



REPUBLIC OF GHANA

**NATIONAL ASSESSMENT REPORT ON ACHIEVEMENT OF SUSTAINABLE
DEVELOPMENT GOALS AND TARGETS FOR RIO+20 CONFERENCE**

MINISTRY OF ENVIRONMENT SCIENCE AND TECHNOLOGY

ACCRA

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List of Acronyms

A21	Agenda 21
CSPG	Cross Sectoral Planning Group
CSO	Civil Society Organization
CSD	Committee for Sustainable Development
ECOWAS	Economic Community of West African States
EPA	Environmental Protection Organization
ERP	Economic Recovery Programme
ECA	Economic Commissions for Africa
FDI	Foreign Direct Investment
GNI	Gross National Income
GDP	Gross Domestic Income
GPRS	Ghana Poverty Reduction Strategy
GSGDA	Ghana Shared Growth Development Agenda
GHG	Green House Gas
GCF	Gross Capital Formation
HDI	Human Development Index
IMR	Infant Mortality Rate
JPOI	Johannesburg Plan of Implementation
MDGs	Millennium Development Goals
MDA	Ministries, Departments and Agencies
MMDA	Metropolitan Municipal and District Assemblies
MEST	Ministry of Environment, Science and Technology
NAP	National Action Plan
NEPAD	New Economic Partnership on Africa's Development
NSSD	National Strategies for Sustainable Development
NDPC	National Development Planning Commissions
ODA	Official Development Assistance
PRSP	Poverty Reduction Strategy Paper
PNER	Primary Net Enrolment Ratio
PGER	Primary Gross Enrolment Ratio
REDD+	Reduced Emissions from Deforestation and Forest Degradation Plus
SD	Sustainable Development
SAP	Structural Adjustment Programme
SGER	Secondary Gross Enrolment Ratio
SNER	Secondary Net Enrolment Ratio
TNER	Tertiary Net Enrolment Ratio
TGER	Tertiary Gross Enrolment Ratio
TB	Tuberculosis
UN	United Nations
UNCSD	United Nations Conference on Sustainable Development
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Program
U5MR	Under Five Mortality Rate
WSSD	World Summit on Sustainable Development
WHO	World Health Organization

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We will like to state that all the opinions expressed in this report are entirely ours and do not necessarily represent those of any individual or organization. Any other errors are likewise our sole responsibility.

Executive Summary

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in 1992 made a landmark event by concentrating on SD. A five and ten year reviews in 1997 and 2002 showed that not much had been achieved and member states and the international community were urged to increase efforts. In 2009, the United Nations Conference on Sustainable Development (UNCSD) planned a twenty year review of SD in Brazil, in 2012. The objectives are to secure renewed political commitment for SD, assess progress and gaps in implementation and discuss Green Economy in the context of SD and poverty eradication, and institutional framework for SD. 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.

Ghana has made progress in the formulation and implementation of SD strategies since the Rio conference.. There is now a considerable knowledge and understanding of SD. Institutions for Sustainable have been established while SD as a tool for development has been recognized and being implemented.

Analysis of findings on the three pillars of sustainability indicates that the country has made some gains in the social and economic fronts. However, the gains made are marginal and can dissipate with little shock. Specifically, stable governance has led to a stable average growth rate of about 5% since 1990. However, a lot remains to be done on the environmental pillar where depletion, degradation and pollution is still a major challenge. Furthermore, the country is receiving a small share of revenue from natural resource exploitation due to weak value addition to primary products. Structural transformation of the economy also remains a major challenge since growth in the manufacturing sector is very weak. Additionally, there are still some challenges in job creation, education, water and sanitation, urbanization and health.

The consensus with government officials is that Green Economy is not a substitute for SD, but rather a way of realizing it. In the past two years with the support of UNEP, the country has been discussing the transition to green economy in the areas of green budgeting; agriculture; energy; forests; water; transport and to a lesser extent, urban environmental management, roads, buildings, industrial installations, finance, manufacturing and tourism. Such a transition will require substantial resources part of which must come from the international community.

There are emerging issues that will make it difficult to achieve SD. Many of these are not new but the intensity of their impact has increased and therefore poses fundamental challenges to SD. These issues include climate change, desertification, coastal erosion, energy crisis, transparency in the management of mineral/oil resources, biodiversity and ecosystem loss, food insecurity, graduate unemployment, globalization and urbanization. Many of these issues arise from the fact that a long term SD strategy has not yet been put in place. With significant natural resources, the need to integrate the total impacts of their exploitation can only be fully realized within a long term strategy. It is also through this that their linkages with agricultural modernization through the value chain to manufacturing and industry can be realized.

Ghana faces a number of challenges in formulating and implementing SD strategies. These include inadequate ownership, commitments, governance and participation. There is also poor integration and coordination among MDAs; weak technical, institutional and financial capacity; political and policy inconsistencies; lack of harmony between national, regional and district policies; inability to monitor and evaluate the process and inadequate commitment of donors to meet their development assistance pledges as well as aligning their development assistance objectives to the priorities of the country. In terms of transition to green economy, challenges include high initial investment cost; pledges from international community that are not fully fulfilled; law reform and its implementation and standardization.

To address the challenges require the development and implementation of long term development strategies with harmoniously integrated pillars of SD. This calls for building human and institutional capacities for policy formulation, implementation, monitoring and for the enforcement of legislation. Effective grassroots participation including the private sector and CSOs at the design and implementation stages is critical. There is also the need to strengthen decentralized government administration and political processes; sensitize and create awareness at the local level, promote sustainability practices and foster partnerships among policy makers and the people.

The country must also improve significantly its internal resource mobilization through market based policies such as taxes, subsidies, incentives; encourage the polluter pay principle in natural resources management and above all ensure efficient and effective management of resources to avoid waste. This will serve as a signal for donor commitment to pledges. Above all, there is the need for the country to begin a serious transformation of

the economy through the modernization of agriculture and the addition of value to our natural resources with the view to expanding the manufacturing sector. This is the surest way of creating significant employment, generating income and eradicating poverty.

1.0 Introduction

1.1 Background

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.

On 11th December 2009, the Second Committee of the General Assembly adopted a resolution to organize the United Nations Conference on Sustainable Development (UNCSD) at the highest level, including Heads of State and Government, in Brazil, in 2012. The objectives of the Conference are to:

1. Secure renewed political commitment for SD;
2. Assess progress to date and gaps in the implementation of the outcomes of the major summits on SD
3. Address new and emerging challenges and Green Economy in the context of SD and poverty eradication and institutional framework for SD.

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 Objectives

The overall objective of the Report is to produce a well-informed Review Report on progress towards SD in Ghana. The specific objectives of the report include: analyzing SD trends of Ghana based on the three pillars of SD- economics, social and environment; discussing the challenges in the development and implementation of NSSD; analyzing the transition to Green Economy in the context of poverty reduction and SD; discussing new and emerging challenges facing Ghana and proposing recommendations for achieving SD

1.3 Methodology and Approach

Methodology for the review process was divided into two phases. The first phase entailed the review of the implementation of NSSD. We considered the extent to which the GPRS integrated the three pillars of SD. We consulted many documents including frameworks, strategies, policies and reports that have bearing on SD from all MDAs. To assess Ghana's success and failures in the implementation of the SD agenda, we used SD indicators selected by the MEST. Information on these indicators was obtained from the World Bank World Development Indicators and the requisite MDAs. We also used information from the Overseas Development Institute's Millennium Report Card and the 2010 Environmental Performance Index of Yale University.

The second phase of the review process involved further stakeholder inputs to the report, building consensus and validating the report. To achieve this objective, the Draft Report was sent to all MDAs for their review. The report was also presented to the National Sustainable Development Committee and Civil Society Organizations on 8th May, 2012. Based on the outcomes of the consultations the draft report was finalized.

1.4 Outline of Report

The report has 8 sections. Section 2 discusses priority SD issues and trends while section 3 discusses institutional framework for SD. Sections 4 and 5 deals with progress made in the implementation of SD Agenda and the transition to a green economy. Section 6 analyzes new and emerging challenges. Challenges in the

implementation of SD agenda are presented in section 7 while conclusions and recommendations for the way forward form the last section.

2.0 Priority SD Issues and Trends

2.1 Introduction

The relationship between Environment and Development was established at the 1972 UN Conference on the Human Environment (1972) in Stockholm. Specifically, Principles 13 and 14 of Stockholm Declaration espouse the need for rational and integrated planning to ensure that development and environment objectives are addressed in a coherent manner. Subsequently, the World Conservation Union (IUCN) published the *World Conservation Strategy* (IUCN, 1980) that linked the interdependence of conservation and development and for the first time threw more light on the meaning of the term “Sustainable Development”.

Following from the work of the World Conservation Strategy, the idea and concept of SD was popularized by the World Commission on Environment and Development (WCED) report also known as the Brundtland report - *Our Common Future* (WCED, 1987). According to this report, SD is defined as “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.” The report contributed significantly to the recognition of the need to integrate economic, social and environmental concerns in the development process.

2.1 Review of Past Development Strategies

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).

Under the ERP/SAP and to a large extent the PRSPs, strategies implemented were mainly short to medium term stabilization and liberalization programs with the support of World Bank/IMF. These programs principally aimed at introducing a market-based economy and at promoting the private sector as the engine of sustained economic growth. The only long term strategy developed during the period and partly implemented was the Vision 2020. The First Medium Term Development Plan (MTDP) carved out of the Vision 2020 was implemented from 1996 to 2000 but was discontinued in 2000 due to macroeconomic imbalances. It was substituted with the medium term PRSPs.

While the ERP/SAP were mainly stabilization programs, the PRSPs sought to enhance the three pillars of SD. GPRS I emphasized several issues including sound economic management for accelerated growth; increasing production and promoting sustainable livelihoods; support for human resource development and provision of basic services; special programmes for the vulnerable and excluded; ensuring good governance and increased capacity for public and private sector development. One shortcoming of GPRS I is the limited emphasis on the environment pillars. To solve this issue, a post Strategic Environmental Assessment of the GPRS I was undertaken. GPRS II introduced a shift of strategic focus, towards accelerating the growth of the economy so that Ghana could achieve middle-income status within a measurable planning period. The document also ensured better integration of the three pillars of SD. The GSGDA continued to expand integration of the three pillars of SD and focused on achieving the intra-generational equity component of SD through the shared growth objective.

2.2 Assessment of the Characteristics of Strategies

The experiences of both industrialized and developing countries suggest that sound and effective NSSD should have certain fundamental elements in common. These elements constitute the underlying principles for strategy development and include country ownership and commitment; integrated economic, social and environmental objectives; outcomes and means of implementation and capacity and enabling environment to which we turn our attention.

Country Ownership, Commitment and Participation - Effective NSSD formulation should be country-owned with commitment and participation by all. Also, the strategy must be based on a long-term, shared strategic and

pragmatic vision and there must be a strong institutional leadership and technical capacity for implementation and coordination. Additionally, the development of the strategy must use the bottom-up approach with broad and effective public participation, including academia, civil society, the private sector and key stakeholders in decision-making.

It is very difficult to conclude that strategies developed before 2000 embody these characteristics of NSSD. However, one can conclude that there have been improvements in ownership, commitment and participation after the 2000s. The GPRS I for example, was country driven, involving multi-stakeholder ownership and was implemented under a relatively sound leadership and good governance. The formulation and implementation of the strategy was driven by institutions and people at the local level through the bottom-up approach to development. The formulation and implementation of the GPRS II have also been influenced greatly by GPRS I to ensure continuity while the GSGDA has built on the GPRS II. Different stakeholders from MDAs, MMDAs, NGOs, CSOs, traditional authorities, scientific and technological community, professional bodies and other civil society groups have been involved in the development of Vision 2020, GPRS I, GPRS II and the GSGDA.

There are, however, shortcomings in participation and hence ownership of strategies. There are also reports that participants of such consultations often have inadequate time to prepare and little advanced information on the subject. Furthermore, the capacity of the CSOs to participate effectively in the consultation process is not adequate. **One area that seems to pose a challenge is the lack of strong institutional leadership, technical capacity for coordination and the development of strategies based on long-term shared strategic and pragmatic vision.**

Integration of Economic, Social and Environmental Objectives - Integration of the three pillars of SD is the most difficult balance to achieve in formulating a national strategy. Yet, it is very important to achieve SD. Integration involves teasing out inter-relationships between sectors at different levels and addressing them. Such integrations facilitate the efficient building of synergies among projects and programs across sectors. To ensure vertical and horizontal integration the various strategies - Vision 2020, GPRS I, II and the GSGDA used Cross Sectoral Planning Groups (CSPGs) to undertake the development of these strategies. While the CSPGs made efforts at integration there were some problems. For instance, GPRS I experienced problems with integration as collaboration between the MDAs was difficult due to the vague definition of roles and the quest by lead MDAs to monopolize the process. Indeed the Strategic Environmental Assessment of the GPRS I concluded that although, the GPRS I considered the social, economic, environmental and institutional issues, the linkages among the pillars were weak (NDPC, 2005; Kuuzegh and Twerefou, 2006).

Box 2.1: Good Practices in Ghana's NSSD- Formation of CSPGs

In order to make the formulation of the GPRS I participatory and integrative, each MDA was asked to nominate technically competent officers to the relevant CSPG. Each CSPG is facilitated by a Consultant supported by a Research Associate, a Co-ordinator selected from the technical staff of the NDPC secretariat and a chairperson selected from among members of each CSPG. The Consultants provided the technical backstopping. To ensure integration of the environment pillars, the Strategic Environmental Assessment Team from EPA/NDPC was represented on each CSPG. This process enabled the groups to build on the GPRS I and provides a link for GPRS II. The broad terms of reference of the CSPG is presented in NDPC (2005).

The NDPC, based on its past expertise and experience, put together the format for a matrix together with the CSPGs to guide the Groups in formulating their policies and strategies. The matrix is presented in the GPRS II (NDPC, 2005). Some of the MDAs used this matrix to pre-formulate their own strategies and policies before attending CSPG meetings to guide them in discussions. The CSPGs for each thematic area discussed the issues and policies proposed with the aim of harmonizing them to ensure integration. Each CSPG formed a core-working group, which collated and drafted reports on deliberations of that particular CSPG. The NDPC secretariat coordinated the process

GPRS II took steps to address most of the challenges that hindered the integration with GPRS I. While GPRS I treated environment and gender as a stand-alone subjects, GPRS II and GSGDA treated these as crosscutting and mainstreamed them into all development policies. Another improvement of the GPRS II and the GSGDA was the mainstreaming of the Millennium Development Goals (MDGs) and Africa Peer Review Mechanism (APRM) targets and indicators. Despite the improvement with GPRS II and GSGDA, there were shortcomings

with analyzing the linkages of sectoral policies, strategies and programs. Box 2.1 illustrates how integration for GPRS II was done using the CSPG while Box 2.2 illustrates how to improve the process of integration of strategies respectively.

Box 2.2: Improving Integration in SD Strategy Formulation

CSPGs or CSDs should be formed in each priority sector of the economy that submits a strategy during national strategy formulation. These CSPGs or CSDs should then be trained in integration of strategies to achieve sustainable development. The integration should start from the sectors during strategy development. When the vision of a sector strategy is laid out by the government, staff of all sectors should brainstorm on this to find the major vision and future of the sector over the planning period. Then a sub-committee that will formulate the sectoral strategy is set up. This will be either the CSPG or CSD for the sector. While the strategy is being formulated, the group will trace all the linkages of policies, programmes, projects and plan on other sectors and anticipate the impact of other related sectors strategy on that particular strategy. This should be done for all sectors.

When all strategies are sent to the NDPC it is these CSPGs or CSDs from the various sectors that will do the integration. It is easier here because sectors would have already outlined the areas to undertake synergy building or integration. To ensure ownership and comprehensiveness of sectoral strategy, CSPGs or CSDs must from time to time make presentations to respective staff of the sector about progress of the strategy development for their inputs. This should continue until the strategy is completed. All medium term strategies should be embedded in a long term strategy.

Development of Capacity and Enabling Environment - Effective NSSD needs to emphasize on multifaceted capacity development at both the sectoral and national levels. Various documents (NDPC, 2002; NDPC and EPA, 2004, *NDPC, 2005*) have attested to the weak capacity of personnel in the Civil Service and institutions to effectively plan and implement NSSD. Strenuous efforts have been made by governments over the years to build capacity of civil servants with the view to enhancing existing knowledge. Unfortunately, unattractive conditions of service makes it difficult to attract and maintain well-qualified personnel. The very few qualified and trained staff are easily absorbed by the private sector leading to weak capacity and loss of institutional memory in many MDAs.

Furthermore, efforts to address the capacity constraints are vague. The responsibility was assigned to institutions such as the Ministry of Public Sector Reform, Office of the President, Public Services Commission, etc. Unfortunately, the average amount of money allocated to these institutions has never exceeded 0.8 percent of the discretionary expenditure ceilings for MDAs.

Focus on Outcomes and Means of Implementation - One key aspect of a NSSD is the outcomes and resources for development and implementation. The strategy must aim at achieving concrete results based on sound technical assessment of the present situation and of projected trends and risks, examining links between local, national and global challenges. In doing this, realistic and flexible targets must be set.

A review of the First Medium Term Development Plan suggested that many of the macro economic targets were mixed leading to the discontinuity of the Plan and Vision 2020 in general when there was a change in government. Analysis of the GPRS I (NDPC, 2005) indicated that most of the set targets on macroeconomic stability were achieved. There were, however, challenges pertaining to service delivery, regional differences in the distribution of key outcomes, geographical and gender disparities in education and health, over emphasis on macroeconomic stability, insufficient involvement of district and local communities. These were addressed in GPRS II. Evaluation of the GPRS II also suggests that some macroeconomic targets were also mixed largely as a result of the global food, fuel and financial crises that started in 2006 and continued to 2009. With regards to the means of implementation, one can conclude that there were serious challenges. Box 2.3 provides a crude estimate of the financing gap in implementing GPRS I. Similar trends can be observed in almost all the Development Plans.

Box 2.3 Financing Gap in GPRS I

The total cost of implementing GPRS I was estimated at US\$5.3 billion over the three year period (2003-2005). This cost is made up of capital expenditure-schools, hospitals, equipment, road construction, among others. Due to the non-availability of funds, government selected some programs and projects, which were considered priority. The total cost of these programs and projects was estimated as US\$2.5 billion over the three year period. Crude estimates from the Medium-Term Expenditure Framework of Discretionary Expenditure Ceilings indicated that the government aimed at spending about US\$1.4 billion annually with about 22 percent going to investment (about 0.9 billion over the three-year period on investments). This implied that less than US\$1 billion was spent on capital investment annually. This amount is far below the minimum requirement of US\$ 2.5 billion required to finance vital investment programs in the GPRS I.

Monitoring and Evaluation - Sustainable development strategy processes need to be recognized as learning processes in which information about progress or otherwise towards sustainability is used constructively to revise the mechanism and the means to realizing objectives. In this regard, they should embody mechanisms for monitoring, evaluation and verification. In connection with the monitoring and evaluation of GPRSs, the NDPC facilitated the development of indicators by providing about 52 indicators to monitoring implementation. Using the list of indicators and the methodology provided by the UNCSD, the MEST also selected indicators for monitoring SD in Ghana.

National Intra-Agency Poverty Monitoring Group, GPRS Dissemination Committee and the Poverty and Social Impact Assessments Technical and Advisory Committees were established to support the monitoring and evaluation of GPRS I and II. Challenges that faced the process included technical capacity, data availability and consistency, incentives to motivate staff of MDAs and institutionalizing the monitoring and evaluation process at the district levels (NDPC, 2005). Furthermore, the Annual Monitoring Progress Report that was supposed to be produced in the first quarter always came very late making it difficult to update strategies.

3.0 Institutional Framework for SD

Institutions are the bedrock of the efficient functioning of any system. Sustainable development Institutions is defined as the behavioral patterns or entities pertaining to the formulation, implementation and monitoring of frameworks, laws, regulations, conventions, customs and practices that guide SD. In Ghana, there exists no legal mandate for the implementation of NSSD. However, the 1992 Constitution of Ghana indirectly covers issues pertaining to the economic, social, environmental and institutional development. Specific articles that indirectly touch on SD include articles 36 (1) and 36 (9). The National Planning Laws also have some bearing on NSSD. Thus, to some extent, the current drive towards NSSD takes its momentum from the national constitution.

Even though there are several governmental organizations that are involved in formulating and implementing SD strategies, the NDPC, MEST and EPA are the main national institutions responsible for SD planning and implementation. The NDPC has oversight responsibilities for the preparation, coordination, implementation and monitoring of medium-term strategic plans prepared by the MMDAs and the MDAs. MEST is responsible for policy issues and exercises supervisory authority over six statutory bodies - EPA, Town and Country Planning Department, Council for Scientific and Industrial Research, Ghana Atomic Energy Commission, Rural Enterprises Project and the Environmental Resources Management Project charged with the responsibility of implementing policies in the areas of environment and science. MEST also coordinates government's activities on SD under the UNCSD framework.

Agenda 21 and the JPOI recommend that countries establish National Commissions or Councils on SD (NCSDs) to ensure effective implementation of SD agreements. Ghana established the Sustainable Development Committee (SDC) with representatives from key MDAs and Civil Society, which acts as the Coordinating Panel. However, one can conclude that the NDPC which is the main organ mandated by the Constitution to formulate development strategies is indirectly the major organ for ensuring SD in Ghana with limited inputs from the SDC. The EPA is the main implementing agency directly responsible for dealing with matters concerning environmental management and protection. It is responsible for initiating action on environmental legislation, and sees to the enforcement of these laws. The Agency also advises MEST on environmental issues and has promoted the development of District Environmental Action Plans in almost all the Districts.

One major element in Ghana's environmental policy is the requirement of an Environmental Impact Assessment (EIA) for proposed projects. The establishment of an EIA under the EPA Act (Act 490, 1994) mandated the agency to protect and enhance the country's environment as well as resolve common global environmental problems. MMDAs are required to set up Environmental Management Committees to deal with environmental issues in their areas of jurisdiction. However, these committees are mainly constrained by lack of suitable legal backing and resources.

These institutions including NGOs and CSOs have contributed significantly in strengthening SD activities in the country, especially the environment pillar. They have also played a major role in implementing most of the Multilateral Environmental Agreements. Information from the Registrar General's Department indicates that there are over 2000 NGOs working on different pillars of SD. However, many of them are not active, while coordination of their activities is very weak. To date the country does not have a policy on NGOs and their activities are not regulated in any way. There are also a number of development partners supporting financially and technically various pillars of SD. Notable development partners include the World Bank, DANIDA, UNDP, UNESCO, UNEP, UNECA DFID, among others.

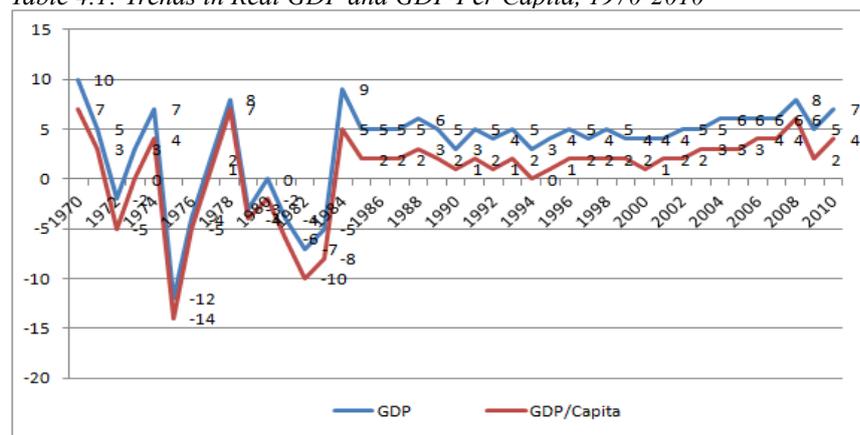
4.0 Progress Made in Implementation of Sustainable Development Agenda

4.1 Economic Performance

At the onset of decolonization, Ghana adopted national development plans with the state serving as the engine of growth in the 1960s and early parts of the 1970s. This period was very significant in terms of improved development. Many of the economic indicators were satisfactory. In the latter part of the 1970s and the early 1980s the economic situation deteriorated basically due to higher oil prices and poor governance resulting in political instability. Of the 7 development plans that were formulated from 1951 to 1978, only two were fully implemented.

The implementation of the ERP/SAP in the first half of the 1980s put the economy back on track in terms of economic growth. The gains are fragile because the programs were mainly that of stabilization and did not contribute to addressing the obstacles to the real sectors of the economy. Growth rates have remained positive since the start of the economic reforms in contrast to some periods in the earlier years where negative growth rates were recorded. Average annual growth rate has improved from about 2.2 % in the decade 1981-1990 to about 4.3% between 1991-2000 and further to about 5.8% between 2001-2010. This has contributed in moving Ghana into the Lower Middle Income Status. While the implementation of SAPs/PRSPs in Ghana has been acclaimed as a success in developing countries, most of the improvements were recorded at the macro level. The real sectors have not benefitted much. Growth rate in per capita income mirrored that of the overall growth though the magnitude is quite small largely as a result of high population growth as shown in Table 4.1.

Table 4.1: Trends in Real GDP and GDP Per Capita, 1970-2010

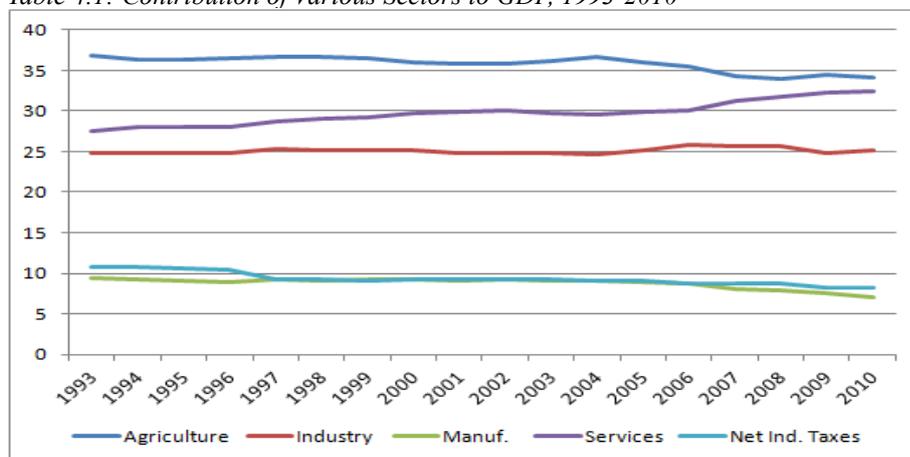


Source: World Development Indicators of the World Bank, 2011

In general, growth in Ghana over the past two decades can be attributed to political stability, strong global demand for key export commodities like minerals and cash crops such as cocoa and good governance. One important observation is that, despite the fact that prices of mineral resources, especially gold, has averagely been increasing for the past two decades, the country has not benefitted much from it. Exploitation of mineral resources in the country is so capital intensive that there is very limited employment created while most of the benefits go to foreign companies in the sector. Tutu (2011) estimates that out of US\$3 billion earned from gold

mining in 2009, only 22% was injected into the Ghanaian economy. Yet the environmental and social cost was close to the 22%. The inability to achieve SD is partly due to transition from this poor local participation in key sectors of the economy and the overconcentration in the economic pillar of SD. This to some extent reflects the inability of the country to formulate and implement integrated strategies, especially long term ones.

Table 4.1: Contribution of Various Sectors to GDP, 1993-2010

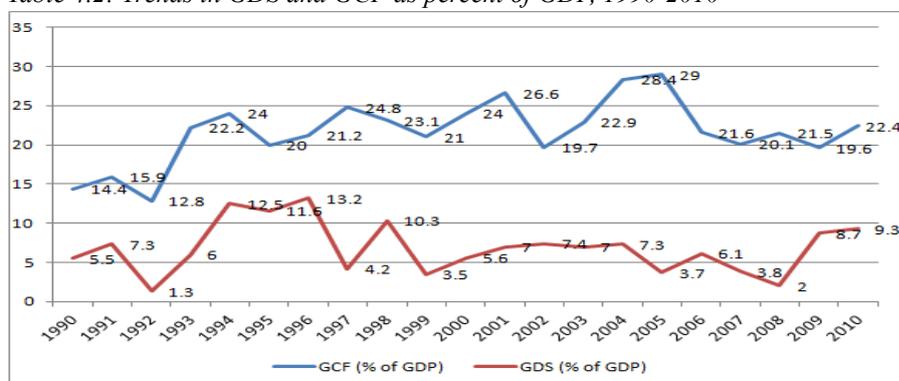


Source: Ghana Statistical Services

One important indicator of SD is structural economic transformation. Structural transformation is meant to improve the quality of life of the people by increasing productivity in agriculture, transferring labor force to higher earning sectors of manufacturing and services. However, one can argue that this is not what is occurring in Ghana today. The share of agriculture in GDP decreased from an average of 36.5% between 1993-2000 to about 35.3% between 2001-2010, while that of the service sector increased from about 28.5% between 1993-2000 to about 30.7 between 2000-2010 suggesting that the country is moving in the right direction. **It is important to note that the share of agriculture in GDP is not reducing because of increased productivity and labor moving out to the manufacturing sectors but rather due to lack of modernization and significant value addition.** Correspondingly, the share of the manufacturing sub sector of the industrial sector has decreased from an annual average of 9.2% between 1993-2000 to about 8.5% between 2001 and 2010 (Table 4.1). Consequently, youth and graduate unemployment have increased since the manufacturing and agricultural sector that can generate jobs and value are decreasing. These are not positive signs for SD.

Savings in Ghana over the past two decades has on average reduced which has had significant impact on investment. On the average, Gross Domestic Savings (GDS) as proportion of GDP has reduced from an overall average of about 8.1 % between 1991-2000 to about 5.7% between 2001-2010, and has averaged about 6.8 % over the period 1991 and 2010. This is mainly a result of growth that has not affected significantly the real sectors of the economy and hence employment.

Table 4.2: Trends in GDS and GCF as percent of GDP, 1990-2010

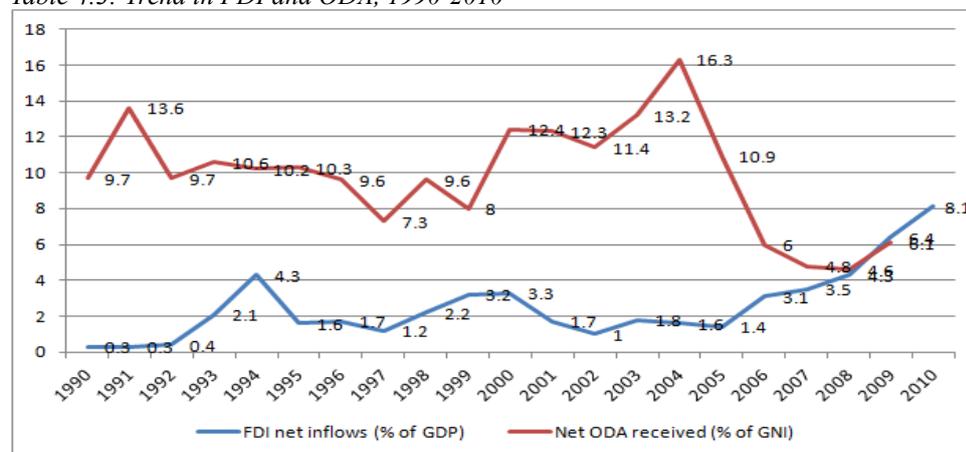


Source: World Development Indicators of the World Bank, 2011

Gross Capital Formation (GCF) has been consistently higher than GDS and has seen marginal increase over the years. Specifically, GCF as proportion of GDP has reduced from an overall average of about 22.3 % between 1991-2000 to about 21.1% between 2001-2010, and has averaged about 21.1 over the period 1991 and 2010. The consistently higher GCF compared to GDS is due to inflow from foreign sources.

Ghana's efforts at attracting Foreign Direct Investment (FDI) over the years has not yielded the expected impacts. Net inflows of FDI have increased marginally over the past two decades (Table 4.3). FDI as a ratio of GDP has averaged about 2.7% for the period 1990-2010.

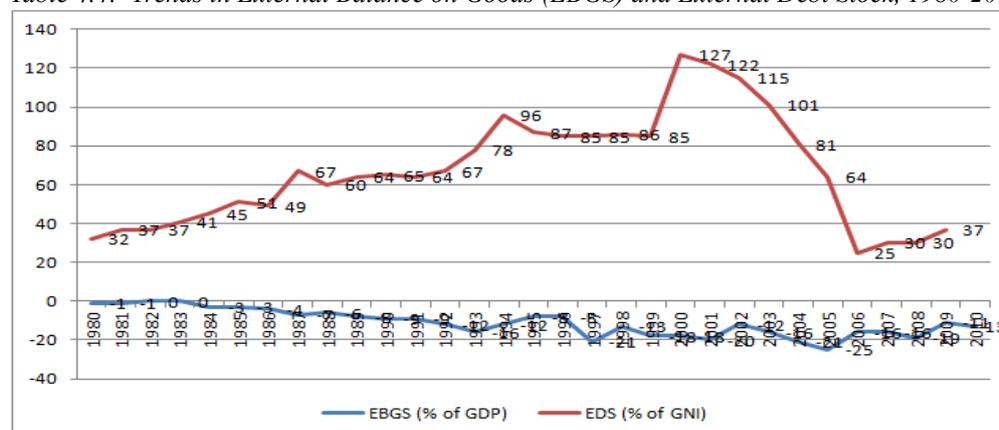
Table 4.3: Trend in FDI and ODA, 1990-2010



Source: World Development Indicators of the World Bank

Disproportionately, however, about 65 per cent of the FDI to the country has gone to the mining sector, more specifically gold between 1990 and 2009 (Minerals Commission, GIPC). Yet this is the sector that contributed an average of 4% to GDP and has very little employment and value addition. Besides, as noted above, the social and environmental cost is significant. Official Development Assistance (ODA) to Ghana has not followed any consistent pattern. ODA as a percentage of GNI has averaged about 10.1 % in the 1990s but increased to about 12.0 % in the 2000. The period between 2004 and 2008 witnessed a massive decline in ODA (% GNI) from 16.3% to 4.6% rising marginally to 6.1% in 2009.

Table 4.4: Trends in External Balance on Goods (EBGS) and External Debt Stock, 1980-2010



Source: World Development Indicators of the World Bank

The challenges with balance of payments has not improved with SAPs/GPRSs but rather worsened. Average external balance on goods and services as a percentage of GDP was in deficit of 4.1 percent for the period 1981 to 1990 but worsened to a deficit of about 13.5 percent in the following decade (1991-2000) and further to about 16.9 percent in the decade 2001-2010. Deterioration of the trade balance in the 2000s can be attributed to the terms of trade deterioration of our merchandise trade. Furthermore, emphasis on the export of primary products and increased imports from Asian countries have made local industries uncompetitive and contributed to the worsening balance of trade.

External debt continues to be a major challenge facing the country largely as a result of the negative trade balance, fiscal indiscipline that results in huge budget overruns and the inability of governments to adequately mobilize revenue from internal sources. The expectation that the implementation of the Heavily Indebted Poor Countries Initiatives will lead to a significant reduction in Ghana's debt appears not to be materializing.

Overall, external debt as a ratio of Gross National Income (GNI) has averaged about 56.6 percent for the period 1981-1990, worsened to about 86 percent in the following decade (1991-2000) but improved to about 67.2 in the decade 2001-2010. Fiscal indiscipline over the years has also led to deficit in the current accounts.

4.2 Social Performance

A major pillar of SD is social sustainability that addresses the issue of social well-being and quality of life. To assess progress in this pillar we focus on social and human development indicators such as infant mortality, life expectancy at birth, maternal mortality, Tuberculosis (TB) prevalence rate, reported cases of malaria, population growth rate, total fertility rate, rate of urbanization, poverty, access to improved sanitation and water, educational enrolment ratios and unemployment. The population of Ghana has increased over the past three decades from 10.9 million in 1980 to about 24.4 in 2010. One important observation is that, the rate of population growth has declined steadily from about 3.4 % in 1980 to about 2.4 % in 2010.

Table 4.2: Total Rural and Urban population and growth

	1980	1985	1990	1995	2000	2005	2010
Total (millions)	10.9	12.9	14.8	16.9	19.2	21.6	24.4
Total growth (annual %)	3.4	3.3	2.8	2.8	2.4	2.4	2.4
Rural (% of total pop.)	68.8	67.1	63.6	59.9	56	52.2	48.5
Rural growth (annual %)	2.1	2.7	1.7	1.4	1	1	0.8
Urban (% of urban pop.)	31.2	32.9	36.4	40.1	44	47.8	51.5
Urban growth (annual %)	3.1	4.3	4.7	4.5	4.2	4	3.8

Source: World Development Indicators of the World Bank

Like many countries in sub-Saharan Africa, urban population growth has been higher than overall population growth and poses a challenge to urban development due to the inability of governments and the private sector to meet the increasing need for infrastructure and employment in urban areas (Table 4.2). In 1980, the urban population was about 31 percent. This figure has increased to about 52% in 2010. Rapid urbanization in Ghana is accompanied by urban poverty, rapid growth of slums, poor housing and sanitation and high pressure on social services (water, education, electricity, transport, waste management, etc.).

Fertility rate has decreased from about 5.6 births per woman in 1990 to about 4.2 in 2009. HIV prevalence increased consistently from about 0.5 % of the population aged between 15-49 in 1990 but has decreased to about 1.8 in 2009, thanks to the massive awareness and educational campaign that was embarked on in the 2000s. Trends in life expectancy are quite impressive and higher than what pertains in many countries in the sub region. Average life expectancy increased from about 56.8 years in 1990 to 63.4 years in 2009 possibly due to increased health care. There is gender disparity of life expectancy in favor of females. From figure 4.7, as life expectancy for females increased from about 57.8 years in 1990 to 64.3 years in 2009, that of males increased from about 55.9 years in 1990 to about 62.5 years in 2009.

Infant Mortality Rates (IMR) and Under 5 Mortality Rates (U5MR) are key indicators of measuring child mortality – Goal 5 of the MDGs. Over the past two decades (1990-2010), IMR and U5MR have declined consistently. While IMR declined by a third from 76.7 in 1990 to 51.3 per 1000 live births in 2009, U5MR also declined approximately by a third from 121.7 to 76.6 per 1000 live births over the same period. Interventions in the health sector such as the National Health Insurance Scheme, the free maternal health care, exclusive breast feeding campaign, inter alia, as well as the general improvement in socio-economic conditions may have contributed to the improvements in mortality rates. Notwithstanding the reductions, child mortality levels are still high compared with other middle income countries. Information from the Overseers Development Institute (2010) on relative and absolute progress¹ on the MDGs indicates that Ghana has not only improved on its U5MR from 1990 to 2007 but also one of the top performers by this indicator.

Maternal Mortality Ratio (MMR) gives an idea of the state of maternal health in general although reliable information is not available. We use the percentage of births attended by skilled health staff as a proxy and this has increased consistently from about 43.8 in 1993 to about 57.1 in 2008. In line with the increase in birth attended by skilled personnel, modelled estimates of Maternal mortality ratio by the world bank indicates that there has been a decrease from about 630 per 100,000 live births in 1990 to about 350 in 2008.

¹ Top performers on relative progress are countries with the fastest rates of progress relative to their starting positions – this highlights the degree to which they have closed the gap with the MDG target. Top performers on absolute progress are countries that have seen the biggest positive change on the indicators regardless of their initial conditions.

Malaria continues to be one of the most prevalent diseases in Ghana claiming many lives, especially children. In spite of the various efforts that are being made to combat malaria, reported cases of malaria are quite high and have doubled from the levels in the 1990's. Between 2000 and 2010, reported cases of malaria have averaged 3.15 million per annum compared to 1.86 million in the 1990's. It is estimated that cost of malaria is 1-2% of Ghana's GDP (Appiah-Darkwah and Badu-Nyarko, 2011) mainly attributed to expenditure on anti-malaria drugs and insecticide treated nets. A notable cause of the high incidence of malaria is the poor sanitary conditions that enable the breeding of mosquitoes in most communities. Though there is no data to support this argument one can safely conclude that many of the affected people are the poor who live under poor sanitary conditions where mosquitoes thrive very well. In fact, Ghana's quest to reduce the incidence of malaria and other major diseases will require renewed efforts if the MDG is to be achieved. It is unfortunate that instead of addressing insanitary conditions which is the root cause of malaria, governments have focused more on curative policies.

Tuberculosis is still a major health problem in the country although there has been consistent decline in the incidence of the disease. The incidence of tuberculosis has decreased marginally from about 223 per 100,000 people in 1990 to about 201 in 2009. According to World Health Organization's (WHO) Global TB Report for the year 2009, Ghana is not among the 22 high-burden tuberculosis countries though the estimated 47,632 new TB cases in 2007, ranks Ghana 19th in Africa for the highest estimated number of new cases per year. These trends indicate that more efforts are still needed to effectively deal with the diseases.

Within the West Africa sub-region, Ghana is one of the countries with the highest literacy rates. Over the period 2000 to 2009 the situation has improved, reflecting the concerted effort on the part of government to eliminate illiteracy. Literacy rates among adults aged 15 and above have increased marginally by only 8.7 percentage points from about 57.9% in 1999 to 66.6% in 2009. A wide gap still persists in the male to female ratio despite falling marginally from 1.33% in 1999 to 1.21% in 2009. Specifically, while literacy rate among males 15 years and above increased from 66.4% in 2000 to about 72.8 % in 2009, that of females increased from 49.8 % in 2000 to 60.4 % over the same period.

Information on gross primary enrolment in the 1990s is scanty. However available data indicates that gross primary enrolment for females increased from about 63.6% in 1990 to about 73.6% in 1995 while that for males increased from about 75.4% to 82% over the same period. Overall total gross primary enrolment ratio for both sexes increased from about 70% in 1990 to about 78% in 1990. Gender disaggregation of enrolment also depicts similar trends. The increase in enrolments may be attributed to the implementation of many social policies such as the Ghana School Feeding program in 2006, Capitation grant, provision of school uniforms and **LEAP**, among others.

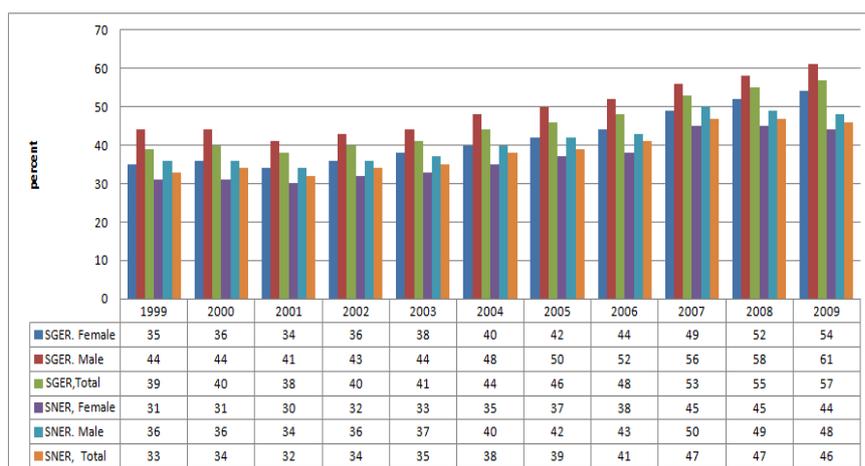
Figure 4.10: Primary School Enrolment Ratios, 1999-2009

Source: World Development Indicators of the World Bank, 2011

Total Primary Net Enrolment Ratio (PNER) has also improved from about 60% in 1999 to about 76% in 2009 with the PNER for both sexes following similar trends. An important observation is that the gap between male and female PNER which was about 3% in 1999 in favor of men has reduced to zero in 2009 and was even in favor of females in the three preceding years of 2009. This indicates that more should be done to promote male education. It is argued that in the mining and coastal areas, many males are dropping out of school to trade at that tender age. More needs to be done to confirm this argument and to rectify the situation. Also, PGER are higher than PNER for all the years, indicating the possibility of high cases of repetition and late entrance in schools.

Information from the Overseers Development Institute (2010) on the progress on the MDGs indicates that PNER has increased from about 54% in 1991 to about 72% resulting in an absolute progress rank of 23 PNER and a relative progress rank of 43 (65 countries). The report also indicates that the ratio of girls to boys in primary education has improved from 0.85 in 1991 to 0.99 in 2006 (93 countries). These improvements in Primary enrolment ratios hide the serious challenge of quality and drop off rate.

Figure 4.11: Secondary Enrolment Ratios, 1999-2009



Source: World Development Indicators of the World Bank, 2011

Secondary Enrolment Ratios have increased over the years but the gender gap in favor of males has seen marginal improvement compared to primary enrolment. Total, male and female SGER was about 35.2%, 42.2 and 27.9% in 1990 respectively. As indicated in figure 4.11, total, male and female SGER increased from about 39%, 44% and 35% in 1999 to about 57%, 61% and 54 % in 2009 respectively. Even though the male to female gross enrolment gap persists over the past decade, there seem to be some progress in closing the gap. The gender gap in gross enrolment reduced from about 14 % in 1990 to about 9% in 1999 and further to about 7% in 2009.

Net enrolment has consistently lagged behind gross enrolment. Total, male and female SNER increased from about 33%, 36% and 31% in 1999 to about 46%, 48% and 44 % in 2009 respectively. Unfortunately the male to female gender gap has revolved between 4% and 5% over the past decade. The large difference between primary and secondary enrolment ratios implies that a large number of children cannot have access to secondary education. Available information on Tertiary Gross Enrolment Ratio (TGER) as indicated on table 4.12 shows that the figure was low in the early part of the 1990s for both sexes but has increased considerably over the past two decades. Again the difference in enrolment ratios between secondary and tertiary is quite significant though better compared to what pertains in the sub-region.

Figure 4.2: Tertiary Gross Enrolment Ratio, 1999-2009

	1991	1992	1993	1994	2005	2006	2007	2009
Female	0	1	1	1	4	3	4	7
Male	1	2	2	2	7	7	8	11
Total	1	1	1	1	6	5	6	9

Source: World Development Indicators of the World Bank, 2011

The proportion of the population with access to improved sanitation has increased from about 7% in 1990 to about 13% in 2008 (Table 4.3). Access to improved water source has also increased marginally over the past two decades from about 54.5% in 1990 to about 82.5% in 2008. In all cases conditions are better in the urban areas than the rural areas. Information from the Overseers Development Institute (2010) on the progress on the MDGs indicates that Ghana has an annual rate of absolute progress of about 1.5% by increasing the proportion of the population using improved drinking water source from about 63.5% in 1995 to about 82% percent in 2008 and among the top performing countries.

Table 4.3: Trends in improved drinking water and sanitation facilities,

	1990	1995	2000	2005	2008
Improved sanitation facilities (% of population with access)	7	8	9	11	13
Improved sanitation facilities, rural (% of rural population with access)	4	5	5	6	7
Improved sanitation facilities, urban (% of urban population with access)	11	13	15	17	18
Improved water source (% of population with access)	54	63	71	78	82
Improved water source, rural (% of rural population with access)	37	47	58	68	74
Improved water source, urban (% of urban population with access)	84	86	88	89	90

Source: World Development Indicators of the World Bank, 2011

Poverty is still widespread and remains a serious threat to the development of Ghana. Available information on poverty suggests that over the past two decades Ghana has made significant impact in reducing poverty nearly by half as the percentage of the population living below the national poverty line declined from 51.7% in 1992 to about 28.5% in 2006.

Table 4.4: Trends in Poverty Indices 1991/92 – 2005/6

		National	Urban	Rural
1991/92	Headcount	51.7	27.7	63.6
	Poverty Gap contribution	18.5	7.4	24.0
	National Poverty (headcount)	to.	17.8	82.2
1998/99	Headcount	39.5	19.4	49.6
	Poverty Gap contribution	13.9	5.3	18.2
	National Poverty (headcount)	to.	16.6	83.4
2005/06	Headcount	28.5	10.8	39.2
	Poverty Gap contribution	9.6	3.1	13.5
	National Poverty (headcount)	to.	14.3	85.7

Source: Ghana Statistical Services

The incidence of poverty amongst urban households is consistently lower than amongst rural households. Being the first country in Sub-Saharan Africa to achieving MDG 1² gives an indication of the level of reduction in poverty levels in the country. The Human Poverty Index (HPI), also declined from 33.1 in 2004 to 28.1 2007. This performance compares favorably with the sub-Saharan region median of 38.5. A comprehensive measure of poverty—Multidimensional Poverty Index³ introduced by the UNDP and the Oxford Poverty and Human Development Initiative in 2010 also declined from 0.309 in 2003 to 0.144 in 2008 again reflecting increasing levels of well being.

Table 4.5: Trends in Gini Index (Consumption Inequality) 1991/92 -2005/6



Source: Ghana Statistical Service

Despite the fall in the headcount poverty, there seems to be growing inequality in income as indicated in Table 4.5. Reduction in income poverty has had a positive correlation with overall development. Information from the 2011 Human Development Index Report indicates that between 1980-2011, 1990-2011 and 2000-2011, the country registered an annual average growth of 1.1%, 1.23% and 1.66% respectively in the HDI showing marginal improvements over the past two decades. Also, over the past 5 years (2006-2011), the country moved five places to 135th position in the HDI country rankings.

Unemployment remains a major socio-economic problem in Ghana. Data from table 4.6 indicates that total unemployment increased from about 4.7% in 1992 to 10.1 % in 1999 and further to 10.4% in 2006. Unemployment among females are higher than men. Also, female employment is mainly at the lower levels where conditions are below labor standards. Unemployment among the youth population is higher than the other groups though some decreasing trend is being observed. A more worrying aspect is graduate unemployment that has been increasing over the years.

Table 4.6: Trends in Unemployment

² Ghana Millennium Development Goals Report, 2006, page 4

³ The MPI measures non income poverty in the areas of health, education, and standard of living. The index ranges from zero to one, with low value implying lower levels of multidimensional poverty.

Year	Total	Male	Female	Youth (15-24 years)
1992	4.7	3.7	5.5	17.1
1999	10.1	9.4	10.7	15.9
2006	10.4	10.1	10.7	16.6

Source: *World Development Indicators of the World Bank, 2011*

The growing unemployment is mainly due to the lack of expansion in the real sectors, particularly in agriculture and manufacturing and the high population growth. The inability of the economies to modernize agriculture along the value chain is one of the main contributory factors to unemployment.

4.3 Environmental Performance

In this section we assess Ghana's performance in environmental sustainability using indicators such as carbon dioxide emissions, emissions of common anthropogenic pollutants, degraded land, forest cover, water pollution, among others. The impact of climate change is being observed in many parts of Ghana. Extreme events such as floods, drought and increasing trend in the frequency of high maximum temperature is being observed. Although Africa contributes only about 4% to GHG emissions, the region is most vulnerable to the impacts of climate change largely as a result of widespread poverty and its limited adaptive capabilities. CO₂ emissions, the most important contributor to climate change has increased significantly from 3927.80 kt in 1990 to about 9801.20 kt in 2007.

The emissions of nitrous oxide, another GHG, has been relatively stable between 1990-2005. It decreased from about 5186.50 thousand metric tons of CO₂ equivalent in 1990 to 4898.70 in 2005. Methane emissions also increased from about 7237.60 kt of CO₂ equivalent in 1990 to 8989.50 in 2005. Other green house gasses emissions (HFC, PFC and SF₆) decreased significantly from about 596.2 thousand metric tons of CO₂ equivalent to 15 in 2005. Emissions of particulate matter (PM₁₀) (country level) has not been stable though generally increased from about 34.5 (*micrograms per cubic meter*) in 1991 to about 42.1 in 2001 but decreased thereafter to about 24.5 in 2008

Land and soil degradation and depletion of nutrients have been significant in the country. This is due to the overexploitation of agricultural, timber and mineral resources. Other sources include increasing application of chemicals and the use of inappropriate equipment and technologies, commercial mono-specific plantations and inefficient irrigation systems. The annual cost of degradation from agriculture was estimated to be about 1.57% of GDP in 2005 (World Bank et. al, 2006). Prolonged land degradation in northern Ghana is leading to the intensification of desertification which has serious linkage with poverty, migration and food security.

Deforestation is a major problem in the country. It is estimated that 33.7% of the forest cover of Ghana was lost⁴ between 1990 and 2010. The total forest area of Ghana has been decreasing from 9600 ('000) ha in 1961 to 4,940 ('000) ha in 2010 (Food and Agriculture Organization, 2010). At this rate, the MDG target of increasing the proportion of land area covered by forests will not be met. Deforestation, land and soil loss has led to loss of significant biodiversity. Species loss is mainly a result of the loss of natural habitats, illegal hunting for food, medicinal or commercial use and national and international trade. In 2010, 118 and 16 plant (higher) and mammal species were considered threatened.

Ghana is generally endowed with abundant freshwater resources such as rivers, lakes, wetlands and groundwater. In addition, the country's coastal zone supports a diversity of habitats and resources, encompassing mangroves, rocky shores, sandy beaches, deltas, estuaries and coastal wetlands, coral reefs and lagoons. These ecosystems do not only contribute significantly to the livelihoods of coastal communities and to national economies - fishing, agricultural activities, tourism, oil and mineral mining and infrastructure development but also have intrinsic value including shoreline stability, beach enrichment, nutrient generation, recycling and moderation of pollution. Unfortunately these water bodies are being polluted due to poor waste management, agricultural and industrial discharges. Overall the country has not done very well in terms of environmental sustainability. This is confirmed by the 2010 Environmental Performance Index of Yale University that ranks 163 countries on 25 performance indicators tracked across ten policy categories covering both environmental public health and ecosystem vitality. Ghana obtained a mark of 51.3 and was ranked 109.

Concentration on primary product production especially oil and minerals in the midst of weak enforcement of environmental regulations, poor value addition, very small proportion of profits come to Ghana due to poverty and the poor bargaining power by the country. This has led to the inability of the country to address environmental and social challenges in the area.

⁴ <http://rainforests.mongabay.com/deforestation/2000/Ghana.htm#01-cover>

5.0 Transition to Green Economy in the Context of Sustainable Development

Rio + 20 will also discuss the concept of Green Economy. UNEP define Green Economy as “system of economic activities related to the production, distribution and consumption of goods and services that result in improved human wellbeing over the long term, while not exposing future generations to significant environmental risks and ecological scarcities.” Discussions with key government officials on Green Economy suggest that the country’s understanding of the term converges with that of UNEP. The consensus is that Green Economy is not a substitute for sustainable development, but rather a way of realizing it.

Ghana has implemented many policies over the years that have implications on the transition to a green economy as elaborated in sections 2 and 3. In the past two years with the support of UNEP, the country has been discussing the transition to green economy in the areas of green budgeting; agriculture; energy; forests; water; transport and to a lesser extent in urban environmental management and infrastructure - roads, buildings and industrial installations, finance, manufacturing and tourism. Ghana’s quest to engage in green projects stems from the fact that, these projects are the engine for SD with the potential to create sustainable employment. From the country’s perspectives, transformation to a green economy means having sustainable recourse for policy direction in specific sectors such as energy, transport, agriculture, water, forestry, urban management, among others, to which we turn our attention to.

Energy - Ghana is rich in renewable and non-renewable resources. In terms of energy, the country has recently discovered oil /gas, in addition to natural fuels such as wind, water and solar which can generate cleaner energy for development. However, the country has huge energy infrastructural and supply deficits that will require massive investment. Research has shown that the photovoltaic industry could create 50% more jobs than highway construction while wind programs create 60% more jobs. It is also estimated that with recent energy efficient building technologies, Ghana can reduce energy consumption in buildings by about 60 percent compared to conventional designs. Similarly, a shift from the use of fossil fuels to more efficient fuels could decrease pollution creating significant health impacts.

Ghana’s efforts at harnessing renewable energy resources have mainly been at a minimal level such as renewable resource assessment and mapping, pilot projects on energy efficiency and programmes aimed at retrofitting existing buildings. A major challenge is the up scaling of these projects based on the outcome of the pilots as well as providing incentives for the private sector to participate. Innovative policies should be undertaken to develop the sector. These include the development of infrastructure for the generation, transmission and distribution of energy; investing in financing schemes that will help lower the high initial fixed costs of renewable energy technologies; providing finance and support for renewable energy service companies; expanding the assessment and mapping of renewable resource; developing the renewable energy markets through subsidies and insurance; providing funding for research and development of renewable energy technologies; investing in human and institutional capacity development.

Forestry - Majority of Ghanaians live in rural areas and depend on the forest for their livelihoods. Unfortunately, forests are being degraded at a rapid rate as mentioned in section 4. Various programmes and projects have been put in place to reduce deforestation in line with the National Forest and Wildlife Policy which aims at the management and enhancement of the permanent forest and wildlife estates for preservation of vital soil and water resources, conservation of biodiversity and the environment. Initiatives such as the Reduced Emissions from Deforestation and Forest Degradation plus (REDD+) have been negotiated and being implemented. This programme has not only impacted on employment, livelihoods and revenues but also enabled local communities to be custodians of forests and its ecosystem services. Transition to a Green Economy will require the intensification of current programmes including assessment of the value of forest products to enable economic pricing of forest resources.

Fisheries - Ghana is one of the countries that share the Guinea Current Large Marine Ecosystem (GCLME) belt which is very rich in fisheries resources. In addition, there are several water bodies – lakes, rivers, streams, and wetlands. These resources provide significant economic benefits such as fisheries which is an important source of protein for Ghanaians. A challenge that confronts Ghana today is the unprecedented degradation, pollution and over-exploitation of fishery resources. The main sources of over-exploitation are the use of unsustainable methods such as pair trawling, use of dynamite, use of small fishing nets and the use of powerful lights. A study by the World Bank/DFID (2005) puts the annual cost of degradation of the Volta Lake and costal fisheries to be 0.16% and 0.27% of GDP respectively in 2005. About 12 countries in the West Africa sub region together with UNEP and other donors are collaborating to restore and maintain sustainable fisheries, reduce pollution and restore degraded habitats in the GCLME belt. Greening the economy in the context of fisheries resources will require the intensification of these programmes, building capacities in the area of aquaculture as well as the

education of communities on sustainable fishing and water use. Rules and regulations on sustainable fishing must also be strictly enforced.

Transport - Efficient transport system is important for sustainable development. African Development Bank (1994) estimates that road transport in Africa handles about 97% and 94% of passenger and freight transport respectively. However, it is inefficient in terms of time and energy consumption compared to other modes like rail, water and air. In addition, many Ghanaians use private cars which are more energy inefficient in terms of passenger-kilometers covered than buses due partly to the poor development of rapid mass transport in urban and other areas. For example, a study by Akoena and Twerefou (2002) revealed that light vehicles and buses covered 59,654 million passenger-kilometers but consumed 356 thousand tons of oil equivalent while taxis and private cars covered 13,786 million passenger-kilometers but consumed about 537 tons of oil equivalent in Ghana in 2002.

Investment in “green transport” could make cities cleaner by reducing congestion, air pollution and fossil fuel consumption. Policies such as integrated planning, differential taxation and duties on vehicle, area licensing, parking fees and tolls could be applied to the less efficient modes of road transport like private cars to promote the use of greener means of transport. It is also imperative to encourage the use of fuel efficient engines and cars with smaller engine capacities; improve standards and regulations; driver and vehicle maintenance habits; road infrastructure and traffic management as well as promoting cycling and walking.

Agricultural Land Use and Management - Agriculture can be considered as the main sector that holds the key to the growth, development and transformation of Ghana. It supports about 70-80 percent of the total rural population, majority of whom are extremely poor. Agricultural practices in the country are mainly subsistent that employs primitive tools such as the hoe and cutlass with low productivity that makes it difficult for many rural communities to be self sufficient in food. Added to that, poor farming practices such as ‘slash and burn’ has led to land degradation, soil quality depletion and biodiversity loss. A study by the World Bank put the cost of environmental degradation from agriculture to be about 1.57% of GDP in 2005.

Several strategies and policies have been undertaken to improve sustainable agriculture and land use. The main strategies include the Accelerated Agricultural Growth and Development Strategy and the Food and Agriculture Sector Development Policy (FASDEP). The policy was reviewed in 2007 to produce FASDEP II. The Ministry of Lands and Natural Resources is also implementing the Land Administration Project that aims at streamlining the provision of land title and certification so as to ensure tenure security.

In spite of these efforts, the cumulative effect of the non-integration of agriculture with industry, inadequate consultation with farmers on policies, lack of access to adequate technology, the relatively underdeveloped infrastructure, inadequate and high cost of capital, land tenure insecurity, climate change and mineral exploitation remains major constraints to sustainable agricultural value chain development. Transition to green agriculture will mean shifting towards sustainable agriculture. This will require the provision of agricultural infrastructure, adequate technology, provision of research, extension services and marketing, provision of access to inputs and credit, reforming land tenure systems and improving the value chain through manufacturing.

Water Resources – Ghana has abundant water resources but many Ghanaians do not have access to potable water. The poor access to potable water has been discussed earlier. Ghana’s water resources face several challenges including managing quantity, quality, flooding, drought and maintaining ecosystem services. Pollution from mining and agriculture is leading to the inability of people to use water from rivers like the Pra and Birim while felling of trees along river banks have exposed many rivers such as Densu to siltation and drying. The low access to potable water is largely as a result of low investment to address obsolete infrastructure, low tariffs, poor management and pollution. Lack of potable water for instance accounts for about 12% of childhood deaths and it is the third largest cause of death for children under the age of five after malaria and pneumonia (WHO, 2006). United Nations (2002) confirmed that with adequate supplies of potable drinking water, incidence of some illness and by extension, mortality could drop by as much as 75%.

The Government of Ghana together with other stakeholders have developed many policies, laws and strategies to manage water resources in the country. The major ones include the National Water Policy, Buffer Zone National Environmental Sanitation Policy, Climate Change Policy, Water Resources Commission Act 522 of 1996 and Water Use Regulations LI 1692 of 2001. At the regional level, Ghana has participated in all water related activities organised by ECOWAS and NEPAD such as the establishment of the Africa Ministerial Council on Water and the Africa Water Task Force; Development of the African Water Vision 2025 and the Framework for Action; establishment of the African Water Facility, among others. Despite these actions, there are still serious challenges due to poor implementation of all these policies and programmes. “Green” water resources will require an Integrated Water Resource Management to promote sustainable water use and water

resource protection. Ecosystem protection policies, "Green" irrigation models, flood prevention are all opportunities that can be explored.

Urban management - Ghana is among the fastest urbanizing countries in the sub-region. Like many other developing countries, the phenomenon is an outward expansion and conversion of prime agricultural lands into residential and industrial uses. Unplanned urban management has resulted in many environmental and social problems - poor sanitation and waste management, increasing disease burden; increased distance to school; increased crime; violence; traffic congestion; slums; air and water bodies pollution; social inequality and exclusion, among others. Transition to Green Economy in the context of urban management will entail the implementation of integrated land use and urban planning framework that ensures the efficient provision of urban services - efficient transport, "green" infrastructure and the management of urban waste through reuse, recovery and recycling. In all these areas, venture capital funds can be an innovative financing mechanism.

6.0 Emerging Issues Facing Ghana

There are a number of emerging issues that makes it difficult to achieve SD. Many of them are not new but the intensity of their impact has increased and therefore poses fundamental challenges. These issues include climate change, desertification, coastal erosion, energy crisis, water availability, transparency in the management of mineral/oil resources, biodiversity and ecosystem loss, food insecurity, graduate unemployment, globalization and urbanization. One important observation is that many of these challenges are linked in a complex manner. Many of the emerging issues have been directly or indirectly addressed in other sections of the document, especially sections 4 and 5. In this section we highlight on a number of these challenges that need special attention.

Climate Change - Climate change poses a serious threat to SD and poverty reduction in Ghana. The Ministry of Environment, Science and Technology estimated that the average maximum temperature of the Sudan Savanna zone is expected to increase by 3°C by the year 2100 and 2.5°C in all other agro-climatic zones. Also, the average minimum temperature is expected to increase by 2.5°C in the Sudan savannah, Guinea savannah and the Semi Deciduous rainforest zones by the year 2100. The Environmental Protection Agency has reported that Ghana is already experiencing hotter weather, increased variability in rainfall, flooding, salt and freshwater temperature change. Agyeman Bonsu (2008) has also documented the impacts of climate change on different sectors - fishing, human health, land management, poverty, roots and tubers crops, women's livelihood and cocoa production.

Ghana has formulated a Draft Climate Change Mitigation and Adaptation Strategy and is in the process of formulating a National Climate Change Policy. The primary challenge is that of resources. The country relies heavily on donor support in direct financing of climate change mitigation and adaptation. While this is very inadequate, Ghana's access to international financing is low. Of the over \$30 billion pledged for climate change related actions globally; Ghana has successfully secured about \$21.3 million from only 4 of the more than 25 international public funding initiatives since 2008. Addressing the issues will require the assessment of the country's climate finance readiness.

Desertification - Desertification is one of the serious challenges that impacts negatively on SD. According to ECA (2007) about 35 % of the total area of Ghana is prone to desertification and or degradation. Several actions have been undertaken to combat desertification. At the international level, Ghana is a party to the UNCCD which came into force in 1996, participated in the NEPAD Environment Initiative and the Initiative on Land policy in Africa. At the national level, action is being taken under UNCCD to address the issue. In 2005, Ghana completed and adopted a National Action Plan (NAP) on desertification. The major challenge is the slow and ineffective process of integrating NAPs on desertification into national development plans.

Globalization - Globalization can simply be explained as the increased international integration of economic, political, social and environmental activities and has been intensified by current developments in information, communication and technology. Although empirical evidence on the impact of globalization is mixed, there is a general notion that the negative impact is more on SSA of which Ghana is not excluded. Ghana should see this as an opportunity to devise strategies that can help take advantage of the positive aspects and address the negative impacts. This calls for a re-orientation of our education, research, culture, and politics to maximize the advantages while minimizing the negative effects.

Lack of Transparency in Management of Mineral/Oil Resources - Ghana has significant mineral resources. However, despite the fact that most FDI goes into the sector, the contribution to the economy is not that significant. Yet it has significant social and environmental costs to mining communities and the country as a whole. These have led to conflicts in communities. The key concerns have been transparency in monitoring of revenue and getting a fair share of the revenues. In 2007, the country discovered oil in commercial quantities.

Since the discovery of oil, the country has enacted two key laws to guide the sector - Petroleum Revenue Management Bill and the Local Content Law. Ghana has also accepted to implement the Extractive Industries Transparency Initiative. The key challenge is in the implementation of these bills to obtain the maximum benefit from the exploitation of oil resources. The establishment of the **Public Interest Accountability Committee (PIAC)** and the need to integrate natural resources extraction in long term development strategy will assist in addressing these problems

Food Insecurity – Apart from traditional challenges discussed above in Ghana’s attempt at achieving food security there are emerging ones. Inaccessibility to international markets for agricultural products remains a major problem for many farmers. Additionally, trade liberalization and globalization is making it difficult for small farmers to compete in markets that are much more demanding in terms of quality. The rise in supermarkets and the growing importance of quality standards is increasingly threatening the ability of smallholder farmers to compete with large-scale commercial farmers from other developed countries. Strenuous efforts are being made by MOFA and related agencies to address these issues but not on the scale required.

Graduate unemployment - In Ghana the slow growth of the economy in the productive real sectors coupled with the rapidly expanding labour force and the marginally declining formal sector employment provides evidence of a low absorption capacity creating excess labour in the economy. The issues of unemployment have been discussed in section 4. The prime concern here is the high graduate unemployment that is being experienced in the country. Increasing graduate unemployment is mainly a result of the lack of modernization of agriculture along the value chain that would significantly boost manufacturing.

7.0 Challenges in Implementation

Ghana faces a number of challenges in its quest to develop strong institutions for sustainable development strategy formulation and implementation. A study by **ECA (2007)** documented the challenges faced by Ghana to include inadequate ownership, commitments, governance and participation; poor integration and coordination; weak technical, institutional and financial capacity, among others. Discussions with key officials in relevant MDAs suggest that in addition to the challenges mentioned above, political and policy inconsistencies; low level of awareness amongst the populace and even policy makers; lack of harmony between national, regional and district policies; inability to monitor and evaluate the process with the view to learning lessons, inadequate commitment of donors to meeting their development assistance pledges as well as aligning their development assistance objectives to the priorities of the country; insufficient understanding of the concept of sustainable development and integration tool by different stakeholders; insufficient synergy and communication between the different MDAs, political interference; poor incentives for policy makers and staff.

With respect to the transition to green economy, the challenges identified include but not limited to high initial investment cost of the transition to green economy which is beyond the reach of the country; inadequate consideration of poverty in policy prescriptions on green economy; inadequate commitment to transform to a green economy by political leaders; perceived green economy policies in Ghana are mainly derived from short/medium term policies though green growth paths has long term objectives; pledges from the international community that are not wholly fulfilled and law reforms; standardization and infrastructure needs for quality control in Ghana required for effective transition.

8.0 Conclusions and Recommendations on the Way Forward

8.1 Conclusions

Ghana has made progress in establishing institutions, put in place policies, strategies, coordinating and collaborating mechanisms and other relevant processes to facilitate the implementation of the SD agenda. However, these institutions are weak and have not been able to make the requisite impacts. A lot remains to be done to strengthen them, particularly with regard to eliminating the environmental bias and addressing the three dimensions of sustainable development in a holistic and integrated manner.

Analysis of findings on the three pillars on sustainability indicates that the country has made some gains in the social and economic fronts. However, the gains made are fragile and can dissipate with little shock. Specifically, stable governance has led to a stable growth rate since the 1990. However, the 8-9 % growth rates required to turn the country into an upper middle income group is yet to be achieved with the discovery of oil. Ghana still experiences low levels of investment since FDI and ODI as a ratio of GDP have not been stable while the trade and current account is always in a deficit. FDI has mainly been in the extractive sectors that have very little impacts on the economy.

On the social dimension, the country has made efforts to improve education and health although quality of education especially in basic public schools where majority of the poor send their children is not the best. Poverty has also reduced by half since 1991 though TB and malaria incidence and population growth are still high. With regards to the environmental dimension, the picture is not the best since all the environmental indicators are deteriorating due largely to the less focus on the environmental dimension of sustainable development. Forests and land degradation are increasing together with atmospheric pollution with its negative consequences on biodiversity. Ghana's progress will be hampered by climate change and there is an urgent need to integrate adaptation and mitigation strategies into national SD strategies.

Transition to green economy is seen by the country as the best way of achieving SD. In line with this conviction, the country has focused on green sectors such as energy, transport, agriculture, water, forestry, urban management, among others as areas where attention should be focused. The challenge is resources and technology transfer. Emerging issues that confront Ghana include climate change, desertification, lack of transparency in management of mineral/oil resources, food insecurity, graduate unemployment and globalization. Even though many of these issues are not new, the uncertainty of their impact and the intensity with which their impact are changing make them worthwhile considering.

8.2 Recommendations

Development of a long-term strategy - There is the need to develop and implement long term development strategies with harmoniously integrated pillars of SD. This is more urgent during the transition to a green and oil economy and calls for building human and institutional capacities for policy formulation, implementation, monitoring and for the enforcement of legislation. Effective grassroots participation including the private sector and CSOs at the design and implementation stages is very critical. Strengthening decentralized government administration and political processes, sensitization and the creation of awareness at the local level will increase knowledge, promote sustainability practices and foster partnerships among policy makers and the people.

Monitoring, evaluation and verification - Sustainable development strategy processes need to be recognized as learning processes. There is, therefore, the need to improve on mechanisms for monitoring, evaluation and verification of results including setting realistic, quantitative and flexible targets. This will require strengthening data collection, especially at the district level and the development of comprehensive databases on monitoring indicators.

Finance - Implementation of SD especially in the area of transition to green economy within the context of poverty reduction will require huge financial resources. Ghana should assess its sustainable development finance readiness and develop innovative and sustainable financing mechanisms for environmental management.

Green economy and Development Partners - The transition to a green economy is a sectoral approach to SD in which all green sectors are integrated into a national strategy. This will require genuine commitment to making aid effective by satisfying pledges made, ensuring cooperation and coordination. It will also require human and institutional capacities at the district, regional and national level. This will involve establishing centers of excellence for training and research on SD, organization of fora for experience sharing, information exchange and networking at all levels.

Linkages/coordination - NSSD processes should decentralize implementation and enhance coordination mechanisms of MDAs. There will also be the need to ensure consistency in all development policies and plan in all departments at the district and regional levels through proper harmonization of national policies.

Implementation of market based policies - In recent years many countries are putting emphasis on market based instruments for environmental policy management and valuing the nation's natural resources. Ghana cannot exclude itself from participating in this laudable idea. The country should therefore consider improving the implementation of market based policies which can facilitate a gradual shift in taxes away from labour to the environmental "bads" and encourage the 'polluter pay principle'.

Transformation of the Ghanaian economy - Ghana as an agricultural economy needs to channel resources from a modernized agriculture through the value chain to manufacturing and industry. This is the surest way of creating significant employment, eradicating poverty and transforming the economy. This will require good governance, enhanced education, health, with the backing of science, technology, research and information.

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