

Ghana's Effort towards the Emergence of Green Economy

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Abstract UNEP's partners the ministry of environment, science and Technology and the institute of statistical, Social and Economic Research, University of Ghana, UNDP, and GIZ, released a key messages concerning the environmental degradation that had had a high cost to Ghana estimated to be about 10 percent of its GDP. The promotion of Investment in resources efficiency, low carbon growth and employment creation and productivity may have a strong potential advancement of sustainable development and poverty alleviation and by building and expanding green development in the economy. The objectives of this research sought to review the threat and challenges posed by green economy and sustainable development and outlining the tremendous Ghana's effort towards the adoption of green growth and sustainable development and poverty alleviation.

Keywords Green Economy, Sustainable development, Poverty alleviation, Effort, Challenges

1. Introduction

Ghana has a long history of national development planning. The first development plan (Guggisberg Plan) was formulated and implemented in 1919 (Birmingham et al, 1966). The longest series of medium term stabilization programs began in 1983 with the Economic Recovery Program (ERP)/Structural Adjustment Programs (SAP) (1983-1999) followed by the Poverty Reduction Strategy Papers (PRSPs). The first PRSP was the Interim Poverty Reduction Strategy Paper (2000-2002). The others are Ghana Poverty Reduction Strategy I (GPRS I) (2003-2005), Growth and Poverty Reduction Strategy Paper (GPRS II) (2006-2009) and currently the Ghana Shared Growth and Development Agenda (GSGDA) (2010-2013).

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in 1992 otherwise known as Rio Summit was a landmark event marking international commitment to provide public and political support to address environment and development issues in a holistic and integrated manner for the attainment of SD. Agenda 21 (A21), the main outcome of the Rio Summit called on countries to adopt National Strategies for Sustainable Development (NSSDs) that harmonize and integrate economic, social and environmental policies and plans at the national level. A five-year review of Rio Conference in 1997 revealed that

little progress had been made in implementing Agenda 21. In view of this, the World Summit on Sustainable Development (WSSD) was convened in Johannesburg, South Africa, in 2002. The goal of WSSD was to conduct a 10-year review of the implementation of the outcomes of UNCED, particularly A21 and to reinvigorate global commitment to SD. WSSD also urged states in the Johannesburg Plan of Implementation (JPoI) to take immediate steps to formulate NSSDs and to begin their implementation by 2005.

To ensure quality inputs to the Conference, the Second Committee of the General Assembly called for efficient and effective preparations at the local, national, regional and international levels by Governments and the United Nations system and encouraged the active participation of all major groups at all stages of the preparatory process. The 13th Session of the African Ministerial Conference on the Environment held in Bamako, Mali, in June 2010 underscored the importance for Africa to effectively prepare for Rio+20 with a view to ensuring that its concerns and priorities are effectively addressed. Against this backdrop, this Review Report for Ghana is being prepared within the framework of the Africa Regional Preparatory Process for Rio+ 20 by the Government of Ghana.

2. Government of Ghana's Role on Green Ecology

Climate change has been established as a fact by the leading global science institutes, and the time has come for effective policy responses. In the face of rising temperatures, irregular rainfall patterns both in volume and seasons, and

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more extreme weather patterns, the Government of Ghana is taking action to ensure that climate change does not derail our national progress. We view climate change as a development challenge, giving it the priority and urgency it deserves. Ghana's progress has been impressive, with our country outperforming many others to reduce hunger by three-quarters between 1990 and 2004. Our country is expected to achieve the first Millennium Development Goal—on poverty and hunger—before the 2015 deadline. Ghana's economy is in transition. We view climate change as a development challenge, and will give it the priority and urgency it deserves. We cannot allow climate change to pull us back. The only way we can go forward, developmentally, is to address its impact and to seize any opportunities it presents. The Government is calling for immediate action on climate change across the board to ensure that Ghana remains on course to become a middle-income country of an advanced human society by the year 2020. Climate change is being mainstreamed into our key planning processes at national, regional and district levels—and in particular into our Ghana Shared Growth and Development Agenda. There is, however, much to do. That is why we need the full engagement of colleagues from every sector and every group. To this end, we are working to ensure an equitable balance in national development. This is shown by our action on the development gap and differing climate impacts between North and South (under the new Savannah Accelerated Development Authority—SADA). We are, through a consultative process, developing the National Climate Change Policy Framework (NCCPF). The NCCPF would be broad enough to address the multiple challenges of climate change and ensure a multi-sectoral response across all stakeholders. This discussion paper is a first step, and aims to spark debate on this crucial issue. This process is another example of the Government's deep commitment to the 'Better Ghana' agenda and we encourage all to join us as we move.

3. Methods of Data Collection

This research is purely an understandable one. Primary data were collected by means of personal interview guided by an already prepared questionnaire. Simple random sample technique was used in interviewing stakeholders. Questionnaires were designed for the stakeholders. It was made up of closed and opened ended questions to add quality and effectiveness of the data and to enable the respondents to express their knowledge. The analyses of the data are presented in a combined form taking into accounts all questionnaires and gathered information from interview and other documentary sources.

3.1. The Sustainability Perspective

Huffpost Green (The Growing Reality of the Green Economy) December 6, 2015. Sustainability management is the practice of economic production and consumption that

minimizes environmental impact and maximizes resource conservation and reuse. As opposed to the political debate regarding environmental protection -- which claims there is a trade-off between environmental protection and economic production -- the sustainability management framework demonstrates that continued economic prosperity is dependent on the health of the environment. Pollution is seen as a form of waste that should be eliminated by careful and sophisticated production processes. Economic growth requires the continued availability of high quality natural resources -- especially air, water and soil. We need to develop technology, organizational capacity and political will to make the changes necessary to ensure these resources continue. Society requires water, food and energy, and cannot exist in an environment dominated by waste. Sustainability management adds an emphasis on the physical issues in an organization's standard management practices that impact the natural environment. Under this framework, organizations: Efficiently use raw materials to reduce the creation of waste; Shift to renewable or recycled materials; and Look for innovative materials or processes that have a lesser impact on the environment. We are at the start of the development of a sustainable or green economy. To measure the green economy, it is possible to measure the presence of green jobs, green markets, and investment in green industries. Because sustainability cuts across industries and sectors of the U.S. economy, defining just what contributes to the green economy is a challenge. In general, the green economy can be considered the production of goods and services that benefit the environment or conserve natural resources.

According the first Bureau of Labor Statistics data, in 2010, 3.1 million jobs in the U.S. were associated with the production of green goods and services, accounting for 2.4 percent of total U.S. employment in that year. Of the total, 2.3 million jobs were in the private sector, and 860,300 in the public sector (BLS, Mar 2012, 1).

4. Discussions of Green Ecology

By definition, SCP means "the production and use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the ability to meet the needs of future generations —(Oslo Symposium, 1994). The main objective of SCP is to promote social and economic development within the carrying capacity of ecosystems and the de-coupling of economic growth from environmental degradation. The implementation of SCP as an integrated approach helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

To promote Sustainable Consumption and Production in Africa, it is very important to put its relevance into context. For example, given that 41% of the African population is

below poverty line (UNDESA, 2008b), it is essential that sustainable consumption is not automatically translated into —consuming less || — as this is highly irrelevant in the region. The large segment of the African population living in poverty has a real need to rather increase their consumption of basic products and services. Sustainable consumption in the African context refers to more efficient, better informed and less resource intensive consumption, creating opportunities to meet basic needs for the ever increasing population. For many poor people in Africa, the quality of their environment and of the natural resource base is a matter of survival. The challenge is to provide more people with a better quality of life without undermining the natural resource base and destroying the ecosystems on which everybody depends. More efficient resource use allows poor people to meet more of their needs - or consume more – from the same resource base. Many of the underlying causes for other priorities are in fact directly linked with how we use resources for production and consumption. For example, domestic water and energy needs often require that women spend several hours daily collecting water and wood or other fuel, hindering them to spend time on other activities such as income generating activities or education. A water and energy system based on the SCP approach should provide everybody with clean water and affordable energy. Another example is vehicle transportation systems in cities which are causing health risks, air pollution and economic losses. By shifting these forms to public and efficient transportation systems and by promoting clean fuels and energy efficient vehicles, many of these problems could be addressed simultaneously. SCP therefore contributes to meeting other objectives. Examples of objectives which are directly relevant to SCP, and which are imperative if Africa is to reduce poverty, are as follows:

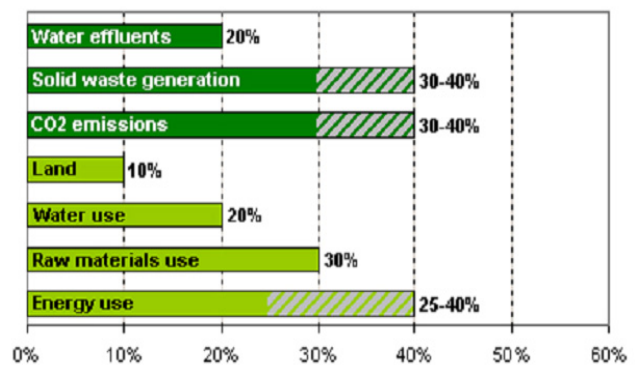
Acceleration of industrial development to provide employment and enhanced incomes and to raise financial resources needed to stimulate growth. Any national industrialization strategy must however be environmentally sustainable and must not be a contributor to further environmental degradation.

Increasing sustainable agricultural production for food security and avoiding degradation of the natural resource base. Avoiding the depletion of water resources through water conservation measures. Increasing energy efficiency and access to affordable and sustainable energy sources. Improvement of infrastructure and sustainable human settlement patterns to reduce congestion and pollution and improve access to infra-structural services such as water and sanitation. SCP should therefore be seen as a basis for sustainable resource use, which can help to achieve new sustainable development models as Africa explores the potential and possibility to leapfrog to sustainable development. Sustainable Consumption and Production are therefore essential tools to attain the Millennium Development Goals (MDGs), in particular goals one and seven, which relates to the eradication of poverty and hunger, and to ensure environmental sustainability. SCP is also an

opportunity to leapfrog to more resource-efficient, environmentally sound and competitive technologies and infrastructures. AS governments and other actors consider how to manage energy, food and water crises and build a Green Economy, promoting and implementing holistic and integrated policies and actions towards SCP will help to address these.

4.1. Sustainable Buildings

Reducing the impact of buildings on the environment is vital, listed below is the impact the building environment has on pollution and resources according to Earth Trends, 2007 using data from UNEP SBCI, 2006.



Source: www.isover.com (W.B.C.S.D)

Professionals in the construction sector tend to estimate the cost of constructing a green building to be 17% higher than the cost of building a conventional structure. This estimate is over three times higher than the actual figure, which is only about 5% higher. This misunderstanding is a huge obstacle to the construction of environmentally-friendly buildings. This is the conclusion of a study carried out by the W.B.C.S.D in the context of the "Energy Efficient building project safeguarding the environment.

Best practice emphasizes:

Cost effectiveness and long-term affordability, Resilience and strength .Energy efficiency. Climate change mitigation, Conservation of water and preservation of other natural resources. Comfort (acoustical, thermal, visual...) Human productivity, health and safety, Indoor air quality, Reduction of air, ground and water pollution, Aesthetics.

4.1.1. Indicators for Policy Interventions

In the green economy approach, policy interventions focus on ways to change the flow of investments to address issues and achieve targets aimed at reducing environmental degradation and improving human well-being and social equity. For example, the reform of fossil fuel subsidies (to be indicated by the percentage reduction over time) is one option that can induce investment in renewable energy if the policy target is reducing GHG emissions. Another option is to increase public investment and leverage private investment in renewable energy (to be indicated by the level

of investment). Table below provides some examples of green economy policy interventions and related indicators:

Illustrative policy interventions and related indicators:

Policy	Indicators
Green investment : R&D investment % of (GDP)	EGSS investment (\$/year)
Fiscal reform : Fossil fuel, water and fishery subsidies (\$ or %)	Fossil fuel taxation (\$ or %)
Pricing: Renewable energy incentive (\$ or %)	
Carbon price (\$/ton)	Value of biodiversity (\$/ha of forestland)
	Value of ecosystem services (e.g. water provision)
Government procurement: Expenditure in sustainable procurement (\$/year and %) CO ₂ and material productivity of government operations (ton/\$)	
Training : Training expenditure (\$/year and % of GDP) Number of people trained (person/year)	

Source: United Nations Environment Programme, June 2012

5. Conclusions and Results

In the example of climate change mitigation, policy interventions include the use of demand and supply instruments in the energy sector to limit GHG emissions. On the demand side, growth in energy consumption could be curbed through energy conservation (e.g. behavioral change) or by investing in energy efficiency (e.g. installing more efficient appliances and/or light bulbs). On the supply side, renewable energy could be used for power generation or more efficient thermal power plants could be built. Indicators can be used to depict and assess the current state of affairs (e.g. how much renewable energy is being used for power generation and at what cost), and the extent to which these interventions can effectively contribute to mitigating an issue (e.g. how much CO₂ emissions are reduced by investing in renewable energy for power generation, and at what cost relative to other possible interventions). It should be noted, however, that synergies among different issues exist and policy interventions can be designed to achieve multiple benefits. For example, investing in renewable energy could be designed to give a particular emphasis to rural access to renewable energy, which can contribute to poverty eradication and a reduction in carbon emissions. Ghana's government for the time being made several efforts towards promoting green growth in its economy. The Ghanaian economy is putting much effort towards green growth and poverty alleviation which indeed is a step forward of Ghana's economic development.

However the research has to be extended on the effect of green growth on the economy and the reduction of poverty alleviation on Ghana's fastest growing market.

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REFERENCES

- [1] Reduction Strategy Paper (2000-2002).
- [2] Ghana Poverty Reduction Strategy I (GPRS I) (2003-2005).
- [3] Growth and Poverty Reduction Strategy Paper (GPRS II) (2006-2009).
- [4] Ghana Shared Growth and Development Agenda (GSGDA) (2010-2013).
- [5] First Bureau of Labor Statistics data, in 2010 US.
- [6] Oslo Symposium, 1994.
- [7] Hak, T. (2011): 'Status report on composite indices of environmental sustainability'. Discussion Paper Prepared for UNEP and supervised by EWB/DEWA.
- [8] Arrow, K., P. Dasgupta, and K. Maler (2003): 'Evaluating Projects and Assessing Sustainable Development in Imperfect Economies, working paper of the Beijer International Institute of Ecological Economics, Stockholm.
- [9] Eurostat (2009): The Environmental Goods and Services Sector. A Data Collection Handbook.
- [10] OECD (2011): Towards Green Growth: Monitoring Progress, OECD Indicators
- [11] Pretty, J. (2006): 'Agro ecological Approaches to Agricultural Development'. Background paper for the World Development Report 2008.
- [12] United Nations Environment Programme (UNEP) (2009): Integrated Policymaking for Sustainable Development.
- [13] United Nations Statistics Division (2003): Handbook of Integrated Environmental and Economic Accounting (SEEA). United Nations, New York.
- [14] World Bank (2002): Manual for Calculating Adjusted Net Savings, Environment Department. Bolt, K, M. Matete, and M. Clemens, World Bank: Washington DC.
- [15] Zieseme, J. (2007): 'Energy Use in Organic Food Systems'. FAO International Conference on Organic Agriculture and Food Security. 3-5 May 2007.
- [16] United Nations Environment Programme (UNEP) (2011c): Decoupling natural resource use and environmental impacts from economic growth. A Report of the Working Group on Decoupling to the International Resource Panel.
- [17] Pyatt G., and J. I. Round (1985): Social Accounting Matrices: A Basis for Planning. The World Bank, Washington D.C.