments

DVB	Security Policy Department
DMD	Human Rights, Good Governance and Democratisations Department
DCH	Conflict Management and Humanitarian Aid Department
DEW	Economic Structure and Employment (Developing Countries) Department
DRU	Rural and Urban Development Department
DML	Environment and Development Department
DSI	Social and Institutional Development Department
DCO	Cultural Co-operation, Education and Research Department
DES	Economic Co-operation Department
DPC	Movement of Person, Migration and Consular Affairs Department

Multilateral departments

DVN	United Nations Department
DIE	European Integration Department
DMO	Multilateral Development Financing and Macroeconomic Policies Department

CBI and SNV

CBI	Centre for the Promotion of Imports from Developing Countries
SNV	Netherlands Development Organisation

Central Support Services

BLS	Office of the Deputy Secretary-General
BSC	Office of the Director-General for International Co-operation
HPI	International Co-operation Personnel Branch

formulation, monitoring and evaluation), desk studies to support the advisory work, and the establishment of databases on forestry and forestry-related topics. In geographical terms, IKC-N is concerned mainly with development activities in parts of Asia and Latin America. The forestry professionals within the Forestry and Biodiversity Support Group of the International Agricultural Centre (IAC), which is also within the Ministry of Agriculture, fulfill rather similar functions for Africa and parts of Latin America. IAC provides training services and organises seminars and workshops, on agriculture, natural resource management and rural development for staff from governmental and non-governmental organisations in the developing countries and Eastern Europe. It provides an employment service for experienced professionals in these areas, and maintains a database to support this work.

3.2.2 Aid delivery

Development-related activities in the Netherlands fall into three main spheres:

Activities carried out *in the Netherlands* concentrate on policy, project and programme monitoring and control and on awareness-raising, and involve the Ministry of Foreign Affairs (through the DGIS) and other ministries as well as NGOs. Regular meetings are held between the various ministries involved in tropical forestry through the Interdepartmental Working Group on Tropical Rainforests. This promotes development of policy for international fora, such as the Commission on Sustainable Development, the Intergovernmental Panel on Forests, the EU and the FAO Forestry Advisers Groups, etc. NGOs play an important role in awareness raising in the Netherlands, and also make inputs into policy development. They have occasional meetings with government departments on policy matters.

Activities carried out *in the developing countries* through official development assistance can be divided into two main channels, *bilateral* and *multilateral*. In relation to bilateral aid, priority is given to activities which are in line with Netherlands official policy on forestry aid, through a variety of consultative mechanisms: regular bilateral consultations between the Dutch Government and the governments of recipient countries; consultations between the sector specialists in the Dutch embassies on environment, forestry and rural development and other relevant personnel of the embassies in close collaboration with the local authorities, etc. These activities are coordinated through mechanisms such as the National Forest Action Plans, of which the Netherlands has been a prominent supporter since the earliest days.

Until recently, bilateral aid activities were managed according to a standard embassy structure, with DGIS officials complementing the diplomatic service personnel. About 60–70 DGIS staff were posted to key embassies around the world, with a Head of Development Co-operation functioning to coordinate DGIS activities in the larger embassies where several sector experts are deployed.[7] With effect from January 1997, the system of aid management within the embassies has been reorganised, with the aim of devolving more responsibility to the field. Aid personnel within the embassies will henceforth be responsible for project identification, appraisal, approval, monitoring and evaluation while DGIS headquarters will cover policy development and support services, with a significantly reduced staff.

Prior to this reorganisation, there was a single Tropical Forestry Adviser at the DGIS headquarters in The Hague. The individual in question has now taken on additional functions, as head of the Rural Development Unit, and there is no one with specific responsibilities for tropical forestry. The Adviser to the Environment Programme has some responsibility for forestry matters, although his brief is primarily for biodiversity. However, it is the intention that forestry advice will be strengthened at HQ level to reinforce the new, decentralised structure. Sectoral and geographical emphases in this system are considered further in section 4.

In 1987, a 'Forestry Support Group', comprising the tropical forestry professionals from IKC and IAC, was formed to provide support for the DGIS, Ministry of Foreign Affairs and Ministry of Agriculture in their specialist field. In 1993, this was enlarged and renamed the Forestry and Biodiversity Support Group.

At the multilateral level, support is given to international fora such as the Commission on Sustainable Development, the Inter-governmental Panel on Forests, the Conference of Parties to the Conventions on Biodiversity and Climate Change, as well as the CITES Convention and to their respective secretariats. Ever since its establishment, the coordinating unit for Tropical Forestry Action Plans within FAO has been receiving support from the Netherlands, which still offers support to the plans on a regional basis. Other multilateral channels that are currently being supported include the European Union (coordination, coherence and complementarity between the European Commission and the Member States), the FAO Commission on Forestry and the non-governmental Forest Stewardship Council (in connection with the development of certification procedures for sustainably produced wood).

3.2.3 Non-governmental organisations

The Dutch development organisation SNV (Netherlands Development Organisation) and the MFOs (Co-financing non-governmental organisations),[8] ICCO, BILANCE (recently formed from the merger of CEBEMO and VASTENAKTIE), NOVIB and HIVOS are important implementing organisations for aid programmes including forestry. BILANCE has links with the Catholic Church, ICCO is inter-church and HIVOS humanist. NOVIB has social democratic, non-religious leanings; since 1995 it has been a member of the 'OXFAM-International' group. To date, only SNV and HIVOS has had overseas representation. Until 1991, SNV was the governmental foundation for Dutch volunteers, though it now operates with a large degree of autonomy, as a quasi-NGO, and has taken on responsibilities for the management of a variety of grassroots development projects as well as for recruitment and

7. At present (1/1997) there is only one sector expert with specific responsibilities for forestry (posted to the embassy in Vietnam), though there are three other forestry professionals with wider development briefs.

8. MFO stands for *Medefinancierings Organisatie*. The role of these organisations is discussed further in *Tweede Kamer*, 1990a.

management of technical co-operation workers.

The four MFOs occupy a unique position in Dutch development aid, receiving (as from 1994) a guaranteed 7% annually from the DGIS budget. They are thus permitted an unusual degree of confidence in their forward planning in comparison with most NGOs.

3.2.4 Tropenbos

Tropenbos is an international programme for the promotion of research on problems of deforestation in the humid tropics. It was set up in 1986 on the initiative of the Dutch Ministry of Education and Science, to gather and generate knowledge which might help to slow down the rate of deforestation. The programme addresses five principal themes: resource inventory, land use evaluation, ecological sustainability analysis, socio-economic local sustainability analysis, and the design of options for sustainable land use. The Tropenbos Foundation was established in 1988, in order to expand the international programme by networking and other means. The Foundation formulates, organises and finances objectives-oriented research programmes. In close co-operation with other research institutions and the governments of the Netherlands and partner countries, several major multidisciplinary research sites have been established. Research is presently under way in Colombia, Guyana, Cameroon, Côte d'Ivoire, and Indonesia (Kalimantan). Extension and training work is also undertaken.

3.2.5 Project implementation

Project implementation is carried out through a variety of organisations, though usually with a local counterpart in the recipient country. For each project or programme a contract is signed between the Netherlands Government and the executing agency. Contracts are based on written project memoranda.

Among the major recipients of funding support from the Netherlands are multilateral organisations such as FAO, UNESCO, UNEP, the World Bank, GEF, ITTO, ESMAP and the regional development banks; the CGIAR research centres such as CIFOR and ICRAF and the regional CATIE; and international NGOs like IUCN, WWF, IIED and CARE.

The Netherlands' overall aid disbursements, by category and agency, are shown in Table 1.

Table 1: oda net disbursements by main categories (US$m.)

	1992	% of total oda
Bilateral:	1,732	68.3
Grants	1,830	72.1
dev. projects/programmes	368	14.5
technical co-operation	979	38.6
food aid	113	4.4
emergency aid	182	7.2
debt forgiveness	81	3.2
support through NGOs	15	0.6
administrative costs	92	3.6
Loans	–98	–3.9
Multilateral:	805	31.7
UN Agencies	269	10.6
WFP	37	1.5
UNDP	83	3.3
UNICEF	18	0.7
UNFPA	32	1.3
EU	230	9.1
World Bank group	208	8.2
Regional development banks	59	2.3
Other multilateral	39	1.5
TOTAL	2,537	100.0

(Source: OECD, 1994)

4. TROPICAL FORESTRY POLICY

4.1 Background

Overall Dutch aid policy is laid down, periodically, in White Papers (which have budgetary implications), most notably those of 1990, *'A World of Difference'* and of 1996, *'A World in Dispute'*. Policy on tropical rainforests has been set out most recently in the Government's Policy paper of 1991.[9]

4.2 Forestry Strategy

Since 1981/82 substantial assistance has been provided to the tropical forestry sector (Pelinck and van Dijk, 1987). In the period 1950–78, assistance to national governments and industry dominated the forestry aid agenda. This period saw the continuation of what was basically the traditional forest policy of the colonial era, reoriented to the interests of the developing nations (*ibid*). Activities were concerned particularly with themes such as forest inventory, large scale plantations and support for the establishment of forest industries.

Increasing concern with environmental degradation and poverty in tropical countries led gradually to a new concept of 'social' or 'community forestry'. According to Pelinck and van Dijk, two international meetings in the early 1970s were crucial in reorienting the tropical forestry agenda in the Netherlands (as elsewhere): the Stockholm UN Conference on the Human Environment of 1972 (which established the environment as a central concern of development), and the World Bank meeting in Nairobi in 1973 (where rural poverty and development were identified as priorities for Bank lending, and the issue of the livelihoods of the poor were placed at the top of the international agenda). Five years later, in Jakarta, the VIIIth World Forestry Congress demonstrated the changing concerns of tropical forestry, with its theme: 'Forests for People'.

Whilst the pressures to place the human dimension at

9. English translation of 1992.

the centre of development efforts were thus international, the Netherlands can still count itself as amongst the earliest group of donors to incorporate a social perspective into its forestry aid. By the mid-1970s, it was already apparent that a mono-sectoral approach was contributing to, rather than limiting, deforestation and that a more integrated approach was needed in the aid programme, paying greater attention to the needs of the local populations who depend primarily on the forests. The Wageningen Agricultural University reorganised its Forestry Department in this period to focus attention on social aspects including agroforestry and people's participation in forest management. A social focus was given to the Netherlands' contribution to tropical forestry action plans from the earliest days. Whilst project experience in the developing world certainly played a part in consolidating this trend, it is arguable that influences emanating from the Netherlands were also influential. Such influences include the fragmentation of the Dutch forests which, for the most part, are integrated into a small-scale, multiple enterprise economy and the fact that the relationship between forestry and agriculture has long since been 'rediscovered' in this heavily populated land. In addition, the organisation of the Netherlands higher education curriculum (a forestry degree from the Wageningen Agricultural University, for example, requires four years of study, including six months practical work in the field) puts emphasis on the integration of forestry with other aspects of land management.

Since 1980, the DGIS's concern with environmental matters has steadily increased. In line with the new development approaches of the Dutch Government of the 1970s, which were focused on the small farmer and which were executed in a 'programmatic' (ie. flexible and integrated) way, attention was initially geared towards fuelwood activities in semi-arid regions as well as the integration of forestry components into rural development projects (DGIS, 1996b). In 1985, a stimulus was given to policy formulation and the development of supportive instruments by the issue of the DGIS document 'Ecology and Development Cooperation' (DGIS, 1985). Within the broad rubric of its support for the concept and implementation of Tropical Forestry Action Plans (later called Tropical Forest Action Programmes), the Netherlands focused its attention on three of the five priority areas of the TFAP: forestry in land use, fuelwood and energy, and institutional strengthening (DGIS, 1996b).[10]

The 1987 report '*Our Common Future*' of the Brundtland Commission on Environment and Development re-emphasised the relationships between the issues of poverty, environmental degradation and economic development in relation to the concept of sustainable development. These concerns were incorporated into the policy of the Netherlands Government (*ibid*).

The Ministerial Conference on Pollution and Climate Change in 1989 in Noordwijk, the Netherlands, demonstrated the global importance of forests for stabilising climate change, and it was agreed that before the year 2000 some 12 million hectares of forests should be planted worldwide, as a carbon sequestration mechanism. The UNCED summit in Rio de Janeiro in 1992 had a major influence on Netherlands tropical forest policy. Although the Netherlands Government had already adopted a specific policy on tropical rainforests, the Earth Summit in Rio reaffirmed its commitment to this theme (*ibid*; IKC-N, 1994).

Aid strategy is determined by the '*Policy on Tropical Rainforests*' which was adopted in 1991 (Ministerie van LNV, 1992) and by the International Programme on Nature Management 1996–2000 (*Tweede Kamer*, 1995). Together they make up the framework to orient current activities and identify new initiatives.

The Netherlands Government is aware of the complexity of the threats to rainforest ecosystems and of its own limited ability to overcome them. In shaping its policy objectives, it has recognised five key issues:

- the right of sovereign states to autonomous control and use of the rainforest within their territory;
- the responsibility and commitment that all nations share in the face of global problems;
- the existence of international agreements, treaties and organisations;
- the fact that the destruction of the tropical rainforests will exacerbate the already fragile position of indigenous peoples dependent on the forest for their existence;
- the variations in ecological and socio-economic situations among regions and even nations with tropical rainforests, along with differences in their relations with the Netherlands.

With these issues in mind, the Dutch Government has adopted the following central policy objective as a frame of reference in determining its stance on individual cases:

> "to encourage the preservation of the tropical rainforest through balanced and sustainable land and forest use, with a view to halting the current rapid progress of deforestation along with other environmental damage and degradation" (*Ministerie van LNV*, 1992).

The following orientations have been laid down in pursuit of this policy objective:

- active protection of surviving virgin rainforest;
- in principle, no collaboration with projects and developments that are harmful to the rainforests;
- encouraging planned land use and land management along with sustainable agriculture and forestry;
- with respect to the tropical timber trade, a concern for controlled harvesting, and encouraging the formulation and implementation of long-term planned timber production;
- national and international encouragement of afforestation and re-afforestation projects;
- strengthening institutions and legislation; empowering local populations;
- strengthening the political and social base in tropical nations;
- improving economic relations and relieving the debt burden;

10. The other two priority areas of the TFAP are forest-based industrial development and conservation of tropical forest ecosystems.

- increasing the scope for national and international tropical rainforest policy by strengthening research and institutions.

4.3 Aid delivery in Forestry Development Co-operation

Delivery of development assistance with regard to forests and forestry shows a trend of steady increase towards an expenditure of 113 million NG in 1995, of which 32 million NLG went to projects specifically on tropical rainforests. The targets for delivery within the framework of the Dutch policy on tropical forestry have been set at 150 million NLG a year since 1994 of which one third is reserved for activities directly related to tropical rainforests and the remainder (100 million NLG) for support of forest institutions, for formulation and implementation of national forest plans and programmes, and for participatory forest management and forestry activities (DGIS, 1996c). The intention is to create a fund of 0.1% of GNP for activities related to international environmental policy, starting in 1999 (*ibid*; *Tweede Kamer*, 1996). The Forestry and Biodiversity Support Group of IKC-N/IAC plays a pivotal role in preparing policy papers for the government in relation to these targets.

The shortfall of expenditure against the targets to date reflects both shortages of project proposals in conformity with existing policy and lack of appraisal capacity within the supervising agencies. The need to overcome these limitations has provided part of the justification for the decentralisation of aid management, with a shift of responsibilities to the embassies in the partner countries.

Besides a continuous growth in expenditure one can also observe changes of focus, with attention moving from the traditional fuelwood and agroforestry projects of the 1970s to institutional strengthening, forest planning, forest sector coordination, participatory forestry approaches and integrated watershed management in the last decade (DGIS, 1996b). Traditional fuelwood projects have increasingly been integrated into rural development projects as an aspect of the overall production system, particularly in the Sahel.

In making financial resources available, due attention has been given to the relatively long-term nature of forestry activities. The Dutch Government has shown itself ready to commit resources on a long-term basis where circumstances so demand, and major projects often run into several phases. The Kenya Woodfuel Agroforestry Programme (KWAP), for example, which began in 1983, completed its third phase in 1996; the Project: *Bois de Villages: Appui à la Foresterie Villageoise* in Burkina Faso commenced in 1979, and still receives some support, as does the Kali Konto Project in Indonesia, launched in 1979. In the Americas, the *Proyecto participativo de manejo de bosques y recursos naturales con pueblos indigenas* in Bolivia is now in its eighteenth year, and a project proposal is under consideration which will assure funding at least until 2001. This project has been supported by HIVOS since its inception, and has been provided with technical assistance by SNV since 1987.

Since 1984, the Dutch Government has adopted a policy of delegating implementation of activities in the field to other organisations, and official Dutch-managed projects have been severely cut back. The private sector is intended to benefit from this policy change, particularly in the recipient countries. This is felt to be more cost-effective in the long run. For forestry the delegation of implementation activities has been an important channel of aid disbursement. The 'multi-bi' funding of projects has been extensively employed, with UN organisations, particularly FAO, acting in a quasi-commercial capacity for the implementation of projects supported by the Netherlands through a trust fund arrangement.

5. PROJECTS FUNDED BY REGION AND TYPE

5.1 Geographical criteria for selection

In the main reformulation of Dutch policy on development co-operation of 1984 (*Tweede Kamer*, 1984), an assessment was made of the criteria for the selection of countries which could benefit from Netherlands' aid. Before that date support was given to so-called 'concentration' countries. Since 1984, the main beneficiaries have been known as 'programme' countries, with additional categories of 'regional' countries (countries belonging to a region that is supported in an integrated manner) and 'sector' countries (countries that may be supported only to a limited extent for specific activities important for one of the sectoral policy priorities of the development co-operation).

Until 1984 continuity of co-operation between the Netherlands and the recipient country was one of the factors taken into account in making the selection. This continuity remained important after 1984 as a means of improving knowledge of countries, their populations and culture, and facilitated a structural approach to development co-operation. However, it was obvious by this time that too many activities were being implemented in too wide a variety of sectors in too many countries, resulting in a generally rather low level of impact. For this reason, it was found necessary to decrease the number of recipient countries (*Tweede Kamer*, 1984).

The 'programme' countries were selected on the basis of their per capita income not being above the IDA standard (in 1983, this was US$795 per year). There was an additional requirement that their social and economic policies should be progressive. These countries coincided with the existing 'concentration countries': Bangladesh, Egypt, India, Indonesia, Kenya, North Yemen, Pakistan, Sudan, Sri Lanka and Tanzania. Criteria for aid were thus related to poverty status, social and economic development policy, and the human rights situation (*Tweede Kamer*, 1984). The 'concentration' regions were the Sahel, Southern Africa and Central America. In 1986 a fourth region was added to the concentration regions: the Andes region.

In the 1990 White Paper on development co-operation, '*A World of Difference*', some changes were proposed in the number of selected countries and in the criteria for selection, especially with regard to the 'sector' countries. The new criteria were relevance to conceptual policy priorities together with a certain degree of geographical dispersal and balance (*Tweede Kamer*, 1990). In 1996, another important general

policy document on aid, '*A World in Dispute*', was published and this led to a further geographical review (*Tweede Kamer*, 1996).

As from 1993, the countries eligible for development assistance were classified into the following categories:

- countries with regular co-operation (including the countries with which the Netherlands has signed a special sustainable development agreement, in which development co-operation is only one aspect among several);
- countries where co-operation will contribute to conflict resolution and rehabilitation; and
- countries in transition and subject to structural transformation towards a market oriented and democratic society.

Co-operation with countries in the first category is usually structural whereas this is not the case with the other two categories.

The current policy of the Ministry of Foreign Affairs concentrates activities in the following countries (DGIS, 1996a):

a. *countries with regular co-operation*

In **Asia**: Bangladesh, India, Nepal, Pakistan, the Philippines and Sri Lanka.
In **Africa**: the Sahel region: Burkina Faso, Ghana, Niger, Guinea Bissau, Cape Verde, Mali and Senegal; the Nile and Red Sea region: Egypt, Ethiopia, Yemen; the East Africa region: Kenya, Tanzania and Uganda; and the Southern Africa region: Mozambique, Zambia and Zimbabwe.
In **Latin America and Caribbean**: the Central America region: El Salvador, Guatemala, Haïti, Honduras, Jamaica and Nicaragua; and the Andes region: Bolivia, Ecuador and Peru. Special relations exist with Surinam, the Netherlands Antilles and Aruba.

Special sustainable development conventions have been signed with Benin, Costa Rica and Bhutan.

b. *countries in conflict or in rehabilitation:*

Angola, Occupied Territories,[11] Eritrea, Cambodia, Rwanda, Sudan and Somalia.

c. *countries in transition:*

Armenia, Bulgaria, Georgia, Moldavia, Romania, former Yugoslavia, Albania, Azerbaijan, Kyrgyzstan, Mongolia, Namibia, Vietnam and South Africa.

Since 1995, an internal Ministerial Memorandum has also been operative, which has required each country programme statement to include a paragraph on the status of its forests.

In relation to aid to forestry, an additional criterion for funding is relevance to the natural resource conditions and needs of the country in question. The policy paper adopted in 1991 re-emphasised the government's commitment to action in support of rainforests and this led to an extension of the number of countries where rainforest-related activities may be implemented (*Ministerie van LNV*, 1992). These additional countries are Madagascar, Colombia, Cameroon, Laos and Papua New Guinea. Some activities are also undertaken in Brazil and Thailand (*Tweede Kamer*, 1994). The Netherlands is represented on the International Advisory Group for the Brazil Pilot Programme, and contributed almost 10 million NLG to the programme for the period 1992–8.

The selection of partners for forestry aid is thus a rather complex matter, with a mix of factors – socio-economic, political and economic – all playing their part in deciding eligibility.

5.1.1 Disbursements in selected countries

Recent expenditure on forestry development co-operation projects on a regional basis is shown in Table 2.

From the table it can be seen that spending on forestry activities within the framework of Netherlands development co-operation has increased considerably in recent years. Taking into account the expenditure in 1995 noted above, this trend seems likely to continue.[12] In addition, funding for activities of a worldwide nature has increased substantially.

5.2 Types of projects supported

The most recent information available on forestry projects is that for 1995, although the most complete information is for 1992. A total of 201 projects was in the implementation phase during 1992. Forestry aid by sector is shown in Table 3.

It is apparent that expenditure on projects concerned with the conservation of forest ecosystems increased substantially in the period 1986–92.[13] This was partly because of the increasing attention devoted to management and preservation of biological diversity and tropical rainforests in the overall programme [DGIS and *Ministerie van LNV* 1993], and partly because of participation in the Global Environment Fund (47% of the expenditure in the GEF pilot phase has been on biodiversity). A decrease can be observed in expenditure on fuelwood and energy projects which is partly due to integration of these activities into broader rural development projects (*ibid*).

5.3 Institutional channels for project assistance

The channels through which forestry aid has been implemented are also of interest. Table 4 indicates the important part played by the multilateral agencies (particularly FAO) in Dutch forestry aid, and substantiates the trend towards increased funding of NGOs, largely at the expense of bilateral projects. 60% of expenditure in the years 1991–92 can be accounted for by only five implementing agencies: FAO (22%), GEF (14%), IUCN (19%), World Bank (7%) and SNV (also 7%). Only 5% of the project volume has been implemented directly through the DGIS' own implementing channels. Generally the latter concern forestry

11. ie. Palestine and the Israeli-occupied territories

12. Detailed breakdown of expenditure for 1995 is not yet available.

13. Included in these statistics (in addition to forest ecosystems) are other ecological types in the tropics, like wetlands.

Table 2: **Disbursements in forestry development co-operation projects, 1988–95 (in NLGm.)**

Area	1988	1990	1992	1995*
Worldwide	**4.3**	**10.1**	**33.5**	**21.2**
Africa, regional	0.0	0.5	0.0	
Nile and Red Sea	6.2	5.6	4.4	
East Africa	2.4	5.2	7.5	
Sahel	19.4	29.8	22.1	
Southern Africa	0.5	0.9	0.4	
Sub-total Africa	**28.5**	**42.0**	**34.3**	**34.6**
Asia, regional	1.2	2.7	2.5	
East Asia and Indonesia	6.4	8.7	7.8	
Mekong, Bangladesh, Pakistan, Bhutan	5.3	8.1	2.3	
Southern Asia	5.0	2.3	5.4	
Sub-total Asia	**17.9**	**21.8**	**18.0**	**27.6**
Latin America, regional	0.0	0.3	2.1	
Central America and Caribbean	4.3	10.0	5.4	
South America/Andes	4.7	8.4	10.8	
Surinam	0.0	0.0	0.0	
Sub-total Latin America	**9.0**	**18.7**	**18.3**	**29.5**
TOTAL	**59.7**	**92.6**	**104.1**	**112.9**

(Source: DGIS, MvanLNV, 1991 and 1993; FBSC (IAC/IKC) 1996 (*unofficial figures))

Table 3: **Total disbursements of forestry aid, 1986–95 according to TFAP categories (NLG m.)**

Programmes	1986		1990		1992		1995	
Forestry in land use	23	(41%)	46	(50%)	47	(46%)	39.9	(35%)
Forest-based industrial development	0	(0%)	2	(2%)	0	(0%)	7.1	(6%)
Fuelwood and energy	7	(12%)	14	(15%)	6	(6%)	3.0	(3%)
Conservation of tropical forest ecosystems	1	(2%)	4	(4%)	30	(29%)	18.9	(17%)
Institutional strengthening	26	(45%)	27	(29%)	20	(19%)	43.8	(39%)
of which:								
Research		(21%)		(5%)				
Training		(12%)		(6%)				
General		(12%)		(13%)				
TOTAL	**57**	(100%)	**93**	(100%)	**103**	(100%)	**112.9**	(100%)

(Sources: DGIS, M van LNV, 1991 and 1993: and BLITTERSWIJK, 1991; FBSG (IAC/IKC) 1996)

components of broader rural development projects (*ibid*).

Within the framework of the Policy on Tropical Rainforests, the Netherlands also contributes to activities in countries with which it does not maintain a regular development co-operation relationship. It co-finances the Brazil Pilot Programme initiated by Brazil, the European Union and the World Bank, in 1990–91.

5.4 Forest management models

Interventions by the Netherlands in tropical forestry projects have used many different approaches, most notably (in the last two decades) variants of the 'participatory' approach.

Ever since the sub-Saharan village forestry projects in the late 1970s, where the participatory GRAAP 'model' was the basis of all local-level interventions, many

Table 4: Disbursements on forestry development co-operation according to implementing agency, 1990–95 (NLG m.)

Implementing Agency	1990		1992		1995	
Multilateral	48	(51%)	50	(48%)	46.2	(41%)
Bilateral	37	(40%)	27	(26%)	31.6	(28%)
NGOs[a]	9	(9%)	27	(26%)	35.1	(31%)
TOTAL	**93**	**(100%)**	**103**	**(100%)**	**112.9**	**(100%)**

Note(a) In 1993, the Netherlands development organisation SNV is classified as an NGO, while in 1990 it was classified as bilateral; this organisation alone counts for 7% of DGIS expenditure.

(Source: DGIS, MvanLNV, 1993; FBSG, IAC/IKC, 1996)

Dutch-funded projects have followed a participatory approach.[14] Examples include the FAO Peru and Bolivia projects, the FAO *Desarrollo Forestal Participativo de los Andes*, the Kali Konto project in Indonesia, and the Malakand Social Forestry project in Pakistan.

Through these participatory approaches new types of activities have been formulated according to the interests of the various stakeholders. Starting with the fuelwood projects of the 1970s in sub-Saharan Africa (aiming at fixed acreages of Eucalyptus plantations per year per village), forestry interventions have evolved towards a more integrated approach involving the management of existing vegetation through concepts like *aménagement de terroir villageois*. These have involved intersectoral links (for instance, with annual crop production and soil conservation activities).

The only real 'forest management model', in the strict sense of the term that has been developed through Dutch interventions in tropical forests and in close co-operation with institutions in developing countries is the CELOS management system (Box 1). This was one of the first sustainable forest management models to include silvicultural, logging and harvesting elements.

6. TROPICAL FORESTRY RESEARCH AND TRAINING IN THE NETHERLANDS

6.1 Educational courses in forestry

The main institutions providing degree-level courses dealing with forestry, both temperate and tropical, are the Department of Forestry of the Wageningen Agricultural University (*Vakroep Bosbouw, Landbouwuniversiteit Wageningen* or 'WAU') and the International Agricultural College, Larenstein (*Internationale Agrarische Hogeschool Larenstein* or 'IAHL'). WAU no longer offers a single specialism forestry course; since 1995, forestry issues have formed part of a new course in Forest and Nature Management, which covers four main subject areas: forest and nature policy; forest and nature management; forest and nature development; and recreation and tourism. The course is of 5-years duration and leads to an Ir. (engineer) degree comparable to an Msc. IAHL offers higher vocational education in both tropical and temperate forestry, leading to an Ing. (engineer) degree, comparable to a BSc. These courses are of relevance to both temperate and tropical forestry.

Besides these programmes, which are mainly for Dutch forestry students, WAU and IAHL also offer international MSc courses in tropical forestry. WAU has a PhD programme. WAU has wide research and educational interests in tropical forests and trees as living systems and in the methods to use them sustainably to the benefit of user groups.

6.2 Training courses in tropical forestry

Shorter training courses in tropical forestry are provided by three institutions: the International Agricultural Centre (IAC, *Internationaal Agrarisch Centrum*) in Wageningen; the International Institute for Aerospace Survey and Earth Sciences, Forest Science Division (ITC) in Enschede; and the International Vocation Training Centre (*IPC Groene Ruimte*) in Arnhem.

IAC offers training programmes in agriculture, management of natural resources and rural development, to staff from governmental and non-governmental organizations in developing countries and Eastern Europe. It also provides advice and assistance to the Dutch government regarding policies, programmes and projects in the field of agriculture, natural resource management and rural development.

ITC provides a comprehensive service through 'knowledge transfer' (ie. education and advisory work) and 'knowledge development' (research) to strengthen the productive, innovative and management capabilities of individuals and organisations, primarily in developing countries, engaged in the acquisition, handling, presentation and use of geo-information. It aims to strengthen abilities to acquire geographic information, particularly through aerospace survey, and to contribute to the development co-operation goals of the Netherlands Government and other international development agencies through facilitating the efficient capture, analysis and use of geo-information in the resolution of development problems.

In relation specifically to tropical forests and forestry, ITC is concerned with the acquisition and use of information for decision-making in sustainable forest and tree management, in combatting deforestation and

14. GRAAP is a community animation approach developed in francophone West Africa in the 1960s and 1970s. The approach began to be used in the Netherlands aid programme in the early 1980s, in the *Bois de villages* ... project in Burkina Faso; support has since been given to the development of the methodology and its adaption to a range of management issues. For a description of GRAAP, see Bouyer (1995).

Box 1. The CELOS Management System (CMS)

CMS is a management system for tropical rain forests with defined objectives and planned harvesting and silvicultural treatments. It is a polycyclic system which aims to produce a forest in which several generations of trees are present which will be harvested sequentially on a 20–25 year rotation. It was developed in Surinam in a joint project of the Agricultural University Wageningen and the University of Surinam entitled "Human interference in the tropical rain forest ecosystem". The name CELOS derives from the Dutch name of the Centre for Agricultural Research in Surinam where the initial experiments were made.

The CMS may be classified as a modern forest management system as it includes the economics of harvesting of commercial timber and silvicultural treatment within the limitations set by the need to maintain the ecological stability of the forest.

The CELOS Management System consists of two components, the CELOS Silvicultural System (CSS) and the CELOS Harvesting System (CHS). The CSS favours the growth and enrichment of commercially valuable species. The CHS aims at efficient logging with a minimum of damage to the remaining stand and soil.

The starting point of CMS is a forest area allocated as a permanent management unit (with the most important function being the production of timber). The unit is planned and designed with the aid of the maximum available information, such as aerial photographs, terrestrial inventories (including a 100% inventory of potentially harvestable trees of commercially attractive species), and topographic and soil maps. The aim is to open up the forest in such a way as to minimise the disturbance to the ecosystem, while permitting harvesting operations to be carried out efficiently and economically. Logging intensity is restricted in order to minimize the damage to the stand and to prevent excessive loss of nutrients from the forest ecosystem. The Silvicultural System is based on the concept of 'biomass dependent site quality', appropriate to situations in which large parts of the nutrients of the whole ecosystem are concentrated in the biomass, and not in the soil. It comprises several treatments, referred to as refinements, in which undesirable trees are killed by poison-girdling not cutting, so that the nutrients of the dying trees are slowly released and captured within the ecosystem, benefiting the growth of the remaining trees. The ecological balance is carefully monitored against disruption, as this process takes place. An adequate stock is maintained of tree species which may be commercially unattractive but which are necessary to sustain the forest ecosystem.

The full effects of the CMS on the ecosystem are as yet little understood. Changes in the populations of species of flora and fauna have been detected, but more research is necessary to determine the long-term effects on the forest ecosystem.

The CMS was developed in Surinam and is adapted to the conditions in that country: mesophytic forest on nutrient-poor soils in an area of low density of human population. These conditions are also met over the region covering much of the Guyanas (Guyana and French Guyane) and in the northern part of Brazil. In several parts of this region forest management systems based on CMS are being implemented. For other tropical regions, especially in areas of high population pressure, the applicability of the CMS is questionable. Nevertheless, some of the methods used in the Harvesting and Silvicultural System are also likely to be valid in tropical areas elsewhere.

Reference

Bodegom, A.J van, and N.R. De Graaf (eds). 1991. *The CELOS Management System: a provisional manual*. National Reference Centre for Nature Management (IKC N), Department of Forestry, Wageningen Agricultural University, BOS Foundation. Wageningen, The Netherlands.

forest degradation, in conserving biodiversity, in environmental protection and in achieving social and economic development.

IPC provides educational training and advisory services in management of natural resources to a variety of target groups, both from the Netherlands and abroad.

All three institutions offer training courses focused on the needs of international students.

6.3 Other educational, training and research institutions

There are, in addition, well over twenty other university teaching departments and research centres, independent research organisations and foundations, NGOs and consultancy groups offering courses of varying duration relevant to tropical forestry. These and other organisations involved in tropical forest management are discussed in detail in the inventory prepared by BOS Foundation (1996).[15]

15. BOS Foundation, Organisation for International Forestry Co-operation (1996) *A guide to Dutch organisations on tropical forest and nature management*, PO Box 23, 6700 AA Wageningen, The Netherlands.

7. PROJECT CYCLE MANAGEMENT

The project cycle management models used in development projects are determined by the wide variety of conditions relating to the diverse organisations employed. Two general characteristics of project management in Dutch official aid are particularly worthy of review, namely, the procedures applied by the Ministry responsible for the approval of projects and the general project cycle used.

7.1 Project cycle

The *project cycle* involves a familiar sequence of stages: identification, formulation, appraisal, implementation, monitoring and evaluation. Project identification is carried out in several ways ranging from the simple adoption of a local proposal to the sending of special identification missions. Project ideas are often generated in the course of other funded projects or alternatively, emerge from framework planning mechanisms like the National Forestry Action Plans. If the project idea is in line with prevailing Dutch policy on development co-operation and its policy for forestry development in the tropics, and if the respective budgets allocated to the recipient countries contain appropriate funds, then the project idea may be developed into a project proposal,

with or without the assistance of the Dutch Government, as the case demands.

The formulation of project proposals has undergone considerable changes in recent years. Whereas in the 1960s and 1970s projects were mainly based on 'blueprint' models, by the end of the 1970s the programmatic 'process' approach had already come into vogue in the Netherlands. This allowed more attention to be given to the interests of target groups and categories.

The period needed for approval of projects at the Ministry level in the Netherlands has tended to be excessively long, due largely to staffing shortages within the DGIS. Since the most recent reformulation of Dutch foreign policy concerning development co-operation in 1996, all procedures relating to formulation, approval and implementation of normal projects are now in the hands of the embassies. This may be expected to shorten the identification and appraisal periods.

The implementation phase has seen major improvements in monitoring and evaluation systems in recent years. Evaluation of projects normally involves mid-term review and final evaluation at or near the end of the project phase. The Inspection Unit of the Ministry of Foreign Affairs also undertakes evaluations of country programmes or of thematic areas across a number of countries, on a random basis (IOV, 1992 and 1994).

7.2 Ministry procedures

Within the Ministry, the procedures for approval of project proposals are rather complicated. Variations occur according to the total budget required for the projects. After the project proposal has been submitted to the embassy, an identification memorandum ('IDMO') is prepared. This locates the proposal in relation to the development policy of the Netherlands towards the recipient country in question, and the policies of the recipient country itself. After appraisal, this analysis is elaborated in the 'memorandum of appraisal' ('BEMO'), which is then signed by the managers of relevant units within the Ministry. It is a requirement that all proposals are appraised against three criteria: the position of women, the environment and poverty alleviation.

External advice is provided by the Forestry and Biodiversity Support Group of the Ministry of Agriculture, Nature Management and Fisheries. For the larger projects, a project advisory committee is set up to deal with the request. Once all the units have approved the proposal, implementation can start as soon as the contracts are signed. During implementation the same Forestry and Biodiversity Support Group may be called on to monitor the project, at the request of the Ministry of Foreign Affairs.

Beginning in 1997, the majority of these administrative steps are to be handled by the respective embassies in the recipient countries, under the new policy on foreign affairs and development co-operation.

There are no special requirements as regards procedures for submission of proposals by external agencies. The use of the logical framework or other standardised formats is not obligatory (although, of course, proposals need to be presented in a coherent way). The essential requirements are that the proposal is shown to address an obvious need in the recipient country, to be locally owned in a meaningful sense both by the recipient country and the implementing organisation, and to correspond to the Netherlands' priorities in both policy and budgetary terms.

8. REVIEW OF THE MAJOR FORESTRY PROJECTS

8.1 The need for flexibility

A feature of Dutch project management in recent years has been flexibility of execution, to take account of changing perceptions of the project rationale. In the early years, reforestation was often considered to be the solution to the problems of land degradation, but later on, changing perceptions of the environmental problems and the role of land use practices led to a more holistic view, and hence to the integration of forestry activities in agricultural systems and rural development programmes.

Conservation and sustainable management of natural forest resources have become increasingly important project themes. This shift in approach can be observed in all projects in which reforestation is an important activity. In the fuelwood projects in Burkina Faso and Kenya, the multipurpose use of trees has been integrated into agroforestry systems management. In the Jalapa Valley Project in Nicaragua, the Participatory Forest Management Project in Bolivia, and the Malakand Social Forestry Project in Pakistan, the development of management schemes for the natural vegetation has become part of the project activities. The research project CONIF-HOLANDA was set up specifically to investigate the possibilities of integrating agricultural practices with management of the natural forest vegetation in rural development projects.

Institutional strengthening has been increasingly recognised as a prerequisite for ensuring the sustainability of project activities. This often requires long-term assistance to allow the relevant institutions to make substantial adjustments in their policies and to train their staff to perform new tasks. Consequently, evaluations often reveal the necessity to extend the projects into a new phase in which the capacity of the institutions can be built up further by training and extension activities. This was recognised in the Village Forestry Project in Burkina Faso, the KWAP project in Kenya and the Malakand Social Forestry Project in Pakistan, where the forest services had to familiarise themselves with a participatory approach, and learn to be agents for technical assistance. In Latin America, where aid is directed to the reinforcement of networks (for example the 'Participatory Forestry Development Project' in the Andes region, the 'Participatory Forest Management Project' in Bolivia, the 'Forests, Trees and People' project, and the 'Project Support for the implementation of the National Forestry Action Programmes' of Ecuador, Bolivia and other Andes countries), network activities have had to be followed by other efforts to consolidate the results and ensure their sustainability, independent of external support.

The role of women in the rural development process is another aspect that has gained increasing attention over the years. In all projects, activities can be identified

which aim to increase the economic independence of women and their influence on the planning of the rural development process. Through involvement in fuelwood schemes, which are directly related to their traditional tasks, women are increasingly involved in other forestry activities. Some projects have special women's components, for example the Jalapa Valley Project in Nicaragua and the Malakand Social Forestry Project in Pakistan; others have a generic gender aspect to all interventions and activities (for example, the Participatory Forest Management Project in Bolivia and the Village Forestry Project in Burkina Faso). Evaluations reveal that these activities need long-term project support. Considerable training and extension are needed to strengthen and consolidate the position of women in rural development processes.

The increase in attention given to environmental problems can be attributed to experiences gained in forestry projects, notably in the Sahel. These experiences are now being exploited to help policy development and improve the execution of programmes with a rural development character. Institutional strengthening and the participation of the local populations, in particular women, are recognised as important conditions for the success of the programmes and the sustainability of the results.

8.2 Case studies

This section briefly reviews three forestry development projects, as illustrative of key themes in the Netherlands' aid programme of development assistance.

8.2.1 Kenya Woodfuel Agroforestry Programme (KWAP)

Introduction

During the 1970s and early 1980s, the environmental crisis received growing recognition from the international community. The International Council for Research in Agroforestry (ICRAF) was established and energy studies in a number of African countries led to rural afforestation initiatives. In Kenya, the Fuelwood Cycle Study which was jointly carried out by the Ministry of Energy (MOE) and the Beijer Institute (1981–82) led to the establishment of the Kenya Woodfuel Development Programme (KWDP) under the auspices of the MOE (1983–88), This operated in two districts (Kakamega and Kisii). The Netherlands has supported the project technically and financially.

KWDP (Phase I) (1983–88)

The overall objective was to focus research on the development of socially acceptable agroforestry technical packages within the two pilot districts, with the intention that these would provide the basis for replication elsewhere in Kenya. The project was also concerned with extension approaches and methods to increase fuelwood production, the development of replicable planning methods and personnel development to prepare, execute and monitor fuelwood projects. The KWDP recognised the existence of sociocultural values (often gender-specific) relating to woodfuel and tree management. A Mass Awareness Programme (MAP) tackled this issue.

The Phase One evaluation called for continuation of the programme so as to transfer the results to the district extension agencies. The original focus on fuelwood was broadened to agroforestry in order to include tree planting for various end uses. The project was reformulated (and renamed) and a rather different set of objectives and approaches was developed.

KWAP1 (Phase II) (1989–91)

The overall objective was now to develop a process of transfer of KWAP's knowledge on improved biomass production and extension methodologies to field extension staff. This was to be done in collaboration with district extension officers and other relevant organizations operating within the pilot districts.

A shift took place in tasks and target groups away from the original concern with research and development with farmers towards transfer to, and institutionalisation by, extensionists and trainers. Another important shift was the decision to include multipurpose aspects of tree use, not just fuelwood. Fodder production, soil conservation, the maintenance of soil fertility and local seed production and supply were included as project activities.

The methods employed in training, extension and field activities followed the 2-way mirror approach, representing a big shift from conventional approaches to extension training which tend to emphasise the delivery of messages from extensionists to farmers. Use was made of a multiple means approach to develop public awareness, including mass rallies, follow-up meetings, agricultural shows, radio, drama, films, video and slides.

KWAP1 made a valuable contribution to the development of an approach to training, extension and technology development, making good use of existing government and non-government staff and resources. The focus on agroforestry proved to be a fruitful one, both as regards bringing together different line ministries, and contributing to the sustainability of farming systems for people with small land holdings in situations of significant land pressure.

The overall conclusion of the Phase Two evaluation was that satisfactory progress had been made in both districts towards achieving most of the objectives. The process of transfer of methods was proceeding satisfactorily and there were indications of good complementarity between co-operating agencies in planning and executing field work in agroforestry. This work was responding to the needs of the rural population in relation to woodfuel and other woody biomass requirements and was also in line with government policy of Kenya. Its contribution to environmental awareness was in line with the objectives of the Netherlands development co-operation policy.

Despite the emergence of new forms of inter-agency co-operation and problems of woodfuel supply in the two districts, application of agroforestry practices only took off to a limited extent. The outreach of district agencies to farm level was small due to lack of funds and logistic support, and the sectoral bias of the agency tended to limit the effectiveness of the approach. Many farms incorporated a number of new trees but only few developed the full potential of agroforestry. However, awareness of agroforestry was high at all levels.

It was recommended that further work be carried out to consolidate the achievements to date by:

- follow-up activities and support;
- training of new extension trainers and other target groups;
- monitoring and evaluation of effectiveness and impact of methods of transfer used.

This resulted in the formulation of KWAP2 (Phase III) in which attention was to be concentrated on farmer needs.

KWAP2 (Phase III) (1992–96)

This phase of the project was implemented in four new Districts. A period of withdrawal from the two old districts was also included in this phase. The objective of the phase was to develop a sustainable rural production environment for responding to the woody biomass needs of the rural households.

Farmers were directly involved in developing agroforestry options, and in analysing the socio-cultural constraints and potential in a participatory way. The KWAP approach concentrated on strong collaboration with existing organisations and institutions involved in agroforestry activities with the farming communities.

A considerable degree of institutionalisation and integration of programme activities was accomplished within the administrative and development organisations of the Districts. The agroforestry systems approach resulted in a zoning of each district into different agroforestry recommendation areas. Sensitization and training of Senior District Staff and extension staff in the agroforestry systems approach was successful in all districts.

The handing-over of KWAP activities in the old Districts has now been completed, but it is hoped to provide continuing support to the communities in question in order to reap the benefits of the programme's earlier activities.

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8.2.2 The Kali Konto Project, Indonesia

The rate of population growth has increased significantly in Indonesia in recent decades, especially on the island of Java. One of the consequences has been a more intensive pattern of land use, in some places leading to deforestation on slopes, and thus erosion and decrease in the production capacity of the soils. This has also affected the river system, causing sedimentation and inundation in the lowlands.

In order to address this problem the Indonesian Government began to develop watershed management plans. A request was made to the Netherlands Government to provide technical co-operation to help develop a plan for forestry as a basis for rural community development in one of the catchment areas of the Brantas River Basin in East Java. This resulted in the implementation of the Kali Konto project in 1979, coordinated by the Javanese Forestry Department *Perum Perhutani* in co-operation with the Netherlands National Forestry Service *(Staatsbosbeheer)*. Kali Konto is one of the major tributaries of the Brantas river and its catchment area covers about 25,000 ha. Two thirds of this area is forested and owned by the Indonesian Forest Service and one third consists of village agricultural lands. The project was originally prompted by the rapid sedimentation of a dam in the Kali Konto River, which was blamed on upriver deforestation.

Objective

The objective of the project was to draw up a master plan for forestry and agro-forestry for the upper watershed of the Kali Konto in such a way that a proper balance could be achieved between the environmental functions of the forest and the needs of the population. Secondary objectives were to draw up a planning and management model for a study area on Java as an example for all watersheds in densely populated areas of Indonesia. The following priorities were identified:

- improving living conditions of the local people, encouraging self-reliance and maintaining and increasing standards of living;
- creating sound and stable ecological systems;
- creating a forest system based on multipurpose management fitting in the national forest policy.

Strategy and methodology

In the first phase the focus was on agricultural and socio-economic aspects (including inventories of vegetation) in order to be able to make an appraisal of existing land use practices in the area and their impact on the environment. This appraisal was coordinated by the Netherlands Institute for Nature Management (RIN). Its results were used to draw up a master plan. One of the conclusions was that the sedimentation was not caused by deforestation but by land use practices on the village lands. It was also concluded that the forest land had the potential to fulfil the demands of both the local population and resource conservation, allowing optimal financial returns. It was recommended that there should be modifications to the policy, rules and regulations for the management of the Kali Konto forest land to allow the implementation of integrated management options. The appraisal called for surveys of the availability and use of natural resources and pilot trials to test various management models, and for a programme to transfer the experience and information to counterpart personnel and government authorities.

As a result several changes took place during the course of the project. In the first phase emphasis was on forestry management and reforestation. The second phase was broader in scope, and aimed at regional development (including village lands) and raising living standards. The third and the fourth phases were mainly concerned with the application of improved farming techniques and the development of a planning methodology for sustainable management of river basins.

This broadening of objectives extended the project area considerably beyond that for which the *Perum Perhutani* was responsible. Consequently, responsibility was transferred to the Ministry of Forestry's Directorate of Reforestation and Rehabilitation. On the Dutch side, the technical assistance project was put out to contract and the brief given to a consultancy firm. The research component was gradually expanded. This was encouraged by the DGIS. The new project staff concluded that

the earlier analysis had been deficient. Local erosion problems were less severe than had been assumed. This led to a shift away from a sectoral approach to one integrating environmental considerations into the framework of regional development.

The main activities of the project were:

- research: surveys of the availability and use of natural resources, social and economic studies, design and testing of improved techniques, etc. This category of activity received much more emphasis than had been originally planned;
- training courses: from 1986 onwards these were transferred to the School of Environmental Conservation Management;
- operational activities in such areas as forestry, income generation and improved land use in woodlands and village areas.

Results

The main effect is a better understanding of the causes of erosion in river basins like that of Kali Konto. Deforestation and agriculture proved to be secondary contributors; natural processes and the construction of houses, roads, etc. are likely to be significantly more important. Other outputs were reforestation of 1,680 ha between 1986 and 1989 and the encouragement of new agricultural techniques in the village areas. Though impact analyses are inadequate, the project may have helped increase the output of forest products (without leading to demonstrable overexploitation) and may have reduced water flows by five per cent in the dry season. On the social and economic side the project made a temporary contribution to increasing rural employment and incomes. Research showed no structural changes in income levels.

The project faced the consequences of a sectoral (forestry-based) background analysis: misidentification of the principal problems and a poor choice of location. In the course of implementation greater stress came to be placed on certain aspects of sustainable development, in particular greater awareness of surrounding conditions and intersectoral relations. The follow-up project appears to have drawn lessons with regard to need for careful project identification and formulation, with considerable care being taken over the choice of area and identification of local people's opinions and needs.

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8.2.3 Project: 'Desarrollo Forestal Participativo en los Andes'

In 1989 the FAO regional project 'Participatory Forestry Development (PFD) in the Andes' was implemented with Netherlands funding, to coordinate the national participatory forestry development programmes in several Andean countries, notably Bolivia, Colombia, Ecuador and Peru. The project was subsequently extended to include Argentina and Chile.

Objective

The objective of the project was the promotion of participatory forestry development in the Andes in order to improve the livelihoods of rural communities and preserve the environment.

Strategy and methodology

In the first phase emphasis was on the promotion of the concept of participatory and community forestry development through awareness creation activities. In the second phase emphasis was given to the reinforcement of the capacities of the national institutes and agencies supporting community forestry activities. The focus was on the evaluation and systematisation of experiences, methodologies and agroforestry technologies and the development of training programmes. In the first phase the regional project formed an autonomous structure with coordination units in each of the participating countries, whereas in the second phase the regional project served as a source of human resources and materials for the reinforcement of the institutional frameworks and national development programmes of the participating agencies.

Results

By means of training activities, the dissemination of numerous publications and exchange of experiences, more than 1,000 people from 80 organisations were reached in the first phase. Campaigns were set up to promote the integration of trees in the production systems of the farming communities in the Andes. This resulted in the development of a regional programme of research and transfer of forestry development technologies and contributed to the incorporation of PFD into the national Tropical Forestry Action Plans.

In the second phase (42 months for the regional project and 30 months for the Chile project) about 300 institutions, private agencies, NGOs and projects in the five countries participated in the programme. Many of these have expressed the desire to continue along the established lines using their own resources, following completion of the project.

The project has identified, selected, systematised and evaluated about 45 experiences concerning small forest-based industries, communal forests, agroforestry practices, extension methods and gender-related activities. These have been synthesised in a series of publications to guide the planning of future PFD activities. In order to disseminate the contents and results of the evaluation, 12 national workshops were organised in the 5 countries, in which representatives from public institutions, NGOs and community organisations participated. The recommendations formulated at the workshops were taken up by the participating organisations in the PFD networks.

A total number of 43 events were organised for the preparation and implementation of the 5 permanent national training programmes. These dealt with participatory community planning, agroforestry practices,

extension communications and participatory extension methods. 1,045 technicians, trainers and extensionists belonging to over 300 organisations from 5 countries have benefited from these training events. The evaluation mission concluded that there was a need for, and interest in, continuation of the training programmes after the completion of the project, but that their development needed more time. There was also a need to introduce the contents of the PFD into the curricula of universities and similar institutions.

In the five countries 194 institutions, agencies and NGOs have become affiliated to national PFD networks, representing an important tool for future forestry development. The regional project has contributed to co-operation between national networks, but no regional network was formed that could continue the exchange in an organised manner. Recommendations made to the regional project and the Chile project, to the governmental institutions and to FAO stress the importance of continuation of project activities in order to reinforce the PFD networks. It is felt that the projects still have not been consolidated enough to safeguard future sustainability and that there is need for additional external support to the countries concerned, either through a new regional project or through a series of associated national projects. It is hoped that the *'Forest, Trees and People Programme'* (FTPP) of the FAO, which is co-financed by the Netherlands, could play an important role in this endeavour.

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9. CONCLUSION

Tropical forestry development has been a major interest of the Netherlands since colonial times. Tropical forestry expertise was acquired in colonial times, and built upon in a variety of ways in the post-colonial period. Forestry development activities have been intensified since the late 1970s.

A clear pattern of budget allocations can be observed since 1985, with the commitment to allocate substantial sums for forestry activities within the framework of the Tropical Forestry Action Plan. At present, a total amount of 150 million NLG a year is allocated for Dutch forestry aid, of which in 1995, around 113 million NLG was actually disbursed.

Significant shifts in policy have take place over the years, from an initial support for fuelwood and energy projects in sub-Saharan Africa in the 1970s to a more institutional orientation in the 1990s. In recent years, much more attention has been given to tropical rainforests and biodiversity aspects, in line with developments in international policy.

In keeping with the policy on tropical rainforests, forestry development activities are currently focused on such themes as:

- protection and sustainable management of forests with special attention to the conservation of primary tropical rainforest and the encouragement of sustainable forest management;
- protection of watersheds through maintenance and rehabilitation of the forest;
- participatory forestry and agroforestry;
- relationships between forests, trees and energy;
- institutional support and strengthening of local and national governments and other implementing organisations, such as NGOs as well as local community based organisations within the framework of National Forestry Action Programmes, training and education of personnel, applied research and dissemination of information to policy level, to governments, the private sector and the general public.

Projects are implemented by many institutions and organisations. For the Netherlands, the FAO has long been a major implementing agency, especially for activities oriented towards institutional strengthening and social forestry. For projects oriented towards protection of forests, IUCN and WWF are important implementing agencies. Local governmental institutions and NGOs, sometimes supported by international organisations, are also actively participating in the implementation of Netherlands aid.

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16. *Tweede Kamer* is the Second Chamber of the Netherlands Parliament, roughly parallel to the UK House of Commons.

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ACRONYMS

BEMO	'Memorandum of appraisal'
BILANCE	Dutch NGO formed from the merger of CEBEMO and VASTENAKTIE
CARE	International NGO
CATIE	*Centro Agronomico Tropical de investigación y Enseñanza* (Tropical Agriculture Research and Teaching Centre, Costa Rica)
CELOS	Forest management system
CGIAR	*Centres du Groupe Consultatif pour la recherche agricole* Consultative Group on International Agricultural Research
CHS	CELOS Harvesting System
CIFOR	Centre for International Forestry Research
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	CELOS Management System
COCOS	Interministerial Co-ordination Committee for Development Co-operation
CONIF-HOLANDA	Netherlands-funded research project
CSS	CELOS Silvicultural System
DAC	Development Assistance Committee

DGIS	*Directoraat-Generaal Internationale Samenwerking* Directorate-General for International Co-operation
ESMAP	Energy Sector Management Assistance Programme
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FSC	Forest Stewardship Council
FBSG	Forestry and Biodiversity Support Group (formerly FSG: Forestry Support Group)
FTPP	Forest, Trees and People Programme
GEF	Global Environment Facility
GNP	Gross National Product
GRAAP	*Groupe de recherche et d'appui à l'autopromotion paysanne* – animation methodology
HQ	Headquarters
HIVOS	Humanistic Institute for Development Co-operation
IAC	International Agricultural Centre
ICCO	Umbrella organisation of Protestant developmental NGOs
ICRAF	International Council for Research in Agroforestry
IDA	International Development Association
IDMO	Project identification memorandum of the Netherlands Ministry of Foreign Affairs
IIED	International Institute for Environment and Development
IKC-N	National Reference Centre for Nature Management
IOV	Operations Review Unit
ITTO	International Tropical Timber Organization
IUCN	International Union for the Conservation of Nature
KWAP	Kenya Woodfuel Agroforestry Programme
KWDP	Kenya Woodfuel Development Programme
LBB	*Dienst Lands Bosbeheer*, Surinam Forest Service
LNV	Ministry of Agriculture, Nature management and Fisheries
MAP	The Mass Awareness Programme of the Kenya Woodfuel Development Programme
MFO	*Medefinancierings Organisatie* Co-financing non-governmental organisation
MOE	Ministry of Energy
NGO	Non-governmental Organisation
NLG	Dutch Guilder
NOVIB	Netherlands Organisation for International Development Co-operation
ODA	Overseas development assistance
OECD	Organization for Economic Co-operation and Development
PFD	Participatory Forestry Development
ROS	Council for Development Co-operation
RIN	Netherlands Institute for Nature Management
SBB	*Staatsbosbeheer*, the Netherlands State Forest Service
SNV	Netherlands Development Organisation
TFAP	Tropical Forestry Action Plan Programme
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WWF	World Wide Fund for Nature

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