

Forests and the Biodiversity Convention

Independent Monitoring of the Implementation of the Expanded Programme of Work in Germany

ARA Working Group on Rainforests and Biodiversity





E-mail: miguel.lovera@globalforestcoalition.org

Citation:

Country monitoring report on Germany. (2008) 20 pages.

Independent monitoring of the implementation of the Expanded Work Programme on forest biodiversity of the Convention on Biological Diversity (CBD POW), 2002-2007.

ARA (Working Group on Rainforests and Biodiversity)

August Bebel Str. 16-18, 33602 Bielefeld.

www.araonline.de

Email: wolfgang.kuhlmann@araonline.de

Disclaimer:

The information contained in this report has been provided by the independent country monitor. As such, the report does not necessarily reflect the opinion or position of GFC or other contributors.

Photos:

Cover: Beech forest 1: young and even aged beech forest

Photographer: Wolfgang Kuhlmann

This report was made possible through the generous contribution of the Dutch Ministry of Foreign Affairs.

For more information visit: www.globalforestcoalition.org

© Global Forest Coalition, May 2008

CONTENT

CHAPTER PAG	E
★ EXECUTIVE SUMMARY	4
❖ National Forest Programme	4
❖ Federal Forest Act	4
❖ Old-growth Protection Act / Flegt	5
❖ Impact of Pollutants	5
❖ 1. BRIEF DESCRIPTION OF THE ENVIRONMENTAL, GEOPHYSICAL AND	
SOCIOECONOMIC ASPECTS OF GERMANY	5
❖ 2. CHARACTERIZATION OF FORESTS OCCURRING IN GERMANY €	5
⇒ 3. LAND TENURE REGIME AND FOREST MANAGEMENT SITUATION IN GERMANY 6	5
 4. THE STATUS OF FORESTS AND FOREST PEOPLES BEFORE AND AFTER THE ENTRY INTO FORCE OF THE CBD/POW 	7
 COMPARISON OF PREDOMINANT FOREST MANAGEMENT PRACTICES (INCLUDING LEGAL FRAMEWORK) BEFORE & AFTER THE INCEPTION OF THE CBD/POW 	9
 ❖ 6. GERMANY'S ROLE IN DEFORESTATION AND FOREST CONSERVATION ABROAD 	2
❖ 7. THE ROLE OF INTERNATIONAL INSTITUTIONS	4
* 8. ENVIRONMENTAL CHANGES IN GERMANY SINCE THE ENTRY INTO FORCE OF THE CBD/POW	.5
 OMPARATIVE ANALYSIS OF THE SITUATION OF FOREST IN GERMANY BEFORE AND AFTER THE INCEPTION OF THE CBD/POW 	۱6

EXECUTIVE SUMMARY

Forests cover nearly a third of Germany. In the last 20 years the area has slightly increased, but its composition is far from natural. Originally, Germany was primarily covered with deciduous forest. Today 62 % of German forests are coniferous.

For over 200 years German foresters played a significant part in developing the concept of sustainable forestry. But until recently, sustainability was reduced to two key indicators: forest area and timber production. As a result, a large part of German forests are either monoculture (27 %) or composed of only a few species.

Long before the elaboration of the Expanded Programme of Work on Forest Biodiversity of the Convention on Biological Diversity (CBD/POW) the federal states (Länder) introduced ecological management rules for the state forest authorities, which are suitable to foster the aims of the POW. Until now they are not binding for private forest owners, who own nearly half of German forests.



Spruce forest mountain: Naturally, coniferous forests would primarily be found in higher altitudes only.

To implement the Expanded Programme of Work on Forest Biodiversity of the Convention on Biological Diversity (CBD/POW) the German government supports numerous activities abroad. However, up to now activities in Germany can't compare to that.

The POW is hardly known by anybody outside those government agencies that are directly involved in CBD and UNFF related activities. Reports on CBD/Powys implementation primarily refer to ongoing activities that have started well before 2002. New activities are either lacking or insufficient.

Since the adoption of CBD/POW nearly no noteworthy activities have been started that aim at improving forest biodiversity in Germany – with the exception of awarding a couple of new studies.

Whereas German development aid supports the elaboration of National Forest Programmes in 20 countries, activities within Germany are limited to ongoing programmes:

National Forest Programme

Nine years after the start of the German National Forest Programme the only result is a list of 180 recommendations for action, non of which have received due political attention.

As long as the recommendations of this body are not translated into binding activities with a binding time frame, a noteworthy contribution of the National Forest Programme towards achieving the goals of the POW can not be expected.

Federal Forest Act

The initiative to amend the Federal Forest Act that started in 2004 is not pursued by the current government. Thus a chance has been missed to frame minimum standards which are applicable in all federal states and set a benchmark for the change to forestry close to nature.

Due to the resistance of forest and timber trade associations the attempt has failed to focus funding by the "Joint Task for the Improvement of Agricultural Structures and Coastal Protection" on forestry close to nature.

The amendment of the federal Forest Act and a new orientation of public funding could have set a frame to considerably improve the conservation of forest biodiversity in Germany. This chance hasn't been seized.

Instead the government supports a "Charta for Wood" and its demand to raise timber consumption without even mentioning activities on forest biodiversity in this document.

• Old-growth Protection Act / FLEGT

To keep illegally logged timber off the German market the federal government is primarily banking on voluntary commitments by the timber trade.

With rejecting the Old-growth Protection Act the federal government abandoned the option for national regulations. Instead they opted for European activities in the context of FLEGT (Forest Law Enforcement, Governance and Trade). This excludes a large part of the timber market as, for the time being, partnership agreements are only negotiated with five countries (Malaysia, Indonesia, Ghana, Congo-Brazzaville and Cameroon). As these negotiations only make slow progress in the foreseeable future we can't count on a change in the status quo.

Impact of pollutants

Since 2002 the forest area with visible crown defoliation has increased.

Since the coming into force of the expanded programme of work on forest biodiversity no further action has been taken to improve the situation.

The fact that the ministry for consumer protection, food and agriculture announced that in future the National Forest Condition Survey will only be published every four years (instead of annually) is not a sign for hope that this will change soon.

1. BRIEF DESCRIPTION OF THE ENVIRONMENTAL GEOPHYSICALAND SOCIOECONOMIC ASPECTS OF GERMANY

With 82 million inhabitants The Federal Republic of Germany has the second largest population in Europe (after European Russia) and is seventh largest in area. The territory of Germany covers 357,021 km² (7.798 km² of it is water).



(highest point: the Zugspitze at 2.962 m in the south to the shores of the North Sea in the north-west and the Baltic Sea in the north-east. Between lie the forested uplands of central Germany and the low-lying lands of northern Germany, traversed by some of Europe's major rivers such as the Rhine, Danube and Elbe. Because of its central location, Germany shares borders with more European countries than any other on the continent.

Elevation ranges from the mountains of the Alps

Protected area: Forests are managed in most protected areas in Germany. Only one percent of Germanys forests are not used for timber production.

With a per capita gross domestic product of US\$ 35000 (2006) Germany has the largest economy in Europe and the third largest economy in the world (following the United States and Japan). The export of goods is an essential part of the German economy and one of the main

factors of its wealth. According to the World Trade Organisation, Germany is the world's top exporter with 1,133 trillion US\$ exported in 2006.

2. CHARACTERIZATION OF FORESTS OCCURRING IN GERMANY

Forest area

Forests cover 11, 1 Mill. ha – that is nearly a third of Germany. Since 1987 the forested area increased by 0, 7 % (54.000 ha) in former West Germany, although 82.000 ha were converted to urban areas and roads. In the mean time, 135.000 ha were reforested.

Natural forest cover

In its natural state, central Europe would be nearly completely forested. The forest area is limited by moisture (swamps, river lowlands etc.), dryness (on rocks) or short vegetation periods in the mountains.

Originally, Germany was primarily covered with deciduous forest (mainly beech forests). Coniferous trees found an ecological niche only in higher mountains or drier areas in the northeast.

Actual forest cover

Today 62 % of German forests are coniferous and only 38 % deciduous. The following forest formations can be observed over a wide area: In the north of Germany firs prevail, low mountain ranges and coastal areas are shaped by deciduous trees and in southern Germany spruce prevails.

3. LAND TENURE REGIME AND FOREST MANAGEMENT SITUATION IN GERMANY

3.1.Forest property

Nearly half of the German forests are private property (47%)¹. A third is state-owned² and the remaining 20 % belong to communities, churches and foundations (public corporate bodies).

Thus private ownership is the prevailing form of forest property in Germany. 57 % of it belong to smallholders (<20 ha) and 12 % consist of large areas (>1000 ha). The number of forest owner's amount to round about 2 million. Thus 90 % of the forest area belongs to 10 % of the forest owners.

3.2.Forest use

Only 83.000 ha or 0, 77 % of the forest area not used at all. These are mainly forests in natural forest reserves or parts of national parks and biosphere reserves.

The use of timber is limited on 4,6 % of the forest area. Here, other forest functions (like recreation, nature conservation or research) predominate. These areas are mainly found in state forests.

3.3. Economic importance

In the 90s timber production amounted to a relatively steady 40 Mio. m³ per year. Since 2002 it increased continuously and reached 60 Mio m³ in 2006.

In Germany app. 75.000 people are working full-time in the field of forestry, another 100.000 are working part-time. If you add wood processing, handicraft and paper industry (which is strongly dependent on imports), 950.000 people are employed in the sector "forest and

 $^{^{1}}$ This includes forests in former East Germany that mainly have been privatised in the following years.

² The major part is owned by the Länder (29, 6 % of the total forest area). The federal government owns forests in military training areas and alongside highways and waterways.

timber"³. A business volume of 115 billion Euros corresponds to about 5 % of Germany's gross national product.

3.4.Forest and law

Several legal provisions are related to forests: The Federal Forest Act (Bundeswaldgesetz) was adopted in 1975 and provides a legal framework. Its basic standards can be specified and amended by corresponding acts of the federal states (Länder). Forestry operations and other forest users primarily have to adhere to state forest acts (Landeswaldgesetze). The provisions can differ in the different federal states.

Aims of the Federal Forest Act are preservation, increase and sustainable use of forests. The legal provisions shall help to balance different interests in forests. Important elements are:

• Orderly and sustainable forest management of all forests

What this should be is not specified in the Federal Forest Act.

Imperative to reforest

Forest owners are obliged to reforest clear cut or thinned out forest areas within due time if natural regeneration remain incomplete.

Caveat to approval of conversion

Forests may only be cut and converted to other land use with the approval of the appropriate authority according to state law. The approval can be denied if there is an overriding public interest in its preservation.

Provisions for entering the forest

Generally, forests may be freely entered for recreational purposes at any time. It is irrelevant who owns the forest.

4. THE STATUS OF FORESTS AND FOREST PEOPLES BEFORE AND AFTER THE ENTRY INTO FORCE OF THE CBD/POW

In 2001 and 2002 data were collected for the Second Federal Forest Inventory⁴, which can serve as a basis for the description of German forests at the starting point of the Expanded Programme of Work on Forest Biological Diversity of the Convention on Biological Diversity (CBD/POW). A third federal forest inventory will be conducted in 2011 and 2012.

4.1.Forest composition

Large parts of German forests are quite young and lack structural and species diversity:

- 66 % of the trees are less than 80 years old and only 21 % are older than a hundred years. Ecologically valuable old growth (with trees older than 180 years) can only be found on 2 % of the forest area.
- In nearly half of German forests (46 %) trees only form one layer, while 45 % consist of two layers? Only 9 % can be describes as multi-layered.
- 27 % of the forest is monocultures. Here coniferous trees prevail: Fir and spruce monocultures constitute 10 % of German forest area each. The other 73 % are classified as mixed forest stands. To meet this target only 10 % of the trees must differ from the predominant specie. Thus, a forest consisting of 90 % spruce a 10 % Douglas fir (which is not native to Germany) would be considered a mixed forest.

4.2. Forest condition

The average amount of dead wood in the forest is 11, 5 m^3 per hectare. With the average stock of wood amounting to $317 \text{ m}^3/\text{ha}$, this is only 4 %. More than 40 % of dead wood are

 $^{^{3}}$ Institut für Zukunftsstudien und Technologiebewertung 2006: Holzwende 2020 plus

⁴ www.bundeswaldinventur.de - The first Federal Forest Inventory was conducted in former West Germany in 1987. It was used as a reference to describe changes.

coniferous trees, a large part due to storm damage. Only 1/5 of this consists of ecologically valuable standing dead trees or stumps⁵.

The trunks of 20 % of all trees are damaged: 40 % were damaged by felling and transport of other trees, the rest result from bark peeling and game bite by roe and red deer. In many places their population is too high.

Because nearly all forests are managed for timber on average every hectare is crossed by over 100 meters of streets and paths. Over 40 % are roads bigger than 2 m. Bicycle, riding and hiking paths amount to only 5 %, the rest is used to transport timber.

4.3.Impacts of pollution

Although air pollution could be reduced within the last decades, it still puts a strain on forest ecosystems in Germany. Nitrogen compounds, sulphur compounds and ozone are of special importance. Regarding their effect there are three ways in which air pollutants can harm forests:

- Above ground increased concentrations of sulphur- and nitrogen dioxide, ammonia and ozone can harm leaves and needles.
- Sulphur and nitrogen compounds acidify the soils. This leads to a loss of nutrients and the release of toxic aluminium and heavy metals.
- Nitrogen compounds lead to eutrophication. The disturbed balance of nutrients makes trees more susceptible to natural stresses like dryness, frost or pests.

The crown condition of forest trees has been recorded annually since 1984. It is an "early indicator" which reacts quickly, is easy to record and provides reliable information on the health of trees.

Compared to 2002 the 2006⁶ national forest condition survey shows only minor changes:

- The proportion of forest areas with visible crown defoliation (defoliation classes 2 4) amounts to 28 % (21 % in 2002). At 40 %, the proportion of forest at warning level (slight defoliation) is below the level of 2002 (44 %). The proportion of trees without crown defoliation decreased from 35 to 32 %.
- Of the main trees species, beech trees had the largest percentage of visible crown defoliation (48 %, 2002: 32 %), overtaking oak trees (44 %, 2002: 29 %). 27 % of the area covered by spruce trees is marked by visible crown defoliation (2002: 26 %). At 18 %, pine trees have the lowest percentage of damaged trees (2002: 13 %).

4.4.Forest and Climate

The predicted climate-change will lead to a rise in temperature, changes in the amount and distribution of rain and an increase in extreme weather conditions like droughts, heavy rains and storms. This will lead to considerable changes in ecological conditions. It can not be predicted yet whether mechanisms of natural adaptation will be able to react quickly enough⁷.

⁵ Bundesamt für Naturschutz 2005: Analyse und Diskussion der Erhebungsmethoden und Ergebnisse der zweiten Bundeswaldinventur, BfN Skripten 158

⁶ Bundesministerium für Ernährung , Landwirtschaft und Verbraucherschutz 2006: Bericht über den Zustand des Waldes 2006 – Ergebnisse des forstlichen Umweltmonitoring

⁷ Zebisch M, Grothmann T, Schröter D, Hasse C, Fritsch U & Cramer W (Potsdam-Institut für Klimafolgenforschung) 2005: Klimawandel in Deutschland. Vulnerabilität und Anpassungsstrategien klimasensitiver Systeme, Final report for Umweltbundesamt

5. COMPARISON OF PREDOMINANT FOREST MANAGEMENT PRACTICES (INCLUDING LEGAL FRAMEWORK) BEFORE AND AFTER THE INCEPTION OF THE CBD/POW

National Forest Programme

In 1999 the Federal Ministry of Agriculture invited representatives of ministries, organisations of forest users, timber trade, unions and environmental NGOs to a first round table of what was than still called National Forestry Programme. To transform international agreements into an action oriented programme for Germany was a goal that was out of reach at the end of the first phase (1999-2000). In the final document of that phase one could read: "A National Forestry Programme is not supposed to be an operational and political programme in a stricter

sense. Rather it is supposed to be a continuous dialogue that should lie a basis for societal consensus what is sustainable forestry."⁸

Instead of non-binding discussions the participating environmental NGOs demanded a programme consequently oriented at implementation. But until today it could not be clarified what political significance the National Forest Programme should have. Not knowing whether agreed recommendations for action will have a binding character is hampering a committed participation.

At the end of the second phase (2001-2003) a list of 182 recommendations for action was produced. What was missing was a time frame for implementation. Likewise, the question of funding could not be solved.

To improve the influence of the National Forest Programme in politics and in the public, in November 2004 the 16th round table mandated a working group to formulate a manageable number of core recommendations. A year later the results were presented at the 17th round table. But instead of concrete recommendations for action it was only a list of eleven rather vague statements recapitulating the status quo. It neither indicated who would be responsible for which activity, nor did it present time frames or indicators for implementation. The original goal to provide politicians with concrete demands on how to improve the situation of forests and forest companies got out of sight. Again the environmental NGOs had to reject the results.

As the situation did not improve during the 18th round table in June 2006, some NGOs like Greenpeace stepped out. They demand that instead of organising an ineffective participation processes like the National Forest Programme the responsible minister should rather promote forest conservation in Germany and worldwide.

Old growth protection act

When environmental NGOs demanded a ban on illegal timber the German government first referred to the European Union as responsible for the common market. Following heavy protest by NGOs the then minister for the environment Jürgen Trittin presented a draft of the so called "Old growth Protection Act" in March 2005. It should amend the Federal Nature Conservation Act so that ownership and trade in timber and timber products that have been cut in old growth forests disregarding local laws and regulations could be prosecuted. On the question of how to prove legality NGOs supported confirmations by accepted certifying systems like the Forest Stewardship Council (FSC).

Re-elections lead to a change in government that did not support the act any more. In October 2006 the act was rejected by the governing parties. The government regards the EU FLEGT

⁸ All documents can be found on www.nwp-online.de

process as appropriate (see below), but didn't use the German EU-presidency in 2007 to achieve progress on EU level.

FLEGT

In May 2003 the European Commission presented the FLEGT action plan (Forest Law Enforcement, Governance and Trade). It shall help to convince timber producing countries and regions to adopt binding partnership agreements with the EU. A licensing scheme shall make sure that all timber exports of the partner countries are legal. To make this work, a reform of the forest sector in the exporting countries shall be supported.

Three regional processes were started to help implementation on the ground: ASIA-FLEG (Forest Law Enforcement and Governance) in Southeast Asia, AFRICA-FLEG in Central Africa and ENA-FLEG in Europe and North-Asia (with a focus on Russia). Action plans were drawn up with the participation of different stakeholders that aim at better compliance with existing laws and enhancing politics in the forest sector. Fighting illegal logging, corruption and trade in illegal timber products are important parts of the action plans. However, measures for implementation are not binding but leave it to the partner countries to choose those they feel appropriate.

In December 2005 an EU regulation on the establishment of a FLEGT licensing scheme for timber imports into the European Community became operative9. On the basis of partnership agreements with several timber exporting countries reliable licensing schemes shall be developed certifying that imported timer has been logged in compliance with national law. At EU level, however, progress is at best moderate. Up to now, agreements are only negotiated with five countries (Malaysia, Indonesia, Ghana, Congo-Brazzaville and Cameroon). Thus only a small part of timber imports from old growth forests to the EU fall under the FLEGT-regulation. And even that can be avoided by channelling the timber though non-partner countries. It is evident that the EU has to take further measures. A general ban on trade and ownership of timber from illegal sources would be essential. Industry should be obliged to produce documents that prove legality.

For the time being, the German government is not a driving force but will wait until the European Commission has continued to develop FLEGT. Corresponding regulations are not expected to be drafted earlier than some time in 2008.

Procurement guidelines

In January 2007 the federal government published a regulation for the procurement of timber and timber products: Federal authorities shall only buy timber from legal and sustainable sources. Approved certifying systems are FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification Schemes) as well as comparable certificates (after an appropriate audit). The regulation is limited to four years – in the meantime it will be audited to prove its value.

Most German environmental NGOs have criticised this decision¹⁰: In defining its own procurement guidelines the federal government should set an example for corresponding regulations in the public and private sector. However, the regulation that was passed waters down the differences between FSC and PEFC: Whereas the FSC is influenced by stakeholders in its social, ecological and business chamber, PEFC is primarily controlled by forestry and timber industry.

With accepting PEFC no difference is made between the diverse national certifying systems assembled under that roof. Procurement regulations without defined social and ecological standards miss the mark: The use of timber from regions where traditional rights of local

⁹ Council Regulation (EC) No. 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for timber imports into the European Community, http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/oj/2005/l_347/l_34720051230en00010006.pdf
¹⁰ Joint Position Paper by 10 German Environmental NGOs. March 2007: Neuer Erlass zur Holzbeschaffung: Bundesregierung akzeptiert Waldzerstörung, Klimakollaps und Missachtung indigener Völker, http://www.greenpeace.de/fileadmin/gpd/user_upload/themen/waelder/JointNGO_Position21032007.pdf

people are violated, high conservation forests can be logged and large clear-cuts are allowed can not be restricted by such a regulation.

With approving the PEFC systems the German government accredits a certifying system with operational methods that are not very trustworthy. For example, the German PEFC has

- no balanced participation of the different stakeholders
- regional certification where all forestry operation can obtain an certificate without primary control
- Random inspections that not even ensure a single control at operational level within the five year validity period of the certificate.

Forest Condition Surveys

In June 2007 a draft law was presented saying that the federal ministry of consumer protection, food and agriculture will not have to publish Forest Condition Surveys annually any more. Instead, the survey will only be produced every four years and will be presented in the context of a general report on agriculture.

Environmental Organisations fear that the public will hardly be able to take notice of the worsening of forest conditions, if information is only given every four years, hidden in an overall review of agriculture in Germany.

Instead, it must be ensured that the annual surveys and reports are not only maintained but improved. Above all this includes the integration of indicators for forest biodiversity, the condition of forest soils and a survey of the consequences of climate change.



In January 2007 the storm "Kyrill" destroyed large tracts of forest. Wind throws occurred especially in even aged coniferous forests.

Federal Forest Act

Nearly 30 years after the Federal Forest Act entered into force in 1975 an amendment was planned. In 2004 the former minister of consumer protection Renate Künast (Green party) presented a draft, which, unfortunately, was not followed up by the coalition of conservatives and social democrats after the change in government in September 2005.

What remained is a "Charta for Wood" which was adopted in 2004¹¹. Supported by the federal government, Länder and representatives of forestry and timber trade, its foremost goal is a 20 % increase in the per capita consumption of timber products within ten years – and thus leading to bigger harvests.

After announcing the amendment of the Federal Forest Act forestry and forest companies began an excited discussion. Primarily they feared the introduction of minimum standards for proper and sustainable forestry. Other aspects were hardly taken account of.

Up to now §11 of the Federal Forest Act only says that "within the context of its purpose forests have to be managed properly and sustainable." The law does not specify what is meant by that. Further regulations are left to the corresponding Länder acts or can be found in the Federal Act for Nature Conservation. However, its description of "good professional practice" (gute fachliche Praxis) only applies for conservation areas. In § 5 it says that forestry should aim at establishing forests close to nature that shall be managed sustainable and without clear

¹¹ Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft (BMVEL) 2004: Verstärkte Holznutzung zugunsten von Klima, Lebensqualität, Innovationen und Arbeitsplätzen (Charta für Holz)

cuts. Thereby an adequate share of endemic forest plants shall be maintained. Up to now, there is no further specification to how much is an "adequate share".

Many foresters feared that the definition of minimum standards would have an effect on current aid schemes for forestry. Following the regulations of the Federal Forest Act forestry can receive public aid because of protection-, conservation- and recreational values of forests. Funds are provided by the federal government and the Länder in the framework of the "Joint Task for the Improvement of Agricultural Structures and Coastal Protection".

Public spending in the field of forestry¹²

Joint Task 2002: 82,2, Mio Euro Joint Task 2004: 66,7 Mio Euro

The amendment of the Federal Forest Act aimed at focussing public aid to forestry that operates nature-oriented. If minimum standards would be laid down by law funding could only be granted to operations that surpass these standards.

If for instance the law defines a 20 % minimum percentage of endemic tree species, public aid could only be granted if forest management achieved a higher portion. Likewise, as long as the law does not make a statement on dead wood, any retention of dead wood in the forest could be funded.

Apart from that there were efforts to completely cut funding the construction of roads or paths within forests. In 2002 12, 0 Mio Euro were spend for 953 km. In 2004 it were 10, 9 Mio Euro for 752 $\rm km^{13}$.

Contractual nature protection in forest areas

Within the last 20 years contractual nature protection in agriculture has developed from pilot projects to an instrument that is widely accepted. Farmers get payments for their activities in landscape conservation with the result that neglected grasslands rich in orchids, juniper heaths or mountain meadows are maintained.

Contrary to that contractual nature protection in forests only plays a minor role in Germany. Whereas farmers receive about 720 Mio Euro annually, activities in forests are supported with less that four million Euro per year. The funds are provided by the Länder¹⁴.

An expansion of contractual nature protection in forests has to go along with more precise definitions of what is "proper and sustainable" forestry as the existing regulations are insufficient.

6. GERMANY'S ROLE IN DEFORESTATION AND FOREST CONSERVATION ABROAD

6.1. Timber trade and paper consumption

Following the USA and Japan Germany is the third biggest consumer of timber worldwide. Between 1999 and 2004 the total consumption of timber and timber products was around 95 and 105 million m³ per year (raw wood equivalent)¹⁵.

This timber consumption is covered by timber production in Germany (which rose from 42 million m^3 in 2002 to 57 million m^3 in 2006), the quantity of collected used paper and the import of timber and timber products (since 2000 around 105 million m^3). Two thirds of the imported timber products are paper and pulp¹⁶.

12

 $^{^{12}}$ Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft (BMVEL): Berichterstattung über den Vollzug von GAK 2002; 2004 13 as 28

¹⁴ Bundesamt für Naturschutz (BfN) 2005: Vertragsnaturschutz im Wald – Bundesweite Bestandsaufnahme und Auswertung, BfN Skripten 146

¹⁵ Institut für Zukunftsstudien und Technologiebewertung (IZT) 2006: Ist-Analyse Wald und Holz in Deutschland

¹⁶ Dieter M (Bundesforschungsanstalt für Holz- und Forstwirtschaft) 2006: Holzbilanzen 2004 und 2005 für die Bundesrepublik Deutschland

Every fifth tree that is felled worldwide already ends in a paper mill – and the amount is growing¹⁷. It is estimated that 17 % of the timber used for paper production come from old growth forests¹⁸. In some regions from where timber, pulp and paper are imported to Germany the amount is considerably higher. It can reach up to 90 % (e.g. in Canada or Indonesia¹⁹).

In 2006 the per capita paper consumption has risen to 253 $\rm kg^{20}$ – one of the highest in the world, alongside with the USA and Japan. Germans consumed nearly 21 million m³ of paper and card board – more than the joint consumption of Africa and South America.

Used paper is an important raw material for paper production in Germany (65 %). However, a large part of it is exported. At the same time, nearly the same amount of paper made of fresh fibres is imported. Thus the amount of recycled paper in paper consumption decreases to 46 %. In 2002 nearly 40 million m³ of timber were needed to satisfy the demand of German paper consumption. Only seven per cent came from local forests²¹.

Today, the rising paper consumption in Germany is responsible for clear cuts in old growth forests (e.g. in Canada, Indonesia or Russia) and the establishment of monocultures (e.g. in Brazil or South Africa).

Apart from that, illegal felling is one of the major causes for the loss of old growth forests. 2002 it was estimated that timber cut illegally amounted to 80 % of timber production in Brazil, 73 % in Indonesia and 20-30 % in Russia. Considerable amounts of illegally produced timber find their way to the German market: 2004 Germany imported timber from Brazil amounting to 272 million Euros, from Russia (354 million Euros) and from Indonesia (277 million Euros). As a result, German timber consumption contributes to the illegal destruction of old growth forests.

6.2. Feed stuffs

Meat consumption in Germany has reached a level of 90 kg per person (61 kg used as food). In 2006 6, 9 million tonnes of meat were produced in Germany²². Two third of it were pork (4, 6 million tonnes). That amounts to 50 million pigs – or 137.000 pigs per day.

Four kilogramme of protein rich feedstuffs are needed to produce one kilogramme of pork. 74 % of the feedstuff for the animals produced in Germany comes from local farm sources. The other 26 % are industrially produced feedstuff²³, which contain app. 15 % soybeans.

In 2004 Germany imported 6, 5 million tonnes of soybean products. 57 % of that came from Brazil $(3, 7 \text{ moil tonnes})^{24}$. On worldwide average the soybean harvest is at 2, 1 tonnes per hectare, in the tropical regions it is only about one tonne per hectare²⁵. That means that only in Brazil 3, 7 moil hectares are planted with soybeans to keep up meat production in Germany. This is an area bigger than the federal state of North-Rhine Westphalia.

Brazil is the second biggest exporter of soybeans (2004-2005: 24 moil t). More than five per cent of that (1, 2 moil t) grow on former tropical forest²⁶. In the state of Mato Grosso alone 12.600 km² were destroyed in 2004. The expansion of soybean production is one of the main driving forces.

6.3.Palm oil

In Germany the per capita consumption of oils and fats amounts to 31 kg per year. This does not include fatty foodstuffs like cheese or meat. Since 2005 the most important edible oil is palm oil (29 % of the world production).

Palm oil has many advantages: it is available in big quantities, it is cheap and at room temperature it is still firm. While it is costly to harden other oils, palm oil is the choice, when

 $^{^{17}}$ International Institute for Environment and Development IIED 1996: Towards a sustainable Paper Cycle

¹⁸ Worldwatch Institute 1999: Paper Cuts, Worldwatch Paper 149

¹⁹ Urgewald, ARA, Forum Umwelt und Entwicklung 2006: Alternativer Waldschadensbericht

²⁰ Verband Deutscher Papierfabriken: PapierKompass 2006

²¹ J. Trauth, E. Schönheit (Initiative 2000plus) 2004: Kritischer Papierbericht 2004

²² Press release by Statistisches Bundesamt Deutschland, 13.02.2007

²³ Prof. M. Besch: Script for lecture on nutritional science 2006/07, TU München

²⁴ Figures by FAOStat: Direct imports from Brazil and share of brazilian soy beans in imports from the Netherlands

²⁵ Katalyse Ümweltinstitut Köln: www.umweltlexikon-online.de

²⁶ Greenpeace International 2006: Eating up the Amazon

hard plant oil is needed: e.g. in margarine, chocolate, ice or washing powder. Potato chips and convenience food also contain palm oil. And it can even be used to substitute diesel oil.

After China, India and the Netherlands, Germany is the fourth biggest consumer of palm oil products²⁷. Since 2000 imports of palm oil increased from 553.000 t to 950.000 t in 2005.

Oil palms produce 4 to 6 tonnes of raw palm oil and palm kernel oil per hectare. This is the biggest harvest of all oil plants (90 % is palm oil, 10 % palm kernel oil). To meet the German demand nearly 200.000 hectares of oil palm plantations are needed.

Worldwide the production of palm oil increased from 22 moil t in 2000 to 34 mio t in 2005. 88 % come from Malaysia and Indonesia. In these two countries alone, production doubled in only five years.

This happens at the expense of rainforests: In Indonesia five million hectares of forest have already been converted to plantation. And there are plans to double this area in the coming years.

6.4. German development aid and forests

For several decades German development aid supported forestry projects in natural forests without much critique. Given that these projects were hardly able to establish a sustainable forestry – and sometimes even counterproductive – the Ministry for Economic Cooperation and Development passed the sector concept "Forest and Sustainable Development" in 2002²⁸. Developed in cooperation with NGOs it is characterised by social and ecological minimum standards and makes the participation of civil society obligatory.

1992 at the Earth Summit in Rio de Janeiro Germany promised to spend 300.000 DM (150.000 Euro) per year on forest projects. By now, this has been reduced to 125.000 Euro per year. This still makes Germany the biggest bilateral donor in this sector. In comparison the funds provided worldwide for bi- and multilateral development aid in the forest sector decreased from 2 billion US-Dollars in the 1990s to about one billion US-Dollars in 2000²⁹.

Four years after passing the sector concept it has to be observed that its standards have not yet become binding in all forest related sectors of funding.³⁰ The Ministry for Economic Cooperation and Development still approves export credit guarantees that contradict the forest sector programme.

But there can be no doubt that the forest sector programme has had a positive influence on German bilateral aid in that field. One of its most important approaches is the support for National Forest Programmes³¹. In 20 countries and regions Germany is involved in the development of such programmes. Unfortunately, hardly any of these programmes promise significant improvements in the forest sector. Political will on the side of the project partner is a prerequisite for success. Where it is missing, any project will fail sooner or later.

7. THE ROLE OF INTERNATIONAL INSTITUTIONS

International institutions, such as the World Bank, UN Food and Agriculture Organization, UN Conference on Trade and Development, World Trade Organization, and others receive funds from Germany which may be used to help other countries implementing the CBD/POW. These institutions have no influence on German forest policies.

²⁷ FAOSTAT (TradeStat), August 2007

²⁸ BMZ 2002: Sektorkonzept Wald und nachhaltige Entwicklung. BMZ-Konzepte Nr. 121. Bonn

²⁹ Forest Trends Fact Sheet 2004: Finance for Conservation, www.forest-

trends.org/documents/press/Finance%20for%20Conservation.pdf

³⁰ Urgewald, ARA, Forum Umwelt und Entwicklung 2006: Alternativer Waldschadensbericht

³¹ The minister for development and econiomic cooperation Heidemarie Wieczorek-Zeul in the preface to BMZ 2004: Nationale Waldprogramme – Instrumente für eine bessere Politikgestaltung im Waldsektor?, BMZ Materialien 133

8. ENVIRONMENTAL CHANGES IN GERMANY SINCE THE ENTRY INTO FORCE OF THE CBD/POW

8.1. Forest biodiversity

Following agriculture, forestry and hunting are the second most important causes for species loss. Of 711 endangered ferns and flowering plants 338 are threatened by forestry, of app. 1.700 endangered animal species it's 800. In particular this includes species specialized on degrading wood. This phase of natural forest development is restrained nearly completely by forestry, as it does not provide timber "of use". As trees are harvested at an early age, old-growth forests can hardly develop. However, for about a quarter of all species of forest animal's dead wood is a prerequisite – as habitat or as an important structural component of it

Also the phase of regeneration is kept short by forestry. The natural life cycle of the forest ecosystem, which stretches from regeneration to optimum, age and degradation, may easily take several centuries. Certain species are threatened, if some of these phases are underrepresented in managed forests³².

8.2. Designating new protected areas

The number of nature reserves increased from 6.588 (924.779 ha) in 2000 to 7.278 (1, 05 Mio. ha) in 2004 (excluding the surface of water in North- and Baltic Sea)³³.

Nearly two thirds of these nature reserves are smaller than 50 hectares. However, larger areas are needed to ensure the preservation of species and of undisturbed natural dynamics. They can only be found in national parks or biosphere reserves. Since 2002 the number of national parks increased from 12 to 14. Excluding the water surface of North- and Baltic Sea, their area only amounts to 0, 54 % of the area of Germany (194.136 ha).

In 2004 two new national parks were identified (Kellerwald-Edersee and Eifel NP). Both represent beech forest ecosystems, which previously were grossly underrepresented in the system of protected areas. Here, Germany has not only got a national but an international responsibility, as it is in the centre of the distribution of European beech forests. Naturally, they would cover 66 % of Germany.

8.3National Biodiversity Strategy

Although Germany is a signatory to CBD since 1992, it has not developed a Biodiversity Strategy yet (as stipulated in Art. 9 CBD). Since May 2007 a draft of the National Biodiversity Strategy is available³⁴. The first German strategy should be adopted before COP 9. It will be compiled and published by the federal government and will oblige it to implement the necessary activities to conserve biological diversity. According to the assignment of capacities between federal government and Länder, the federal government is primarily responsible for sustainable use of nature, while the Länder are responsible for nature conservation.

In the draft of the National Biodiversity Strategy visions and goals are developed for 28 thematic fields. To help realise the visions, quality goals describe the conditions that are aimed at in the long run and which shall guide the activities of politics and civil society. Operational goals indicate the steps needed to reach the quality goals. All goals are supposed to be as concrete as possible, quantified and provided with a time frame to be as effective as possible.

³² Bundesamt für Naturschutz 2001: Sustainable Forest Management in Germany: The Ecosystem Approach of the Biodiversity Convention reconsidered

³³ Bundesamt für Naturschutz (BfN) 2005: Daten zur Natur 2004

³⁴ BMU: Nationale Strategie zur biologischen Vielfalt (Draft May 2007)

9. COMPARATIVE ANALYSIS OF THE SITUATION OF FOREST IN GERMANY BEFORE AND AFTER THE INCEPTION OF THE CBD/POW

To implement the Expanded Programme of Work on Forest Biodiversity the German government supports numerous activities abroad (see above). According to their own information 750 Mio. Euro has been provided since 1992 to help implement CBD³⁵.

Up to now, activities in Germany can't compare to that. The POW is hardly known by anybody outside those government agencies that are directly involved in CBD and UNFF related activities. Reports on the POW's implementation primarily refer to ongoing activities that have started well before 2002. New activities are either lacking or insufficient.

Since the adoption of the POW nearly no noteworthy activities have been started that aim at improving forest biodiversity in Germany – with the exception of awarding a couple of new studies.

Whereas German development aid supports the elaboration of National Forest Programmes in 20 countries, activities in Germany are limited to ongoing programmes:

9.1.National Forest Programme

Nine years after the start of the German National Forest Programme the only result is a list of 180 recommendations for action, non of which have received due political attention.

As long as the recommendations of this body are not translated into binding activities with a binding time frame, a noteworthy contribution of the National Forest Programme towards achieving the goals of the POW can not be expected.

9.2.Federal Forest Act

The initiative to amend the Federal Forest Act that started in 2004 is not pursued by the current government. Thus a chance has been missed to frame minimum standards which are applicable in all federal states and set a benchmark for the change to forestry close to nature.

Due to the resistance of forest and timber trade associations the attempt has failed to focus funding by the "Joint Task for the Improvement of Agricultural Structures and Coastal Protection" on forestry close to nature.

The amendment of the federal Forest Act and a new orientation of public funding could have set a frame to considerably improve the conservation of forest biodiversity in Germany. This chance hasn't been seized.

Instead the government supports a "Charta for Wood" and its demand to raise timber consumption without even mentioning activities on forest biodiversity in this document.

9.3.Old-growth Protection Act / FLEGT

To keep illegally logged timber off the German market the federal government is primarily banking on voluntary commitments by the timber trade.

With rejecting the Old-growth Protection Act the federal government abandoned the option for national regulations. Instead they opted for European activities in the context of FLEGT (Forest Law Enforcement, Governance and Trade). This excludes a large part of the timber market as, for the time being, partnership agreements are only negotiated with five countries (Malaysia,

³⁵ BMU 2004: Voluntary Report in the Implementation of the Expanded Programme of Work on Forest Biodiversity

Indonesia, Ghana, Congo-Brazzaville and Cameroon). As these negotiations only make slow progress in the foreseeable future we can't count on a change in the status quo.

9.4.Impact of pollutants

Since 2002 the forest area with visible crown defoliation has increased.

- Although the limit values for sulphur compounds are nowadays no longer exceeded, the sulphur inputs of the past which have accumulated in the forest ecosystems remain a critical hazard.
- Nitrogen depositions at the forest sites are more problematic. The critical loads for nitrogen input are exceeded at almost all investigated areas.
- The fact that the forests had already been strained on account of persistently high
 deposition and acid inputs intensifies their susceptibility to additional stress factors and
 poses a long-term risk to soils and groundwater.

Since the coming into force of the expanded programme of work on forest biodiversity no further action has been taken to improve the situation. The fact that the ministry for consumer protection, food and agriculture announced that in future the National Forest Condition Survey will only be published every four years (instead of annually) is no sign for hope that this will change soon.

To improve the implementation of the Expanded Programme of Work on Forest Biodiversity German NGOs demand the following activities:

Germany has to take account of its international responsibility to conserve forest biodiversity and to implement the POW. This includes long-term activities to conserve beech forest ecosystems, increasing the forest area that is not used for timber production to at least $10\,\%$ and adopting international regulations for the protection of old-growth forests. This has to be accompanied by a substantial increase in funding by federal government and Länder.

- Minimum standards for forestry close to nature have to be specified in the Federal Forest Act and the forest acts of the Länder as legally binding principles for proper forestry.
- Federal and Länder funding for forestry should put a stronger focus on social and ecological benefits of forests. It should only be granted if minimum standards of the pertinent laws are exceeded. A trustworthy certification system could serve as a control mechanism.
- Federal and Länder hunting acts have to be amended taking into account ecologic imperatives.
- Measures for nature conservation that exceed legal regulations should be funded by the Länder in the framework of contractual nature protection.
- The privatisation of forests has to be stopped. The people and their parliamentary representatives need to have direct influence on forest use and conservation.
- The annual monitoring of the forest condition as well as the decennial federal forest inventory shall include ecological parameters.
- Emissions effecting forests have to be reduced by coherent clean-air-policies.
- Forestry has to take further measures to adapt to the results of climate-change, esp. by changing to mixed forests and ensuring a broad genetic diversity of tree species.

Annually the European Union imports illegally logged timber worth 1, 2 billion Euros. Following Great Britain and Finland Germany is the third biggest importer of illegally logged timber in the EU. Thus it has a special responsibility to take action against illegal timber trade³⁶.

Even though nobody denies the problem of illegal timber trade and the involvement of German companies, the import of illegal timber is not yet liable to prosecution.

³⁶ Joint Position Paper by 10 German Environmental NGOs. March 2007: Neuer Erlass zur Holzbeschaffung: Bundesregierung akzeptiert Waldzerstörung, Klimakollaps und Missachtung indigener Völker

- As long as the EU regulation on the establishment of a licensing scheme (FLEGT) only
 includes countries that will enter into a partnership agreement in an unascertained time
 frame, a national regulation is needed that allows to prosecute illegal timber imports
 from all regions.
- When establishing a licensing scheme labelling timber that is legal and produced ecologically, socially and economically sustainable must resort to reliable certifying systems like the FSC.
- Illegal timber trade shall be introduced as a statutory criminal offence in the act on money laundering.
- Binding environmental and social standards for export credit guarantees and international investments that include the protection of old-growth forests and the rights of indigenous and local communities have to be adopted. Compliance with these standards has to be controlled.
- Public procurement needs binding regulations that rule out the purchase of illegally logged timber and stipulate the exclusive use of timber that is verifiably produced ecologically, socially and economically sustainable.
- Convention 169 of the International Labour Organisation (ILO) has to be ratified by the federal government, inter alia to strengthen indigenous people's rights to full participation in planning and implementation of large-scale project in their territories.

Internationally the German government shall

- increase its financial and technical cooperation with countries with high forest cover in developing coherent economic and agricultural policies to reduce the negative impacts of i.e. soy bean -, palm oil and meat production;
- in the Kyoto+ negotiations support financial mechanisms to reduce emissions from deforestation that are closely linked to CBD;
- support an international regime to regulate the trade in timber from illegal and nonsustainable sources;
- Develop binding standards for the trade in biomass to secure a positive CO2-balance and to avoid negative effects on forests.

Goals and activities in the National Biodiversity Strategy must be more precise and binding. It is suggested that the goals are reformulated, including:

- Until 2020 the conditions for typical biocoenosis in forests (diversity in structure and dynamics) have improved further. Trees and shrubs of natural forest associations rejuvenate naturally. Management systems that are close to nature build on natural processes to strengthen ecological functions. Old trees and dead wood are available in adequate quantity and quality.
- For reforestation natural succession will have priority and endemic species will be used primarily. Mixed forests with a high genetic diversity are better adapted to cope with the effects of climate-change.
- With immediate effect the share of trees that are not endemic will be reduced continuously.

To reach these goals the federal government shall commit itself to the following activities (inter alia):

- Protecting old-growth relicts
- Identifying 10 % of the forests as forest reserves without timber-use (with a representative share of all forest ecosystems) and maintaining large and unsegmented forest areas
- Especially protecting old forests and maintaining as well as increasing forest areas with traditional use that is important from a nature protection point of view until 2010

- Developing a joint strategy of federal government and Länder on forest biodiversity in state forests that sets an example for other forest owners until 2010 and implementing it by 2015
- Certifying 80 % of the forest area using high ecological standards (FSC / Naturland) until 2010
- Amending the Federal Hunting Act in 2008 and establishing an even balance between forest rejuvenation and game populations until 2020
- · Keeping up the ban on the use of genetically modified organisms or parts thereof
- Raising the share of old trees and dead wood on all forest areas (10 old trees and 40 m³ of dead wood per hectare). Corresponding standards already exist in Bavaria. They should be adopted for all German forests.
- Linking the different forest conservation areas on the surface as well as in a vertical dimension as to allow the migration of species especially in the mountains (e.g. in response to climate-change).



Natural regeneration: in spruce forest



For more information, please contact Miguel Lovera, miguel.lovera@globalforestcoalition.org

This publication has been made possible through the generous support of the Ministry of Foreign Affairs of the Netherlands.