



Republic of Uganda

**NATIONAL REPORT ON PROGRESS ON THE
IMPLEMENTATION OF THE RIO COMMITMENTS ON
SUSTAINABLE DEVELOPMENT IN UGANDA**

Draft

**A REPORT TO BE PRESENTED AT THE RIO+20 UNITED NATIONS CONFERENCE
ON SUSTAINABLE DEVELOPMENT, RIO DE JANEIRO, BRAZIL, 15 – 22 JUNE 2012**

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LIST OF ACRONYMS

AIDS	-	Acquired immune Deficiency Syndrome
CAADP	-	Comprehensive African Agriculture Development programme
CBD	-	Convention on Biological Diversity
COMESA	-	Common Market for Eastern and Southern Africa
CSOs	-	Civil Society Organisations
DSIP	-	Development Strategy and Investment Plan
EAC	-	East African Community
EIA	-	Environment Impact Assessment
FIEFOC	-	Farm Income Enhancement and Forest Conservation
GDP	-	Gross Domestic Product
GHGs	-	Green House Gases
IAEA	-	International Atomic Energy Agency
ICT	-	Information and Communication Technology
IDDP	-	Integrated Drylands Development programme
IGAD	-	Inter Government Authority on Development
LSSP	-	Land Sector Strategic Plan
MAAIF	-	Ministry of Agriculture, Animal Industry and Fisheries
MDGs	-	Millennium Development Goals
MEMD	-	Ministry of Energy and Mineral Development
MERECIP	-	Mount Elgon Regional Ecosystems Conservation Project
MoES	-	Ministry of Education and Sports
MoFPED	-	Ministry of Finance, Planning and Economic Development
MoWE	-	Ministry of Water and Environment
MUIENR	-	Makerere University Institute of Environment and Natural Resources
NAADS	-	National Agriculture Advisory Services
NAP	-	National Action Plan to combat desertification
NAPA	-	National Adaptation Plan of Action
NBSAP	-	National Biodiversity Strategy and Action Plan
NDP	-	National Development Plan
NEMA	-	National Environment Management Authority
NFA	-	National Forestry Authority
NGOs	-	Non Government Organisations
NPA	-	National Planning Authority
NWSC	-	National Water and Sewerage Corporation
PMA	-	Plan for Modernisation of Agriculture
POPs	-	Persistent Organic Pollutants
PPP	-	Private Public Partnership
REA	-	Rural Electrification Agency
SIF	-	Strategic Investment Framework
SLM	-	Sustainable Land Management
UNCCD	-	United Nations Convention to Combat Desertification
UNCSD	-	United Nations Conference on Sustainable Development
UNCST	-	Uganda national Council for Science and Technology
UNDESA	-	United Nations Department for Economic and Social Affairs

UNDP	-	United Nations Development Programme
UNFCCC	-	United Nations Framework Convention on Climate Change
UPE	-	Universal Primary Education
URA	-	Uganda Revenue Authority
USE	-	Universal Secondary Education
UWA	-	Uganda Wildlife Authority
WSSD	-	World Summit on Sustainable Development

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FACT SHEET - UGANDA

Location: Bordered by the Republic of South Sudan in the north, the Democratic Republic of Congo in the west, Republic of Kenya in the East, and United Republic of Tanzania and Republic of Rwanda in the south.

Area: Total 241,550.7 km²; land 199,807.4 km²; open water and swamps 41,743.2 km²

Population:	Year	2007	2010	2011
	Total	30,263,000	31,848,169	32,939,800
	Female (%)	51	51.2	51.2
	Male (%)	49	48.8	48.8

Capital: Kampala

Time zone: GMT + 3

Land use: Arable land – 21.57%; permanent crops – 8.92%; others – 69.51%

Independence day: 9th October 1962

Constitution: Republic

Economic and other indicators

GNP (nominal) Billion	US \$ 17 billion
GDP Per Capita Growth Rate	2.6%
Real GDP Growth Rate	6.3%
Budget Deficit	10.6%
Long Term Debt	US \$ 4.76 billion
Workers' Remittances	US \$ 79 million per month (2009)
Trade Exports	US \$ 2.43 billion
Trade Imports	US \$ 4.544 billion
Literacy rate	
Life Expectancy	
Labour force employment by sector	65.4% agriculture; 26.8% service; 7.6% industry

EXECUTIVE SUMMARY

1.0 INTRODUCTION

1.1 National context

Uganda is located in East Africa and lies astride the Equator between latitude 4° N and 1° S and longitudes 29.5° E and 35° E. It is bordered by the Republic of South Sudan in the north, the Democratic Republic of Congo in the west, Republic of Kenya in the East, and United Republic of Tanzania and Republic of Rwanda in the south. The country has an area of 241,550.7 km² of which 41,743.2 km² are open water and swamps, and 199,807.4 km² is land.

Uganda experiences a range of climatic conditions depending on topography, local relief and geographical location. Its annual rainfall figures vary widely following the above parameters, with a range of 500-2,200 mm. The drier areas receive barely 500-1,000 mm annually, most of which is erratic in frequency and distribution (MWLE, 2001). The country is heavily dependent on natural resources such as forests, rivers and lakes for its development.

The country is well endowed with a rich biodiversity of both plant and animal species. Recent studies indicate an occurrence of over 18,783 plant and animal species, with at least 50% of the famed mountain gorillas, over 1,000 bird species, over 7% of global mammal species, and unique game. Most of Uganda's biodiversity is in protected areas (forest reserves and wildlife conservation areas) but there is also a lot of biodiversity on private land. This rich biodiversity offers a comparative advantage in bio-trade and national development. However, there is rapid deterioration of the quantity and quality of these natural resources as a result of high population pressure and economic activities

Uganda had a total population of 31.8 million by mid 2010, and average population density of 123 persons/km², with 14.8% living in urban areas. The sex ratio of the total population is 95 males per 100 females (UBOS, 2010). Uganda's infant mortality rate is 76 per 1000 live births and life expectancy averages 50.4 years. Uganda has a youthful population structure, with 56.1% of the population aged less than 18 years, and more than half of the population (51%) females. (UBOS, 2010).

The Gross Domestic product (GDP) for the Fiscal Year 2009/10 was about US\$ 17 billion, with agriculture (crops, livestock, forestry and fishing) accounting for nearly 24% of the total GDP. In 2009, it was estimated that close to 25% of Ugandans live below the national poverty line, with rural poverty currently about 34% and urban poverty at 14%. (UBOS, 2010).

Its economy and people rely heavily on the agricultural sector that is largely natural resources based. The sector accounts for 22.5% of GDP, 48% of exports, 68% of household livelihoods and provides a large proportion of the raw materials for industry. Over 93% of Ugandans depend on wood-based fuel resources while the electricity consumption per capita was about 69.5 kwh in 2009. Other sectors such as tourism and fisheries are also natural resources-based.

1.2 Uganda's commitments towards sustainable development

Uganda is committed to implement the Rio Declaration, Agenda 21 and its outcomes, including the Rio-environmental conventions. The country has also adopted the Millennium Development Goals (MDGs) and refocused her development approaches towards their achievement. Commitment to sustainable development (SD) is further demonstrated by Uganda's active and continued participation in international and regional processes on sustainable development. These include the World Summit on Sustainable Development (WSSD), the Commission for Sustainable Development (CSD), Rio-Conventions, the New Partnership for Africa's Development (NEPAD) Environment Action Plan and the Comprehensive African Agriculture Development Programme (CAADP).

1.3 Uganda's core sustainable development concerns/ issues

Uganda is classified as a Least Developed Country, has a population of 32 million and an average annual population growth rate of 3.2%. Approximately 85.2% of the population lives in rural areas. Poverty is still wide spread with close to 25% of Ugandans live below the national poverty line, with rural poverty currently about 34% and urban poverty at 14% (UBOS, 2010). Uganda has a youthful population structure with a significantly high dependant percentage, coupled with the high unemployment rate poses a serious challenge to sustainable development.

Inequality in distribution of resources among Ugandans remains widespread, with regional disparities in income distribution. These imbalances need to be addressed if sustainable development is to be achieved. Uganda's economy and her population rely heavily on the country's natural capital, with agriculture accounting for 22.5% of GDP, 48% of exports, and 68% of household livelihoods. Natural resource degradation is exacerbated by climate change and its related impact. Exclusion, marginalization and powerlessness of some sections of society, such as women and other marginalize groups is a serious hindrance to their participation in national development initiatives. The country has also continued to experience both natural and man made disasters which have affected the country's sustainable development endeavours.

1.4 The Rio+20 Conference

Twenty years after the 1992 UNCED in Rio de Janeiro, the United Nations will hold another conference pursuant to the General Assembly Resolution 64/236 (A/RES/64/236) in the same city. The Rio+20 conference aims at strengthening commitment and political will to pursue SD, assess progress in implementation of the outcomes of the SD processes to date, address the outstanding gaps as well as the new and emerging challenges. The themes of this Conference will be (i) a green economy in the context of SD and poverty eradication; and (ii) the institutional framework for SD.

1.5 Objectives of the Rio+20 national report

This report has been prepared with the objectives of:

1. taking stock of Uganda's progress, and identify emerging issues and challenges in implementation of Agenda 21 and other SD commitments;
2. identifying the key issues, challenges and opportunities for Uganda's transition to a green economy in the context of SD and poverty eradication;

3. proposing an institutional framework for SD in Uganda; and
4. making recommendations, means of implementation and specific actions that the country should take in the next decade or so to attain SD.

2.0 METHODOLOGY

The Rio+20 National Report preparation process consisted of three inter-linked phases. These are: (a) Preparation of stock taking reports for the three Rio+20 pillars, namely (i) environment, (ii) economic and (iii) social pillars, as well as institutional and governance issues; (b) Multi-stakeholder consultative meeting on Rio+20; and (c) Preparation of a National Synthesis Report based on the stock taking reports and the multi-stakeholder meeting. A National Preparatory Core Team (NPCT) was constituted to guide the report preparatory process. Four consultants were hired to carry out assessments on the four themes related to SD in Uganda. A Civil Society Organizations (CSOs) meeting and a national stakeholders' workshop on Rio+20 were held to review and provide additional input to the report. A National Consultant was hired to prepare the National Report basing on the synthesis of the stocktaking reports and the multi-stakeholder meeting.

3.0 PROGRESS IN NATIONAL IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT COMMITMENTS

3.1 National commitment to integrated planning and sustainable development

Uganda has since 1992 put in place national instruments to facilitate the drive towards achieving of sustainable development and a green economy. Among these instruments are the National Constitution (1995), the National Development Plan (NDP) 2010/11 – 2014/15 and a wide range of sector policies, plans, legislation as well as institutional arrangements addressing sustainable development.

The Constitution of the Republic of Uganda explicitly spells out the commitment of the people of Uganda to building a better future by establishing a socio-economic and political order based on the principles of unity, peace, equality, democracy, freedom, social justice and progress. It also provides for formulation of a National Planning Framework, the National Development Plan (NDP). The NDP (2010/11-2014/15) stipulates Uganda’s medium term strategic direction, development priorities and strategies for national development. It provides for the Vision of Uganda as “A transformed Uganda society from a peasant to a modern and prosperous country within 30 years. It is expected that Uganda will “graduate” to the middle income economy by 2017. The vision provided the direction of the theme of the current NDP, which is “Growth, Employment and Socio-Economic Transformation for Prosperity”. The Vision attributes are (a) independence and sovereignty; (b) democracy and the rule of law; (c) stability and peace; (d) knowledgeable and skilled society (e) able to exploit and use its resources gainfully and sustainably; (f) effectively participate in a federated East Africa with an effective African Common Market and a strong African Defence Mechanism.

A number of policies and laws that guide the country’s sustainable development agenda developed since 1992 are listed below and classified according to the three sustainable development pillars.

(a) Environmental policies and laws

Policies and laws contributing to sustainable environment and natural resources management include: the National Environment Management Policy (1994); the National Policy for the Conservation and Management of Wetlands (1995); Uganda Wildlife Policy (1999); the National Water Policy (1999); Uganda Forestry Policy (2001); National Oil and Gas Policy (2008); the Energy Policy (2002); the Renewable Energy Policy (2007); National Land Use Policy (2010); Disaster Preparedness and Management Policy (2011); National Agricultural Research Policy (2005); National Fisheries Policy (2003); Uganda Food and Nutrition Policy (2003) and the Urban Policy (2011).

The following laws on environment and natural resources are also in place: the National Environment Act (Cp 153); Land Act (1998); the Physical Planning Act (.....); National Forestry and Tree Planting Act (2003); Petroleum Exploration and Production Act (Cap 150); Electricity Act (1999); Registration of Titles Act (Cap 230); and the Atomic Energy Act (2008).

(b) Economic policies and laws

Relating to the economic pillar, the policies put in place include

The economic laws enacted are the Uganda Investment Code Act (Cap 92); The Public Procurement and Disposal of Public Assets Act; The Budget Act (2001); the Uganda Revenue Authority Act (1991); the Income Tax Act (Cap 340); the Value Added Tax Act (Cap 349); the Excise Duty Act; and the East African Customs Management Act.

(c) Social policies and laws

With regard to the social pillar, relevant laws enacted include the USE/Universal Post Primary Education Training policy (2007); Agriculture Education Policy (2004); Second National Health Policy (2010); the HIV/AIDS Policy (2011); National Gender Policy (2007); the National Population policy (1995); National Employment Policy (2011); the National Equal Opportunities Policy (2007); the National HIV/AIDS and the World of Work Policy (2007); and the National Child Labour Policy (2007).

The laws include the Local Government Act (1997); the University and other Tertiary Institutions Act (2001); the National Curriculum Development Centre Act (2000); the Equal Opportunities Act (2007); The Uganda National Cultural Centre Act (Cap. 50); The National Council for Disability Act (2003); The Persons with Disabilities Act (2006); The National Youth Councils Act (2003); the Land acquisition Act (Cap 226), the Domestic Violence Act (2010); the National Women Council Act (2010); the Genital Mutilation Act (2010); the Universal Primary Education Act (1997); the Labour Act; The Children's Act (Cap. 59); the National Women Councils Act (1993); the National Council for Children Act (1996); the Prevention in Trafficking of Persons Act (2009); the workers' Rights to Labour Unions Act No 7 (2006); the Occupational Safety and Health Act No.9 (2006); the Worker's Compensation Act (Cap 225); the Minimum Wages Board and Wages Councils Act (Cap 221); and the Labour Disputes (Arbitration and Settlement) Act No 8 (2006).

In addition to instituting policies and laws that guide sustainable development in Uganda, Government has implemented a number of sustainable development measures. These are outlined in the following sections:

3.2 Progress in economic development sectors

Uganda has registered substantial achievements in the economic development sectors. The country's Gross Domestic Product (GDP) has nearly tripled since 1992, averaging above 6% over the past two decades. Uganda's economy remains largely agro-based and heavily dependent on natural capital. As of 2010/11, the contribution to the national GDP by sectors was agriculture 24%, industry 27% and services 49%¹. On the other hand, the share of the labour force employed in the major sectors in 2009/10² stood at agriculture 66%, services 28% and manufacturing 6%.

Uganda mobilizes financial resources to implement sustainable development commitments from her public and private resources. Uganda's share of the national budget financed from domestically generated revenue has more than doubled from 31.7% in 1992 to over 70% in 2010 (MFPED, 2011). Substantial financing for sustainable development comes from the country's tax

¹ (MFPED, 2011), AEPR

² UBOS (2010), National household survey

base. Uganda's tax effort as measured by the Revenue/GDP ratio rose from 8.6% in 1992/93 to around 13.5%³ in 2010/11. This revenue/GDP ratio is moving steadily towards the Sub-Saharan Africa average which stands at about 20%. This is because Uganda's economy is still largely subsistent in nature with a low industrial base as well as limited tax base. Total domestic revenue is expected to improve with the anticipated commencement of commercial oil production in Uganda in the near future.

Non-tax revenue collections, improved budget transparency and accountability also increased over the past two decades. This has been largely a result of Public Financial Management Reforms including adoption of the Medium Term Expenditure Framework (MTEF) in the 1990s; the Integrated Financial Management System (IFMS) in early to mid 2000's; the Output Based Budgeting/Tool (OBB/OBT) in the late 2000s; as well as introduction of a number of changes in the associated legal framework including the Budget Act (2001).

Official Development Assistance continues to be the main source of external funding to fill the gap in Uganda's public expenditure. Total disbursements of long-term debt to Uganda between 1990 and 2009 amounted to approximately USD 5.5 billion (UNCTAD). As of 2009, significant steps had been taken to reduce Uganda's outstanding total long-term debt from a peak of USD 4.4 billion in 2004 down to USD 2.24 billion. Uganda has over the same period paid out approximately USD 1.68 billion in debt service obligations. The decline in Uganda's total debt stock is also attributed to the country's debt cancellation under the Heavily Indebted Poor Countries Initiatives (HIPC I & II). Uganda is also a major beneficiary of Aid for Trade, ranking second after Nigeria among the recipients of Aid for Trade (AfT) in 2009 with commitments totaling USD 1 million (ECA, 2012)⁴.

Uganda's public expenditure as a share of Gross Domestic Product (GDP) increased from 19.8 % in 1992/93 to 24.2 % in 2001/02 and as of 2010/11, it stood at 22.6%⁵. Of the 8 key programme areas under Agenda 21, education attracted the largest share of approved funding (over 20%) across the period 1997/98 to 2003/04. The Environment and Natural Resources sector on the other hand registered the largest increase in approved budget allocations with a 44-fold increase over the same period. Uganda set a target of reducing the proportion of the absolute poor from 44% in 1997 to 10% in 2017. Government has also undertaken two participatory poverty assessments in 1999 and 2004 to incorporate views of the poor in government planning. Due to a number of measures, income poverty level which stood at 56% in 1992 declined to 24.5% in 2010. (UBOS, 2012; MoFPED, 2012). These measures include: putting in place social and economic policies and programs to eradicate poverty. Key among these are the 1997 Poverty Eradication Action Plan (PEAP) which focused more on economic growth and its successor the 2010 National Development Plan that is more oriented towards sustainable development.

³ MFPED (2011)

⁴ MDGR 2012

⁵ MFPED (2011: 9), AEPR

Uganda's transport system is dominated by the road transport estimated to carry 96.5% of cargo freight and 95% of passenger's km per annum. Reforms in the road sector in the last 7 years created the Uganda National Roads Authority with the responsibility of developing and maintaining national roads. A Uganda National Road Fund meant to be a road maintenance fund was also created. The national road network is estimated at 78,100 Km of which 3,050 kms are paved (NDP, 2010). Total annual traffic flow on national roads in 2003 was computed to be 3,756 million vehicles per km. The recorded growth of traffic from 1997 to 2007 was 7.3% for cars, 5.4% for light good vehicles, 11.4% for mini buses, 4.8% for buses, 9% for trucks.(NDP, 2010).

Over 90% of the national energy demand in Uganda is met from wood fuel resources which are becoming alarmingly scarce. This prompted the development of a National Biomass Energy Demand Strategy (2001-2010) to ensure steady supply and efficient use of biomass energy. Hydro electricity remains the major source of power for industries, institutions and urban areas in general. According to the NDP (2010/11-2014/15), Uganda's electricity consumption per capita was about 69.5 kwh in 2009. Reforms in the energy sector divested management of electric power to autonomous and private companies. The Electricity Regulatory Authority oversees the electricity sector while the Rural Electrification Agency (REA) operationalizes the rural electrification function under a public-private partnership. REA is mandated to facilitate the Government's goal of achieving a rural electrification rate of at-least 10% by the year 2012 up from 1% at the beginning of the decade. A number of initiatives have been implemented to deliver on the country's energy demands. Among these are the Promotion of Renewable Energy and Energy Efficiency Programme (1999-2011); and the Uganda Energy for Rural Transformation Project Phase I (2003-2009).

Uganda's electricity demand increased to 539.5 MW in 2010 while power generation capacity over the same period was only 352.5 MW for hydropower and 170 MW for thermal power (UBOS, 2011). With the commissioning of the newly built 250 MW Bujagali hydropower dam in early 2012, the ongoing development of the 650 MW Karuma hydropower dam and the planned use of some of the newly found oil resource for thermal power generation provide hope for Uganda to adequately address her power needs over the next decade.

Government has implemented various reforms aimed at ensuring a swift transition from public sector driven to a private sector led industrial development and creating a business friendly environment to improve productivity and the quality of products to become more competitive in the global economy. The Medium Term Competitive Strategy (2005-2009) and its successor, the Competitiveness and Investment Climate Strategy (CICS), were key in boosting the industrial sector development. Overall, industry accounted for 27% of national GDP in 2010/11⁶. The construction industry sub sector has the fastest annual growth rate, averaging 11% in 2009/10. It also commands the largest share (61%) of industrial GDP followed by manufacturing with a share of 27%. The other sub-sectors account for a combined share of only 12% of industrial GDP.

⁶ (MFPED, 2011), AEPR 2011/12

3.3 Progress in environmental development sectors

In an effort to strengthen sustainable land use and management, Uganda has developed sector-wide guiding frameworks, namely, the Land Sector Strategic Plan (LSSP) and the Strategic Investment Framework (SIF) for sustainable land management (SLM). These frameworks aim at increasing investment in the sustainable management of land under forests, agriculture and conservation, while ensuring sustainable growth, productivity and economic development in the natural resources sectors. The SLM investment framework puts emphasis on strengthening the enabling environment for SLM, scaling up on the ground community level SLM practices, enhancing research and knowledge management and coalition building among various actors for SLM. The SLM SIF has already leveraged investments with financial support from domestic as well as multilateral and bilateral development cooperation.

Some of the projects being implemented in this context include the Agricultural Technologies and Advisory Services (ATAS) project; Sustainable Land Management in the “cattle corridor”; COMESA funded National Climate Resilient Conservation Agriculture Programme; Stimulating Community Initiatives in SLM; National Livestock Productivity Improvement Project; and the Farm Income Enhancement and Forest Conservation Project, to mention but a few. Furthermore, institutions that deal with land and natural resources have integrated environment and natural resource management issues into their planning processes. Guidelines for mainstream environment issues have also been integrated in the performance monitoring schemes and planning cycles of district local governments. Currently a policy on climate change is also under development.

Uganda has strengthened research and training institutions to generate technologies and approaches in support of sustainable development. These include the Uganda National Council for Science and Technology (UNCST), the National Agriculture Research Organization (NARO), National Forestry Research Institute (NAFORI), National Fisheries Research Institute (NAFRI), and Makerere University, among others. NARO has since 2003 developed up to 218 improved varieties, breeds and prototypes for increased yields, food security and incomes. In addition, a number of studies have been conducted to establish the economic value of Uganda’s natural resources. For example, Bush *et al.* (2004)⁷ estimated the total economic value of Uganda’s forests at UGX 593.24 billion (USD 300 million), while Moyini, *et al.* (2002)⁸ estimated the cost of biodiversity loss to be UGX 506 billion annually. Results of such studies have facilitated evidence based decision making on management of these ecosystems.

Management and safe disposal of waste, including solid waste and sewage, hazardous and radioactive waste and toxic chemicals are key actions in greening the economy. Uganda’s effort to this end includes the development of policies, legislation and strategies put in place after 1992 to

⁷ Bush G., Nampindo, Aguti and Plumptre (2004)

⁸ Moyini Y., E. Muramira, L. Emerton and F. Shechambo (1999). The Costs of Environmental Degradation and Loss to Uganda’s Economy with Particular Reference to Poverty Eradication. IUCN – The World Conservation Union, Nairobi. Policy Brief No. 3.

manage waste; and the polluter pays principle being used to discourage release of the hazardous waste into the environment. Using this principle, the National Water and Sewage Corporation (NWSC) has put in place disincentives (fines) against industries that fail to comply. Strategies for sound management of chemicals have been integrated into the NDP and regulations on the management of hazardous chemicals are enforced by each sector to guide the re-use and recycling of the waste products. Government also announced a total ban of plastics of 100 microns and below in June 2009, although enforcement has not been effective. Regarding importation of chemicals, there are no regulations in place apart from imposing disincentives on importers through taxation.

Measures for recycling of solid waste include improvement in the collection, transportation and disposal of the solid waste and sensitization of the urban communities on solid waste management in 18 Municipal Councils by a Solid Waste Compost production project implemented in partnership with NEMA. However the development of cottage industries for utilizing solid waste including the recycling and reuse of non-biodegradable products, e.g. plastic and polythene materials is still relatively low and limited mainly to the production of mats, ropes and beads for sale locally.

Since 2008, Uganda put in place legal, policy and institutional measures for use of atomic energy and safe disposal of radioactive waste. Atomic energy related activities are mainly in the health and agricultural sectors, and are coordinated and monitored by the Ministry of Energy and Mineral Development (MEMD). Radio-active materials are imported by licensed companies; and after use, the waste generated is accumulated and re-exported. NEMA is responsible for reviewing and evaluating the appropriateness of methods proposed by developers and/or industrialists, before approving the EIA studies. This ensures that issues concerned with radioactive materials are addressed.

In 1997, Uganda developed the Plan for Modernization of Agriculture (PMA) as a multi-sectoral framework for agriculture and rural development. The PMA targeted over 80% of Ugandans living in rural areas focusing on improving the quality of life of poor subsistence farmers as well as contributing to achievement of the MDGs 1 and 7 on poverty eradication and ensuring environmental sustainability, respectively. The follow-on agricultural sector DSIP puts more emphasis on enhancing production and productivity; improving access to and sustainability of markets; creating an enabling environment for competitive investment in agriculture; and enhancing institutional development in the Agricultural sector (MAAIF, 2010). Other complementary strategies include the Prosperity for All (*Bonna Bagaggawale*) and the Rural Development Strategy (2005) which focus on increasing the productivity of selected rural enterprises at the household level and ensuring a stable market for these products. The Strategy also encouraged renewed attention to the formation and operation of rural cooperative institutions. Government strategy to enhance rural financial services includes establishing SACCOs in every one of the almost 1,000 sub-counties and providing infrastructural and capacity-strengthening support for this purpose.

To further support rural development efforts in the agricultural sector, a number of parastatal institutions have been established by legal instruments since 1992. These include the National Agricultural Advisory Service (NAADS), the National Agricultural Research Organization (NARO), the Uganda Coffee Development Authority, the Cotton Development Organization,

and the Dairy Development Authority. Similarly, civil-society organisations supporting rural development in the agricultural sector include the Uganda National Farmers Federation (UNFFE) and National Organic Agriculture Movement (NOGAMU).

The NAADS program has since 2002, created substantial positive impacts on the availability and quality of advisory services provided to farmers, promoting the adoption of new crop and livestock enterprises, and improving the adoption of modern agricultural production technologies and practices. Furthermore, NAADS also has promoted greater use of post-harvest technologies and commercial marketing of commodities. Government considers agriculture's ability to generate income for the poor to be more important for food security than its ability to increase local food supplies. In this respect, the NAADS programme is providing 650,000 farmers country wide with food security related technologies for multiplication as well as for ensuring household food security and is planning to increase it 10 fold (MAAIF, 2010).

3.4 Progress in social sectors

Education Sector development

As a result of Uganda's policies on education especially the Universal Primary Education (UPE) and Universal Secondary Education (USE), education and training at primary, secondary and tertiary levels has improved tremendously and represent a big stride towards sustainable development. Over 80% of children from poor households are now able to attend school compared to just 51% before UPE⁹ was introduced in 1996. Enrolment in primary schools grew from about 3 million in 1996 to 8.3 million in 2009. The number of pupils in public schools in the UPE scheme doubled from 1.1 million in 1996 to 2.3 million in 2007. The introduction of USE has as well improved school enrolment at secondary level, increasing it by 25% from 814,087 in 2006 to 1,165,355 students in 2009, with girls constituting 45.6% of total enrolment. Government also shifted its focus from the provision of general education to promote the teaching of Sciences in Secondary education. Since 1999 a strategy to liberalize provision of University Education opened up the licensing of Private Universities was adopted. The strategy increase access to university education bringing the number of public and private universities to 5 and 28, respectively by 2011. In addition to the Universities, there are other 46 private and 50 government owned tertiary institutions. These efforts have opened opportunities for more Ugandans to find rewarding employment and have supported development of a more skilled population to manage natural resources sustainably.

The affirmative action towards women's training has enhanced gender equity in access to education and development, thus increasing their opportunities to participate in sustainable development. The UPE programme has increased overall enrolment of girls from 2.7 million in 1995 before the programme started to over 3.7 million by 2007 (MoES, 2007). The affirmative action was adopted by public universities, and has increased proportions of female enrolment as undergraduates from less than 23.9% in 1991 to 45.2% by 2006 (MGLSD, 2007). Regarding women and girls who might have missed education in their early years, government with support from civil society organizations has initiated several Functional Adult Literacy (FAL)

⁹ The National Development Plan 2010/11-2014/15.

programmes. FAL has over the years 2009/10-2011/12 enrolled a total of 974,855 learners with women being the main beneficiaries contributing over 70% of enrolled participants. The USE programme has targeted Orphans and other Vulnerable Children (OVC) who would otherwise drop out of school for lack of school fees. Other achievements in the education sector included the provision of bursaries and scholastic materials to children and youths.

Health Development Sector

Uganda has made notable efforts towards improving health for sustainable development by introducing health reforms to guide health care service delivery. The Health Sector Strategy and Investment Plan (HSSIP) has been implemented over 10 years and is in its third phase (2010/11-2014/15). The HSSIP addresses a number of Rio targets such as malaria, childhood diarrhoea, polio, guinea worms, appropriate health care-seeking, and the importance of child immunization and Prevention of Mother-to-Child Transmission services. Other health sector reforms implemented since the 1990s include decentralization of health services and promotion of private sector involvement in health care service delivery to reach out to more Ugandans. Expansion of available health care facilities from 3,443 in 2004 to 4,394 in 2010 which drastically reduced the distance to access health services. The abolition of user fees in public primary health care facilities in 2001 led to an increase in utilization of health care services among the population, especially the poor.

As a result of these reforms, there has been significant improvement in health indicators as follows. A reduction of confirmed cases of measles from 580 in 2006 to only 22 in 2009 and a 20% reduction in malaria cases among outpatients. Conversely, the proportion of children receiving effective treatment of malaria within 24 hours after the onset of symptoms has increased from 25% in 2001 to 71% in 2008 (MoH, 2010). Under 5 years mortality improved from 156 in 1995 to 137 deaths per 1,000 live birth in 2006 (UDHS, 2006), while infant mortality decreased from 85 to 54 deaths in 2011 per 1,000 live births (NPA, 2010). Reproductive health has improved with fertility rate reducing from 7.1 in 1992 to 6.2 in 2011. Maternal mortality rate reduced from 506 deaths per 100,000 live births in the 1990s to 435 in 2006 (UDHS, 1995; 2006), and life expectancy has also improved from 45 years in 2003 to 52 years in 2008 (MoH, 2010). HIV prevalence reduced from 23% in 1992 (MoH, 1993) to 6.4% in 2011 for the reproductive age population (MoH, 2011). These trends show a general improvement in health indicators of the population largely due to measures that have enabled the poor to access health services.

Decentralization

In 1993, Uganda adopted a decentralization policy divesting decision-making on development issues to sub-national levels with the aim of bringing services closer to the people. This aims at strengthening local governance structures by devolving service delivery, promoting participation and empowering local people. In this regard, District and Sub-County Development Plans are the basic planning instruments to guide action and budget allocation. The Ministry of Local Government (MoLG) builds capacity of local governments for effective service delivery including management of natural resources taking into account national policies. Government also introduced the Fiscal Decentralisation Strategy (FDS) that gives Local Governments some

flexibility and/ or discretion to reallocate resources between and within sectors during planning and budgeting processes. The decentralization governance approach has empowered local communities to manage their development activities based on their own priorities.

Democratization

The democratization process in Uganda advanced significantly following the enactment of the 1995 Constitution. A number of democratic institutions have been put in place in line with the constitution. The three arms of Government namely the legislature, the Executive and the Judiciary are in place and functioning with varying degree of respect for each other's constitutional mandate. Parliament continues to exercise its constitutional mandate and has strengthened a number of institutions for promoting democracy and good governance. These include the Electoral Commission (EC), Inspectorate of Government (IGG), the Auditor General (with enhanced powers) and the Uganda Human Rights Commission, among others. Uganda has also held over 4 general elections every 5 years since 1996 for presidential, parliamentary and local government leaders. The last two general elections have been held under a multi-party system. Uganda's democratic process has created a favourable environment and encouraged increased participation in politics and decision making for sustainable development. In particular, womens' participation has been enhanced by the provisions in the constitution that allocate quotas for women seats in the National Parliament and local government councils. This has resulted in a rise of the proportion of women in local councils from 6% in early 1990s to 44% in 2003, and women Parliamentarians from 18.8% in 1996 to 30.4% in 2006.

Media

The Media has been liberalized and is relatively free with both electronic and print media providing citizens with ample opportunities to express their views on a wide range of issues that affect their lives. At the same time, Uganda has seen a dramatic emergency of non-governmental organizations and civil society organizations able and willing to engage the arms of Government in policy debates and advocacy on democracy and good political governance issues

Workers organizations

Uganda's annual labour force stood at about 11.5 million people in 2009/10 and is growing fast at an annual rate of 4.5%. Measures to improve conditions at work places, as well as enhancing gender and age based equity in access to employment have been initiated. The labour management information system and work place inspections by government for example have been strengthened. In addition occupational safety and health has been mainstreamed in some sectors including the transport sector and the roads sub-sector since 2004. Labour organizations have also been strengthened with the National Organization of Trade Unions (NOTU) registering 20 trade unions in various sectors. Furthermore, workers are represented on several policy level institutions such as Parliament, the National Social Security Fund Board and Immigration Board. Uganda is also promoting the externalization of labour, and to date, over 11,000 Ugandans have been placed in jobs abroad. All these achievements are in line with Agenda 21 recommendation for strengthening the role of workers and their trade unions.

Civil Society Organizations'

The Uganda National NGO forum was established in 1997 as an independent, collective voice for civil society in areas of Advocacy and Lobbying to engage in a more effective way, on public policies so that they reflect the views and concerns of the poor. NGOs have also developed other linkages and networks to improve their capacities and coordination. These include the Development Network of Indigenous Voluntary Associations (DENIVA), Uganda Debt Network (UDN), National Association of Women's Organizations in Uganda (NAWOU), and the Human Rights Network (HURINET) are examples of such networks. NGOs are Sub contracted by Government for service delivery especially in health and education sectors. Similarly, several districts actively involve NGOs in the process of developing their comprehensive plans, integrating NGO activities in the overall district plans.

There are significant efforts by NGOs in mobilizing resources locally and internationally to complement government efforts in service delivery. For example the Uganda Water and Sanitation NGO Network (WasNet) mobilized and invested UGX 18.5 billion and 17.9 billion in the water sub-sector activities in the FY 2009/2010 and 2010/2011, respectively¹⁰. Several cultural and religious organizations in Uganda also have objectives to address the general social and economic issues that affect their constituents in addition to promoting thier cultural and religious beliefs. Religion or faith-based CSOs have a strong role in the provision of social services – particularly in the areas of health, education and community development. In addition to direct service delivery, other CSOs such as the Foundation for Human Rights Initiative (FHRI) and the Human Rights Network (HURINET), ACFODE, UWONET, NAWOU, FIDA and FOWODE, NUDIPU among others advocate for disadvantaged groups such as women and other minorities.

Urbanization

Uganda's urbanization is relatively low with urban centres consisting of one city (Kampala)¹¹ and a number of up-coming towns. Urban population increased from 1.7 million (11.3%) in 1991 to 5 million (15%) in 2012. The population growth rate in urban areas is currently at 5.1% and is attributed to high rural-urban disparities in terms of opportunities for employment and other social services. The current urban population growth rate is high and has not matched with the slow growth and development in basic physical infrastructure such as housing, social amenities and management of urban areas. Uganda's decentralized governance approach has enabled local governments to do their own urban planning, creating a good context for planning urban centres based on local needs and resources. The creation of more administrative units in the country has also influenced urbanization, by increasing planned urban centres to 22 municipalities. The urbanization process has come with some economic benefits, especially markets from the informal sector, which dominates Uganda's economy. The country has also established solid waste management facilities in 9 municipalities and intends to support 9 others.

¹⁰ WasNet Performance Report, FY 2010/11

¹¹ UN Habitat, 2008. Country programme document 2008-2009: Uganda

3.5 Challenges to and opportunities for enhancing sustainable development

Despite the notable achievements registered, there are several challenges and opportunities to achieving sustainable development in Uganda. These are presented below.

3.5.1 Challenges

- Policy issues and institutional – These include lack of a national land policy, weak institutional capacities, poor coordination, etc. leading to low of compliance.
- Financial issues – Lack of funds to implement the NAP, NAPA & NBSAP.
- Technical capacities - inadequate specialized skilled human resource e.g. engineers, doctors, scientists, teachers, etc.
- Climate change and its associated impacts affect productivity and resilience of agricultural systems which are dominantly rainfed
- Technological issues – Limited technological capacities and high cost of investment in technology development.
- Lack of scientific data – e.g. on air quality, soil carbon, climate impacts, valuation of resources, etc.
- Poverty issues - Unevenly distributed poverty reduction, mismatch between GDP structure and the labourforce.
- Limited education and awareness - high drop-out rates for girls, poor quality of education, low remuneration for teachers, low funding to the UPE programme.
- Marketing – Limited value addition & access to markets.
- Demographic issues – Uganda still has a very high population growth rate.

3.5.2 Opportunities

- The on-going investment in development of clean renewable energy sources such as hydro, solar, biogas, geothermal, etc. is a big opportunity to enhance Uganda's economic development in a sustainable manner.
- Uganda's oil sector has a high potential to contribute to Uganda's economic transformation because of the significant revenue expected in the near future. The revenues will contribute to infrastructure development, especially roads, renewable energy and railway.
- The planned investment in development of transport infrastructure such as railway and water transport systems as well as on-going efforts to expand the road network and introduce mass transport systems will improve traffic flow and reduce GHG emissions.

- Adoption of sustainable agriculture and land use technologies through market incentives that increase investment in sustainable land management practices, efficient irrigation and mechanization will spur Uganda towards a green economy.

4.0 TOWARDS ACHIEVING A GREEN ECONOMY IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT AND POVERTY ERADICATION

Uganda has taken initiative, as provided for by the National Constitution, to develop a long term national development framework – the Vision 2040. This vision outlines the medium and long term strategies the country will take to adopt a development pathway that will lead to achievement of a green economy in the context of sustainable development and poverty eradication. Under the Vision, Ugandans aspire to live and work in a peaceful, secure, harmonious and stable country, where rule of law prevails and respect for human rights observed. The citizenry desire to have a country with strong democratic governance structures and systems. Uganda’s Vision is “A transformed Ugandan society from a peasant to a modern and prosperous country within 30 years”. It is envisaged that the country will transform to a middle income economy by 2017 and reach per capita income of about US \$ 9,500 by 2040. The Vision goal is “A competitive upper middle income country by 2040”. To achieve this goal, Uganda needs to multiply her GDP 30 times in the next 30 years.

The current conditions in Uganda call for re-enforcement of action to bring about change towards environmental sustainability, sustainable consumption and production, climate resilience, resource use efficiency, decent jobs creation, adequate public participation, good governance and sustainable population growth. These are critical ingredients towards a green economy that can be achieved through well integrated actions in the natural resource management as well as social and economic sectors as described below.

4.1 Resource efficiency

Achieving a green economy calls for resource efficiency in the production function of the economy and factor productivity. This should be defined as it relates to sustainable land use and management; human resource training and skills development; research and technology development and transfer; and resource mobilization.

4.1.1 Sustainable land use and management

Uganda can achieve sustainable development and a green economy by focusing on sustainable management and use of the land and water resources owing to the high dependence on natural capital particularly agriculture and other land based natural resources. Building the knowledge base on the state of natural resources including their valuation, assessment of the cost and drivers of land degradation and the benefits of investing in sustainable land management should be the starting point. The knowledge generated should justify and influence decision makers to allocate adequate budget to Natural Resource Management sectors for scaling up on the ground investment in SLM. Land use planning should be promoted and land use change especially the conversion of forests and wetland areas to other uses should be minimized and call for stronger political will. Transforming to a green economy in the predominantly rain-fed agricultural systems of Uganda calls for the adoption of sustainable and efficient technologies. These technologies should include, among others, agricultural intensification technologies, sustainable irrigation and mechanization systems which should be re-enforced by increased access to markets. Institutional measures for effective enforcement of relevant policies and laws and ensure that land tenure and ownership regimes enhance sustainable land management.

4.1.2 Human resource training and skills development

Implementation of the UPE and USE has enabled Uganda increasing literacy levels significantly. However, providing quality education to produce graduates with required skills to meet the market requirements is still a challenge. To achieve a skilled human resource Uganda needs to build a strong education system that imparts relevant knowledge and skills by (i) increasing the number of vocational institutions to cater for those who may not continue with secondary and tertiary education; (ii) review the education curriculum and ensure it is tailored to the demands of the local labour market; and (iii) create incentives to stem migration of scientists to other countries as a result of low salaries, lack of facilities and limited professional advancement.

4.1.3 Research and technology development and transfer

Government recognizes research and technology development and transfer as critical areas in the development of a green economy. As such, Uganda should build and strengthen the capacities of her centres of excellence in research and technology development. Technology transfer of clean technologies should also be enhanced through targeted investments, innovation and skills development, taking full advantage of international cooperation i.e. south-south and north-south partnerships. More effective mechanisms are needed to create the appropriate enabling environments to address technology transfer barriers at national and global levels, including trade tariffs, intellectual property rights and technical trade barriers (standards and eco-labeling).

4.1.4 Resource mobilization (savings and investments)

Uganda has intensified efforts to mobilize resources for sustainable development from domestic and external sources. However, with the emerging trend of reduced fund inflows from external sources, Uganda needs to expand her tax base, increase internally generated revenue and intensify public finance management reforms to improve accountability, transparency and stem corruption. National budget allocation and public investment in the 8 key sustainable development programme areas should also be increased significantly.

4.1.5 Waste management (re-use, reduce and recycling)

Uganda's fast growing urban population and industrial sector are increasing the challenge of waste management. Greening of Uganda's economy therefore calls for development of efficient and safe systems of waste disposal. In particular, facilities for the destruction of hazardous materials should be established, recycling of solid waste and non-biodegradable materials should be enhanced and legislation put in place for the management of toxic chemicals. In general, implementation of laws on safe waste disposal requires more effective supervision and enforcement to realize the goal of a green economy.

4.1.6 Planned urbanization

Urban areas if well planned represent growing centres of industry, financial services, trade, education and other services that can support a green economy. Ideally, urban people enjoy better incomes, a higher life expectancy and tend to maintain smaller families. Urban areas are also centres of entrepreneurship and innovation that attract talented and skilled workers. To develop towards a green economy, Uganda's urban authorities should strengthen their planning and development controls and step up the provision of basic services such as water, sanitation, electricity etc. all of which contribute to sustainable urban growth. These measures should aim at

changing the unplanned nature of many urban settlements which has led to the proliferation of slums, traffic congestion, air pollution and poor waste management.

Strategies to create employment, especially for the youths should be enhanced to stem the high unemployment, poverty and crime rates in Uganda's urban centres. Urban authorities should be adequately financed to plan and implement green development programmes. This should include physical infrastructure such as roads, housing and other social amenities to match the urban population growth rate, bearing in mind that 80% of urban dwellers are low income. Measures to improve waste management should be diversified to address its generation, collection, segregation, and disposal methods including waste recycling and management of industrial wastes and enforce the sanitation laws.

4.2 Inclusive growth

4.2.1 Poverty eradication

Despite the remarkable economic growth in the last two decades, Uganda still faces challenges of poverty and low human development. Uganda's success towards a green economy will be measured partly by the achievements in addressing poverty. Measures to improving access of the poor to education, health care, safe water and sanitation, and other resources, especially land need to be intensified to attain sustainable development. Empowerment of the disadvantaged especially women, youth and indigenous people should be central in meeting the objective on poverty and equity in the Uganda society.

4.2.2 Equity

(a) Access to education

The introduction of UPE, USE and abolishing cost sharing in public tertiary education institutions improved equity issues in Uganda's education system. Public universities also introduced district quota systems to ensure equitable distribution of opportunities of access to public universities under Government sponsorship. These measures increased access to education by the poor, Uganda still requires stepping up investment and financing to the education sector for sustainable development. Financing of the UPE programme should particularly be increased in order to attain quality education especially among hard-to-reach areas, increase remuneration for teachers and the number of secondary schools to meet the demands for USE. The number of vocational institutions to cater for those who may not continue with secondary and tertiary education should be increased. Steps should also be taken to ensure that education is tailored to the demands of the local labour market. In addition, measures should be taken to stem the high migration of scientists to other countries due to the low salaries, lack of facilities and limited professional advancements.

(b) Access to health care

Ensuring equity in provision of basic health services to all Ugandans requires a coordinated approach involving the citizens and the health sector as described in Agenda 21. A healthy population and labour force is important for a green economy. There should be adequate budgetary allocation to the health sector to further improve health indicators that are still far

below the MDGs targets. This should include financing for measures to increase the doctor to patient ratio, increase availability of essential drugs and family planning services especially in rural health facilities, and address HIV/Aids and the neglected tropical diseases such as sleeping sickness, river blindness, and leprosy, which still occur and have huge negative implications for sustainable development. There are also emerging health issues in northern Uganda e.g. nodding disease that should be urgently addressed.

(c) Access to safe water and sanitation

Regarding access to safe water and sanitation, 77% of the Ugandans have access to safe water, while latrine coverage at national level improved from 63% in 2008 to 68% in 2009 (UBOS, 2010). However, population growth rates in urban centres outstrip coverage of water and sewerage facilities. This calls for increased investment in establishing and operating waste water treatment plants and sewerage networks to serve the urban population including outside the Central Business Districts in most towns of Uganda

(d) Women empowerment

Principle 20 of Agenda 21 recognizes that women should have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development. Despite several achievements towards promoting women's participation in sustainable development, gender inequity remains prevalent. In general measures should be taken to strengthen women mobilization and empowerment programmes; improve the quality of Non Formal Adult Literacy Services; expand programmes to eliminate gender based violence; increase access to education opportunities beyond primary level for the girl child; and increasing national funding for women's programmes. In addition, several interventions towards affirmative action need to be implemented and a number of policies that have remained in draft form for many years, such as the domestic relations bill, which was first drafted in 1965 should be passed. The structural segregation against women into low paying sectors should be reversed. Half of the women (50%) are employed in the three lowest paying sectors, that is, agriculture, household and quarrying, in comparison to 33% of men¹². The cultural values that undermine gender equity should be discouraged.

(e) Addressing Children and Youth issues

Uganda predominantly has a young population, and therefore, addressing children and youths issues is critical for the attainment of sustainable development. Advancement of the role of youths and actively involving them in the promotion of economic and social development and the protection of the environment is a key recommendation in Agenda 21. It urges member countries to establish procedures allowing for consultation and possible participation of youths of both genders, in decision-making processes with regard to the environment, involving youths at the local, national and regional levels. In response to this call, the Uganda government has established several structures that are in support to this objective. Currently, children and youths

¹² MoFED, 2009, budget framework paper 2009

comprise the biggest proportion of the national population, which calls for accuracy of information and reporting on their issues and proper planning especially for their health, education and employment. Involvement of youths and integration of youth components in the design of national poverty alleviation programmes, for example, the National Agricultural Advisory Services (NAADS), should be prioritized. Access to jobs and vital information required by the young people to enhance their opportunities and participation in sustainable development should also be improved.

(f) Care and protection of vulnerable groups

According to the NHS (2009), 38% of the children in Uganda are vulnerable. There are also about 1.3 million elderly people in this category. In addition, over 7% of Uganda's population are people with disabilities (PWDs). During the Vision period, a system of universal pension for every citizen above 65 years will be adopted. Government will also develop and implement social protection systems to respond to the needs of the vulnerable groups.

4.2.4 Decent work and green jobs

Section 3 chapter 29 of Agenda 21 recommends efforts for strengthening the role of workers and their trade unions. Among the targets for this objective are to promote ratification of relevant ILO conventions, establishment of bipartite and tripartite mechanisms on safety and health, reduction of occupational accidents and diseases and to increase the provision of workers' training in the area of occupational health and safety, with the view to increase sustainable development. While many positive actions have been taken since 1992, a number of interventions are needed to realized decent work and green jobs for Uganda's workers. These include: urgently formulation of a minimum wage policy; enforcing of the regulations and code of conduct at work places; the formation and registration of unions in all organizations; strengthen advocacy for workers' rights at their places of work; and strengthening Occupational Safety and Health and Employment Services.

4.2.5 Agriculture and Rural development

Agriculture accounts for 22.8% of the GDP and employs 70% of the population (UBOS, 2010). With a high population growth rate and need to ensure food security, land use change associated with promotion of agricultural activities in Uganda is high. This is especially so regarding land use change in forests and wetland areas. To transform to a green economy, there is need to promote the adoption of sustainable technologies through market incentives that increase investment in sustainable land management practices, efficient irrigation and mechanization. These measures should be re-enforced by actions to increase access to markets, address unfair trade policies and practices, including tariff and non-tariff barriers and protectionist policies usually imposed by developed countries. Agricultural systems should be made more efficient, productive and profitable especially for the resource poor to secure their livelihoods and ensure food security as a strategy to adapt to climate change. Resilience of agricultural systems can be re-enforced through measures that enhance soil carbon, in addition to the benefits of adaptation to climate change particular conservation agriculture practices.

4.2.6 Decentralisation

In 1993, Uganda adopted the Decentralisation Policy as an instrument to deliver sub-national development, with the aim of bringing services closer to the people. Under this policy, planning, budgeting, administration, fiscal management and control and administration of justice under Local Council Courts functions were devolved to local governments. As a result of decentralisation, there has been an improvement in service delivery in areas of education, primary health care, water and sanitation, roads and agriculture extension. In spite of these achievements, Uganda needs to strengthen decentralisation through enhancing democratic and political governance; ensuring efficient and effective administration; promoting local economic development initiatives; and enhancing good governance.

4.2.7 Combating corruption

Uganda has established legal, policy and regulatory frameworks to support transparency and accountability at all levels. This includes putting in place the Inspectorate of Government, Anti-Corruption Court and enactment of the Whistle Blowers Act. Over the Vision 2040 period, these policy, legal and institutional frameworks will be operationalised to strengthen public transparency. The specific strategies include (a) computerization of information systems to increase efficiency; (b) strengthening the legal frameworks for ethics and integrity; (c) promoting result-based management within the public institutions; (d) strengthening Parliament's legislative oversight role; and (e) encouraging public access to information and data

4.2.8 Democracy

While Uganda has taken significant steps to democratization, the country's culture towards constitutionalism needs to further improve. Many institutions established in the legislative, executive and judicial branches of Government should fully embrace the ideals, principles and practices of democracy. In addition the citizenry in general need to be empowered to engage effectively in demanding their rights and insisting that institutions meet their obligations (NDP, 2010).

4.2.9 NGOs and their Contribution to Sustainable Development

The objective of Agenda 21 is that by 1995, a mutually productive dialogue should be established at the national level between all Governments and non-governmental organizations and their self-organized networks to recognize and strengthen their respective roles in implementing environmentally sound and sustainable development. While an enabling environment for the operation of the NGOs has been provided by the government, the policy and legislative framework should be further improved. In addition the technical and institutional capacity of the National NGO Board should be enhanced to improve to delivery of efficient and effective services. On the other hand, NGOs should endeavor to spread their activities to the rural areas where they are most needed, avoid duplication of effort by other actors and improve transparency and accountability in managing public resource at their disposal.

4.3 Low carbon growth

4.3.1 Sustainable transport

An efficient transport system is essential for social –economic transformation and a requisite for a green economy. Over-reliance on road transport as is the case in Uganda is not a viable choice from a green economy perspective taking into account the high cost of road construction and maintenance, high consumption and efficiency in use of petroleum, traffic jams and associated high carbon emissions. Uganda should plan and develop a standard gauge railway system with high speed trains for both passenger and cargo freight to link Uganda with the neighbouring countries to facilitate regional and international trade. Uganda should also improve road infrastructure by enlarging roads, creating flyovers and putting in place traffic lights to minimize traffic congestion. Mass transport system should be developed, especially in urban centres. The potential for marine transport should be exploited by expanding marine infrastructure to increase the volume of passenger and cargo traffic.

4.3.2 Renewable energy

Uganda’s fast growing economy calls for a responsive energy sector to meet the demands for economic growth. Increasing rural coverage of grid electricity has the potential to propel agro-based and cottage industries and enhance employment opportunities thereby contributing to poverty reduction and alternative livelihood systems among the rural populations. To achieve the Vision targets, Uganda requires to develop 41,758 Mwatts by 2040, thus increasing the electricity consumption per capita to 3,668 Kwh. Uganda will significantly exploit her hydro-power potential by developing large and small hydro-power plants. The major ones are Ayago North, Ayago South, Karuma, Isimba and Murchison Bay. Other renewable energy sources such as solar, wind, biogas and geothermal will also be developed. Development of nuclear energy from Uranium deposits will also be considered.

Current inefficiencies and losses incurred in transmission of grid power should be reduced through use of appropriate materials and management practices. Likewise, measures to improve efficient use of energy in the manufacturing and industrial sectors should be prioritized. Since Uganda’s main source of grid electricity is hydro-power, management of water catchments feeding into the rivers and dams is critical and consistent with greening of the sector. Development of renewable energy sources presents a big opportunity for Uganda’s drive to a green economy. This, however, requires heavy investment in the technology and technical expertise beyond national means. There is a high potential for international cooperation especially through bilateral, multilateral and the private sector support to address the investment gaps.

Box 1. Promoting Alternative Energy Sources and Sustainable Use of Energy in Schools – By Uganda Environmental Education Foundation (UEEF)

With more than 90% of Ugandans depending on wood fuel, forest cover has consistently declined over the years, with dire consequences on the general environment and mankind. In an effort to counteract this trend, Uganda Environmental Education Foundation (UEEF), a local Non Government Organisation (NGO), implemented a pilot project titled “Promoting Alternative Energy Sources and Sustainable Use of Energy in Schools”. The project was implemented in 5 schools with the objectives of increasing knowledge, awareness and capacity to use and manage alternative energy sources in Mukono District; and increasing the use of solar energy systems and improved stove technologies, and exploit their commercial and economic potential. The interventions in each school included (i) establishing a school woodlot; (ii) construction of a demo improved institutional energy saving stove; and (iii) installation of a solar energy system.

Through these interventions, significant savings were made by the schools in terms of expenditure on purchase of firewood. For example, during the second term of 2007, Kojja Secondary School, with a total of 654 pupils, used 4 tons of firewood costing Ushs. 240,000 while using the improved stove. This was down from the 12 tons used during the first term using the ordinary stove which costed the school Ushs. 720,000/= in firewood purchase. This resulted into savings of Ushs. 480,000/=, which was used to improve on other school facilities. Other impacts resulting from these interventions include reduced degradation of natural forests in the neighbourhood as less firewood was required by the schools; improved school performance since students were able to do their night preps using solar lighting; improved kitchen hygiene and health of cooks since the improved stoves do not emit smoke; reduced theft of school property as the solar lighting improved security around the school; and schools acquired their own firewood sources from the planted woodlots.

The popular participation of all stakeholders and effective project implementation committees were pointed out by the beneficiaries as being largely responsible for the success of the project. A memorandum of understanding signed between UEEF and each of the schools spelt out the roles and contributions to be made by each party. A sensitization workshop for Members of Parliament on the Environment and Natural Resources Committee and other policy makers held at one of the schools informed formulation of the renewable energy policy. In addition, a study tour that was organised for 30 schools from within Mukono district led to replication of the stoves in 12 other schools. Therefore, the project was spot on in saving forests and enhancing national efforts towards achievement of a green economy in context of sustainable development and poverty eradication.

4.3.3 Sustainable urbanisation

Urbanization in Uganda is characterized by unplanned construction leading to sprouting of unplanned towns and slums. Development has also been concentrated in Kampala, putting enormous pressure on the city’s limited resources. By 2040, five regional cities are planned, including Gulu, Mbale, Mbarara and Arua. This will be guided by urban planning legislation, integrated physical planning and strict development control. During the Vision period, Government will develop area physical master plans to guide the development of the “Greater Kampala” and other regional cities and towns. Social amenities such as health, education, etc. will be integral part of the sustainable urban development. Environment and waste management, including pollution control, wetland management and conservation of green areas will also be key ingredients of this urbanization.

4.3.4 Sustainable housing development

The majority of Ugandans still live in indecent housing with lack of access to electricity, water and sanitation facilities. By 2040, government will expand rural electricity coverage, water and sanitation facilities through provision of piped water and modern toilet facilities. Over this

period, 2.8 million new housing units are planned to be constructed through private-public partnership with private sector to invest in constructing appropriate housing estates.

4.3.5 Green industrialization

Uganda aims to transform into modern and prosperous economy within a generation and industrialization is core to this transformation process (NDP). Green industrialization means employing technology in the production of goods and services with low carbon emissions, efficient resource use and decent job creation. To realize a green industrial sector Uganda should take a number of actions including: putting in place appropriate policies and legal framework to promote low carbon technologies and efficient technologies; enhance industrial support institutions to develop and sustain a competitive industrial sector; enhance low carbon technology transfer, adoption and adaption; increase and broaden the pool of skilled industrial human resources (engineers, technologists, technicians); increase and improve industrial support physical infrastructure; provide cost efficient and reliable energy for industries; industrial finance and access to credit; broaden the scope for forward and backward integration of industries and agric-industry linkages; support the young and weak domestic private sector; increase investment in research and development, innovation and entrepreneurship; and increase foreign direct investment in the industrial sector.

4.3.6 Sustainable tourism

Uganda is endowed with various tourism attractions. The main potential lies in nature-based tourism where there is a variety of flora, fauna and beautiful sceneries. It estimated that the country has 50% of the mountain gorillas, 7% of the world's mammal species, 11% of the world's birds species and a variety of butter flies. The country also has beautiful mountain ranges, the second largest fresh water lake in the world, the third deepest lake and a source of the world's longest river (River Nile). These tourist attractions provide huge opportunity to boost the tourism sector and substantially increase the country's foreign exchange earnings during the Vision period.

Box 2. Promoting Community Tourism in Bigodi Wetland Sanctuary by KAFRED

Kibale Association for Rural and Environmental Development (KAFRED) is a registered CBO implementing a Bigodi Wetland Sanctuary (BWS) community eco-tourism project in order to conserve the wetlands through the wise use of natural resources and simultaneously use tourism as a tool to develop the local community and eradicate poverty. The wetlands form an important wildlife corridor, and are home to rich biodiversity, including over 200 species of birds such as the rare Great Blue Turaco, warbler, kingfisher, crane and flycatcher, among others. There are also 8 species of primates such as the Black and White Colubus, Red Colubus, Baboon, Grey Cheeked Mangabey, Red Tailed Monkey, Blue and Vervet Monkeys, and the L'Hoest Monkey. These attract significant numbers of tourists to the area.

With participation of the local community and authorities, KAFRED put in place bylaws for management of the wetlands, which halted their encroachment and ensured conservation of biodiversity. The revenues from tourism have been used to build the only secondary school in the area, capitalise a loan scheme for the wetlands fringing families, promote environmental education in the area, and supported a local women's group producing artisanal handicrafts. The CBO has also put in place a protected water source to reduce the community's reliance on unsafe water from the wetlands and is presently constructing a health unit in order to increase maternal health access for the community.

The initiative started with only 6 founder members in 1992 and presently has over 100 members. The high level of community participation has been fundamental to the success of the initiatives. In 2010, KAFRED became the only initiative to win the UNDP Equator Prize for a second time, following their first win in 2004. They have consistently demonstrated the benefits and potentials of community-based innovation for eco-tourism, conservation and development, and serve as a role model both within Uganda and internationally. This initiative is one of the examples of community involvement in sustainable management of the natural capital that

4.4 Current development status and desired Vision 2040 targets

A comparison of the present development status with the desired Vision 2040 targets is summarized in the table below:

Current development status and desired Vision 2040 targets (Source: NPA, MoFPED)

No.	Development indicator	Baseline status	Target 2040	
1.	Per capita income	US \$ 506	US \$ 9,500	
2.	Poverty as % of population below poverty line	24.5	5	
3.	Income distribution (Gene coefficient)	0.43	0.32	
4.	Sectoral composition of GDP	Agriculture	23.8	10
		Industry	24.9	31
		Services	45.3	58
5.	Labour force distribution in line with sectoral contribution (%)	Agriculture	65.6	31
		Industry	7.6	26
		Services	26.8	43
6.	% share of national labour force employed	70.9	94	
7.	Manufactured exports as % of total exports	4.2	50	
8.	Gross capital formation as % of GDP	24.1	30	
9.	Saving as % of GDP	14.5	35	
10.	ICT goods and services as % of total exports	0	40	
11.	Electricity consumption per capita (Kwh)	75	3,668	
12.	% population with access to electricity	11	80	
13.	Water consumption per capita (m3)	26	600	
14.	% population with access to safe piped water	15	80	
15.	% of standard paved roads of total road network	4	80	
16.	% cargo freight as rail to total freight	3.5	80	
17.	% level of urbanisation	13	60	
18.	Life expectancy at birth (years)	51.5	85	
19.	Infant mortality rate per 1,000 live births	63	4	
20.	Maternal mortality rate per 100,000 births	310	15	
21.	Under 5 mortality rate per 1,000 live births	96	8	
22.	Child stunting as % of under 5 years	33	0	
23.	Literacy rate (%)	73	95	
24.	Gender related development index (GDI)	0.51	0.90	
25.	Population growth rate (%)	3.2	2.4	
26.	Forest cover (% of land area)	15	24	
27.	Water cover (% of total area)	8	13	

5.0 INSTITUTIONAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

The Uganda's National Development Plan (NDP) stipulates that implementation of sustainable development and other related frameworks for Uganda will be executed under the existing structures within the central and local governments, according to the mandates and functions of the different institutions. Implementation of sustainable development initiatives is a shared responsibility of all stakeholders, including public and private sector, civil society, academia and local communities. Overall leadership for the implementation of the sustainable development agenda is vested in the President of Uganda who is appropriately represented at all levels within the existing institutional arrangements. To effectively implement sustainable development initiatives, the national Sustainable Development Forum should be strengthened to regularly review progress. This forum should be embraced by the highest level of political commitment, with a secretariat hosted by the National Planning Authority. The Forum should comprise of Ministers, Permanent Secretaries, Heads of Government Departments and Agencies, Private sector and CSO representatives.

5.1 Institutional set up to facilitate sustainable development in Uganda

In order to achieve the sustainable development objectives enshrined in Uganda's NDP, which is the overarching Government development framework for social and economic development, sectors have been categorized under the following broad headings:

- (i) **Primary growth sectors** – These are sectors and sub-sectors that directly produce goods and services. They include Agriculture, Forestry, Tourism, Mining, Oil and gas, Manufacturing, ICT, and Housing development sectors.
- (ii) **Complementary sectors** – These are sectors and sub-sectors that provide institutional and infrastructural support to primary growth and other sectors. These include Science and technology, Transport, Energy, Water for production, Land management and administration, Physical planning, Urban development, Trade development, Financial services, and Cooperatives.
- (iii) **Social sectors** – These are sectors and sub-sectors that provide services required for maintaining a healthy and quality population, and developing the required human resource for effective engagement in profitable economic activities. They include Population, Labour and employment, Education and sports, Skills development, Health and nutrition, HIV/AIDS, Water and sanitation, and Social development sectors.
- (iv) **Enabling sectors** – These encompass all sectors and sub-sectors that provide a conducive environment and framework for efficient performance of all sectors of the economy. They include Legislature, Justice, law and order, National defence and security, Environment, Climate change, Water resources management, Meteorology, Wetlands management, Development of national statistics, Standards and quality infrastructure, Public sector management, Accountability, and Disaster management sectors.

The above categorization is to a large extent consistent with the economic, social and environmental sustainable development pillars, with the primary growth and complementary

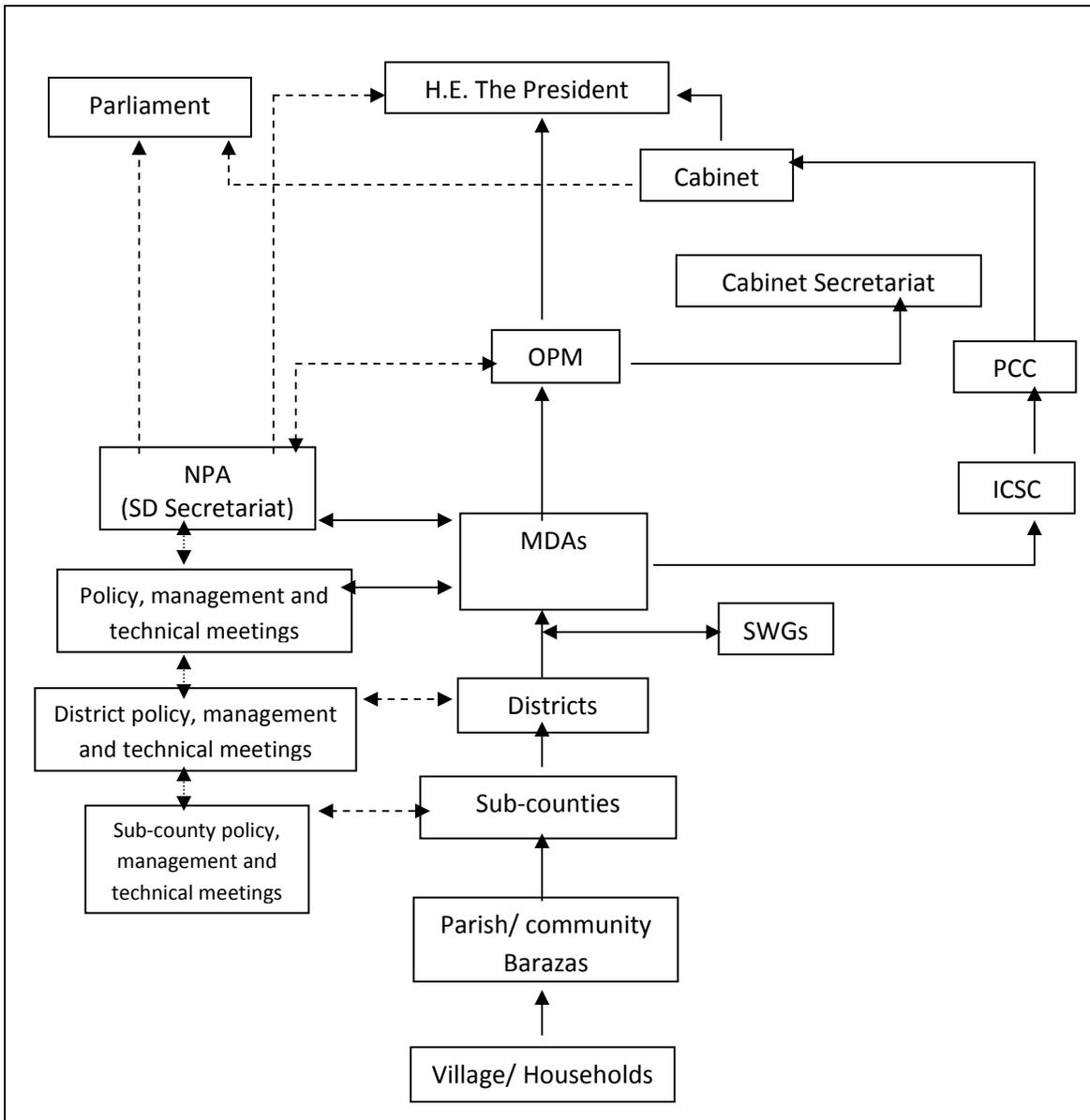
sectors addressing the economic pillar, social sectors the social pillar and the enabling sectors the environment pillar.

5.2 Implementation arrangements for sustainable development

Ministries and the Departments and Agencies under them are largely responsible for policy development and monitoring and evaluation of policy implementation at the national level. Overall, the Cabinet monitors implementation of sustainable development initiatives to ensure political ownership and leadership. The cabinet also considers, approves and presents draft proposals to Parliament for consideration. On the other hand, Parliament ensures effective implementation of sustainable development efforts through its oversight, legislative and appropriation functions. Parliaments' sectoral committees scrutinize the proposals presented by Cabinet before their general discussion and adoption by its plenary.

The Permanent Secretaries are accountable and responsible for the overall coordination and implementation of sustainable development initiatives within their respective sectors. The Ministry of Local Government in liaison with the line ministries coordinates implementation of sustainable development efforts by Local Governments. Within Local Governments, sustainable development initiatives are implemented at all levels starting with households, villages and parish. Coordination of these efforts is effectively managed at the sub county and district levels. The proposed structure for implementation of sustainable development (adapted from the NDP 2010/11-14/15) is presented in Figure 1 below.

Figure 1. Proposed structure of implementation of sustainable development agenda for Uganda (Adapted from the NDP, 2010/11-2014/15)



To strengthen supervision of implementation of the sustainable development agenda, policy, technical and management meetings are held regularly at different levels under the chair of their respective Ministers, Permanent Secretaries, and managers respectively. Similarly, policy, technical, and management meetings are held at all Local Government levels.

The various Government MDAs and local governments regularly report to Parliament on performance of their respective sectors basing on their approved work plans and budgets. Parliamentary sectoral committee scrutinize performance of Ministries and districts to ensure that the funds received from the treasury are used as agreed.

The Ministry of Finance, Planning and Economic Development (MFPED) has a central role to play of coordinating line ministries in the planning and budgeting processes. The MFPED ensures active participation of all stakeholders, including the general public, in all debates and discussions related to in planning and budgeting for sustainable development. The same is done by the local governments. This is essential to ensure that the three sustainable development pillars (economic, environment and social) are allocated a fair share of resources to ensure equitable achievement of sustainable development across all sectors and regions.

5.3 Governance issues related to sustainable development

Uganda is fully committed to promoting good governance commitments in line with the tenet of sustainable development. The country has developed the necessary institutional and strategic frameworks for public participation, democratization, accountability and transparency.

To ensure public accountability, transparency, effective and efficient management of service delivery, the following institutions and processes have been established: the Anti-corruption division of the High Court established in 2009, the Inspector General of Government, the Auditor General's Office, the Public Procurement and Disposal of Public Assets Authority, and the Department of Ethics and Integrity. Processes include: the National Anti-corruption Strategy (2009-2013), the Leadership Code (including declaration of assets by public servants), the Client Charter (reflecting the right of citizens to demand for quality services from public institutions), and whistle blowing (as reflected in the Whistleblowers Protection Act of 2010).

Uganda operates under a multiparty political dispensation. The 2005 Political Parties and Organisations Act set the platform for conformity to democratic principles in internal party organization and practice. General elections are held every five years starting with the Presidential, Parliamentary and Local Council levels. Gender participation in politics has been enhanced by the representation of women, youth and people with disabilities. Since 1997, environment and natural resource management was decentralized to local governments as part of a broader process to increase local ownership and improve environmental planning and management. This process is known as "mainstreaming". There has also been affirmative action on specific gender consideration in the implementation of government policies and programmes. Besides, budgeting processes integrate gender, HIV/AIDs and environmental concerns.

Civil society also plays a role in monitoring government programmes and private business. Uganda's NGO sector continues to expand and involve the masses in scrutinizing government policies and programs. The enactment of the Access to Information Act (2005) facilitates citizens' access to public information and encourages public participation. The media has taken advantage of this to freely and independently participate in enhancing access to information by the public.

6.0 UGANDA’S RECOMMENDATIONS ON THE RIO+20 DOCUMENT ON “THE FUTURE WE WANT”

Uganda concurs with the draft Rio+20 outcome document, with proposals to put emphasis on the following areas for the post-conference actions:

- Boosting the use of efficient renewable energy technologies and creating high value products in order to reduce over-reliance on natural capital. This calls for investment in enhancement of human capacity, research and development to support the knowledge economy.
- Since Uganda’s economy is natural resource based, the outcome document should put emphasis on promoting sustainable management and utilization of natural resources, including climate change mitigation and adaptation measures. Combating climate change cannot be achieved by individual countries, hence the need for the conference to come up with global action towards combating climate change, including setting up of climate change funds that can be accessed by developing countries at concessional rates to enable them to mitigate and adapt to the effects of climate change.
- The outcome document should emphasize evidence-based information to justify prioritization, increased investment and financing for environment and natural resource sectors to inform decision makers in planning and budgeting processes.
- The goals of the green economy should not substitute but complement the other sustainable development related frameworks, which should also be stated in the outcome document. An example is the MDGs whose achievements should be continuously monitored as part of achievement of a green economy.
- Energy security is pivotal to Uganda’s sustainable development and achievement of a green economy. Accordingly, Uganda embraces the UN Secretary General’s pioneer “Sustainable Energy for All” initiative to ensure universal access to modern energy services, double the rate of improvement in energy efficiency and double the share of renewable energy in the global energy mix. The conference should come up with concrete strategies to operationalise this initiative.
- In addition to the numerous laws and policies in place, effective regulation and implementation of sustainable development efforts calls for reinforcement of institutional measures and capacity to implement the existing legal and policy frameworks, taking into account the use of innovation and positive incentives.
- Knowledge generation through research should go hand in hand with strategies to create the capacity to apply and roll out new knowledge to promote sustainable development.
- A balance between development and conservation should be pursued in the course to achieve sustainable development. Such should be the case, for example, in the application and use of organic versus inorganic farm inputs to realize the objectives of food security, improved household incomes and a healthy environment.

- Green accounting as a new concept integrating natural resource management in economics should not negatively impact developing economies, such as Uganda, especially through unfair trade discrimination practices associated with it.
- Sustainable population growth should aim at achieving a reduced fertility rate to avoid a population explosion, leading to unsustainable exploitation of resources by the highly natural capital dependant society.
- Fair remuneration of human labour is a prerequisite for a green economy. A clear policy commitment on a minimum wage in Uganda is necessary to improve productivity, efficiency in the use of resources and effective delivery of services for sustainable development.
- Weak local private sector entities in developing countries, such as Uganda, should be strengthened through promoting and prioritizing their participation in public-private partnerships in order to genuinely achieve the objective of a private sector led economy.

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