

**Food and Agriculture Organization of the United Nations,
Forestry Department**

and



International Network for Bamboo and Rattan (INBAR)

**GLOBAL FOREST RESOURCES
ASSESSMENT UPDATE 2005**

**NIGERIA
COUNTRY REPORT
ON
BAMBOO RESOURCES**

ABUJA, FEBRUARY, 2005

Table of contents

1 Table T1 – Extent of Bamboo Forest	5
1.1 GBRA 2005 Categories and definitions	5
1.2 National Data on Bamboo Resources	5
1.3 Data for National Reporting Table T1	5
1.4 Comments to National Reporting Table T1	5
2 Table T2 – Ownership of Bamboo Forest	6
2.1 GBRA 2005 Categories and definitions	6
2.2 National Data on Bamboo Resources	6
2.3 Data for National Reporting Table T2	6
2.4 Comments to National Reporting Table T2	6
3 Table T3 – Characteristics of Bamboo Forest	7
3.1 GBRA 2005 Categories and definitions	7
3.2 National data on Bamboo in Forests and Other Wooded lands	7
3.3 Data for National Reporting Table T3	7
3.4 Comments to National Reporting Table T3	7
4 Table T4 – Bamboo Growing Stock	8
4.1 GBRA 2005 Categories and definitions	8
4.2 National data on Bamboo Resources	8
4.3 Data for National Reporting Table T4	8
4.4 Comments to National Reporting Table T4	8
5 Table T5 – Bamboo Biomass stock	9
5.1 GBRA 2005 Categories and definitions	9
5.2 National Data on Bamboo Resources	9
5.3 Data for National Reporting Table T5	9
5.4 Comments to National Reporting Table T5	9
6 Table 6 – Diversity of bamboo tree species	10
6.1 GBRA 2005 Categories and definitions	10
6.2 National Data on Bamboo Resources	10
6.3 Data for National Reporting Table T6	10
6.4 Comments to National Reporting Table T6	10
7 Table T7 – Bamboo Removal	11
7.1 GBRA 2005 Categories and Definitions	11
7.2 National Data on Bamboo Resources	11
7.3 Data for National Reporting Table T7	11
7.4 Comments to National Reporting Table T7	11
8 Table 8 – Value of Wood Removal	12
8.1 GBRA 2005 Categories and Definitions	12
8.2 National Data	12
8.3 Data for National Reporting Table T8	12
8.4 Comments to National Reporting Table T8	12
9 Table 9 – Non Wood Bamboo Product Removal	13
9.1 GBRA2005 Categories and Definitions	13

9.2 National Data on Bamboo Resources	13
9.3 Data for National Reporting Table T9	13
9.4 Comments to National Reporting Table T9	13
10 Table T10– Value of Non Wood Bamboo Product	14
10.1 GBRA 2005 Categories and Definitions	14
10.2 National Data on Bamboo Resources	14
10.3 Data for National Reporting Table T10	14
10.4 Comments to National Reporting Table T10	14
11 Map of country’s bamboo resources distribution.....	15
12 List of bamboo species in the country	15

General Guidelines:

The main purpose of the Country Thematic Report on Bamboo Resources (CTRB) is to develop a Global Bamboo Resources Assessment (GBRA) and to integrate it in the global UN FAO FRA. The approach is to create sub-category on Bamboo in the framework of FRA 2005 (www.fao.org/forestry/fra) to provide supplementary information on bamboo resources. This document provides format for compiling information on Bamboo resources and should be treated as a supplement to the basic documents of FRA 2005 including Specification of National Reporting tables, FRA Working Paper No. 81; Guidelines for Country Reporting, FRA Working Paper No. 82 and Terms and Definitions, FRA Working Paper No. 83.

The country Bamboo Resources Thematic Study Report should clearly and concisely document all data sources that have been selected and used for this reporting process and assign quality rating to the data sources. Comment on any problems encountered in finding relevant data sources. The Report should also indicate if no data sources have been found which meet the requirements. Similarly all the relevant national classification and definitions should be documented clearly and concisely. Comments on any problems or incompatibilities in classification and definitions should also be provided, if necessary. Please email the Bamboo Thematic Report directly to the focal point at INBAR (mlobovikov@inbar.int) with the copy to FAO (kailash.govil@fao.org) as a part of GFRA.

General information

Country:	
National Correspondent: (Name and contact information)	
Other professionals involved in the reporting process:	
Date of submission of 1st draft:	March 1 2005
Date of submission of 2nd draft	April 1 2005
Date of submission of final report	May 1 2005

INTRODUCTION

BACKGROUND

Bamboo is perennial, giant, woody grass belonging to the group angiosperms and the order monocotyledon. They are in the sub-family of bambusoideae.

The dominant bamboo in Nigeria is commonly referred to as the Indian bamboo. Analysis of result revealed that the bamboo species across Nigeria have similar morphological characteristics, though there is variation in size, suggesting influence of age and perhaps the soil conditions. Bamboo is particular adapted to the rain forest belt of Nigeria where it is found in abundance along riverbanks and other relatively marshy areas.

The Country reporting data about bamboo resources of Nigeria is on going. This is being done through a consultant, and it will provide a good chance to report the latest result of Nigerian forestry development.

NATIONAL BAMBOO INVENTORIES

The National forestry inventories (NFI) is being carried out through consultant and it will be used to monitor the status of bamboo in Nigeria,

1 Table T1 – Extent of Bamboo Forest

1.1 GBRA 2005 Categories and definitions

Category	Definition
Bamboo on forest land	Bamboo on lands defined as "Forest" in FRA 2005.

1.2 National Data on Bamboo Resources

1.2.1 Data sources

References	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
National forest resources statistics(1998-2002)	M	Extent	2000	

1.2.2 Classification and definitions

National class	Definition
Bamboo on forest land	Bamboo species with the diameter at breast height of 2cm are spanning over 0.0221.

1.2.3 Original data

1.3 Data for National Reporting Table T1

GBRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Bamboo on forest land			
Monopodial bamboo area			
Sympodial bamboo area		1589.6	
TOTAL			

1.4 Comments to National Reporting Table T1

Including information on the minimum area on which information is collected

Only few states are covered in the report. Those under the Eastern part of the country.

2 Table T2 – Ownership of Bamboo Forest

2.1 GBRA 2005 Categories and definitions

Category	Definition
Private ownership	Same as FRA: Land owned by individuals, families, private co-operatives, corporations, industries, religious and educational institutions, pension or investment funds, and other private institutions.
Public ownership	Same as FRA: Land owned by the State (national, state and regional governments) or government-owned institutions or corporations or other public bodies including cities, municipalities, villages and communes.
Other ownership	Same as FRA: Land that is not classified either as "Public ownership" or as "Private ownership".

2.2 National Data on Bamboo Resources

2.2.1 Data sources

References	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments

2.2.2 Classification and definitions

National class (Bamboo)	Definition
Private ownership	Land or Tree owned by individuals, Families and other private institutions.

2.2.3 Original data

2.3 Data for National Reporting Table T2

GBRA 2005 Categories	Area (1000 ha)	
	1990	2000
Private ownership		1589.6
Public ownership		
Other ownership		
Total		

2.4 Comments to National Reporting Table T2

3 Table T3 – Characteristics of Bamboo Forest

3.1 GBRA 2005 Categories and definitions

Category	Definition
Natural bamboo forest	Bamboo area of naturally regenerated native bamboo species.
Plantation	Bamboo area of native or introduced species, established through planting, seeding or assisted natural regeneration.

3.2 National data on Bamboo in Forest

3.2.1 Data sources

References	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
National forest resources statistics(1998-2002)	M	Extent	2000	

3.2.2 Classification and definitions

National class	Definition
Natural forest	Bamboo area in forest land with naturally regeneration of native species
Plantation	Bamboo area in forest land, established by planting and assisted by natural regeneration .

3.2.3 Original data

3.3 Data for National Reporting Table T3

GBRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Natural bamboo forest		1589.6	2100.2
Plantation		0.9874	588.9
TOTAL		1590.7874	26891

3.4 Comments to National Reporting Table T3

4 Table T4 – Bamboo Growing Stock

4.1 GBRA 2005 Categories and definitions

Category	Definition
Bamboo Growing stock	Volume of all bamboo forest more than N cm in diameter. Stem form ground to top .
Commercial growing stock of Bamboo	
Growing stock of Common bamboo species	Volume of bamboo species

4.2 National data on Bamboo Resources

4.2.1 Data sources

References	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
National forest resources statistic (1998-2002)	M	Stem	2001	
Ogunwusi A. A., et al	M	Stem number	2004	

4.2.2 Classification and definitions

Category	Definition
Bamboo Growing stock	Volume of bamboo forest with over 2cm diameter at breast height

4.2.3 Original data

4.3 Data for National Reporting Table T4

GBRA 2005 Categories	Total Volume (tons)		
	1990	2000	2005
Bamboo Growing stock		26.875	30.553
....			

Note: if possible, please (1) breakdown by species groups (2) include information on the minimum diameter used as thresholds and (3) provide coefficient of number of culms per a ton of weight

4.4 Comments to National Reporting Table T4

5 Table T5 – Bamboo Biomass stock

5.1 GBRA 2005 Categories and definitions

Category	Definition
Above-ground biomass of Bamboo	All living biomass above the soil including stem, stump, branches, bark, seeds, and foliage.
Below-ground biomass of Bamboo	All living biomass of live roots. Fine roots of less than 2mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.

5.2 National Data on Bamboo Resources

5.2.1 Data sources

References	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments

5.2.2 Classification and definitions

Category	Definition

5.2.3 Original data

5.3 Data for National Reporting Table T5

GBRA 2005 Categories	Bamboo Biomass (million metric ton dry weight)		
	1990	2000	2005
Above-ground biomass of Bamboo			
Below-ground biomass of Bamboo			
Total of living biomass			
TOTAL			

5.4 Comments to National Reporting Table T5

6 Table 6 – Diversity of bamboo tree species

6.1 GBRA 2005 Categories and definitions

Category	Definition
Number of native Bamboo species	The total number of native tree species that have been identified within the country.
Number of introduced Bamboo species	The total number of introduced tree species that have been identified within the country.

6.2 National Data on Bamboo Resources

6.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments

6.2.2 Classification and definitions

Category	Definition

6.3 Data for National Reporting Table T6

GBRA 2005 Categories	Number of species (Year 2000)
Native Bamboo species	
Introduced Bamboo species	
Critically endangered Bamboo species	
Endangered Bamboo species	
Vulnerable Bamboo species	

6.4 Comments to National Reporting Table T6

7 Table T7 – Bamboo Removal

7.1 GBRA 2005 Categories and Definitions

Category	Definition
Bamboo Wood removal	The Bamboo wood removed (volume) for production of goods and services other than energy production (woodfuel).
Woodfuel Bamboo removal	The Bamboo wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

7.2 National Data on Bamboo Resources

7.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Ogunwusi A. A. et al, 2004	M	Removal	2000	

7.2.2 Classification and definitions

National class	Definition
Bamboo timber removal	Bamboo timber that are to be sold which is at breast height of about 16

7.2.3 Original data

7.3 Data for National Reporting Table T7

GBRA2005	Bamboo removal (million ton)		
	1990	2000	2005
Bamboo wood removal		6.90	7.32
Bamboo woodfuel removal			
Total			

7.4 Comments to National Reporting Table T7

The actual statistics of bamboo removal is not certain, it is only an estimate.

8 Table 8 – Value of Wood Removal

8.1 GBRA 2005 Categories and Definitions

Category	Definition
Bamboo Wood removal	The Bamboo wood removed (volume) for production of goods and services other than energy production (woodfuel).
Woodfuel Bamboo removal	The Bamboo wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

8.2 National Data

8.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Ogunwusi A. A. et al, 2004	M	Removal price	2000	

8.2.2 Classification and definitions

National class	Definition
Bamboo timber removal	Bamboo timber that can be sold excluding small clums

8.2.3 Original data

8.3 Data for National Reporting Table T8

GBRA2005	Value (million USD)		
	1990	2000	2005
Bamboo wood removal		64.8	96.4
Bamboo woodfuel removal			
Total		64.8	96.4

8.4 Comments to National Reporting Table T8

This depend on the exchange rate.

9 Table 9 – Non Wood Bamboo Product Removal

9.1 GBRA2005 Categories and Definitions

Category
<u>Plant products / raw material</u>
1. Food
2. Raw material for medicine and aromatic products
3. Raw material for utensils, handicrafts & construction
4. Ornamental plants
5. Other plant products
<u>Animal products / raw material</u>
1. Living animals
2. Other edible animal products
3. Other non-edible animal products

9.2 National Data on Bamboo Resources

9.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments

9.2.2 Classification and definitions

9.2.3 Original data

9.3 Data for National Reporting Table T9

GBRA 2005 Categories	Scale factor	Unit	NWFP removal		
			1990	2000	2005
<u>Plant products / raw material</u>					
1. Food (bamboo shoots)					
2. Raw material for medicine and aromatic products					
3. Raw material for utensils, handicrafts & construction					
4. Ornamental plants					
5. Other plant products					
<u>Animal products / raw material (if any)</u>					
1. Living animals					
2. Other edible animal products					
3. Other non-edible animal products					

9.4 Comments to National Reporting Table T9

The information is being source.

10 Table T10– Value of Non Wood Bamboo Product

10.1 GBRA 2005 Categories and Definitions

10.2 National Data on Bamboo Resources

10.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments

10.2.2 Classification and definitions

10.2.3 Original data

10.3 Data for National Reporting Table T10

GBRA 2005 Categories	Value of the other than culms removal (Million USD)		
	1990	2000	2005
Plant products / raw material			
1. Food (bamboo shoots)			
2. Raw material for medicine and aromatic products			
3. Raw material for utensils, handicrafts & construction			
4. Ornamental plants			
5. Other plant products			

10.4 Comments to National Reporting Table T10

11 Map of country's bamboo resources distribution

(see attached)

Please attach a map of bamboo distribution in the country with explanatory notes

12 List of bamboo species in the country

Please attach list of the main bamboo species in the country

List main uses, quantity, value of the bamboo removal

Add the table: list of the main pest species