### THE IMPERATIVES OF GREEN ECONOMY AND THE TRANSFORMATION OF AFRICA'S AGRICULTURAL SECTOR

BY

SAMUEL A. IGBATAYO, PhD<sup>1</sup>

&

**RUFUS OLUWAFEMI, PhD<sup>2</sup>** 

<sup>1</sup>Dean College of Business & Management Sciences Igbinedon University, Okada, Nigeria.

<sup>2</sup> Lecturer, Department of Agricultural Economics, College of Natural & Applied Sciences, Igbinedon University

•

A paper presented at an International Conference on Sustainable Development of Natural Resources in Africa.

5-7 December, 2011. University of Ghana, Accra.

#### **OBJECTIVES OF PRESENTATION**

The main objectives of this presentation, amongst other things, are to:

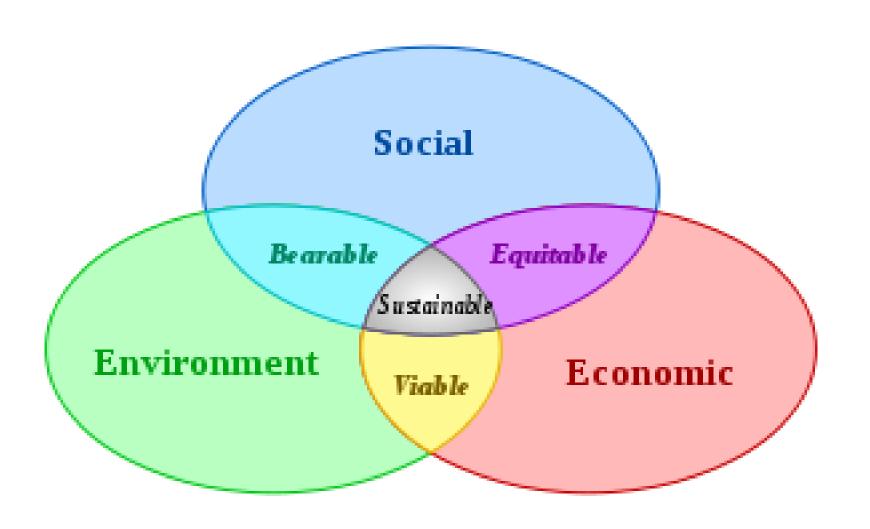
- Conceptualize the Green Economy and articulate pertinent issues associated with the phenomenon;
- Establish the nexus of sustainable development and the green economy;
- Discuss the imperatives of 'greening' Africa's agricultural sector and implications for economic transformation; and
- Proffer pertinent recommendations.

**Table 1: Greening the Economy: Key Sectors and Green Goals.** 

T 1 1 G	
Industrial Sector	Green Goals Associated with Sector
Manufacturing	Cradle-to-cradle; closed loop production; industrial ecology
Energy Utilities	Renewable; distributed (local) generation; green design
Water Utilities	Integrated (storm water, waste water systems; water sensitive urban design
Waste	Recycling, reuse; eco-industrial development
Construction	Smart, green building; virtual design and construction; life cycle
Trade (Retail/Wholesale)	Zero waste (packaging, food, etc); carbon management
Transport	Hybrid, electric, hydrogen vehicles; land use integration
Finance and Property	Green accounting; urban retrofitting; building accreditation
Services	Zero waste; reduced consumption, carbon management; e-services
Government	Green procurement; de-coupling policies; sectoral decarbonizing schemes;
	regulation

Source: Newton and Newman, 2010

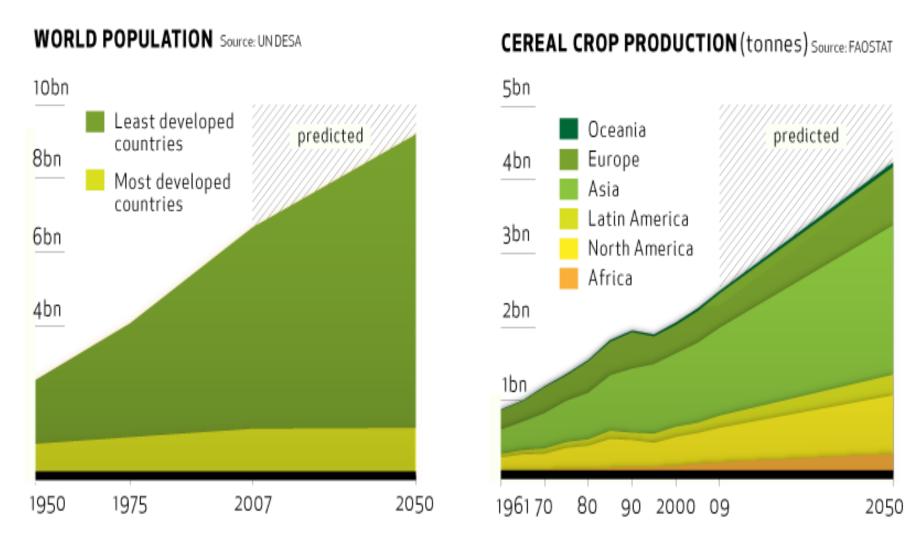
Figure 1: A Model of Sustainable Development



## CONTRIBUTIONS OF THE GREEN GROWTH STRATEGY (OECD, 2011):

- Creating a common understanding of green growth;
- Developing a conceptual model of green growth;
- Assessing countries' green growth measures taken since the crisis and future plans;
- Quantifying the potential effects of green growth;
- Describing the new issues raised by green growth;
- Identifying the potential effects of green growth;
- Describing the new issues raised by green growth;
- Identifying key principles and providing a toolkit for green growth policies;
- Developing a set of indicators covering economic, environmental and wellbeing aspects;
- Strengthening performance through peer reviews of green growth policies;
- Addressing the political economy considerations of green growth; and Identifying lessons learned and best practices.

Figure 2: Global Population and Cereal Crop Production Trends



Source: UNDESA, FAOSTAT

#### THE AIMS OF GREENING AGRICULTURE

- Restoring and enhancing soil fertility through the increased use of naturally and sustainable produced nutrient inputs; diversified crop rotations; as well as livestock and crop integration;
- Reducing soil erosion and improving the efficiency of water use by applying minimum tillage and cover crop cultivation techniques;
- Reducing chemical pesticide and herbicide use by implementing integrated biological pest and weed management practices; and
- Reducing food spoilage and loss by expanding the use of post-harvest storage and processing facilities.

#### THE PROFILE OF AFRICA'S AGRICULTURE

- African agriculture has unique features that set it apart from Asia, where the Green revolution has had a positive impact on food security and development. These include (IAC, 2008):
- Lack of a dominant farming system on which food security largely depends;
- Predominance of rain-fed agriculture as opposed to irrigation agriculture;
- Heterogeneity and diversity of farming systems and the importance of livestock;
- Key roles of women in agriculture and in ensuring household food security;
- Lack of functioning competitive markets;
- Under-investment in agricultural research and development (R&D) and infrastructure;
- Dominance of weathered soils of poor inherent fertility;
- Lack of conducive economic and political enabling environments;
- Large and growing impact of human health on agriculture;
- Low and stagnant labour productivity and minimal mechanization;
- Predominance of customary land tenure.

## CONTEMPORARY ENVIRONMENTAL CHALLENGES IN AFRICA

- Incessant droughts.
- Increasing desertification
- Deforestation
- Unsustainable urbanization
- Soil erosion
- Loss of biodiversity

## ADVANTAGES OF GREENING AFRICA'S AGRICULTURE

- Catalyzes novel technologies that spawn productivity
- Promotes environmental sustainability
- Prevents biodiversity loss
- Supports rural livelihoods
- Holds the key to the transformation of the agricultural sector.

#### RECOMMENDATIONS

- Embrace the concept of a green economy for the transformation of agriculture
- Integrate poverty reduction policies into development strategies
- Adapt novel agricultural technologies to mitigate impacts of climate change
- Promote new approaches to agricultural extension services; and
- Foster development partnerships

# THANK YOU