

Enhancing Environmental Sustainability and Social Equity through Fiscal Policy Reforms: Towards Green Economy in Africa

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Abstract: This paper articulates the need for transition to an inclusive sustainable economic growth through the green economy concept. Scholars for decades have been focusing on the pursuits of development that are restricted to the measure of economic variables (Gross Domestic Product, Per Capital Income, etc.) without adequate consideration for the environmental implications of these variable interactions. This conventional approach to development is called *brown growth*, that is, a development approach that fails to account for negative consequences of economic production and consumption (World Bank, 2013; Dowarkasing, 2013). Practically, addressing the demands of economic development, unemployment and poverty alleviation remain tough challenges globally. Contrary to the exclusive economic-centric fiscal policy, there has been growing recognition of fiscal policy reforms that account for environmental conservation while targeting sustainable development through an inclusive and green economy. The pursuit of green economy provides for fiscal reforms that account for environmental sustainability. Accordingly, at the United Nations Conference on Sustainable Development in Rio de Janeiro (2012), Member States recognized green economy as one of the essential mechanisms available for achieving sustainable development. Fiscal reforms that ensure social equity and leads to substantive reduction in environmental risks are the most desirable for developing countries.

Keywords: Fiscal Policy Reforms; Environmental Sustainability; Green Economy; Externalities; Social Equity

INTRODUCTION

For over many decades, the pursuits of development have been restricted to the measure of economic variables (Gross Domestic Product, Per Capital Income, etc.) without adequate consideration for the environmental implications of these variable interactions. This conventional approach to development is called *brown growth*, that is, a development approach that fails to account for negative consequences of economic production and consumption (World Bank, 2013; Dowarkasing, 2013). In reality, there could be depletion of natural resources, abject poverty, prevalence of unemployment and environmental degradation while economic growth is improving. Phenomena in Africa context bear this testimony¹. Almost half of the population of sub-Sahara Africa still lives in extreme poverty with less than US\$1.25 a day and the average youth unemployment rate stands at over 12 percent. Meanwhile, in recent

times, some of these countries have experienced increased economic growth rates (UNECA, 2014*).

Practically, addressing the demands of economic development, unemployment and poverty alleviation remain tough challenges globally. These demands present more complex dimensions when governments are faced with the dilemma of policy choices directed at balancing goals of economic development, unemployment, poverty alleviation and environmental sustainability. Contrary to the exclusive economic-centric fiscal policy, there has been growing recognition of fiscal policy reforms that account for environmental conservation while targeting sustainable development through an inclusive and green economy [1]. Besides addressing financial crisis, social costs and environmental vulnerabilities, risks and scarcities, fiscal policy reforms targeted at green economy tends to move tax system from primarily levying jobs and incomes towards environmental damages and unsustainable practices in order to capture environmental externalities [2]. Hence, there is a need for a shift from brown economy to a green economy that provides for environmental externalities in addition to achieving other ends.

The pursuit of green economy provides for fiscal reforms that account for environmental

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sustainability. Accordingly, at the United Nations Conference on Sustainable Development in Rio de Janeiro (2012), Member States recognized green economy as one of the essential mechanisms available for achieving sustainable development. While green economy is targeting at sustainable development and poverty alleviation, fiscal policy provides a critical set of instruments for building green economy by pricing environmental externalities and redressing social impact. In United States, it was estimated that US\$ 25 per ton of carbon could bring in about one percent of the country's GDP, or more than US\$ 1 trillion over a decade. A study on Australia fiscal reforms also provides that environmental taxes amounted to AU\$26 billion and accounted for 2 percent its GDP and 7 percent of total tax revenues between 2010 and 2011 [3]. Therefore, there has been paradigm shift from economic-centric fiscal policy to a holistic fiscal policy that internalizes the externalities to the environment.

According to the United Nations on Environmental Policy Reports (2014a,b,c,d, e &f), Africa is well-positioned to be the epicentre of a global shift to more sustainable economies that produce growth without eroding underlying stock of natural wealth. Similarly, IMF Reports (2013) established that reforming fossil fuel subsidies in Africa would free public resources amounting to 1.4 percent of the region's GDP - resources that can be used to invest in green sectors' research and development to stimulate innovation, reduce waste and the cost in production processes. Given the strong endowment of natural resources and with approximately 70 percent of the population in Africa under the age of 30 and an estimated 11 million young people expected to join the labour market every year, green economy, a shift to more sustainable model could not only reduce poverty pressure, but also attract industries and encourage innovations.

Recent studies show that Ghana and South Africa have embarked on fiscal reforms that support development of energy markets in the Sustainable food production produce food, renewable energy and emerging efficiency (IISD, 2012; UNEP, 2013; UNEP, 2014). There is also evidence of building capacities for green economies through different approach among other Africa countries such as Kenya, Mauritius, Egypt and Burkina Faso (UNEP, 2014). In fact, South Africa is projected to reform its fiscal policy into a green economy by 2015 while most of Africa countries are yet to embrace green economy. However, green economy could be an effective mechanism available to sustainable development; it is not an end in itself. There exist a number of instruments for achieving green economy that translates to sustainable development among which is fiscal policy reforms. In the developed

regions, for example European Union, there have been harmonized fiscal reforms which takes account of environmental sustainability, but in Africa there is yet effective fiscal reforms for green economies. Therefore, this study seeks to (1) examine extent of transition to green economy in Africa, (2) analyze different environmental fiscal reforms and implementation strategies of European Union (EU) and Africa and (3) Alternative fiscal model for green economy in Africa.

THEORETICAL FRAMEWORK ON CONCEPT OF GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT

The concept of green economy has currently dominated policy debates over the recent years. Green economy carries the premise of a new economic growth paradigm shift that is friendly to earth's ecosystem and can also contribute to poverty alleviation. Hence sustainable development entails risks and challenges for developing countries in which development is more demanding and the fears of meeting the conditions associated with international financial cooperation in with respect to sustainable development. The ultimate purpose is to review the emerging issues on green growth and sustainable development, with a clear precision on the origin and the meaning of the concept and the justification to carry out the research. Our review precisely indicates that there is not yet a consensus definition for green growth, but most stakeholders take it to mean economic growth that is environmentally sustainable. Consistent with this definition, it's a strategy to achieve sustainable development. This term is politically attractive because it focuses on the synergies, rather than the trade-offs, between economic growth and environmental protection.

During the recent financial crisis the UN general assembly and several UN agencies underscored that the crisis represented an opportunity to promote green economy reforms and initiatives as part of the stimulus packages put in place to support the recovery. Accordingly, the UN Conference on Sustainable Development (UNCSD) that was held in June 2012 in Rio de Janeiro chose one of its major themes as 'a green economy in the context of sustainable development and poverty eradication. Some international organizations acknowledge that little is evident for successful green growth. It's evident that a win-win project is voluminous contrarily to internalizing the implications of growth to the environment. Indeed most developed countries experience environmental degradation as opposed to environmental sustainability during their industrialization stages. Nevertheless to make our readers acknowledge the potential synergies between economic growth and environmental protection, we provide a brief overview of the relationship between

economic growth and sustainable development, Examining on how environmental policies may affect the growth and how economic growth may affect environment. When economic growth is narrowly defined as the GDP in the short run, the tradeoff between the two concepts is perceived to exist. However when economic growth refers to the long run growth or growth in broader definition of social welfare or “green GDP” then such trade-offs may be weakened.

ORIGINS OF GREEN GROWTH CONCEPT

According to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and Korea International Cooperation Agency (KOICA), green growth “was not born out of economic theory. Rather, it is a vision put forward by policymakers in an attempt to find practical ways of reconciling economic growth and environmental sustainability” (2012, xxi). Green growth, as a policy concept, originated from the Asian and Pacific region. The concepts of green growth and green economy are not new in the Africa’s literatures because there was conception of sustainable development before the Bruntland Report of 1987 from which it was popularized in Africa. Africa leaders had already recognized the links between environment and development over four decades. African Convention on the Conservation of Nature and National Resources (Algiers 1968) took place five years after the formation of Organization of Africa Unity in 1963. Recognizing the need for sustainable use of the continent’s natural resources, the Lagos Plan of Action in 1980 proposed concrete measures to address the interface between environment and development in Africa .It was first in the ministerial declaration adopted by the Fifth Ministerial Conference of Environment and Development (MCED), which was convened by UNESCAP in the Republic of Korea in 2005. This conference focused on the synergy between environmental sustainability and economic growth and labeled environmentally sustainable economic growth as “green growth” (IISD 2005). In May 2010, UNESCAP countries further expressed in the Incheon Declaration their intent to “strengthen [their] efforts to pursue green growth strategies as part of [their] response to the current [global financial] crisis and beyond. In 2012, UNESCAP and KOICA elaborated their views on green growth in a report titled Low Carbon Green Growth Roadmap for Asia and the Pacific: Turning Resource Constraints and the Climate Crisis into Economic Growth Opportunities. That same year, UNESCAP, Asian Development Bank (ADB), and United Nations Environment Programme (UNEP) jointly released a report on green growth in the Asia and Pacific region, Green Growth, Resources, and Resilience: Environmental Sustainability in Asia and the Pacific.

SCHOLARLY DEFINITIONS AND CONCEPTUAL FRAMEWORKS

Definitional criteria form the basis for understanding and categorizing green economy as an inclusive process of environmental sustainability. Various perspectives of green economic should be analyzed so as to establish an inclusive definition of a green economy. These includes the:(1) technical perspective, (2)the economic perspective, (3)the development perspective.

Technical Perspective - defines the green economy through the application of quantitative, analytical criteria that measure exactly what it is about a product, process or service that is ‘green,’and to what extent.

Economic Perspective- relates the characteristics of an activity to categorize its economic classification system of sectors, industries, and occupations. Economic criteria might assess whether products or services contribute to decreased greenhouse gas emissions, or include sustainable resources in manufacturing processes.

Development Process- identifies where in the development cycle a green job is situated. The development process includes the phases of development of a product or service, from the research phase through to design, delivery, implementation, ongoing use and maintenance.

In addition, authors have put forward different ideologies as it pertains to the concept of green economy and sustainable development responding to concerns of many countries, that the concept of green economy should be seen as consistent with the broader and older concept of sustainable development. The specificities of the broader concept are its holistic character, as it encompasses the three pillars of development – economic, social and environmental – and its particular focus on inter-generational equity.

This is reflected in UNEP’s definition of a green economy as “*an economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities*” (UNEP, 2011). *It is also an economy whose growth in income and employment is driven by reallocation from unsustainable industries to ones that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent losses of biodiversity and ecosystem services. Actions can refer to sectors (e.g. energy), topics (e.g. pollution), principles (e.g. polluter pays), policies (e.g. taxes or regulations) or an effort to mainstream certain*

principles over time. Green economy integrates economic, social welfare and environmental policies, and focuses on new opportunities for economic growth that reduce pressure on the quality and quantity of natural capital systems (UNEP,2011)

Green economy as a transition towards an economic model based on the sustainable generation of equitable social, environmental and economic benefits. This framing is embraced by civil societies and international agencies active in the field of sustainable development, including green economy coalition (www.greeneconomycoalition.org) and UNEP's Green Economy Initiative(www.unep.org/greeneconomy/).

“A green economy as an economy in which economic growth and environmental sustainability work together in a mutually reinforcing fashion while supporting progress on social development” (International Chamber of Commerce Green Economy Task Force)

“Green growth means fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. It focuses on the synergies and tradeoffs between the environmental and economic pillars of sustainable development” (Green Growth Knowledge Platform).

“Green economy as low carbon development strategies that are “forward-looking national economic development plans or strategies that encompass low-emission and/or climate-resilient economic growth” (OECD).

As far as well being well being is concerned, it's not about the standards of living in a conventional term, but the quality of life- a world that is anchored by its pursuit of social equity, a world where people have the freedom and ability to pursue meaningful lives, and a global populations that lives as though natural resources were finite.

While some established definitions of green economy pays some secondary attention to social equity, well being and poverty alleviation, the focus has been clearly on technology .Green cars, green jobs , green agriculture, green manufacturing and green everything. Its not sufficient to focus on technology only since improved technology should be a means to a greater end, not as an end in and of itself. Green economy ought to encompass human well being and environmental health. The current emphasis on GDP is limiting as it only measures what society produces hence perpetuates an incomplete and harmful definition of wealth with regard to environmental sustainability.

Hence need for alternate definition that factors in *Green GDP*. I therefore propose the following definition of green economy...

A green economy is an economy that enables optimal maximization of the welfare of human beings in terms of production and consumption while minimizing the negative impacts on the environment. It's an economy measured against the yardsticks of the wellbeing of people and its productive capacity. It's an economy anchored on passion for social equity and improved of individuals while significantly reducing all forms of negative impacts to the environment.....Nduvi,2015.

FISCAL POLICY AND ENVIRONMENTAL SUSTAINABILITY

A green economy seeks to drive growth, jobs, environmental improvement, poverty eradication and social equity by shifting investments towards clean and efficient technologies social infrastructure and natural capital. Fiscal reforms are central in driving investments and catalyzing public expenditure. At Rio+20, countries adopted green economy as a key tool for sustainable development and poverty eradication. Alleviating poverty and achieving economic development whilst safeguarding our environment is a major challenge for governments aiming at sustainable development. In order to achieve success, the choice of policy instruments is crucial. Market-based instruments have been increasingly applied in the last two decades, as they have proven to lead to efficient environmental management, to trigger innovation, and possibly create revenues which could be – at least partially – used for poverty reduction.

“Environmental Fiscal Reform” has emerged as a most promising set of policy tools in this context, as it corrects price signals within the formal economy to include environmental and other costs and reforms fiscal policy so that the tax system takes environmental criteria into account.

Environmental Fiscal Reform, referring to a set of instruments, here, to charges, fees, taxes, subsidies and emission trading, have the potential to make a significant contribution to the implementation of green economy strategies. Therefore it contributes to the agreement at the United Nations Conference on Sustainable Development in Rio de Janeiro 2012 (the so-called Rio+20 summit) acknowledging “green economy in the context of sustainable development and poverty eradication as one of the important tools available for achieving sustainable development”. Factually the design of fiscal policies must consider their potential social impacted, for example, low income households as well as economic and

environmental impacts in order to promote a green and more inclusive growth.

Fiscal policy reforms accommodate the social costs of production by incorporating the full cost of pricing the goods and services as well as the impact on the environment. This leads to generation of revenues that the government can redirect in to provision of public goods such as health, education and electricity. For example, while green economy is targeting at sustainable development and poverty alleviation, fiscal policy provides a critical set of instruments for building green economy by pricing environmental externalities and redressing social impact. In United States, it was estimated that US\$ 25 per ton of carbon could bring in about one percent of the country's GDP, or more than US\$ 1 trillion over a decade. A study on Australia fiscal reforms also provides that environmental taxes amounted to AU\$26 billion and accounted for 2 percent its GDP and 7 percent of total tax revenues between 2010 and 2011 [4]. This indicates the need for shift from economic- centered policy to fiscal reform policy as the spillover effects greatly reduce environmental risks leading to sustainable development.

Fiscal policy reforms for green economy should emphasize on renewable energy production as this is the key sector of production in an economy. A tax system that discourages consumption of high carbon fuels should be put in place as this will shift behavior towards low carbon activities and stimulate green investment by pricing environmental externalities, as well as subsidizing low carbon activities to stimulate their consumption. Globally the cost of energy subsidization is high and accounts for significant part of GDP annually. For instance, in 2011 petroleum subsidies alone accounted for US\$ 200 billion in USA. Scrapping of US\$ 500 billion of fossil fuel could increase global economy by 0.3 %. In addition to potential fiscal benefits, removal of fossil fuel subsidies in developing and emerging economies could reduce global GHG emissions relative to economic centric policies by 6% in 2050.

Market based instruments of reducing environmental pollution are highly favored for they are purposive in nature. They include: indirect taxation, targeted subsidies, or tradable emission rights. One of the main market based instruments is the fiscal instruments which are cost effective to promote environmental goals and highlights in which cases taxes and other fiscal instruments can usefully complement each other to achieve environmental targets. Effective fiscal reforms help to internalize the externalities to the environment which is the ultimate goal of sustainable development. Fiscal instruments can be categorized into two main groups namely; Tax instruments and

Subsidies. Taxes are charges levied on goods directly or indirectly linked to polluting the environment. Taxes can also be defined as "*all compulsory, unrequited payments whether the revenue accrues directly to the Governments budget or is destined for particular purposes*" (European Commission, 1997). Taxes are labeled as pricing instruments as they impose a price on the environment harmful aspects of production and consumption. This in returns signals the market leading to simultaneous adjustments in demand and supply of goods and services in respect to the taxes imposed. Market based instruments act through the market mechanisms and they include; taxes, charges and tradable permits (emissions trading schemes).

Subsidies are incentives given directly or through tax system to encourage producers and consumers to choose the inputs and goods that are environmental friendly. In contrast with taxes they lead to decrease in price or purchasing cost of a product hence mainly referred to fiscal incentives.

ADVANTAGES OF FISCAL INSTRUMENTS AS POLICY INSTRUMENTS

Market based instruments are efficient as they surcharge each polluter by imposing a pollution tax to reduce pollution to an extent where marginal cost of pollution is equal to the tax. They are flexible in choosing the level and method of abatement which is pegged on the extend of environmental risks and other social costs. It requires lower administrative costs since taxes and charges are less detailed than regulation by legislation as it's determined by market mechanisms. Market instruments are powerful incentives for innovation since charges per unit of pollution or emission induces firms to seek for alternative possibilities of green technologies of production so as to cut down on production cost and maximize on profits. Taxes and charges provide market signals that induce shift in demand and supply of goods and services from "dirty" to "clean" ones hence greening the economy. They are essential instruments for the "getting prices right" policy of the Community Sustainable Development Strategy [5]. However environmental taxes have implications on the factor market hence entails welfare cost as far as it reduces labour supply by increasing consumer prices and thus reducing real wage. The negative welfare effect can be substantial even in the case of slight reduction of labour supply (Parry and Oates, 1998). This is due to the fact that labour market form a large share of national economies. Auctioned tradable permits raise revenues and can be used to reduce other distorting taxes in the economy notably taxes on labour. However this does not produce a win-win situation since labour taxes are broad based while environmental taxes are narrowly based and thus increases the excess burden of taxation (Parry and Oates

1998). Hence the strong form of “double dividend associated with environmental tax does not hold [6]. Notably due to existence of imperfect labour markets and involuntary unemployment in many African economies, green tax reforms under certain conditions generate higher level of employment and cleaner environment hence reaping a double dividend [7]. Model based simulations indicates that green tax reforms can improve employment and the quality of environment at the same time. Tax revenues should be recycled in form of reduction of the employer’s social security contributions, provision of health, education and security among other public goods [8]. In European Countries fiscal reforms on environmental sustainability have led to favourable effects from both an economic and environmental perspectives [9]. Fiscal reforms on environmental sustainability aims at shifting tax burden from labour to consumption and polluting taxes while simultaneously broadening the tax base. Accordingly, environmental tax revenues can be earmarked for specific environmental purposes such as financing eco-efficiency or eco-innovation investment. Secondly, recycling of the revenues can lead to compensation of households and businesses who suffer disproportionately from higher taxation hence creation of the double dividends. Finally these compensation can also inform of tax reductions or tax credits for the households and businesses. Financing tax credits for energy efficiency reduces regressivity of energy taxation and promote energy efficiency simultaneously.

Environmental taxes are very effective and if appropriately designed then they are efficient tool for environmental policy [10]. It leverage and generates private financing. Evidence indicates that market instruments have accelerated increase in green investment. Carbon taxes, for instance, could direct investments towards cleaner technologies and energy efficient. Lessons that can be learned from the past on the impacts of fiscal environmental reforms include: The higher the GDP of a country, the higher the share of green investment in relation to the GDP. The lower the interest rate, the higher the green investment. An increase in crude oil price positively influences investment in renewable energy. Carbon pricing and use of feed-in-tariff have significant impact towards greening the economy and pricing and tax measures have a clear impact on renewable energy investment [11]. However in unique circumstances, root tax must be complemented with direct regulation to bring the desired environmental outcomes more effectively. For this particular case when risks to the environment are location specific and vary with the source of pollution, a more targeted instrument rather than general emissions taxes are required. Contrary quantity based instruments such as quotas are desirable for they bring forth more certainty in reaching given environmental targets than

the price based instruments such as taxes. Hence combination of taxes and other policy instruments are very effective depending on the nature of environmental damage. There are two basic reasons why tax instruments need to be complemented by other policy instruments. First, due to information asymmetries and costs on emission, taxes which ensure optimal the optimal outcome may be difficult to implement in practice. Measurement and monitoring of emissions may be prohibitively costly and technically infeasible [12]. It may be administratively cheaper to use existing tax system to address environmental problems, for instance differentiating of the tax rates in indirect taxation instead of introducing entirely new taxes. Hence taxes are based on sales of goods that relate to the externality rather than the externality itself. The tax bases are imperfect proxies for the externality and they correct it inefficiently compared to instruments whose benefits exceeds the cost of implementing them [13]. The market signal response induces consumers to reduce the good in question but not to cut the emission. For instance an output tax on electricity reduces consumption of it but not reduce the Carbon emissions in electricity generation. Hence from these grounds need for the use of multi-part instruments which could better target emissions or other externalities. Example for efficiency in taxing emissions on cars, combination of gasoline tax, a flat rate tax on engine size and flat rate subsidy to pollution control equipment [14]. Secondly market imperfections or market failures other than the environmental externality calls for use of combination of instruments. In this single tax instrument is inefficient or may involve higher cost that combination of two or more instruments. Complementary instruments may be of diverse nature , ranging from information campaigns, labeling and direct subsidies to differentiated indirect taxes in favour of clean products. Market failure may be due to the following reasons. Lack of adequate information by customers on quality of products and their relationship to environmental problems. In such instances, information tools, such as labeling schemes can usefully complement the tax system. Subsidy schemes can also raise awareness and provide more information on product qualities but are likely to be less cost effective. Secondly credit market constraints make it difficult to finance through borrowing the purchases of the products, which are relatively expensive for ordinary households such as energy efficient cars, household appliances or heating equipments. In this case, direct subsidies, tax credits or allowances alleviate this affordability problem and usefully complement the tax instruments in place. Thirdly it is the principal-agent problem that weaken incentives provided by taxes to invest in energy efficient building materials and equipment. The problem arises since the owner is not the one who pays energy bills hence tax credit to the

owner enhances sale of more energy-efficient equipments. Fourthly consumers disregard future benefits of energy savings and pay more attention to upfront costs [15]. In such instances, fiscal instruments that reduces purchasing costs are more effective than tax increases that affect the energy bill over the product life time.

It should be noted that use of complementary instruments, in particular fiscal instruments, is not without caveats and should in each case carefully designed and evaluated. All subsidies given directly or through the tax system cost money to governments. They have to be financed either by increasing other taxes or reducing public expenditure which will entail welfare costs. Consequently the benefits achieved through the use of tax incentives should always be compared to the costs before implementing such measures.

CONCLUSION AND RECOMMENDATIONS

While ‘green economy’ might imply a focus on the nexus between the economy and the environment, the pursuits of development have been restricted to the measure of economic variables (Gross Domestic Product, Per Capital Income, etc.) without adequate consideration for the environmental implications of these variable interactions. This conventional approach fails to account for negative consequences of economic production and consumption (World Bank, 2013; Dowarkasing, 2013). In reality, there could be depletion of natural resources, abject poverty, prevalence of unemployment and environmental degradation while economic growth is improving. Phenomena in Africa context bear this testimony Almost half of the population of sub-Sahara Africa still lives in extreme poverty with less than US\$1.25 a day and the average youth unemployment rate stands at over 12 percent (ILO, 2013; World Bank, 2014). This review highlights that there is little emphasis on enhancing social equity while pursuing the objective of economic growth and environmental sustainability. Infact, it would appear that the green economy principles from published sources as well as those extracted from the Rio+20 outcome document place additional emphasis on the social dimension above and beyond the other dimensions of sustainable development. It is likely that recent articulations of the concept such as the ‘inclusive green economy’ will become the new norm and future analytical work and international cooperation in support of green economy will incorporate a strong social component. However, the need to ensure that the inclusive green economy addresses economic, environmental and social dimensions in an integrated way, as well as the need for flexibility in its application, can also give rise to ambiguity. This raises the question of how the inclusive

green economy, which encompasses all three dimensions of sustainable development in a balanced manner, in fact differs from what countries are already doing to implement sustainable development. Governments may choose to focus their green economy policies on creating decent work and green jobs, the promotion of resource and energy efficiency, using metrics and indicators to measure progress beyond GDP, implementing measures to drive innovation, and facilitating the necessary skills development and education. They may also wish to consider the broader recognition of planetary boundaries or ecological limits and the importance of ensuring environmental, social and economic resilience in the face of growing risks and uncertainties. Definitions and principles for an inclusive green economy can provide some initial insight into the key elements and characteristics of this concept and a broad framework for policy design and implementation. Ultimately, however, green economy will need to be interpreted and applied by national governments as a suite of policy measures selected and designed in accordance with national priorities and circumstances. Governments will need to take into account the various costs, risks, benefits and opportunities of different policy options in accordance with their institutional and governance arrangements, level of development, and social, economic and environmental priorities. It is likely that governments will face similar implementation challenges to those faced during the past 20 years of implementation of sustainable development. How governments identify their priorities and design and implement appropriate green economy policy responses will be critical over the coming years. It will therefore be important that governments focus on fiscal policy reforms that suitably fits the African context of developing states where poverty is a the talk of the day. The ultimate goal for driving green economy must be aimed at enhancing social equity through poverty alleviation driven fiscal policies for sustainable development. This research however is limited in scope due to aspect of time and lack of adequate resources to carry intensive research through collecting data for tabulation from different institutions across different sectors of the economy in different countries. Further research can be undertake to determine the capacity of institutional frame works to implement these fiscal policy reforms as well as analysis of how different sectors can be targeted towards an inclusive green economy for a sustainable development since currently green growth is prioritized only in energy, agriculture and transport sectors while overlooking other critical sectors like technology sector among others.

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