

THEME

NATIONAL WORKSHOP ON APPLICATIONS OF JUNCAO TECHNOLOGY AND
ITS CONTRIBUTION TO THE ACHIEVEMENT OF SUSTAINABLE
AGRICULTURE
AND THE SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA;

Presentation on

Addressing Deforestation from Agriculture and Livelihood Challenges

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Presentation Outline

- ***Agricultural Contribution to National Development***
- ***Nigeria Deforestation Picture***
- ***Drivers of Deforestation:***
 - ***Hunger For Land***
 - ***Agriculture Induced Drivers of Deforestation***
- ***Strategic Action Required: REDD+ Perspective and others***
- ***Conclusion and Way forward***

Contribution to National Development

- Agriculture plays a decisive role in Nigeria's economic development.
- Accounts for more than 45% of the gross domestic product (GDP).
- Employs two-thirds of the workforce.
- Ranks as the most important driver of deforestation.
- Increase in the population engaged in farming primarily drives the conversion of forests to agricultural land use types.

State of the Forest in Nigeria

- Nigeria has one of the World's fastest rates of deforestation having lost over 90% of its original forest resources (FME 2010).
- The loss is a result of long term pressures from agricultural development, uncontrolled forest exploitation and urbanisation.
- **Currently less than 10% of the country is forested.**

A Case of Continuing Rapid Deforestation

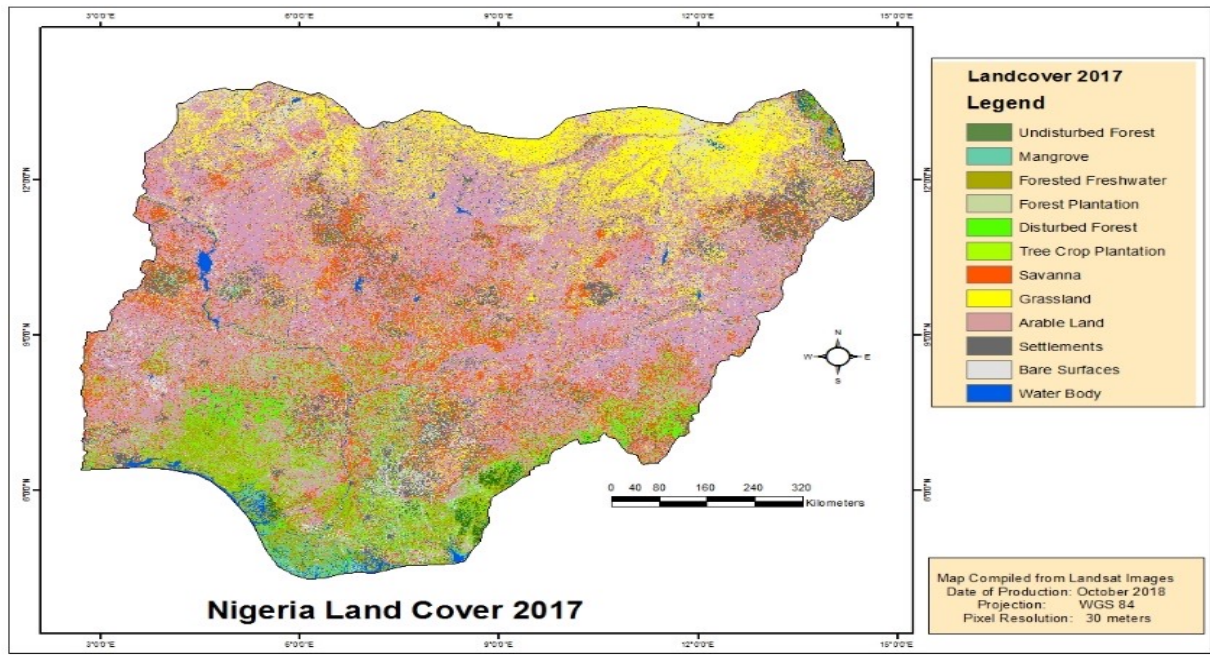
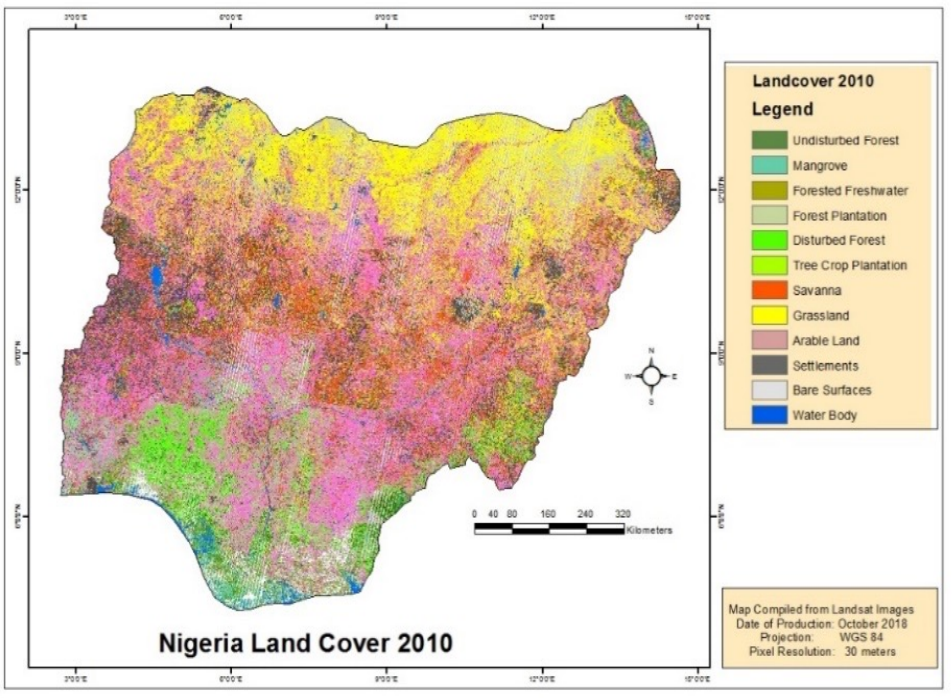
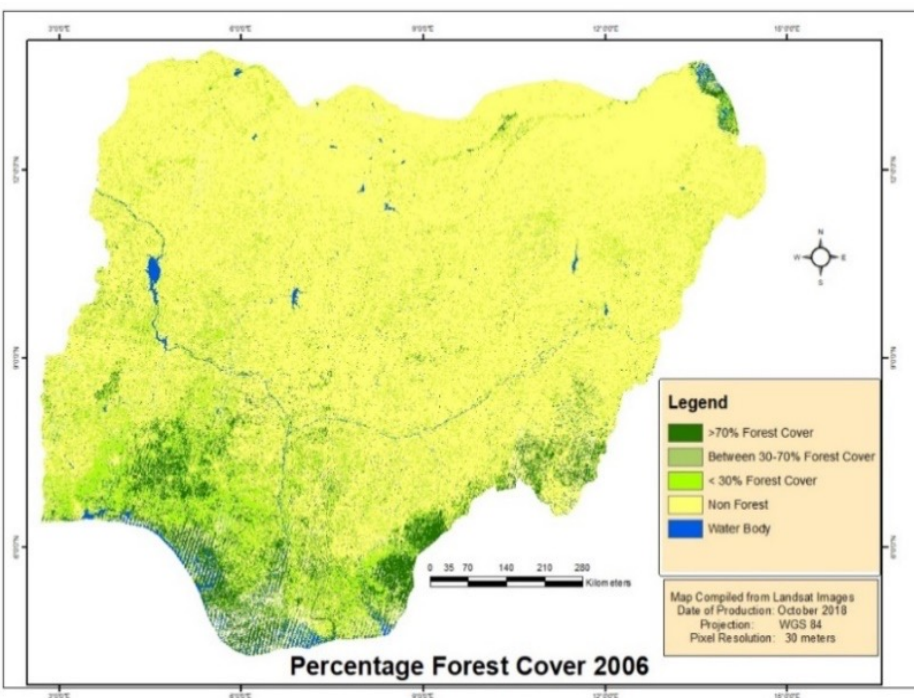
- Between 1990 and 2010, Nigeria lost an average of 409,650 ha or 2.38% per year.
- Between 1990 and 2010, Nigeria lost 47.5% of its forest cover, or around 8,193,000 ha.
- Corresponding loss in biomass = 42% (i.e about 2 billion tonnes of carbon).
- Forest ecosystem services are at risk.
- The total value of forest ecosystem services based on valuations done between 2000 and 2015 is approximately 1million Naira (USD2857)/ha.



1978 LUV Map



1995 LUV Map



National Response to Deforestation and Climate Change

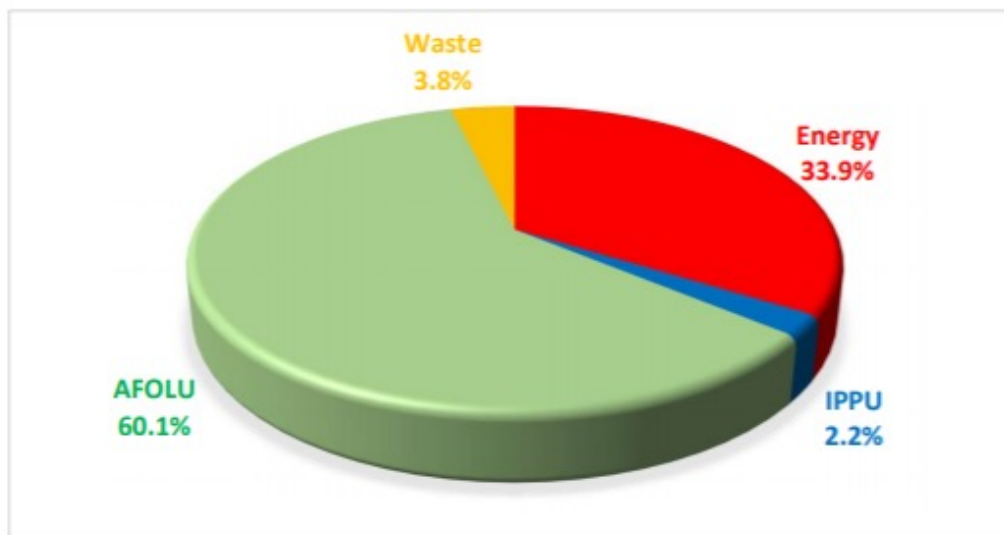
- Nigeria has outlined several strategies such as the National Economic Empowerment and Development Strategy (NEEDS) and Nigeria Vision 20: 2020, the NDC, to obtain goals that also include addressing problems associated with resource management, socio economic development, and climate change.
- **REDD+** in particular provides opportunity for Nigeria to apply **nature-based solution** and the **carbon income** to the bouquet of policy instruments to mitigate forest loss and climate change and contribute to its national development agenda.

Hunger for Land

- Nigeria is the leading agricultural power and the largest market in West Africa.
- In 2019 Nigeria had an arable land area of 34m hectares -6.5m permanent crops and 28.6 for others pasture included
- **Factors responsible for the hunger for land:**
 - Large population of about 216 million;
 - Considerable agricultural production potential;
 - Wide range of ecosystems for growing a broad range of crops.

Table 2.5 - National emissions for the year 2016

Categories	Net CO ₂ (Gg)	CH ₄ (Gg)	N ₂ O (Gg)	Total (Gg CO ₂ -eq)	NO _x (Gg)	CO (Gg)	NMVOCs (Gg)	SO ₂ (Gg)
Total National Emissions and Removals	444,668.7	6,170.4	114.6	609,783.8	756.1	13,875.9	2,107.0	121.4
1 - Energy	124,021.6	3,762.3	11.0	206,452.4	473.6	10,268.0	1,638.4	64.5
2 - IPPU	13,254.9	0.6	0.0	13,267.1	0.0	0.0	0.9	0.0
3 - AFOLU	307,320.4	1,640.0	80.6	366,733.9	0.2	5.9	0.0	0.0
4 - Waste	71.8	767.6	23.0	23,330.3	59.0	835.9	0.0	9.8
5 - Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memo Items (5)								
1.A.3.a.i - International Aviation (International Bunkers) (1)	1,241.3	0.0	0.0		5.0	0.4	0.2	0.4
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	70.0	0.0	0.0		1.8	0.2	0.1	0.4



Agriculture-induced Drivers

- **Demography**

- Projections suggest that Nigerian population might reach over 400 million people by 2050, with attendant impacts on land use.

- **Economic**

- Need for food, income, employment and nutritional securities will drive more investments in subsistence and commercial agriculture.

- **Cultural**

- Slash-and-burn agriculture to compensate for low soil fertility problem; and use of fire to get rid of pests affecting soil organic content levels.

- **Technological**

- Unsustainable agricultural practices, inefficient farm input, and low agricultural productivity resulting in farmers being forced to open up new lands that are more fertile, and in a lot of cases in forested areas.

- **Policy and Institutional**

- Subsidies that are in favour of non-climate smart agricultural practices.
- Uncoordinated sector linkages for addressing food security.

Agriculture

GREENPEACE



Strategic Actions Required: REDD+

Perspective

- Nigeria anchors its National REDD+ Strategy on one **general objective**, which is,
- “To reduce the rate of carbon emissions and enhance removals from the forest sector while creating benefits for resilience building and green economic development”.
- This will be by way of adopting ecologically friendly and climate-smart forest and forest-related investments **especially in the agriculture and forest sectors**.
- The aim is promote the conservation and rehabilitation of forest ecosystems as well as generate economic, social and environmental incentives.

The Place of REDD+ Programme in Addressing Deforestation and Livelihood

- Institutional Strengthening of Government initiative in driving sustainable forest management initiatives through climate smart Agriculture.
- Connecting National, sub-national and communities with global financial investment opportunities that meets livelihoods needs, economic growth and emission reductions.
- Restoration of forest cover through afforestation, reforestation and Agro-forestry

CHALLENGES

Consequences of Climate Change

(source: UNDP Samoa)

Changes in forest composition, extent, health & productivity

Variability in water supply, quality and distribution. More competition and cross-border conflicts over water resources

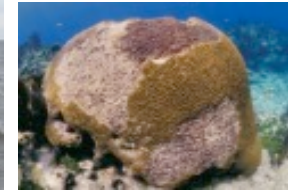
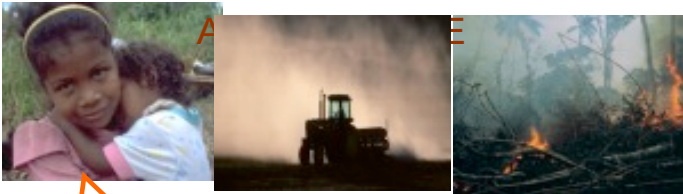
Erosion, inundation, salinisation, stress on mangroves, marshes, wetlands

HEALTH AGRICULTURE FORESTRY

WATER RESOURCES

COASTAL SYSTEMS

ECOSYSTEM SERVICES



Increasing incidents of infectious, water-borne and vector-borne diseases, heat stress & mortality, additional public health costs

Less predictability in crop yield, changing irrigation demand, growing risk of pest infestations

Loss of habitat, species and protective ecosystems, migratory shifts







Conclusion and Way Forward

Strategic Actions

- Promote climate smart agriculture with the intent to:
 - raise agriculture productivity and profitability;
 - reduce the growth of agricultural land usage; and
 - enable sustainable forest management and emissions reduction.
- Transform agricultural commodity value chain.
- Create incentives (e.g. certifications) for green agricultural development.
- Build capacity for extension services and monitoring.
- Intentionally develop and implement policies and programmes to strengthen multi-sectoral collaboration.

Policy and Institutional Co-ordination

Actions

- **Strengthen Existing Mechanism**
 - **For Horizontal Co-ordination**
 - **Between Entities and Particular Tier**
- **Strengthen Vertical Co-ordination**
 - **National, Subnational and Local Levels**
- **Shared Information - MDAs and Other Key Stakeholders**
- **Define and Distribute Responsibilities**
- **Efficiently Allocation of Resources for SDG Implementation**

Policy Integration - Balancing different often divergent dimensions of SD

- **Maximizing Synergies**
- **Managing Trade-off**



At all Stages of Policymaking

- **Policies aimed at achieving one SDG contributes to the process in others**
- **Development of Strategic Frameworks and Mandates**
 - **Under new logic of cross-sectoral collaborations**
 - **Shared Responsibilities**
 - **Align sectoral objectives to overarching or higher level goals**

Example: Policies for Improving Energy Efficiency (SDG 7)

- **Contribute to Economic Sustainable growth (SDG8)**
- **Contribute to Building Sustainable Cities (SDG11)**
- **Support Responsible Consumption and Production (SDG12)**
- **Contribute to Climate Change Action**

Long-term Planning Horizon

**Long term Perspective due to
Intergenerational nature of the SDGs**

- **Precautionary Decisions**
- **Precautionary Mechanism**
- **Maintain Commitment Over Time**
 - **Beyond Electoral Cycles**

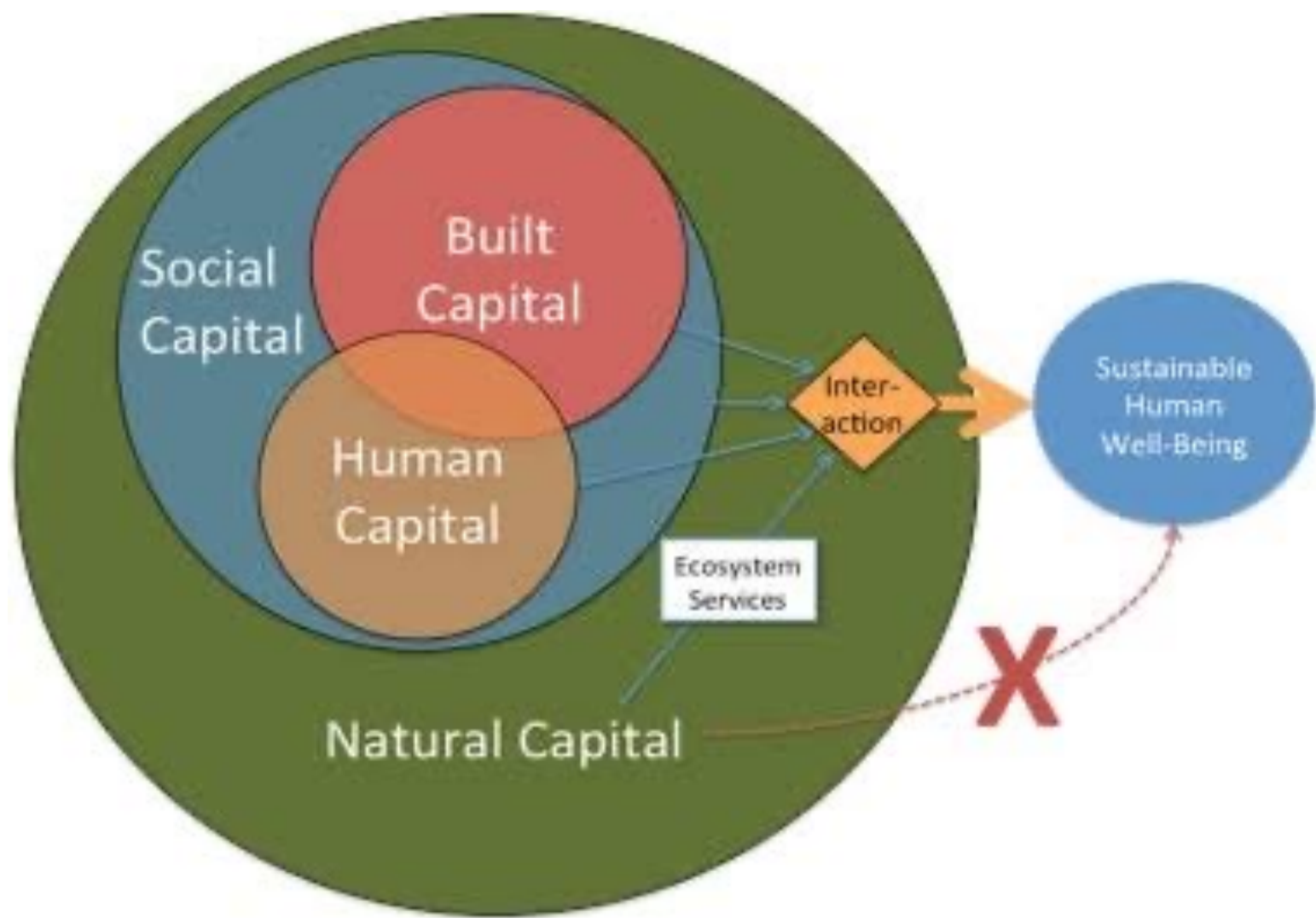


Think Green Productivity

- Sustainable development requires a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.
- Green productivity therefore offers one of the core strategies for mitigating the effects of climate change and achieving sustainable development. When used effectively, green productivity can lead to positive change in a nation's socio-economic development

Think Green Productivity

- Green productivity has been defined by the Asian Productivity Organization (1997) as
 - *a strategy in which appropriate tools, techniques, technologies and management systems are applied to produce environmentally-sound and climate-resilient goods and services.*
- Green Productivity attempts to answer society's needs for a better quality of life by increasing productivity through environmentally sound manufacturing practices and management activities



QUOTE

“Future generations will surely judge this generation of leaders not by principles they set out in communiqués but by what they actually do to eradicate poverty, build shared prosperity and protect our children and their children from climate disaster. Let us act now and act together”

Kofi Annan

THANK YOU

