

Forestry Practice in Nigeria: An Overview

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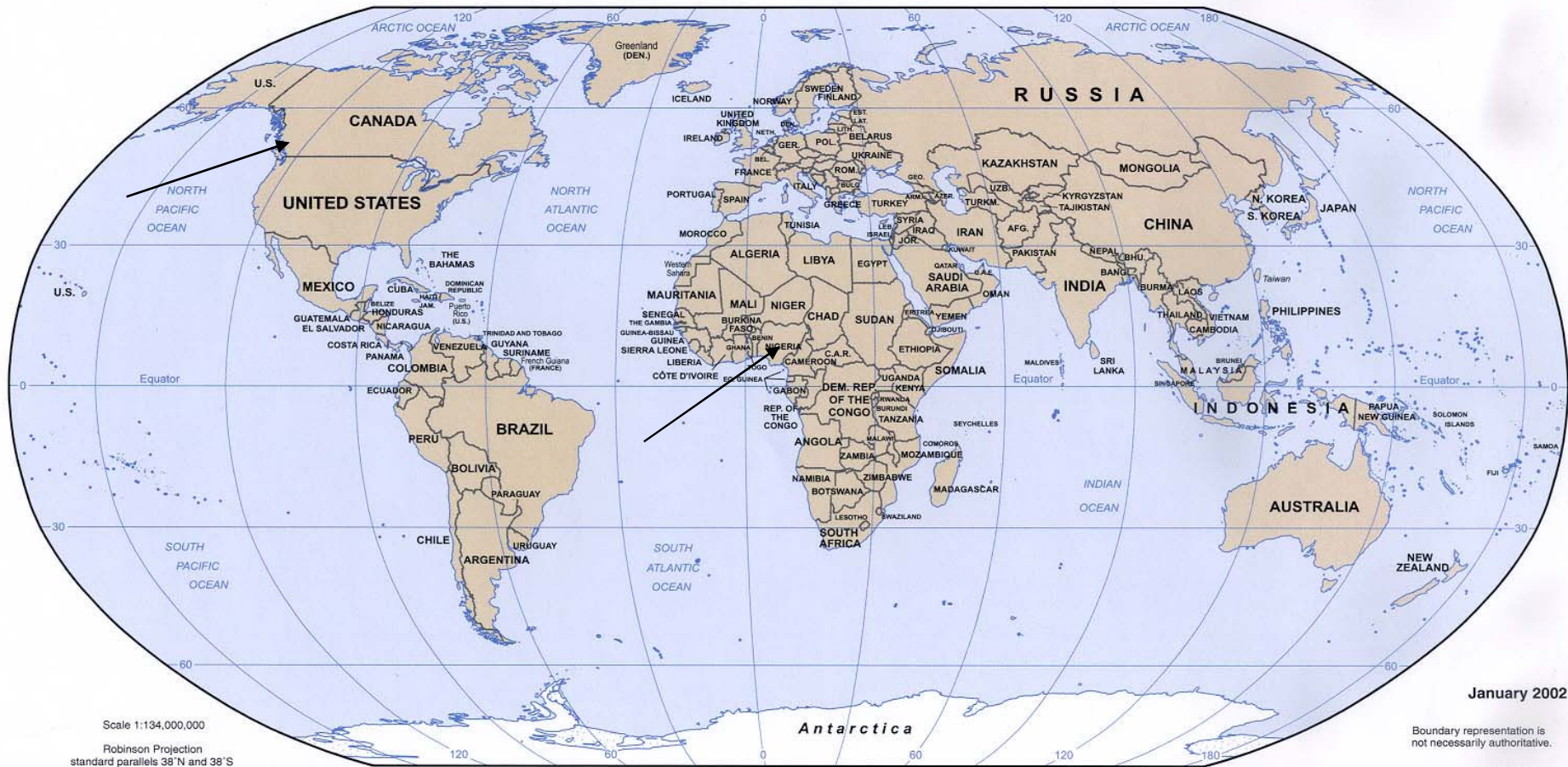
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Outline

1. Some facts about Nigeria
2. Historical background of Forestry Practice
3. Forestry Administration
4. Silvicultural Practices
5. Problems of Forestry Practice in Nigeria
6. The way forward





World Map with arrows pointing to the location of Canada and Nigeria



Administrative Map of Nigeria showing the States in Northern and Southern Nigeria

Some facts about Nigeria – the land

- Lat. $4^{\circ}16'N$ & $13^{\circ}52'N$; Long. $2^{\circ}49'E$ & $14^{\circ}37'E$;
- Total Land Area = 923,768 km² (BC = 947,800 km²);
- Fragmented into three parts (North, Southeast and Southwest) in lie with the Y-shape formed by Rivers Niger and Benue;
- Generally lowland with some inselbergs;
- Highest Elevation = 2,419 m (BC = 4,663 m);
- Endowed with many natural resources such as petroleum, tin, columbite, iron ore, coal, limestone, lead, zinc, etc.

Some facts about Nigeria – the economy

- Oil sector provides 20% of GDP, 95% of foreign exchange earnings, and about 65% of budgetary revenues;
- About 70% of the population live below the poverty line;
- Nigeria's external debts = US\$34 billion (*Nigeria paid US\$42 billion over the past 38 years to service a US\$13.5 billion debt, and yet US\$34 billion is still outstanding due to interest*);
- Oil production = 2.7 million barrels per day;
- 2005 national budget \approx N1.8 trillion;
- Currency: Naira (N), Exchange Rate: US\$1.00 = N132.86.

Some facts about Nigeria – the vegetation

- Forest cover thins out as one moves from the south to the north;
- Two broad types (Forests and Savanna);
- Forest Cover \approx 10% of land area (Canada = 50%);
- Plant diversity: Over 4,600 plant species identified (Ranked 11th in Africa);
- The forests have over 560 tree species (with a range of 30 to 70 species per hectare for trees \geq 5 cm dbh);
- Natural Forest MAI = 3 – 5 m³/ha/yr, Plantation MAI = 20 - 25 m³/ha/yr;
- Gmelina and Teak occupy about 60% and 25% of total plantation area, respectively.

Some facts about Nigeria – the people

- Population = 137 million (Canada \approx 33 million);
- Population Growth Rate = 2.78%
- Over 250 ethnic groups with distinct languages (the most prominent are Hausa/Fulani, Igbo and Yoruba);
- Amalgamated into a country by the colonialists in 1914;
- Official language is English.

Some facts about Nigeria – the forestry sector

- Nigeria is a member of African Timber Organisation (ATO) and the International Tropical Timber Organisation (ITTO);
- Nigeria has several NGOs involved in forestry, e.g. the Forestry Association of Nigeria (FAN), Nigeria Conservation Foundation (NCF), Savanna Conservation, Nigeria Environmental Study Team (NEST), etc.;
- Forestry Education: 2 Technical Colleges, 12 Universities;
- Nigeria has not endorsed any certification scheme yet, but work is in progress in this regard. Less than 10% of forest reserves is managed sustainably;
- Federal Forestry Legislation almost ready.

Historical Background of Forest Management

- Promulgation of Forestry Ordinance for constituting Forest Reserves – 1890;
- Establishment of a Forestry Department for the Southern Protectorate – 1899;
- Extension of the jurisdiction of Forestry Department to the Northern Protectorate – 1916;
- Preparation of Forest Management Plans for the constituted forest reserves.

Historical Background *contd.*

- Extensive logging in the forest reserves
 - To meet the demand of overseas market;
 - To generate revenue for political activities especially as native/local authorities were in charge of revenue generation (the Forestry Department only carry out inspection of exploitation activities and collect levies);
- Reliance on Natural Regeneration;
- Establish of Forestry Technical College to train forestry technicians.

Historical Background *contd.*

- Termination of local councils' involvement in forestry services in the south;
- Adoption of taungya practice for artificial regeneration;
- Establishment of Forestry Programmes in Universities to train professionals;
- Forestry Department embarked on plantation establishment using both indigenous and fast-growing exotic tree species;
- Formation of Forestry Technical Committee which later became the National Forestry Development Committee;
- Creation of a Federal Department of Forestry.

Forestry Administration

Federal

- Plays advisory role to the State Forestry Departments;
- Coordinates and monitors projects funded by the Federal Government;
- Relates with International development Agencies.

State

- Implementation of forest policy at the State level;
- Revenue generation from the forestry sector.

Local Government

- In the south, no specific role;
- In the north, dual control with the State Government.

Importance of the Forestry Sector in Nigeria



- Raw materials for the wood industries

Small sawmills \approx 1300

Large sawmills = 10

Pulp mills = 0

Importance of the Forestry Sector *contd.*

- Fuelwood for domestic use
(About 70% of the population use fuelwood).



Importance of the Forestry Sector *contd.*

- Land rehabilitation.



Importance of the Forestry Sector *contd.*

- Watershed Protection



Importance of the Forestry Sector in Nigeria

- Non-timber forest products (NTFPs) which boost rural income, health, food security, etc.



NTFPs
include roots,
bark, leaves,
exudate,
climbers,
animals, etc.

Sacred Groves



Silvicultural Practices

- **Enrichment Planting**
 - Line cutting through the undergrowth
 - Girdling and poisoning of shade-casting trees with sodium arsenite
 - Mahogany species were then planted along the lines.



Silvicultural Practices *contd.*

- Tropical Shelterwood System (TSS)

- Treatments begins 5 years before logging

- Cutting of climbers and thicket

- Girdling and poisoning of non-economic tree species

(This results in destruction of 25 – 75% of the standing basal area of the forest)

- The forest was then left to regenerate naturally.

Without climber cutting, when one tree is cut, about 12 others die and more than 20 others suffer some damage.



Silvicultural Practices *contd.*

- **Taungya System**

- Land hunger
- Farmers are allowed to come and farm in the forest reserves
- Portions are allocated to them for a period of two years
- Only arable (annual) crops are allowed
- The farmers clear the land and plant their agric. crops
- The Forestry Department plant fast-growing tree species within these farmlands
- The farmers take care of the trees
- After two years, the farmers are given new areas.

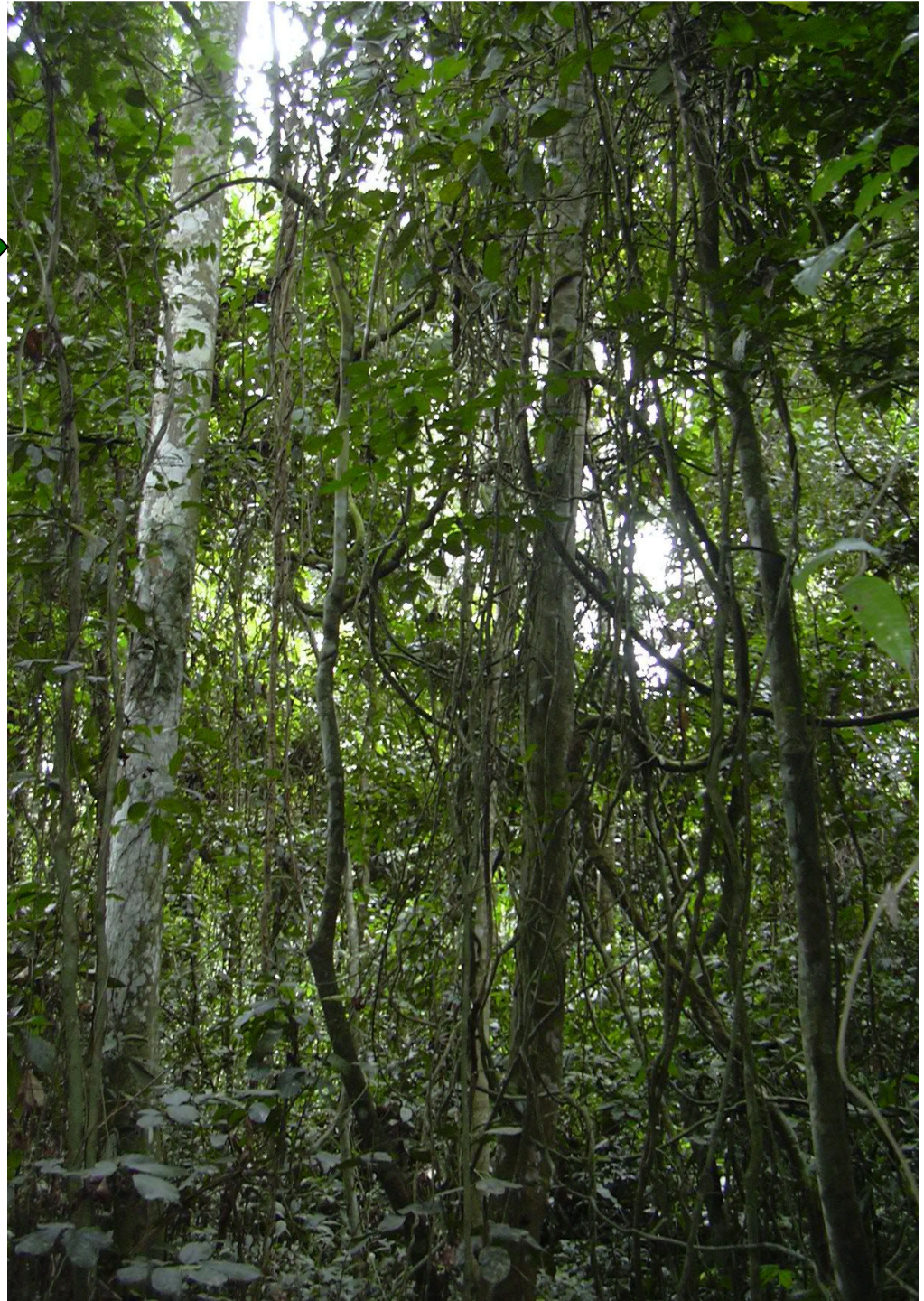
Problems of Forestry Practice in Nigeria

- Political:
 - Political instability, long period of military rule;
 - Deep ignorance among political leadership leading to lack of political will to adhere to the principles of sustainable forest management;
 - Undue pressure from Government for more revenue from the forest;
 - Poor funding (huge shortfalls, late disbursement, and over-dependence on foreign loans);
 - Encroachment into forest reserves;
 - Corruption which leads to reckless contempt of sound professional advice.

Problems of Forestry Practice *contd.*

- Technical:
 - High biodiversity (little is know about many species);
 - Presence of climbers makes logging to be very destructive;
 - Lack of modern equipment for most forestry operations;
 - Absence of up-to-date maps of the forest reserves;
 - Absence of forest management plans, no AAC;
 - Shortage of trained personnel;
 - Lack of adequate facilities for teaching and research.

Walking through the tropical rainforest could be fun, but sometimes very challenging.





Climbers constitute serious problems in logging operations.

Log conversion at site

Results in great wastage of wood, desirable only in situations where accessibility is very difficult due to bad terrain.

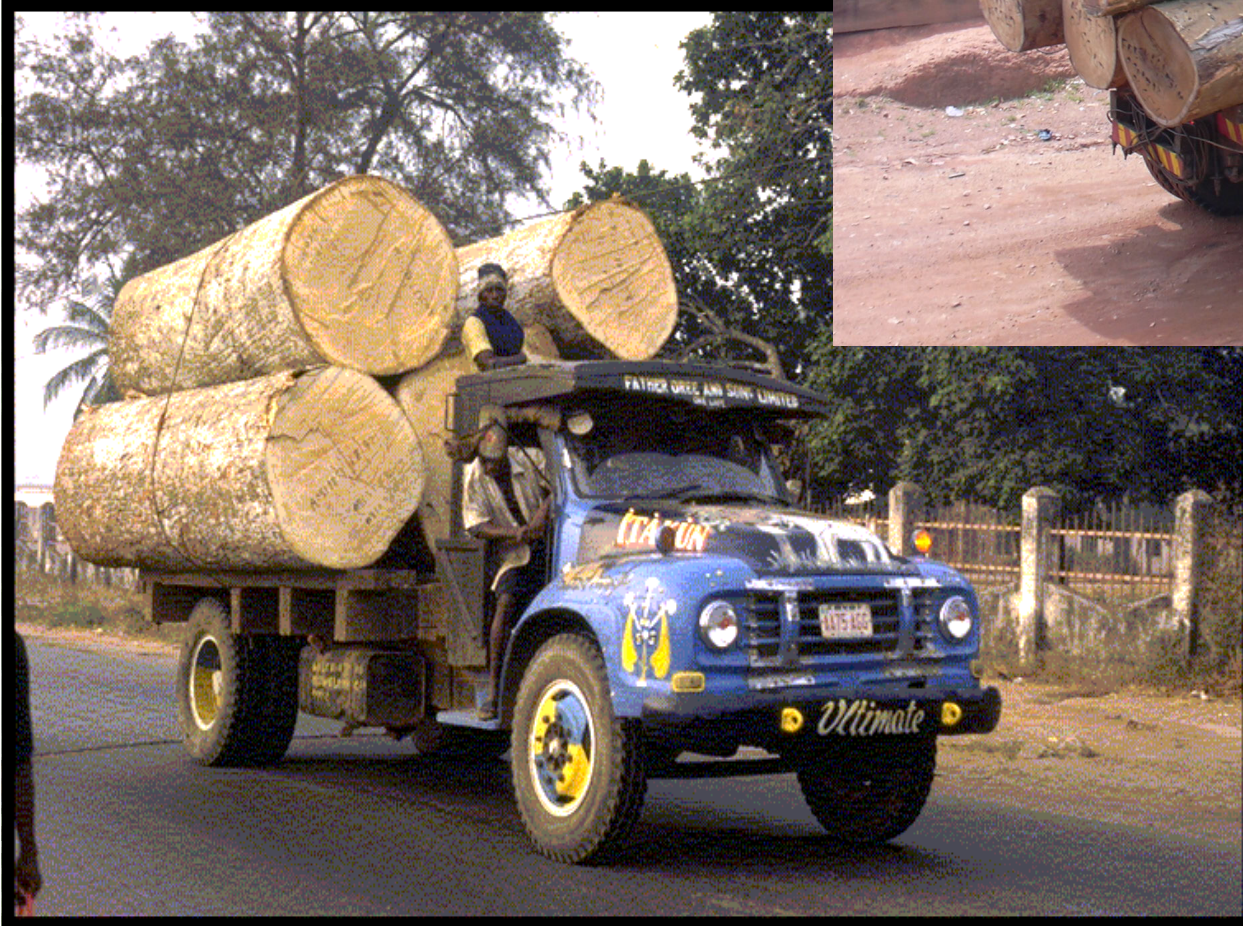


Loading the timber truck



Log Transportation

Average log length = 3.66m (12ft)





The way forward

- Restoration of the Forestry Trust Fund;
- Delineation of boundaries and mapping of the forest reserves;
- Promotion of community participation in forestry programmes;
- Capacity building and Institutional Strengthening.

Thank You