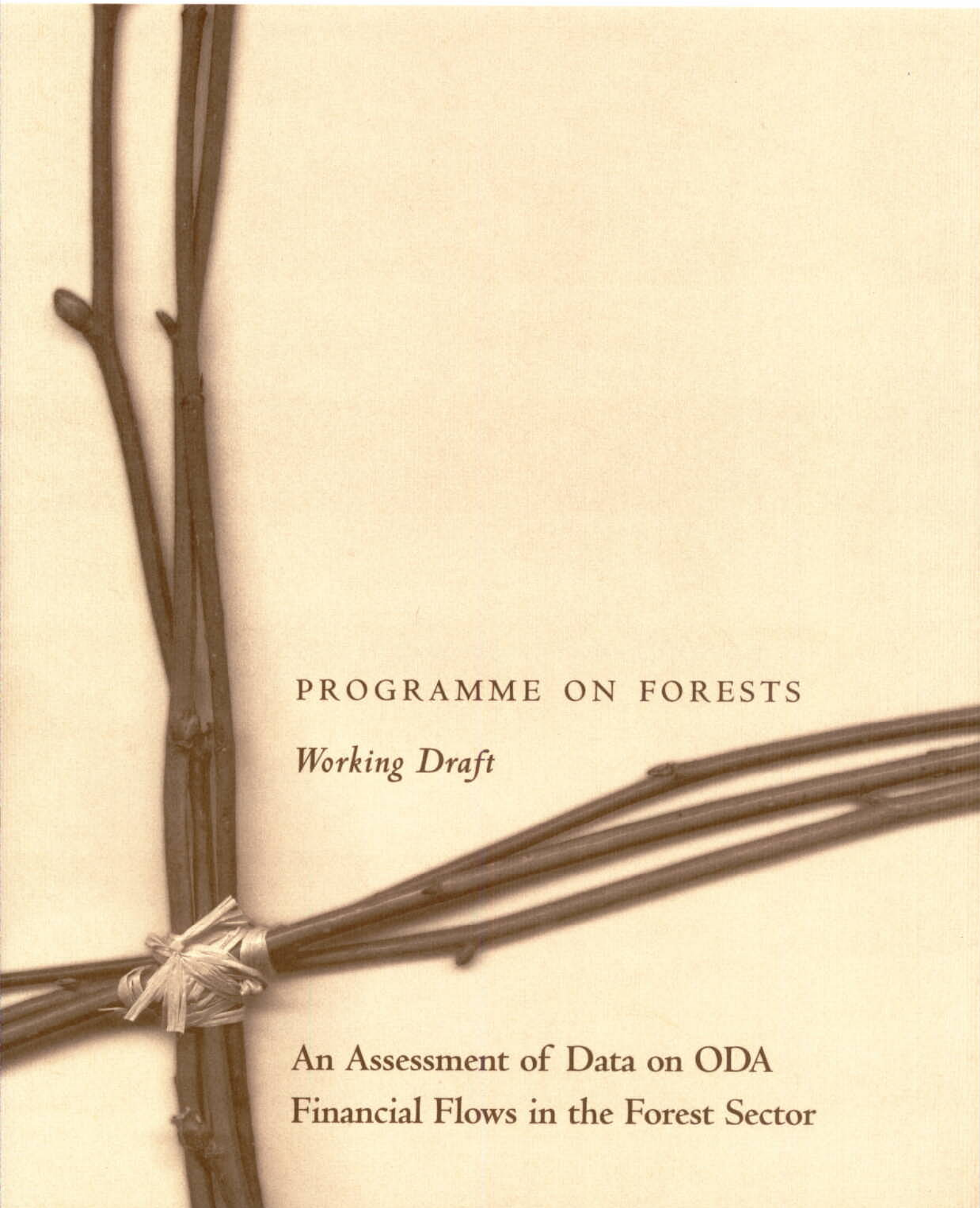

PROGRAMME ON FORESTS

Working Draft

An Assessment of Data on ODA Financial Flows in the Forest Sector

PROFOR

AN ASSESSMENT OF DATA ON ODA FINANCIAL FLOWS IN THE FOREST SECTOR

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April 1999

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1. Summary

This study presents information gathered on international ODA flows in the forestry sector, as part of UNDP and the IFF Secretariat's preparations for IFF-3. It also comments on issues of relevance to the broader context of IFF Process Programme Element II.a.

Levels of new ODA commitments appear to have risen over the late 1980's, reaching their highest levels in real terms in the 1990-2 period *(in excess of 2 billion US dollars, 1996 prices),* ***and subsequently fallen to lower levels****. Such a peak in aggregate levels of new commitments is partly a result of the largest single provider of funds, the World Bank, having particularly large commitments (over $600 million) in 1990, 1992 and also 1994.*

Data for all other agencies suggest that their aggregate levels of new commitments were at their highest levels over the same period ($1.3-1.6 billion over 1988-92), and have fallen slightly since then ($1.2-1.4 billion for 1993-6, 1996 prices). Though this study is not in a position to explain this subsequent decline, part of the reason may lie with the growing popularity of parallel funding areas concerned with the environment and biodiversity.

Due to limited time and resources, the methodology chosen had to make a number of practical compromises, which have implications for the accuracy and depth of data gathered:

- *firstly, data were gathered from the central OECD and FAO sources, and synthesised, together with other readily available information, mainly from published sources;*
- *secondly, the information thus collected for each agency was then presented to the agency in question, which was invited to check, update and, where necessary, correct and add to it.*

The results of this second phase were then brought together to supplement and inform the data initially collected.

Qualifications are therefore made regarding the accuracy and depth of the aggregate figures presented here. In particular, it is important to note that

- ***some agencies have not yet responded to our requests for information,*** *and as a result* ***estimates have sometimes had to be used,*** *and there remains a degree of uncertainty about the accuracy of the aggregate ODA figures;*
- ***commitment figures give an exaggerated picture of changes in ODA levels*** *over time;*
- *the* ***figures gathered represent flows to forestry defined in a very broad sense****, rather than to sustainable forest management specifically;*
- *because of trends towards including forestry components in broader, multi-faceted projects, or classifying forestry activities under 'environment' or 'biodiversity' headings (which make them more difficult to capture in such a limited exercise),* ***figures obtained for recent years may substantially underestimate actual flows*** *to the forest sector.*

Limitations to the accuracy, depth and usefulness of information gathered reflect wider problems with delineating the forestry sector clearly. In addition, there are generic problems with the types of aggregate ODA data presented here, which also hold for other sectors.

With regard to the possible refinement of this information, there is clearly a balance that needs to be struck between the value of increasing the accuracy and depth of forestry ODA data in the future, and the costs of those improvements. Four different options for improving future accuracy of

data collection and maintenance are considered, together with their relative strengths and weaknesses.

A resumption of FAO-style intermittent surveys may be a sensible trade-off, and suggestions are made to improve the accuracy of these. The OECD databases are unlikely to provide a complete picture of forestry activities in the shorter term. The practical reasons for this suggest that creating a forestry-specific system to monitor flows is likely to face similar problems. Finally, a small number of more focussed and detailed surveys, perhaps at country level, would be useful to provide more depth and understanding of the main issues highlighted here.

2. Introduction

This study presents information gathered on international ODA flows in the forestry sector, as part of UNDP and the IFF Secretariat's preparations for IFF-3. It also comments on issues of relevance to the broader context of IFF Process Programme Element II.a.

The report details work undertaken for UNDP and the IFF Secretariat, in preparation for the third session of the Intergovernmental Forum on Forests (IFF-3), to be held in May of 1999. UNDP is the lead agency in the IFF process Programme Element II.a on matters related to financial resources to support sustainable forest management in all types of forests.

Due to the limited time period available before this report had to be submitted to the IFF Secretariat, the terms of reference took an unusual structure:

> 'As noted in the Financial Studies Workplan, which forms an annex to these terms of reference, the last possible deadline for new information to be included in the Secretary-General's Report for IFF-3 is roughly 15 January 1999. Since it is not possible to conduct all the studies requested by that date, this consultancy will focus, in its first phase, 23 November 1998 to 22 January 1999, on collecting and synthesizing as much useful data as possible for the IFF-3 report'
>
> '…The consultant will first concentrate on establishing and synthesizing the most recent available estimates for international public financial flows for forest-related programmes in developing countries (ODA and non-profit). He will then gather readily available information on international private-sector flows for forest-related activities.'

The report therefore presents the information gathered and issues raised during this initial two-month stage, the data gathered during this phase being largely public international ODA flow information.

It also comments on issues of relevance to the broader context of Programme Element II.a. In particular, there is an assessment of how systematic, reliable and regular the existing forestry flow information sources are, and suggestions are made as to how data collection might be improved in the future.

3. Results and Analysis

Levels of new ODA commitments appear to have risen over the late 1980's, reaching their highest levels in real terms in the 1990-2 period *(in excess of 2 billion US dollars, 1996 prices),* ***and subsequently fallen to lower levels****. Such a peak in aggregate levels of new commitments is partly a result of the largest single provider of funds, the World Bank, having particularly large commitments (over $600 million) in 1990, 1992 and also 1994.*

Data for all other agencies suggest that their aggregate levels of new commitments were at their highest levels over the same period ($1.3-1.6 billion over 1988-92), and have fallen slightly since then ($1.2-1.4 billion for 1993-6, 1996 prices). Though this study is not in a position to explain this subsequent decline, part of the reason may lie with the growing popularity of parallel funding areas concerned with the environment and biodiversity.

The estimated figures for ODA flows to the broad forestry sector (see Table 1 and Figure 1) have been based on a variety of sources. Only a limited number of agencies have responded directly to our requests for information to date (10 out of 35), so estimates are as yet provisional. However, for the 1990-96 period, 50-75% of the ODA estimates shown are derived from newly acquired data, which include figures for most of the major agencies. Estimates have been made up to and including 1997, but less data has been obtained for 1996-7, and therefore estimates for this period are less reliable. The methodology used to generate estimates is considered in section 4.

Table 1: Estimated forestry ODA flows

Commitments, nominal US$ (million)

1996-1997 estimates are less reliable

		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Bilateral	non-EU bilaterals	182	275	367	269	366	461	364	333	270	447	511	307
	European Union*	247	320	394	446	514	557	566	466	491	520	469	465
	Total	429	595	761	715	881	1,017	930	799	761	967	980	772
Multilateral	Multilateral Development Banks	170	196	367	313	766	430	869	279	782	173	148	277
	UN Agencies	186	187	194	201	204	212	209	197	241	230	220	221
	Total	356	383	561	514	971	642	1,077	476	1,023	403	368	498
All Donors - estimate		**784**	**978**	**1,322**	**1,229**	**1,851**	**1,659**	**2,007**	**1,275**	**1,783**	**1,370**	**1,349**	**1,270**
	upper limit	866	1,150	1,454	1,436	2,036	1,896	2,257	1,403	2,018	1,552	1,554	1,487
	lower limit	703	805	1,190	1,022	1,666	1,422	1,757	1,148	1,549	1,188	1,143	1,054
	excluding World Bank	721	845	1,168	1,088	1,198	1,405	1,385	1,142	1,149	1,296	1,309	1,086
FAO Questionnaire data		765		1,115		1,425			1,545				

Commitments, 1996 US$ (million)

1996-1997 estimates are less reliable

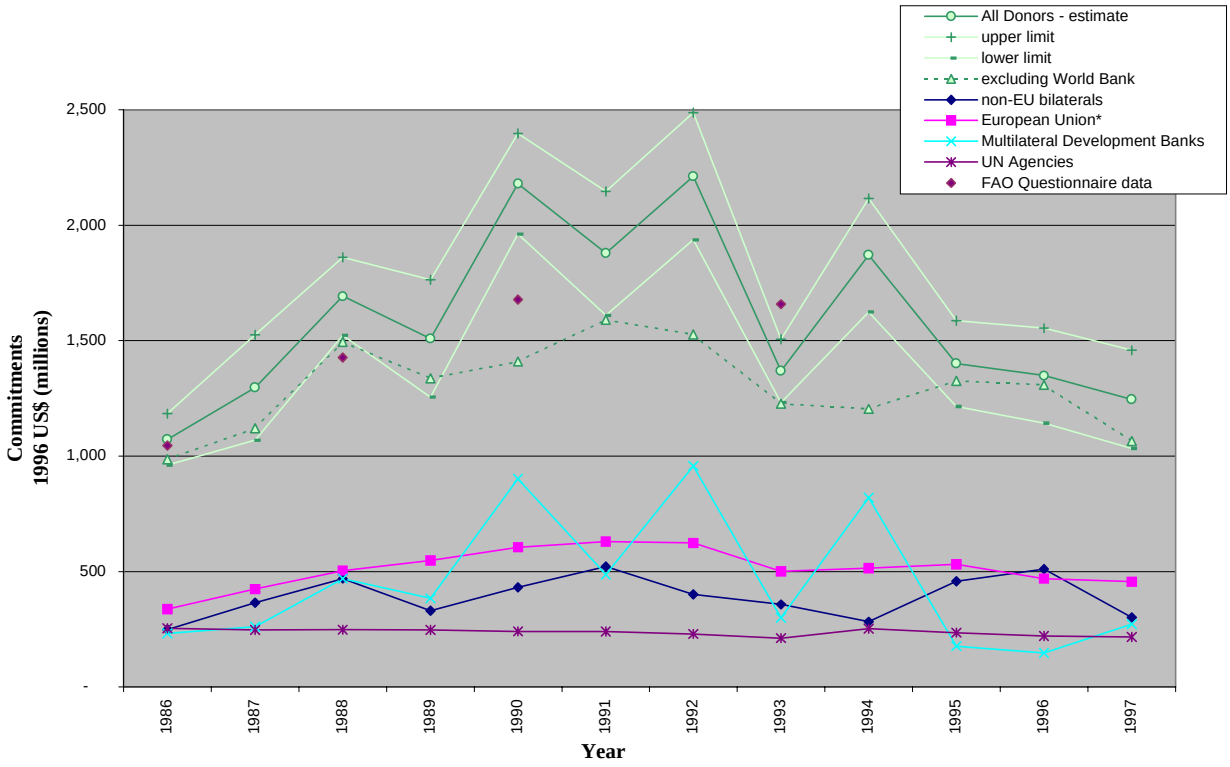
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	***1996***	1997
Bilateral	non-EU bilaterals	249	365	470	330	432	522	401	357	283	458	***511***	301
	European Union*	337	424	504	548	605	630	624	500	515	531	***469***	456
	Total	586	789	974	878	1,037	1,152	1,025	858	798	989	***980***	757
Multilateral	Multilateral Development Banks	232	261	470	384	902	487	958	300	820	177	***148***	271
	UN Agencies	255	248	249	247	241	240	230	212	253	235	***220***	217
	Total	487	508	719	632	1,143	727	1,187	512	1,072	412	***368***	489
All Donors - estimate		**1,073**	**1,297**	**1,692**	**1,510**	**2,180**	**1,879**	**2,212**	**1,369**	**1,870**	**1,401**	***1,349***	**1,246**
	upper limit	1,184	1,526	1,862	1,764	2,398	2,147	2,488	1,506	2,116	1,587	***1,554***	1,458
	lower limit	962	1,069	1,523	1,256	1,962	1,610	1,937	1,232	1,624	1,215	***1,143***	1,033
	excluding World Bank	986	1,121	1,495	1,337	1,410	1,591	1,527	1,226	1,205	1,326	***1,309***	1,065
FAO Questionnaire data		1,046		1,427		1,678			1,658				

* including the Commission of the European Communities

In line with the OECD DAC definition of ODA, figures represent flows to countries in Part I of the DAC List of Aid Recipients. They exclude aid flows to Countries and Territories in Transition (Part II of the DAC list, which includes Eastern Europe and New Independent States of the former Soviet Union).

The estimates are directly comparable with the earlier FAO questionnaire data (see section 4.1.i), as they cover the same set of agencies, and use the same definition of forestry.

Figure 1: Estimated forestry ODA flows



Figures presented in the graph are shown in 1996 US dollars, making them comparable by adjusting for inflation.

3.1 Trends suggested by the estimated figures

The absolute levels of flows are hard to verify, because of the difficulties with identifying and estimating the size of forestry components of large multi-faceted projects (see section 4.3.v). Given the reported trend towards funding such projects, and also towards classifying forestry activities under 'environment' and 'biodiversity' headings, figures for recent years may substantially underestimate actual commitment levels (see section 4.3.vi).

3.1.i Overall trends

In aggregate, for all bilateral and multilateral agencies considered in this study, the data obtained presents a series of large peaks and troughs. This pattern of large fluctuations is largely a result of the World Bank's reported commitments over the 1990-4 period. Because the World Bank operates in two-year financial cycles, this leads to large numbers of new commitments being reported in the first year, followed much less in the next - hence the stepped pattern shown. Similarly exaggerated changes in flows are seen with several other agencies, particularly when commitments for large loans are reported. This illustrates some of the problems of using commitment information (see section 4.3.iv).

The data obtained show a rising trend in forestry ODA over the late 1980s, peaking in 1990-2 at levels in excess of 2 billion US$ (1996 prices). Since 1993, levels of new commitments appear to have declined slightly, to 1-1.5 US$ billion in 1995-7.

This pattern is partly a result of greatly increased commitments on the part of the World Bank in 1990, 1992 and also 1994[1]. World Bank commitments in all three years were in excess of $600 million - about a third of total aggregate flows for those years. They have not since attained such levels.

Since the Bank data is artificially discontinuous and the flows unusually large, the graph also shows flows for all agencies excepting the World Bank, to show trends for other agencies more clearly. Here the pattern is for new commitments being at their highest levels over the 1988-92 period ($1.3-1.6 billion), with levels falling slightly for 1993-6 ($1.2-1.4 billion, 1996 prices).

It is important to note, however, that since these are changes in the levels of new commitments, they may exaggerate changes in levels of actual disbursements. Some of the apparent fall in ODA for the later years will in fact be offset by continued disbursements from the large commitments made in earlier periods. The observed rise and subsequent fall will therefore be levelled-out to an extent when actual flows are considered (see section 4.3.iv).

3.1.ii Bilateral agencies (excluding the European Union)

The data gathered for non-EU bilateral agencies is very incomplete, since of the seven agencies contacted, only Australia, Japan and Switzerland supplied data. While Japan is the largest donor in the group, without information from both the USA and Canada a large proportion of the data had to be estimated on the basis of the limited FAO data available. In total, such estimates comprise more than 60% of the figures assigned to this group of donors for many of the years in question (see Annex II).

For the group in total, the aggregate estimates vary between $300-500 million (1996 prices), with sharp peaks and troughs reflecting the patterns of Japanese ODA. With no information available from most of the agencies in question, it would be misleading to attempt to identify trends in these data.

[1] The 1994 peak in World Bank commitments coincides with lower levels of commitments from all other donors in aggregate, and therefore total flows are lower in 1994 than in 1990-2.

3.1.iii The European Union

For the agencies of the European Union, the rate of response to our requests for information was in fact lower than for non-EU bilateral agencies (only three out of the fourteen agencies contacted responded with data within the period of the study). However, this information was supplemented for most agencies with data recently published in a study of European Union forestry aid[2]. As a result, the overall data coverage is better than for the other bilateral agencies (less than 20% of flows for 1992-5 are based on FAO figures or estimates).

These figures suggest a gradual rise in aid flows over the late 1980s, peaking at over $600 million (1996 prices) in 1990-2, but then falling to levels of approximately $500 million in 1993-5. Incomplete data for 1996 suggests a further fall in levels of aid, but since there is less data available for this year (only 40% of the 1996 estimate is based on data), it is to early to say whether this is indeed the case (see Annex III).

3.1.iv Multilateral Development Banks

The data quality is better for the four banks considered, than for any of the other groups of agencies surveyed. The World Bank and two of the three regional banks responded with information for the study, covering the whole period in question, while for the third regional bank partial data was obtained from an earlier FAO regional survey (see Annex IV).

This high data quality is of particular importance, since the data indicates that these four MDBs shows a large increase in their commitments in the sector, especially over the 1990-4 period. The increase is largely due to the World Bank, although commitments reported by all three regional development banks were substantially larger than those indicated by the FAO questionnaire data. The pattern of flows for the World Bank has already been indicated above (see section 3.1.i).

3.1.iv The UN system

The information presented for the UN agencies is dominated by one agency, the World Food Programme, which accounts for over half the flows in question. While it was not possible to obtain full data for this agency, estimates were made and subjectively verified by WFP staff, on the basis of the partial data available. The gradual decline shown is thought to accurately depict actual changes in levels of WFP commitments.

Information was successfully obtained from the other major agencies with large flows in the sector, so the slight decline shown for UN agency flows estimated (from $255 million in 1986 to $235 million in 1995; 1996 prices) is likely to be broadly correct (see Annex V).

[2] Shepherd et al. (1998)

4. Methodology

Due to limited time and resources, the methodology chosen had to make a number of practical compromises, which have implications for the accuracy and depth of data gathered:

- *firstly, data were gathered from the central OECD and FAO sources, and synthesised, together with other readily available information, mainly from published sources;*
- *secondly, the information thus collected for each agency was then presented to the agency in question, which was invited to check, update and, where necessary, correct and add to it.*

The results of this second phase were then brought together to supplement and inform the data initially collected.

Qualifications are therefore made regarding the accuracy and depth of the aggregate figures presented here. In particular, it is important to note that

- ***some agencies have not yet responded to our requests for information,*** *and as a result* ***estimates have sometimes had to be used,*** *and there remains a degree of uncertainty about the accuracy of the aggregate ODA figures;*
- ***commitment figures give an exaggerated picture of changes in ODA levels*** *over time;*
- *the* ***figures gathered represent flows to forestry defined in a very broad sense****, rather than to sustainable forest management specifically;*
- *because of trends towards including forestry components in broader, multi-faceted projects, or classifying forestry activities under 'environment' or 'biodiversity' headings (which make them more difficult to capture in such a limited exercise),* ***figures obtained for recent years may substantially underestimate actual flows*** *to the forest sector.*

To obtain the most useful and flexible data on ODA flows in the forest sector, it would be necessary to analyse all the project portfolios and loan activities of each bilateral and multilateral agency in detail, and analyses these to produce regional, geographic and sub-sectoral breakdowns over time. Due to the limited time and resources available to conduct this study, it was not considered feasible to attempt such a level of detailed data collection and analysis.

The strategy employed had therefore to be more restrictive:

Phase I - Basic data collection
collect all readily available information on the major agencies, from central sources such as FAO and the OECD DAC.

Phase II - Data verification and supplementation
present Phase I information to agencies, and request them to supplement and, where necessary, correct that information.

This methodology clearly has limitations, mainly restricting the accuracy and depth of information gathered. These issues are considered in more detail in section 4.3.

4.1 Phase I - Basic data collection

The main central sources of information consulted in Phase I were:
- FAO/NFAP Unit (National Forestry Action Plan) Survey Information;
- OECD DAC (Development Assistance Committee) Systems.

Further information about these is given below.

For European Union Member States and the Commission of the European Communities, the recent ODI publication 'The EU Tropical Forestry Sourcebook'[3] provided useful data, particularly for 1995 flows. It was also possible to obtain some information from individual agency publications, such as annual reports.

4.1.i FAO/NFAP Unit (National Forestry Action Plan) survey information[4]

The UN Food and Agriculture Organisation conducted surveys by questionnaire of bilateral and multilateral agencies, to assess their forestry ODA flows. This information is available for the major bilateral and multilateral agencies, funds and multilateral development banks, for the years 1986, 1988, 1990 and 1993. It uses a broad definition of forestry, and does not double-count contributions to multilateral agencies. Published data gathered using these questionnaires was used, although it was not practical to obtain and analyse the original questionnaires themselves within the scope of this study (despite certain reservations as to the accuracy of these data - see section 6.1).

4.1.ii OECD DAC (Development Assistance Committee) systems[5]

The OECD DAC maintains two statistical reporting systems for information on aid flows from DAC members. These are the DAC and CRS (Creditor Reporting System), the online versions of which are referred to as the DAC/o and CRS/o respectively. To avoid confusion between the database and the Committee itself, the database is referred to as the DAC/o throughout the following paragraphs.

The DAC/o information collects aggregate ODA commitment information annually, for all sectors, from each OECD DAC member, using a set of ten forms (DAC Tables 1 to 10). Statistics on the purpose of aid cover three dimensions: the sector of destination, the form or type of aid, and the policy objective(s) of aid.

In addition to this annual aggregate commitment, data at individual commitment level is collected by the Creditor Reporting System. The CRS should therefore aggregate to the same totals as the DAC/o, but allows more detailed breakdowns (e.g. by region and sector) to be carried out. In practice however, there are usually discrepancies between the data sets, with less data being reported to the CRS database, because of the agencies' reluctance to undertake the extra work required to collect and report data at this more detailed level.

Information used in this study has been taken from both the CRS and the DAC/o Table 5 data sets. DAC/o data is only available from 1995 onwards, when data on forestry began to be collected as a

[3] Shepherd et al. (1997).

[4] Chandrasekharan (1996).

[5] Further information:
http://www.oecd.org/dac/

specific item (it had previously appeared only under the 'Agriculture, Forestry and Fisheries' total). Data should be available for the 15 DAC member donor countries, and the multilateral development banks that report to the OECD DAC, and cover ODA commitments to forestry in a broad sense (including research, plantations, agroforestry, conservation etc.). UN agency information is not collected by the DAC, and the forestry figures do not include contributions to multilateral agencies.

There is no mechanism in the OECD statistical systems to capture information on forestry sub-components of multi-faceted projects in other sectors. As a result, and compounded by the incompleteness of donor reporting to the DAC in many cases, both DAC/o Table 5 data and CRS data might be expected to underestimate actual agency forestry commitments by some margin. This was found to be the case by a large margin (see section 6.2).

4.2 Phase II - Data verification and supplementation

In the second phase, agencies were provided with the figures pertaining to them, gathered from these various sources, and asked to indicate or provide the most accurate information for their total ODA flows to the (broadly constituted) forestry sector. Information on disbursements was requested as well as commitment information, and sub-sectoral (especially sustainable forest management expenditure) and geographic breakdowns were also requested. Agencies were also asked to provide an indication of whether tendencies to include forestry components within broader multi-faceted projects were increasing, decreasing or changing in character.

The information thus gathered in the second stage was used to inform and correct that gathered in the first. For each agency, a 'best estimate' set of data for the period was generated, relying wherever possible on information provided directly by the agencies themselves. Where such information had not been obtained, FAO questionnaire and OECD DAC information sources were consulted.

Where no data were available for a particular agency and year, estimates were made based on the most relevant information available. These estimates usually took the form of imputed averages, for years falling between those for which FAO questionnaire data were available (i.e. estimates for 1987, 1989, and 1991-2). For years after 1993 and agencies for which we had no more up-to-date information, it was necessary to use data obtained for the closest available year (usually FAO questionnaire data for 1993).

It is important to note that these processes of estimation, in the absence of other data, give the aggregate figures a tendency to reflect the FAO data. They may also tend to hide fluctuations in actual flows during periods for which no data were supplied to us.

4.3 Qualifications on interpreting the data

There are a number of qualifications that need to be made regarding the accuracy, depth and usefulness of data presented here. The accuracy and depth are clearly limited by the limited scope of this study, and the main limitations are discussed below. These are, however, also an effect of more general problems with assigning boundaries to forestry as a sector (discussed in section 5.1).

It should be recognised, in any case, that there are general problems with the usefulness of such ODA data in any sector (see section 5.2), which suggest that attempting to gather more accurate and detailed information on ODA flows in this sector will be of limited value.

The main qualification to the estimates given is clearly the lack of complete data for many agencies. Estimates needed to be made in a number of cases, and secondary data sources such as the FAO questionnaires used,where agencies had not provided data in response to our requests. Figure 2 shows a breakdown for each year, indicating the proportion of the aggregate figure derived from such estimates. Clearly figures are most reliable for the 1990-6 period, when 50-75% of the estimates have been based on verified data.

Annex I gives a more detailed breakdown of the actual figures and sources used for each agency. These are presented in graph form in Annexes II-V by each group of agencies.

4.3.i Margins of error

To underline the more limited accuracy of estimated figures, the likely upper and lower limits of the total ODA series have been indicated. Where no figures have been made available by an agency for a given year, an estimate based on the closest available data has been made, and assigned a likely margin of error of +/- 20%. All other figures were assigned a lower margin of error (+/- 10%). In aggregate, these margins of error have been used to produce the upper and lower and lower limit series shown.

Detailed statistical analysis has not been possible given the partial nature of the data collected, all that can be stated about the margins of error is that the actual levels of commitments are likely to lie within the bands shown. In any case, pursuing greater accuracy in levels of commitments is unlikely to be very useful, since commitments themselves are only a proxy for actual levels of flows (see section 4.3.iv).

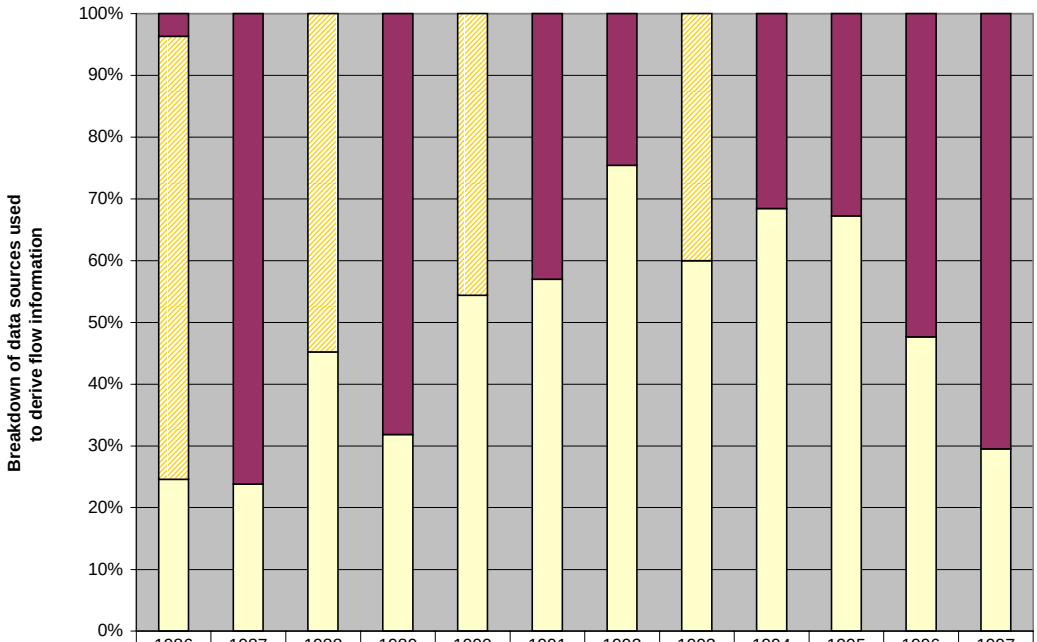
4.3.ii Limitations to cross-checking data from different sources

It should be possible, in theory, to check the accuracy of agency ODA figures by a process of comparison, since comparable data should be held by FAO and the OECD, as well as provided in the second phase of data collection. In practice, however, this proved very difficult to do, since only very partial information could be gathered from each source, and where multiple inconsistent sets of figures were available, it was not always easy to determine which were the most reliable. While the FAO data is the most complete available, for the four years in which it was gathered, there are some doubts as to its accuracy for some agencies (see section 6.1). The OECD information is very incomplete, with some agencies not reporting at all, and the majority clearly under-reporting their activities (see section 6.2). The OECD system data for bilateral donors and for multilateral

development banks total to only a third of our estimated figures for these groups (UN agencies do not report to the OECD systems).

Some corrections have been made at individual agency level to the FAO questionnaire data, based on revised information provided to us by agencies. However, since this questionnaire data is the only data series available with information for all major agencies, it has been used where agencies have not provided more up-to-date information, despite the possibility that it may contain further errors.

Figure 2: Data sources used to compile forestry ODA information



	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
% of figure estimated	4%	76%	0%	68%	0%	43%	25%	0%	32%	33%	52%	70%
% of figure based on FAO data	72%	0%	55%	0%	46%	0%	0%	40%	0%	0%	0%	0%
% of figure based on non-FAO data	25%	24%	45%	32%	54%	57%	75%	60%	68%	67%	48%	30%

Figure 2 above shows breakdowns of the proportions of aggregate figures for each year based on new data, FAO data, or estimated values (where no data was available). In 1993 for instance (the last year for which FAO data is available) 40% of the total estimated ODA flow is directly based on the previously available FAO figures, while the remaining 60% is derived from new data. The close correspondence between the aggregate FAO data and the new estimates, in particular for 1986 and 1988, is therefore largely a result of heavy reliance on the FAO figures. Such close correspondence should therefore *not* be interpreted as suggesting that the FAO figures independently confirm the accuracy of new estimated values, or vice versa.

More generally, the degree of correspondence between all data obtained for an agency varies a lot between agencies. Only a small number of agencies have reported very similar figures to FAO, the OECD and to this study. It is important to note that close correspondence does not necessarily imply that the numbers are an accurate measure of actual flows in the forest sector, since it could instead mean that the same inaccurate numbers are being consistently reported.

This has a slightly counter-intuitive effect. Because of the way that OECD data is gathered, there is an in-built bias for it to underestimate actual forestry commitments, since there is no mechanism to account for components of multi-faceted projects (see section 6.2). Were larger agencies to report similar figures to both the OECD systems and to forestry-specific questionnaires, this might signal that such figures are incomplete, rather than lend support to their accuracy.

4.3.iii Broadly constituted forestry sector / Sustainable Forest Management

Since few agencies provided a breakdown by type of activity, the flows represent ODA in the broadly constituted forestry sector (i.e. including activities such as agroforestry, forest conservation, plantations etc.). It has not been possible in the course of this study to gather information from agencies specific to sustainable forest management.

It would be quite difficult to do this, in any case, because of a combination of practical and conceptual difficulties. A practical problem is that most agencies tend to use their own schema for classifying activities, which are not easy to reconcile across agencies. To address this, it would be necessary to analyse and reclassify portfolios at the level of individual activities, according to a standard schema, which would be a very large undertaking (see section 6.3).

The conceptual problem is that 'sustainable forestry management' is a very broad term, without clear boundaries, and a term which may be interpreted in a variety of ways by different agencies. It also has strongly evaluative connotations and very broad scope, the tendency is to classify almost all activities as 'sustainable forestry' (agencies would clearly be reluctant to identify any activities as '*un*sustainable').

4.3.iv Commitment / disbursement information

Agencies were asked to supply commitment *and* disbursement information where possible, to give a more accurate picture of *actual* flows over time. Commitments are almost always higher than levels of disbursements for a variety of reasons. In addition, commitment data can present a distorted picture of the flow of aid over time, especially for large projects that are active for relatively long periods (which we would expect to be characteristics of many forestry-sector projects).

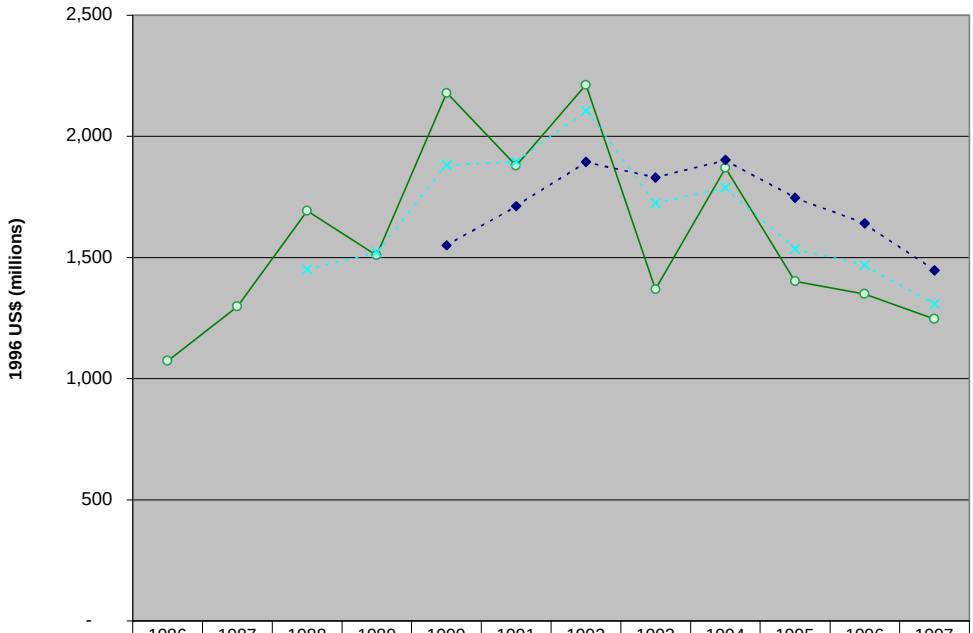
However disbursement information is more difficult to obtain for a mixture of practical and political reasons, and the majority of agencies only provided commitment information in response to our request. The data presented here is therefore the commitment information we have obtained[6].

Clearly, this will have two effects on the data presented. Firstly, the estimated commitments will be larger than the actual disbursement levels. Secondly, changes in levels of actual aggregate flows over time will be more gradual than those indicated by the commitment data (as has already been noted for the World Bank data in particular - see section 3.1.i). A regular pattern of peaks and troughs in the commitment data of an agency could be entirely consistent with a steady flow of disbursements, which makes analysing trends in ODA commitment levels problematic.

[6] The only exception to this is the UK, which provided only disbursement figures.

To illustrate such timing effects, Figure 3 shows two different models of disbursement patterns. The first assumes a three-year pattern of disbursements, weighted so that 50% of the committed amount is disbursed in the first year, 30% in the second and 20% in the third. The second model assumes an even flow of disbursements over a longer five-year period, with 20% of the commitment disbursed each year. It is assumed that total disbursements will equal total commitments, although as indicated above, disbursements will actually be less than commitments.

Figure 3: Models of possible disbursement patterns



	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
All agencies - estimated commitments	1,073	1,297	1,692	1,510	2,180	1,879	2,212	1,369	1,870	1,401	1,349	1,246
3-year disbursement pattern (50%, 30%, 20%)			1,450	1,522	1,881	1,895	2,106	1,724	1,788	1,536	1,469	1,308
5-year disbursement pattern (20% each year)					1,550	1,712	1,895	1,830	1,902	1,746	1,640	1,447

These simple models suggest how patterns in aggregate commitment levels might be reflected in disbursement patterns, but as more gradual trends, and later in time. Disbursement patterns are also likely to temper large yearly fluctuations in commitment patterns.

More information on actual disbursement patterns would be necessary to refine such aggregate models, which would be valuable given the difficulties with obtaining disbursement data. A study of disbursement patterns, with a view to refining such models for future use, could be a useful element of further studies at country or at donor level (see section 6.4).

4.3.iv Grant / loan analysis

Agencies had been asked to supply information on the levels of grants and loans, but since relatively few agencies responded to this request, it has not been possible to analyse this aspect of the financial data obtained. It is possible to obtain information from the OECD systems giving a

breakdown by ODA type, but since the data in these systems is clearly incomplete, and not necessarily representative of total flows[7], it would be misleading to extrapolate from such data.

4.3.v Multi-faceted projects

Multi-faceted cross-sectoral projects ('integrated' projects) which include forestry components pose a number of difficulties for measuring the levels of forest-sector ODA. Firstly, it can be difficult to identify such projects, which can lead to calculations of their importance being too low. Secondly, it is often difficult to measure or estimate the proportion of funds going towards the forest sector. This effect can conversely tend to overestimate the value of their importance, as is explained below. These problems are compounded by conceptual problems with clearly delineating the forest sector, practical and logistical problems of locating individuals who know enough about the projects to answer questions on them, and theoretical problems with understanding how to allocate certain categories of costs.

Most agencies tend to estimate the proportion of money going into forestry from each project only very roughly, without attempting too much detailed analysis. This seems a sensible trade-off between the cost of gathering the data, and the usefulness of enhanced accuracy.

It should be noted however that such estimates are usually made by forestry specialists. At least one agency has found that this tends to over-estimate the importance of forestry. They now ask non-specialist administrators with an overview of all the project's activities to make such estimates. While this seems a minor point, it should be noted that some of the areas adjacent to forestry can involve large investments (e.g. agriculture, infrastructure). A slight miscalculation of the boundary lines can mean large differences in what appears to be funding for forestry, without creating problematic changes for the other sector in question, and so may go unquestioned.

For instance, agriculture budgets in general tend to be larger than forestry budgets, and there has been an increasing trend towards integrated rural development projects. A systematic overestimation of the financial importance of the forestry components included within these could lead to a sizeable exaggeration of forestry funding. Without more detailed and systematic reporting systems to handle multi-component projects, which include financial breakdowns by all sectors (rather than one sector alone), it will be hard to avoid such errors. (An example of the beginnings of such a system at the World Bank is outlined in section 6.3).

It has not been possible to quantify the relative importance of forestry components, which would require far greater depth of data than obtained in the course of this study. Such quantification would however be a useful element of further studies at country or at donor level (see section 6.4).

4.3.vi Changing trends over time

It is likely that changing definitions of forestry, and therefore trends in the design and classification of projects with forestry components, make the trends shown in the estimated data misleading to some extent. Analysis of such trends is based on the assumption that the estimates have the same degree of accuracy over time, even if the absolute levels of funds they indicate may be incorrect.

[7] Technical co-operation for larger donors in particular tends to be under-reported to the OECD systems, which might skew any grant/loan analysis towards exaggerating the loan components

However, several agencies reported an increasing trend towards multi-component rural development projects with forestry components. This could mean that estimated figures for the later years are, relative to figures for the previous periods, too low, since this data is hard to fully capture (see section 4.3.v).

In addition, changes in the understanding of development activities, and changing fashions, could mean that the similar types of activities may be classified in different ways at different times. For instance, what was once seen as a 'forestry' project tends now to be classified as 'biodiversity' or 'environment'. Since it is not always easy to identify relevant projects under such different areas, increased emphasis on any area overlapping with what we have defined as 'forestry' could lead to the reporting of artificially low figures for 'forestry' activities.

Since this is a potentially large source of error, it would be valuable to try to estimate its extent. This would require far greater depth of data than can be obtained in this type of superficial study, but could be a useful element of further studies at country or at donor level (see section 6.4).

5. Wider issues

Limitations to the accuracy, depth and usefulness of information gathered reflect wider problems with delineating the forestry sector clearly. In addition, there are generic problems with the types of aggregate ODA data presented here, which also hold for other sectors.

The methodology for this study had to trade-off the available time and resources against the accuracy and depth of data gathered. It was therefore expected that estimates would have to be made, on the basis of incomplete data.

However, it should be recognised that there are wider issues and problems that make it difficult to obtain greater accuracy and depth, which partly stem from the nature of forestry as a sector. Forestry has grown in scope over time, and different agencies handle forestry in a variety ways (at both policy and organisational levels). These features have implications for the collection of data on forestry ODA flows.

There are also more general limitations to the usefulness of ODA data which apply to all sectors, and need to be balanced against the costs of gathering such information.

5.1 Issues specific to the forestry sector

Forestry, as the term has been used in this study, has been growing in scope from what was initially narrowly focussed on industrial plantations. It has grown to include issues in areas such as:
- rural development defined generally;
- environment, conservation and biodiversity;
- market failure;
- watershed management;
- agro-forestry, and tree-planting of all kinds;
- climate change.

This changing and heterogeneous nature has several implications:
- forestry is not always treated as a single area for agencies, and hence may not have a distinct policy and reporting identity;
- several distinct departments and arms of agencies often deal with 'forestry' issues, which makes it hard to get an overview of those activities in totality;
- 'forestry' means different things to different groups, which raises questions about the comparability of ODA data;
- it can be hard to define clear boundaries between 'forestry' and other sectors, as there are clearly several important areas of overlap with other sectors because of the importance of externality and public good effects. Because of such overlaps, forestry is often a feature of cross-sectoral multi-faceted programmes, which are difficult to analyse (see section 4.3.v);
- as this notion of 'forestry' encompasses a very wide range of activities, it makes less sense to refer to 'forestry' funding in totality - it would be more useful to distinguish more narrowly specified groups of activities;

- the meaning of forestry has changed over time, as issues such as combating desertification, conserving biodiversity etc. have moved in and out of the spotlight of attention. This makes inter-temporal comparisons problematic.

Clearly these features have implications, both theoretical and practical, for obtaining and analysing data on forestry flows. The practical problems make it difficult to obtain complete and accurate ODA flow information from agencies for a number of reasons, largely stemming from forestry activities being spread out between several parts of agencies, and overlapping with other sectors. Such problems obviously will impact on any futures attempts to improve the information available on forestry flows, and systems that gather that information.

The more theoretical problems raise questions about how useful such information would be, due to the limited comparability of activities between agencies and over time, together with the very broadness of the definition of forestry, covering as it does such a wide range of activities.

Since there is such a wide range of difficult issues involved, which could effect calculations of forestry flows, it might be useful to estimate their importance in further, more detailed studies (see section 6.4).

5.2 Issues general to all sectors

Some of the problems outlined above are not specific to forestry alone, but are general difficulties with comparisons of ODA commitment levels in *any* sector, although they may sometimes be felt more keenly in the forest sector because of its heterogeneous and changing character. The key theoretical problems are:

- different agencies may be working to different definitions, criteria and assumptions from one another, and these may vary for the same agency over time. Over-simplistic inter-agency and inter-temporal comparisons of flow levels can therefore be problematic;
- the level of money committed is a poor proxy from the levels actually disbursed, which are almost always lower;
- aid levels as described by aid donors can be greater than the funds actually used for aid objectives, because of rent-seeking behavior by intermediary parties;
- commitment information greatly distorts the flow of funds over time, yet is often used to identify short-term trends (to which it is particularly unsuited) since this is the only source of financial information that is relatively easy to obtain;
- simple commitment levels say nothing about aid effectiveness - the same numbers could equally well represent highly effective or highly ineffective activities, of even activities duplicated over time or across donors;
- because of limited capacities to administer and absorb aid, both in donor agencies and recipient countries, there is some evidence that increasing volumes of aid may have a decreasing marginal effectiveness, so some measure of effectiveness is clearly important;
- analysing the overall levels of flows is a purely retrospective exercise, which can distract attention and resources from other key issues. Costs, opportunity costs and benefits therefore should be assessed.

6. Options and suggestions for improving information

There is clearly a balance that needs to be struck between the value of increasing the accuracy and depth of forestry ODA data in the future, and the costs of those improvements. Four different options for improving future accuracy of data collection and maintenance are considered, together with their relative strengths and weaknesses.

A resumption of FAO-style intermittent surveys may be a sensible trade-off, and suggestions are made to improve the accuracy of these. The OECD databases are unlikely to provide a complete picture of forestry activities in the shorter term. The practical reasons for this suggest that creating a forestry-specific system to monitor flows is likely to face similar problems. Finally, a small number of more focussed and detailed surveys, perhaps at country level, would be useful to provide more depth and understanding of the main issues highlighted here.

Based on the findings of this study, and lessons learnt in the course of collecting the data, a number of options for collecting and improving information on forest sector ODA flows present themselves. These are outlined below, and consist of continued surveys on the FAO model, improvements to the OECD systems, and the construction of a new system to monitor flows on an ongoing basis, in a similar way to the OECD databases, but specifically focussed on forestry activities. The advantages of each approach are outlined, as well as practical problems, and more theoretical issues. These are brought together to indicate practical suggestions for each option.

6.1 FAO-style questionnaire approach

FAO have, in the past, conducted periodic surveys of forestry aid flows by questionnaire (see section 4.1.i). These depend on agencies providing correct and comparable data. There are a number of reasons why we would expect this to be particularly problematic in the forestry sector (see section 5.1), and synthesis of FAO data with that obtained from other sources has indeed highlighted a number of errors and problems in the historic data.

Table 2 shows amendments made to the original FAO figures for agencies during the second phase of data collection (see section 4.2). There is a mixed pattern that emerges from this. On almost every occasion when a more recent source of data has been available (indicated by a coloured background), the original data has been amended.

Table 2: Amendments to FAO Questionnaire data

	1986	1988	1990	1993	Totals for 1986, 88, 90 and 93			
Bilateral	difference - nominal US$ (millions)				nominal US$ (millions)			amendment (%)
Non-EU					FAO data	new estimates	difference	
Australia	+0.7	-1.9	-0.9	-0.6	25.3	22.6	-2.7	-11%
Canada					316.9	316.9		
Japan		+49.0	-45.9	+32.6	304.7	340.4	+35.7	12%
New Zealand					15.9	15.9		
Norway					36.6	36.6		
Switzerland			-6.3	-6.5	86.5	73.7	-12.8	-15%
USA					442.2	442.2		
Non-EU Bilateral Totals		**+47.1**	**-53.1**	**+25.6**	**1228.1**	**1248.3**	**+20.2**	**2%**
European Union								
Austria				+8.3	0.5	8.8	+8.3	1660%
Belgium					5.8	5.8		
Denmark					79.7	79.7		
Finland		-1.4	-8.2	-1.2	118.0	107.3	-10.7	-9%
France					159.2	159.2		
Germany				-7.4	557.4	550.0	-7.4	-1%
Ireland					0.9	0.9		
Italy	+15.0				30.4	45.4	+15.0	49%
Netherlands		-1.9	+4.9	-3.5	167.2	166.6	-0.6	0%
Portugal					0.4	0.4		
Spain	+1.0		-0.1	+1.2	1.5	3.6	+2.1	140%
Sweden					216.1	216.1		
UK	-22.6	-6.1	-0.1	+0.3	132.0	103.6	-28.4	-21%
EU Member State Totals	**-6.6**	**-9.3**	**-3.5**	**-2.3**	**1469.1**	**1447.4**	**-21.7**	**-1%**
European Commission				-140.2	313.3	173.1	-140.2	-45%
European Union Total	**-6.6**	**-9.3**	**-3.5**	**-142.6**	**1782.4**	**1620.5**	**-161.9**	**-9%**
Total Bilateral	**-6.6**	**+37.7**	**-56.6**	**-117.0**	3010.5	2868.8	-141.7	-5%
Multilateral								
Multilateral Development Banks								
African Development Bank	+98.2	+7.8	+21.7	+9.4	11.7	148.7	+137.0	1171%
Asian Development Bank	-6.5	+126.0	-36.5		231.4	314.3	+82.9	36%
Inter-American Development Bank	-6.0	-5.8	+43.1	-7.4	90.4	114.3	+23.9	26%
World Bank	-58.5	+39.0	+484.1	-142.9	683.3	1005.0	+321.7	47%
MDB Totals	**+27.1**	**+166.9**	**+512.4**	**-140.9**	**1016.8**	**1582.4**	**+565.6**	**56%**
UN Agencies								
ITTO					31.9	31.9		
FAO					51.1	51.1		
ILO					5.6	5.6		
UNDP	-1.7	+2.5	-21.5	-10.5	132.4	101.1	-31.3	-24%
UNEP					4.4	4.4		
UNESCO					5.9	5.9		
UNIDO					8.0	8.0		
UNSO			-8.3	-1.0	55.3	46.1	-9.2	-17%
WFP					517.5	517.5		
GEF					10.3	10.3		
UN Agencies Total	**-1.7**	**+2.5**	**-29.8**	**-11.5**	**822.4**	**781.9**	**-40.5**	**-5%**
Total Multilateral	**+25.4**	**+169.5**	**+482.6**	**-152.4**	**1839.2**	**2364.3**	**+525.1**	**29%**
All Major Agencies	**+19**	**+207**	**+426**	**-269**	**4850**	**5233**	**+383**	**8%**

KEY: agency figures | ODI Sourcebook | estimates

otherwise (i.e. no colour) data is from the FAO data set

What emerges from this table is a pattern of one-off large and small discrepancies between the old and new data for a number of agencies. These may be partly a result of the discontinuous nature of the previous FAO surveys. Agencies were not required to account for all activities in all years, but to give 'snapshots' of activities for a particular year. Problems with delineating these are compounded by the fact that agencies work to different financial years, and commitment information can be difficult to allocate to a particular period. One way to avoid some of these timing problems is to avoid asking for data for single periods in isolation, but rather to request series of data. This should help to avoid double-counting activities, or missing activities that fall at the boundaries of previously requested periods.

The FAO data can only be as good as the information which agencies themselves provided to FAO in their questionnaire replies. No overall biases can be discerned from this data suggesting, for instance, that the FAO data generally overestimates or underestimates flows. Overall amendments for the four years in question aggregate to an increase of 8%, but this clearly masks a much more complex picture of overestimates and underestimates when the data underlying this is considered.

Lack of a clearly perceptible bias could however be a result of using the same broad methodology used by FAO (namely asking agencies to provide aggregate information on their forest sector activities). This study was therefore unlikely to uncover systematic problems with the earlier data, as any new data would share some of the same flaws.

On major trend, however, has been for the FAO data to underestimate flows for the Multilateral Development Banks. In aggregate, these have been revised upwards for the years in question by over 50%.

This analysis is based on the assumption that the newer figures obtained are the more accurate, as the portfolio management systems of agencies have improved over time, and earlier figures are likely to have been corrected. Newer figures may, however, be less accurate, as in-depth knowledge of activities from previous periods will have been lost over time. This seems unlikely though, and analysing the reasons for the discrepancies in more detail was not possible in the course of this study.

Despite the apparent inaccuracies in the original data, continuing a series of FAO-style intermittent surveys may be the most sensible trade-off between the large costs of gathering more accurate and detailed data, and the limited benefits of improving that quality.

Were such surveys to be resumed, a number of improvements to the methodology have been suggested, which could help to avoid some of the more straightforward sources of error that were highlighted in the course of this study. A summary of the key issues is outlined below:

6.1.i Advantages

- relatively low cost way to get an overview of aid flows and trends;
- well-known series of data.

6.1.ii Practical problems

- difficult to get accurate, complete and comparable data from all agencies - quality varies by agency;

6.1.iii Structural and theoretical issues

- intermittent sampling (i.e. missing out years) can lead to various types of misreporting, and inconsistencies over time, especially if the questionnaires are answered by different individuals/departments each time, and methods used for calculating the figures are not recorded (this is a problem with interpreting the existing FAO information).

6.1.iv Practical suggestions

- rather than simply ask agencies to provide information without a context, agencies could be presented with time-series of information already available on their activities (e.g. from past questionnaires), and asked to correct and update it. This would require more work on the part of the information gathering agency, but could improve the quality of data provided, and proved to be valuable in this study for raising issues and highlighting inconsistencies;
- clear information should be provided to agencies on how to calculate the figures, what common errors to avoid etc.;
- information on how the data supplied was calculated could be requested, to help improve continuity over time, and allow issues, problems and inconsistencies to be identified earlier.

6.2 Information held in OECD databases

In many ways, the OECD databases are the obvious place to look for forestry ODA data, and some of the necessary central structures are already in place (see section 4.1.ii). However the data available on forestry is extremely incomplete - in aggregate standing at only a third of the figures we have estimated as total flows in the sector. Some donors are not reporting anything at all, while the majority of donors are substantially under-reporting their forestry activities by a large margin, as the table below clearly shows. In total, only 33% of our estimates of forestry flows for bilaterals and MDBs are indicated by the CRS system, while a slightly higher proportion (36%) is indicated by the DAC/o, in the years for which figures are available.

Table 3: Data coverage of OECD databases

	Total flows and CRS data - 1986-97				Total flows and DAC5 data - 1995-96			
	nominal US$ (million)			CRS data as %	nominal US$ (million)			DAC5 data as
Non-EU	OECD CRS	Best estimates	Discrepancy	of totals	OECD DAC5	Best estimates	Discrepancy	% of totals
Australia	60	92	32	65%	15	24	9	61%
Canada	154	847	693	18%	17	98	81	18%
Japan	1,079	1,380	300	78%	268	522	253	51%
New Zealand	2	44	42	4%	-	6	6	0%
Norway	42	129	87	32%	17	29	11	61%
Switzerland	151	244	93	62%	22	38	16	58%
USA	132	1,416	1,284	9%	-	242	242	0%
Non-EU Bilateral Totals	**1,621**	**4,152**	**2,531**	**39%**	**340**	**958**	**619**	**35%**
Member States								
Austria	1	30	29	2%	3	9	6	33%
Belgium	5	18	13	26%	2	3	1	64%
Denmark	84	231	147	36%	6	32	27	17%
Finland	206	319	113	65%	18	46	28	40%
France	47	466	419	10%	-	76	76	0%
Germany	334	1,935	1,601	17%	106	354	248	30%
Ireland	-	3	3	0%	-	1	1	0%
Italy	24	112	88	22%	0	10	10	0%
Netherlands	426	622	195	69%	108	146	39	74%
Portugal	-	3	3	0%	0	1	1	16%
Spain	-	12	12	0%	1	3	2	27%
Sweden	145	588	443	25%	54	72	18	76%
UK	170	389	219	44%	63	88	24	72%
EU Member State Totals	**1,442**	**4,728**	**3,286**	**31%**	**361**	**841**	**479**	**43%**
European Commission Total	65	726	661	9%	9	148	139	6%
EU Total	**1,508**	**5,454**	**3,946**	**28%**	**370**	**989**	**619**	**37%**
Total Bilateral	**3,128**	**9,606**	**6,477**	**33%**	**710**	**1,947**	**1,237**	**36%**
Multilateral Development Banks								
African Development Bank	25	269	244	9%	-	-	-	0%
Asian Development Bank	375	963	587	39%	17	148	131	12%
Inter-American Development Bank	15	452	437	3%	-	60	60	0%
World Bank	1,131	3,086	1,956	37%	83	113	31	73%
Multilateral Development Banks Total	**1,546**	**4,770**	**3,224**	**32%**	**100**	**321**	**221**	**31%**
Totals	**4,674**	**14,375**	**9,701**	**33%**	**810**	**2,268**	**1,458**	**36%**

UN agencies do not report to the OECD, and are therefore excluded from calculations made above.

Reporting should improve over time, and there are signs of this happening already, with forestry figures for 1996-7 more complete than for previous years. However there are a number of key structural features of the OECD systems which may limit their future usefulness to the forestry sector. Amongst these is an inability to handle components of multi-faceted projects, and lack of provision for disbursement data. Since forestry is such a small part of total ODA, it may be unrealistic to expect rapid changes to these systems in response to needs in the forestry sector, so they are likely to remain a rather blunt instrument for the immediate future. The key issues facing use of the OECD systems for forestry are outlined below:

6.2.i Advantages

- systems already in place and well-known, and all major donors should provide information on forestry activities.

6.2.ii Practical problems

- there is large-scale under-reporting to the OECD by many donors;
- some technical co-operation departments of large donors are weak reporters to the OECD, for internal organisational reasons.

6.2.iii Structural and theoretical issues

- forestry is only a small part (2-3%) of total ODA, and unlikely that OECD systems and donor reporting practices will change specifically to address problems encountered by the forestry sector;
- OECD systems only look at commitments rather than disbursements, and from a donor perspective, and therefore tend to overstate and distort actual flows;
- structural features with the OECD systems bias against forestry activities being captured in full (no provision for multi-component projects; data is provided by central financial departments that generally will not be able to provide the best available information on forestry activities);
- the OECD system of codifying forestry activities is not felt to be very useful by some donors.

6.2.iv Practical suggestions

Since forestry only represents a tiny proportion of the money reported to the OECD systems, it is difficult to see changes that could be brought about by the forestry sector acting alone. These objectives are therefore long term ones, which may be more productively pursued within donor agencies, together with other sectors facing similar problems:

- better awareness of, and provision of information to, the OECD data systems should be encouraged, so that they can, over time, become more useful working tools. To do this:

    1. it may be useful to look at ways of integrating procedures for internal management reporting with procedures for reporting to the OECD, to reduce the marginal cost of carrying out what is often a separate reporting activity, and improve the coverage and accuracy of such open-ended reporting by tying it closer to internal management procedures which have to be more accurate;

    2. ways of making the OECD systems more relevant and useful to forestry departments themselves could be explored, perhaps as a co-ordination and information-sharing tool. Matching practical incentives with formal requirements is important, if reporting is to be improved. However the additional textual information this would require would have costs in collecting and maintaining, and there are problems which may preclude this from being practical (see above).

6.3 Creation of a new system for monitoring forestry aid

Since the OECD systems are not meeting the needs of the forestry sector, one way of improving forestry flow information may be to create a new system, focussed specifically on the forestry sector, to collect information on forestry flows.

It would then be possible to address some of the structural problems with the OECD systems (in particular, the inability to handle multi-faceted projects). The more limited focus would also enable information on forest flows to be targeted, whereas in the OECD systems forestry is only a very small component.

However, it seems likely that maintaining such a system solely monitoring forestry financial flows would be difficult and costly. Additional benefits accruing to the participating agencies themselves need to derive from such a system, providing incentives to participate fully and provide accurate information. Benefits need to outweigh costs for participating agencies themselves, for such a system to be a workable long-term option.

One possible model for improving the cost benefit trade-off is currently being explored by the ODI TROPICS system, for the European Commission. This is designed to improve general information flows on forest sector aid activities for a wide range of internal and external audiences - assisting with internal and external financial reporting requirements is only one such function. As such, it is a useful working tool for the officials who are responsible for providing information to it, rather than maintained for purely external purposes. It is therefore more likely to be checked and corrected should errors occur. In addition, the costs of collecting the information are shared across several linked benefits, rather than solely incurred to obtain aggregate financial data. Expansion of this system to include European Member State forestry portfolios is currently being discussed.

The information management systems of agencies themselves are also improving, which may improve the quality and availability of forestry flow information. An interesting approach is that of the World Bank, where a number of sector-specific databases, set up over time by different departments in response to their own data needs (including one on forestry activities), are now being linked together. This should allow different sector-specific perspectives on multi-faceted projects in particular to be easily compared.

6.3.i Advantages

- some of the weaknesses regarding forestry projects of the OECD systems, and the problems with the FAO questionnaires, could be specifically addressed by a system tailor-made for forestry;
- a new system could achieve a more accurate, complete and comparable set of data, by a comprehensive reclassification exercise of donor activities.

6.3.ii Practical problems

- some of the problems encountered by the OECD and FAO stem from the complexity of forestry funding (see section 5.1), rather than resulting from flaws in these existing systems. Such problems are genuinely difficult, and can make it difficult for donors themselves to calculate their own forestry flows, so are likely to cause problems for any new system, rather than be easily addressed by it;

- proper and routine maintenance of such a system is highly dependant on timely and adequate data-provision from individual agencies, and an additional reporting system, which may not be practical or popular (especially if the benefits are likely to be seen as small);
- it may be difficult to obtain information from some agencies on older projects, if a large data capture exercise for previous years is attempted;
- any new system would require agreement on details (such as activity classification schema), and a sense of ownership within participating agencies, which may be difficult to achieve. Organisationally it may also require liasing with several parts of each agency, which increases the workload required and may confuse lines of responsibility.

6.3.iii Structural and theoretical issues

- costs likely to outweigh benefits of creating a new system, since it is not clear that financial flows data is of great value on its own (see sections 5);
- specialists generally tend to overestimate the quantitative importance of forestry in multi-faceted projects, which may lead to an over-exaggerated picture of forestry aid flows (see section 4.3.v).

6.3.iv Practical compromises

- close links would need to be made with donors' ongoing project management processes, portfolio analyses, and sector-wide evaluations where possible, to reduce unnecessary duplication and the marginal cost of collecting data;
- it may be possible to gather other useful information (for co-ordination purposes, or reporting to national constituencies, for instance) as a part of such an system, which may improve the cost/benefit trade-off, and incentives for agencies to participate.

6.4 Detailed further studies at country level

A number of issues have been raised in the course of this study, which it would be useful to study further, and in more depth. Such an exercise might be best done in a more focussed manner, since attempting greater depth and accuracy for all countries and agencies is likely to be more superficial and/or costly.

A more practical option would be to concentrate efforts on a limited number of countries, to examine in more detail forestry aid flows. This could seek to address a number of key issues pertaining to the financial flow information:

- estimate the extent to which forestry flows are not being captured by current methods, with particular emphasis on assessing the importance of multi-faceted projects;
- how well donor commitment information reflects actual trends over time of aid flows;
- if different measurements of aid flows from different perspectives (donor agencies financial and implementation departments, corresponding departments in recipient governments) match up and, if not, the reasons and scale of any such discrepancies;
- what the trends have been for different types of activity, especially for sustainable forest management, for the balance between grants and loans, and differences between the portfolios of different donors.

In addition to such issues, country level studies could also seek to assess private and domestic public flows, flows channeled through the NGO sector, and other aspects of relevance to IFF Process Programme Element II.a.

It would be necessary to carefully choose a range of countries to study in this way, so as not to bias the results, since there appear to be quite different patterns of funding in different countries. With a carefully chosen range of country studies, it may be possible to identify general relationships between aid flows, forest cover, poverty, external debt and other key variables.

7. Acknowledgements and sources of information by agency

The following contacts and publications provided invaluable assistance and data in the course of producing this report:

Bilateral Agencies:

Australia
Anton Vikstrom

Finland
Markku Aho

France
Aude Frequelin

Japan
Mayu Hagiwara

Netherlands
[Additional information from MFA (1997)]

Switzerland
Monika Linn Locher

UK
John Hudson

Multilateral Development Banks:

African Development Bank
Simona Kufakwanda

Asian Development Bank
[Additional information from FAO (1994)]

Inter-American Development Bank
Kari Juhani Keipi

World Bank
Galena Arkusinski
Christian Peter

Multilateral Agencies:

Food and Agriculture Organisation of the United Nations (FAO)
Luis Botero
Yves Dubé
Lennart Ljungman
Hans Page

Global Environment Fund (GEF)
[Additional information from Tighe (1997) and Moura-Costa (1999) papers]

International Tropical Timber Organisation (ITTO)
[Data obtained from ITTO Annual Reports]

OECD
Julia Benn
Gerald Bonnis
Valérie Dammann
Jean-Louis Grolleau
[OECD DAC online: http://www.oecd.org/dac/]

Office to Combat Desertification and Drought (UNSO)
[Additional information from Tighe (1997)]

United Nations Development Programme (UNDP)
[Additional information from Tighe (1997)]

World Food Programme (WFP)
Deborah Hines
György Konda

8. Key references

Chandrasekharan, C. (1996) *Status of financing for sustainable forestry management programs.* Draft report prepared for UNDP Workshop on Financial Mechanisms and Sources of Finance for Sustainable Forestry, 4-7 June June 1996. Pretoria, South Africa.

FAO (1994) *Report on the In-Session Seminar on Forestry Investment in Asia and the Pacific*. Fifteenth Session of the Asia-Pacific Forestry Commission, Colombo, Sri Lanka, August 1993. Document FO:MISC/93/14. FAO, Rome.

FAO (1997a) *State of the Worlds Forests – 1997*. FAO, Rome.

FAO (1997b) *Funding Sustainable Forestry; Unasylva vol 48, 188 - 1997/1*. FAO, Rome.

MFA (1997) *Focus on Development 5 – Forests and Forestry.* Ministry of Foreign Affairs, The Hague.

Moura-Costa, P. et al. (1999) *Financial Mechanisms for Sustainable Forestry.* Indufor-Oy, Helsinki / EcoSecurities, Oxford.

Shepherd, G. et al. (1998) *The EU Tropical Forestry Sourcebook*. Overseas Development Institute, London / European Commission, Brussels.

Tighe, C. M. (1997) *Quantifying UNDP Spending on Forestry Initiatives*. UNDP, New York.