DOING BUSINESS DIFFERENTLY IN NIGERIA: THE EMERGING GLOBAL GREEN ECONOMY

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ABSTRACT

The aim of this study was to examine contemporary body of knowledge on the vexed issues of switching to low-carbon economy, or what is termed green economy or a new way of doing business, different from the status quo. The idea is to stimulate the interest of prospective investors in Nigeria to the emerging global green economy. To accomplish this aim, the study adopted the method of critical review of available literature to answer seven research questions/objectives that were put forward.

The study found that low-carbon economy is not only essential for the stability of future business, and the health of the environment, but also as a new way of doing business; a stimulus to innovation and the discovery of new sources of competitive advantage.

In this regard, the role of forests as key assets in structuring of green economy became obvious. Focusing on forests help draw attention to the importance of creating green economy at local, regional and global levels. Doing business differently, therefore, includes investing in afforestation, reforestation, forest preservation, and reducing emissions from deforestation and

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degradation (REDD). These are marketable assets in a green economy- either by way of forest-based carbon trading, or direct sale of green forest products.

Costs and benefits not withstanding, the study concludes that low –carbon economy represents an enormous opportunity and one in which several nations and businesses are moving fast to capitalize, even as fears and uncertainty surrounding carbon trading, whether in regulatory or voluntary markets are being addressed. But these mechanisms must be deployed within the context of good governance, best practices and a well developed monitoring framework.

Key words:

Emission reduction, low-carbon economy, forest-based carbon, market failure, environmental costs, externalities, investor confidence, wealth creation, forest assets, sustainable finance, regulatory market, voluntary market.

INTRODUCTION:

The emerging green economy no doubt is expected to change the way business is done globally, whether we like it or not. And only those who understand this in time and can grab the opportunities that are abound, will be business leaders in the years ahead.

As we all know, current ways of doing business in Nigeria, as in other developing countries, are not environmentally sustainable. Often, emphasis is on short-term gains which predispose the environment to series of abuses. Unfortunately, these abuses or costs are not factored into the real cost of doing business due to market failures. Instead, production methods which externalize environmental costs are favoured because it is cheaper to do business along the lines of the status quo, thereby sustaining the vicious cycle of environmental degradation.

In reality, these costs are paid for disproportionately by the less privileged members of society. In many cases, consumers of business outputs or products, who benefit from cost reductions due to

the externalization of cost are not the same persons as those who pay the costs. Cost and benefits are borne by different parties (Munang, R, et. al. 2011).

To remedy this unjust allocation of costs, policies and financial mechanisms could be used to internalize environmental and social costs of land degradation, and benefits of sustainable production. These mechanisms and policies will, in effect, form the bedrock of doing business differently in the coming years.

In Nigeria, the Central Bank and seven commercial banks are already brazing the trail on green lending policy for sustainable environment. The new lending policy, when fully developed and implemented, will deny loans to corporate organizations whose activities are impacting negatively on the environment.

THE PROBLEM

Green economy, a way of doing business differently, comes with a lot of opportunities, and with opportunities come risks. These opportunities and risks must be well understood by prospective investors if the desired level of investment is to be realized. The necessary investments in innovations in energy performance and infrastructure are indeed costly. So, they can be made in confidence only if reliable estimates of costs and benefits can be obtained. Lacking confidence, capital retreats to short-term and more certain prospects (Delong, 2011).

In this study, effort is geared towards drawing the attention of prospective (green) investors and stakeholders in Nigeria to existing research findings on new products, services and markets with significant potential for future wealth creation and competitive advantage.

RESEARCH OBJECTIVES/QUESTIONS

In more specific terms, this study hopes to provide answers to the following research questions.

1. When does an economy become green?
2. What does it mean to do business differently?
3. What will be the Structure of the Green Market Economy?
4. What Innovative Schemes are required to drive the green economy?
5. What are the assets base of the emerging green economy?

6. What are the benefits & co-benefits of Green Economy?
7. What are the potential costs/risks of doing business differently?

RESEARCH METHODOLGY

For the purpose of this study, the method of in-depth and critical review of available literature was undertaken. The idea was to aggregate existing knowledge in the field, thereby stimulating interest of investors in the emerging green economy.

RESULTS:

1. WHEN DOES AN ECONOMY BECOME GREEN?

Well, I am sure you know that the biggest environmental problem facing the world today is the issue of climate change due to global warming. Global warming is increase in the average temperature of the planet earth caused by continuous emission of greenhouse gases that trap heat to the earth's atmosphere. The resultant heat waves, sea level rise and flooding, desertification, soil erosion, disease risks, among others, pose serious challenges to humanity and other organisms. To mitigate and adapt to these challenges, humans need to change their attitude towards the planet, and adopt lifestyle changes that are geared towards protecting the environment.(Journal USA, 2009)

Incidentally, most of the people, especially corporate bodies whose production activities damage the environment seem not to be concerned. As Isakpa (2011) puts it succinctly, "not many executives in Nigeria are clued-up on the raging discussions about climate change. And they are not personally making any effort to understand and come to terms with the whole issue, and debate that surrounds the subject. Maybe, if they really took in the fact that some scientists strongly believe that, if people and organizations in the world do not change their ways, the earth will soon combust from their dangerous activities, then they just might begin to pay serious attention. After all, all those talks about bottom line, profit, turnover, shareholder value, will all become meaningless if there are no business and people around any more."

But how can we change our ways? We can do so by rethinking the way we do business so that they can be environmentally sustainable. That is, removing, reducing, and stopping activities that

drive environmental degradation by any means. As Munang, et al. (2011) puts it, "quite often, one of the strongest factors influencing the degradation of natural capital is the simple fact that it is cheaper to do business along the lines of the status quo." If we realize this and begin to adopt practical and realistic measures to change the status quo for sustainable living, then we would be contributing to the emergence of a green economy. Green economy is, therefore, the transition from the status quo to environmentally friendly production processes and activities. UNEP (2010), defines green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource-efficient, and socially inclusive." According to Delong (2011), low-carbon economy is not only essential for the stability of future business, but also as a new way of doing business; a stimulus to innovation and the discovery of new sources of competitive advantage."

The mood in Nigeria seemed to have been captured recently by Uroko (2011). In a report, the Group Managing Director of Access Bank, Aigboje Aig-Imoukhuede was quoted as saying: The good news (after a three-day Sustainable Finance Week), "is that the banking industry is going to start setting standards for protecting the environment, and the ecosystem in their lending and is also going to play an advocacy role to make sure that government starts taking the issue of environment seriously and confront any sector that destroys the environment."

FOREST- BASED CLIMATE CHANGE MITIGATION.

Another dimension to green or low-carbon economy is the role that forests can play in emission reduction efforts. As natural capital, forest assets are important at many levels and in many sectors, and constitute the source of significant benefits to people, ranging from providing subsistence to mitigating the impacts of climate change (Munang,2011). Forests play a major role in sequestering carbon dioxide as a way to reduce the impact of global climate change.

Globally, the overall carbon storage of forests constitutes 54% of the 2,200 gigatons of the total carbon pool in terrestrial ecosystems. Standing forests have an average maximum potential carbon sequestration rate of 1.1 – 1.6 gigatons per year, including above and below ground pools (IPCC,2010). Forest also contain large amounts of sequestrated carbon and their destruction or

degradation (especially by burning) is currently estimated as accounting for 12 – 15% of all carbon gas emissions into the atmosphere(Van der Werf, G.R. et al., 2009). In addition, through natural carbon capture and storage, terrestrial forest ecosystems contribute to planetary carbon cycle by storing more carbon in their soil and organic material than is currently stored in the atmosphere and playing an important role in human response to the challenges of changing climate.(See box 1 for more facts on climate change impacts).

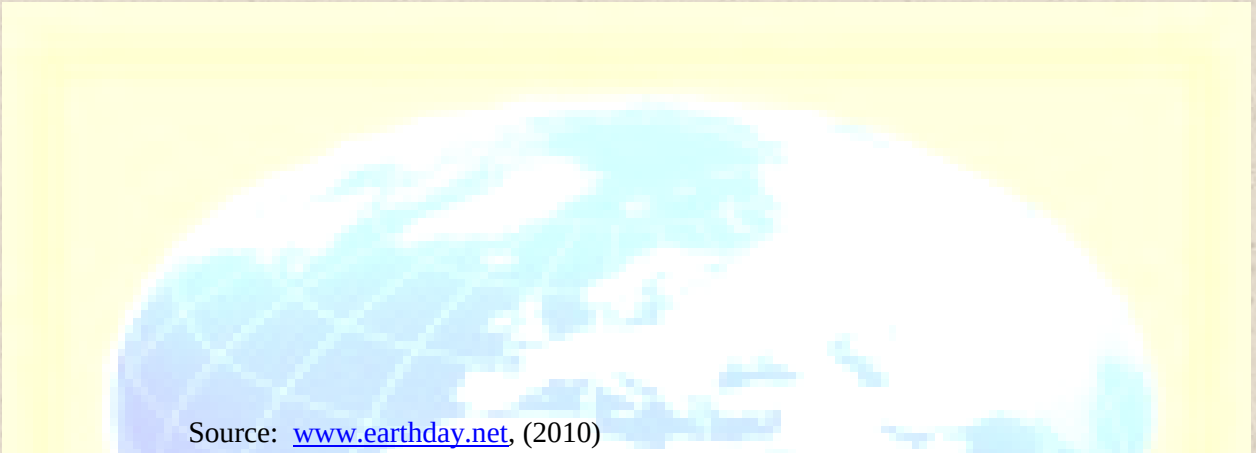
Additionally, forest products are most widely recognized in the global economy, and they can play a major role in green economy. In sum, therefore, green economy encompasses the following:

- low-carbon projects
- use of certified green products
- reducing emission from deforestation and forest degradation(REDD)
- afforestation and reforestation, and forest preservation
- use of forest products & sustainable management of forests
- efficiency in the use of resources, and
- equitable distribution of benefits.

Box 1:

CLIMATE CHANGE FACT SHEET

1. Each gallon of gasoline burned creates 20 pounds of CO_2
2. During the last one hundred years the global temperature has warmed between 0.7-1.50^{0}C
3. It is predicted that global temperatures in 2100 will be



Source: www.earthday.net, (2010)

2. WHAT DOES IT MEAN TO DO BUSINESS DIFFERENTLY?

As already mentioned, low-carbon economy represents in itself, a new way of doing business. It requires designing new products and services that will meet growing demand in a resource-constrained world (Delong, 2011). Low-carbon projects are expected to generate green products and services. Distributing and marketing these green products and services is another side to it. Likewise, carbon credits generated from low-carbon projects will also be certified and sold to countries or businesses that need to meet mandatory emission reduction targets.

Furthermore, forests are key assets in structuring of a green economy as they provide a wide range of services including ecological infrastructure, which comprises public goods such as timber, fibre, biomass and non-wood forest products. Forests act as a source of livelihood, natural insurance, adaptation, employment and health services. Focusing on forests, according to Munang et al (2011), "helps draw attention to the importance of creating green economy at the local, regional and global levels." So, doing business differently includes investing in afforestation, reforestation, forest preservation, and reducing emission from deforestation and

degradation. These are marketable assets in a green economy, either by way of forest-based carbon trading or direct sales of green forest products.

Finally, doing business differently also entails lowering the basic cost of doing (green) business so as to leverage private finance. These includes measures like streamlining licensing procedures and review times, accelerating the process of launching a green business, increasing data transparency, providing access to finance and simplifying tax systems.(Munang, et al. 2011).

3. WHAT WILL BE THE STRUCTURE OF THE GREEN MARKET ECONOMY?

Global carbon market is the dominant feature of the green economy. At present, two main modes of carbon market are in operation – the regulatory (compliance) market, and the voluntary markets (UNEP F1, 2011). Regulatory markets include countries and organizations that have to reduce their emissions as a result of a binding regulatory framework, mostly as a result of emission reduction targets established under the Kyoto Protocol.

On the other hand, voluntary markets include carbon credit trades that are not required by regulations, but which are driven by organizations or individuals voluntarily seeking to offset their emissions (UNEP F1, 2011). In these two cases, countries, organizations, and individuals are ready to buy carbon credit from generators of such credits for a stipulated charge.

Thus, within the global carbon market, carbon credits – whether from low-carbon projects, or from forest-based carbon, becomes the major articles of trade. Investors, or entrepreneurs can now choose to invest in low-carbon projects, or in afforestation and reforestation projects to achieve the same purpose. In addition, they will produce both forest green products and other sustainable products to sell to buyers. Equally, buyers who patronize green products are also helping to mitigate climate change risks.

4. WHAT INNOVATIVE SCHEMES ARE REQUIRED TO DRIVE THE GREEN ECONOMY?

Carbon trading in the global economy is already being driven by a number of innovative mechanisms including those directly linked to the Kyoto Protocol, and those that are not directly linked to it, but to alternative regional or national compliance regimes. Most of these markets are small compared to markets linked to the Kyoto Protocol.(UNEP F1, 2011).

1. ***Regulatory Markets***

Kossoy & Ambrosi, (2010) explain that, regulatory markets directly linked to the Kyoto Protocol includes:

(a) The ***Clean Development Mechanism (CDM)***. This is one of the flexible mechanisms that has experienced significant investment with thousands of projects under development and a market volume exceeding USD 20billion in 2009.

(b) ***Joint Implementation(JI)***: This is another flexible mechanism under the Kyoto Protocol, though, smaller than the CDM, it saw transactions in excess of USD 350million in 2009 (Kossoy & Ambrosei, 2010)

(c) ***The EU Emission Trading System (EU ETS)*** established in 2005 as a means to help EU member States meet their Kyoto Protocol targets. Allowance trading values totaled USD 118billion in 2009(Kossoy & Ambrosi, 2010)

(d) **Other Regional & National Schemes:** Such as New Zealand's Emission Trading Scheme; the Australian New South Wales (NSW) GHG Reduction Scheme, etc.

2. ***Voluntary Carbon Markets***:

Voluntary carbon markets can be divided into (a) Voluntary 'over-the-counter' (OTC) markets which transacted 51 $MtCo_2e$ in 2009 (Hamilton et.al. 2010), and (b) Voluntary exchange-based markets, primarily the Chicago Climate Exchange (CCX), which transacted 41 $MTCo_2e$ in 2009(Hamilton, et. al. 2010)

Forestry and land use projects constitute a significant proportion of transactions in the voluntary carbon markets. Projects that involve trees are traditionally very popular, and reached a market share of 24% on the voluntary markets in 2009, thus being one of three project types with largest market share (together with renewable energy and methane gas projects)(Hamilton, et al.2010). Afforestation & Reforestation (A/R) and REDD+ activities are all eligible under various voluntary carbon market standards, and all three project types have a tangible share in the market

(A/R: 10%; Improved Forest Management, (IFM): 3%; REDD: 7%). Apart from carbon markets, other incentive mechanisms exists such as Official Development Assistance (aid funding), multilateral and bilateral funding initiatives, debt-for-swaps, philanthropic donations, among others (UNEP F1, 2011).

Box 2:

First Clean Development Mechanism (CDM) Project in Nigeria

Pan Ocean Oil Corporation is a Nigerian company involved in oil exploration and production. In the past four years, the firm embarked on a gas utilization project at its oil field in Ovade-Ogharafe, Delta State. This project was recently recognized when it was successfully registered under the United Nations Clean Development Mechanism (CDM), of the Kyoto Protocol, facilitated by Carbon Limits of Norway.

This achievement is based on the fact that gas which would haven been flared, will now be sold to developed countries to generate revenue for the country. Also the carbon emission reductions that occur in Nigeria as a result of the project, will now be sold to NUON, the Netherland's State Utility, to help it meet its obligations under the Kyoto Protocol. So, the project has succeeded in killing three birds with one stone.: a clean and better environment, export revenue for the country, and bottom line additions for the company.

According to Dr. Festus Fadeyi, the company's Chairman and Managing Director, the gas project is the largest CDM project in Africa. At full capacity, it can provide 135 million standard cubic feet of gas per day for electricity generation.

Recall that in 1997, world leaders meeting in Kyoto, Japan, adopted what is now known as Kyoto Protocol. The protocol sought to have developed countries reduce their greenhouse gas emissions to 5.2% below the 1990 level, calculated as an average over the period of 2008 – 2012. It was the first step for the world to fight climate change.

Source: (BusinessDay, vo. 9; No. 167)

5. WHAT ARE THE ASSETS BASE OF THE EMERGING GREEN ECONOMY?

Much of the investment portfolios under the green economy will incorporate those of the status quo, except that they now have to be green, sustainable, with greater efficiency in resource allocation, and more equitable sharing of benefits and co-benefits. To achieve this goal, future investments will need to emphasize the following areas:

- energy switching projects, such as from use of coal to renewable charcoal
- renewable energy and methane gas projects
- carbon-reduction projects, such as gas gathering projects
- Green technology and others.

Also, forests are productive assets in the provision of market and non market goods. Forest industries include the production of wood and paper, the production of energy from biomass, and the production of other non-wood forest products such as nuts, honey & rattan. These products meet many levels of demand, including for subsistence activities at the local level and also for export to global market (UNEP F1, 2011). Under the green economy, these forest areas of business must be fully explored and exploited. Additionally, the forest provides other ventures or activity areas that could be part of REDD+ projects or A/R projects. Some of these ventures are listed in the tables that follow.

Table 1: Examples of activities that can be undertaken as REDD+ Projects

Direct compensation payment for less deforestation	Community Development and environmental education	Enhance Alternative income sources	Agricultural extension	Improved land use planning
Restrict transportation infrastructure	Establish protected areas	Police against encroachment And illegal logging	Reduce impact logging	Enhance productivity of forests and agroindustry
Provide alternative sources of timber	Extend rotation age	Timber market restrictions	Forest law-enforcement	Introduce improved tree varieties (e.g fast-growing species)

Source: UNEP F1,(2011)

Table 2: Example of ventures that can be undertaken as projects in the areas of afforestation & reforestation

Large-scale industrial plantations	Biomass plantations energy production	Jatrophe curcas plantations	Enrichment planting	Small-scale plantations by landlords
Woodlots on communal land	Assisted natural regeneration	Rehabilitation of degraded areas	Introducing trees info-agricultural systems	Restoration of marginal areas with native species
Fruits orchards		Coffe, cocoa, rubber, or palm plantations		

Source: UNEP F1 (2011)

6. WHAT ARE THE BENEFITS AND CO-BENEFITS OF GREEN ECONOMY TO INVESTORS & THE ECOSYSTEM?

As is expected, many countries, especially the developed ones, have already started positioning themselves to capture the economic, investment, and job creation opportunities that will flow to early movers in a low –carbon economy (Gardner, C.O.,2010). Some of these benefits, according to O'Sullivan, et. al.(2010); Streck et al. (2010), are as follows:

1. ***Profit:*** Green economy will expand the assets base of businesses. Hence, new profits can be made through generation and export of carbon credits. This is in addition to other green products which can be marketed locally or in international markets. Local businesses will, under green economy, earn some of their revenue in hard currency.
2. ***Diversification:*** Opportunities for business diversification are abound so much in a green economy. For instance, Forest-based climate mitigation investments can constitute a viable opportunity for risk management by diversifying investors portfolios, including such portfolios with an exposure to forestry sector (UNEP F1, 2011).
3. ***Green employment***: Diversification could mean more profit and more profit could result in lots of employment opportunities. As Gardner (2010) points out, new jobs for our teaming youths in Nigeria are not going to be from traditional jobs but more by green jobs.
4. ***Compliance:*** Investors or their financiers may have emission reduction targets that they need to meet (as in Kyoto Protocol Annex 1 countries), or they may expect such targets to be imposed in the future. Investing in forest-based carbon credit generation can help businesses meet these targets now (through A/R projects
5. ***Corporate Social Responsibility (CSR):*** Green economy has the potential to encourage a lot of social returns for businesses. Much of green economic activities will require involving indigenous people in their management, and this will encourage local participation in decision making in a green economy. Moreover, forestry projects can have especially interesting characteristics as

they often result in a wide variety of significant sustainability benefits alongside reduction in greenhouse gas emissions.

6. ***Co-benefits:*** Emission reduction promotes healthy forests, and forests provide a lot of ecosystem services, some of which are: enhanced water cycle management, the retention of valuable soil, and landscape protection. Thus, by investing in forestry and emission reduction projects, businesses are helping to protect the environment in which they operate. In addition to generating benefits for biodiversity protection, green economy helps to reduce poverty and strengthens governance (Dkamela, G.P., 2010).

7. WHAT ARE THE POTENTIAL COSTS/RISKS OF DOING GREEN BUSINESS?

As earlier mentioned, doing green business presents both opportunities and costs as well. Already, prospective green investors are familiar with risks associated with doing business along the lines of the status quo. Green investments such as in energy efficiency, renewable energy, green buildings, clean vehicles and fuels, and low-carbon transportation infrastructures are not different from those of the status quo. Investors already know how to tackle such risks with their insurance companies.

However, investments in forest-based- carbon markets and other projects affected by climate and weather events do present a different kind of risks unfamiliar to investors. These risks may be grouped into three - political risks, market risks, and general (business) risks (Forum for the Future & EnviroMarkets, 2007).

1. ***Political Risk***:

(a) **International policy risk**: For instance, the risk that an international REDD+ agreement does not enter into force and as such there is no compliance market for REDD+ credits. While this policy risk would not directly affect the voluntary markets, the latter is tightly linked to the compliance market and demand therein will also likely fail if there is no international agreement on REDD+ (O'Sullivan, Streck, Pearson, Brown & Gilbert, 2010).

(b) **Eligibility risk**: The risk that a country, region or project type is not allowed to participate in a REDD+ scheme as a result of an international or bilateral agreement O'Sullivan et. al. 2010).

(c) **Government implementation risk**: The country does not successfully implement a REDD+ strategy and as such the framework conditions for REDD+ project implementation are not in place (O'Sullivan, et. al., 2010)

2. ***Market risks, including***:

(a) **REED+ credits traded at a very low price**. This could happen if, for example, too many REDD+ credits are allowed to enter the market, or if emission reduction targets are not set sufficiently high (Streck, Lehmann, Rau, & Coren, 2010).

(b) **Carbon market specific regulatory risks**: Any performance-based payment system where both demand and supply are created by government regulations will inevitably be subject to a number of unique regulatory risks, much like the risks currently affecting investments in the CDM (Ascui & Moura Costa, 2007). Other REDD specific risks might be associated with the rules for establishing (and possibly updating) national, regional or project level baselines, the rules for measurement, reporting and verification, international rules for the transfer or use of credits and liabilities for error, fraud or other factors after transfer of credits.

3. ***(General) Business risks*, including**:

(a) ***Natural events*** – for example fire, wind, pest and disease

(b) *Country risk* – for example, political stability and security, non carbon specific regulations and taxation, financial markets, quality of infrastructure and human resources (Forum for the future & EnviroMarkets, 2007).

(c) *Social risks* - Forest-based mitigation activities involve new relationships and financial flows that are likely to change the lives of some of the world's poorest small-holders' and forest dwellers. This may lead to unique risk associated with social confrontations.

Although, mitigation measures can be taken by both financial institutions and policy- makers to make forest-based mitigation activities investable; these are outside the scope of this study.

CONCLUSION:

Low-carbon economy represents an enormous opportunity, and one on which several nations and businesses are moving fast to capitalize. By designing new products and services, they hope to meet growing demand in a resource-constrained world (Delong, 2011). For these hopefuls, the dynamic points to the growth of new markets with significant potential for future wealth creation.

Yet, others see green economy as a major source of risks and a threat to business as usual and a real pain for present-day operations which are subject to increasing but ever-evolving environmental controls and costs. Worse, it represents a total nightmare when it comes to planning future investments.

However, no one has denied the fact that climate change is the most pressing challenge facing business and society today, and that human must act fast to save the planet.

As of now, much of the fears and uncertainty surrounding green economy and the carbon trading, whether in regulatory or voluntary markets, are being addressed. With time, other constraints such as mobilizing private sector finance in aid of low-carbon projects, and forest-based carbon markets will be clearer in the months and years ahead.

What remains is for developing countries such as Nigeria to catalyze renewable energy, energy efficiency, and other low-carbon infrastructures, so as to provide investors with the certainty needed to invest with confidence in receiving long-term risk adjusted returns.

Also, international agreements on climate financial architecture, delivery of climate funding, reducing deforestation, robust measurements, reporting, verification, certification, and other areas, are urgently required to set the global rules of the game, bolster investor confidence, and allow financing to flow.

Finally, there is need to develop new insurance products which will cover risks affected by climate and weather events, such as human health, crop yields, and animal diseases. These mechanisms must be deployed within the context of good governance, best practices and a well developed monitoring framework.

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