REPUBLIC OF RWANDA

National Sustainable Consumption and Production Programme

REMA
OUR ENVIRONMENT OUR FUTURE

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ACKNOWLEDGEMENTS

Rwanda has registered and is still registering a remarkable progress towards the Millennium Development Goals (MDGs), which are the world's key targets for addressing extreme poverty in its many dimensions, notably the hunger, disease and lack of adequate health, while promoting gender equality, education, and environmental sustainability.

However, as Rwanda is engaged in the transformation of its economic orientation, especially from agrarian-based subsistence economy into a middle income service-based economy by the year 2020 as envisioned in the country's Vision 2020, challenges in this regard still lie ahead. Therefore, the country will have to continuously examine its production together with its consumption at all economic stages, in order to ensure this anticipated transformation is maintained in line with its sustainable development.

It is in this framework that, Rwanda Environment Management Authority (REMA) is proud and pleased to present the National Sustainable Consumption and Production (SCP) Programme for Rwanda.

The present document presents the current situation of production and consumption, that is, key patterns of production and consumption, as well as the development of the envisaged SCP National programme in all its phases. We hope that this programme will facilitate the planning and implementation for effective management of the environment with the objective to enhance a sustainable development for present and future generations.

On behalf of the Government of Rwanda, I therefore take this opportunity to express my profound gratitude and deep regards to all of those who contributed to the elaboration of this programme.

My sincere thanks are especially addressed to United Nations Environment Programme (UNEP) for having financed this activity.

I also owe many thanks to those who willingly and cooperatively provided valuable information and data from their respective fields, to be included in the present Programme.

Finally, my sincere appreciation is extended to REMA staff for their contribution to the production of this document.

We are grateful for your support and welcome your continued collaboration.

Dr. Rose MUKANKOMEJE
Director General of REMA

ACRONYMS

10-YFP	Ten Year Framework Programme
ABIWSI	Africa Beverage Industry Water Saving Initiative
AfIWSI	Africa Industry Water Saving Initiative
AMCEN	African Ministerial Conference on Environment
ARSCP	African Roundtable on Sustainable Consumption and Production
CDM	Clean Development Mechanism
CER	Certified Emissions Reduction
CFL	Compact Fluorescent Lamp
CSOs	Civil Society Organisations
EDPRS II	Economic Development and Poverty Reduction Strategy Phase II
EESD	Environmental Education for Sustainable Development
EIA	Environmental Impact Assessment
EICV2	Second Integrated Household Survey
EICV3	Third Integrated Household Survey
EMS	Environmental Management System
EWSA	Electricity Water and Sanitation Authority
FONERWA	Fund for Environment and Climate Change
GDP	Gross Domestic Product
IISD	International Institute for Sustainable Development
JPOI	Johannesburg Plan of Implementation
Kwh	Kilowatt Hour
MDGs	Millennium Development Goals
MIGEPROF	Ministry of Gender and Family Protection
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry of Local Government
MINECOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education
MINIRENA	Ministry of Natural Resources
MINICOM	Ministry of Trade and Industry
MININFRA	Ministry of Infrastructure
MINISANTE	Ministry of Health
Mwh	Megawatt Hour
NDP	National Development Plan
NEAP	National Environmental Action Plan
NEPAD	New Partnership for Africa's Development
NSDS	National Sustainable Development Strategy
PRSP	Poverty Reduction Strategy Paper
PSF	Private Sector Federation
PSTA II	Plan for Strategic Transformation of Agriculture – Phase II
RBS	Rwanda Bureau of Standards
RDB	Rwanda Development Board
RECP	Resource Efficient and Cleaner Production
REMA	Rwanda Environment Management Authority
RISD	Rwanda Initiative for Sustainable Development
RNRA	Rwanda Natural Resources Authority

RRECPC	Rwanda Resource Efficient and Cleaner Production Centre
SCP	Sustainable Consumption and Production
SPoD	Sustainable Buildings Policies for Developing Countries
SWG	Sector Working Group
UNDESA	United Nations Department of Economic and Social Affairs
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation
WDA	Workforce Development Authority
WSSD	World Summit on Sustainable Development

EXECUTIVE SUMMARY

Rwanda like most countries around the world is currently faced with the problem of unsustainable consumption and production patterns that threaten the future wellbeing of generations to come. As a way of trying to address that imbalance, the country has developed this National Sustainable Consumption and Production (SCP) Programme to bring about a shift towards a more sustainable mode of development. *Sustainable Consumption and Production (SCP) is the use of services and related products, which respond to basic needs and bring about a better quality of life while minimising the use of natural resources and toxic materials as well as emissions of waste and pollutants over the lifecycle of the service or product so as not to jeopardise the needs of future generations (Oslo Symposium, 1994).*

The programme was developed based on a ten step process for developing National Programmes on Sustainable Consumption and Production (UNEP, 2008) and there was considerable input from a number of key stakeholders within Rwanda as part of the process of its formulation, especially as one of the key requirements is the identification of key government priority areas where SCP interventions can be applied. Coupled with that was a review of existing sustainable development initiatives of which a number were identified including but not limited to initiatives such as Resource Efficient and Cleaner Production (RECP), Environmental Education for Sustainable Development and Green financing.

The key priority areas that will form the basis of the SCP programme were scoped out from Rwanda's Economic Development and Poverty Reduction Strategy II (EDPRS II) and considered in the context of the adopted Global 10-YFP on SCP, African 10-YFP on SCP, as well as the prevailing SCP climate within Rwanda and Africa as a region. Five categories of projects where SCP is to be applied over the duration of the programme were identified, namely;

- Demand side management of energy consumption – as way of ensuring that economic growth bottlenecks that are attributed to inadequate energy supply coupled with its inefficient use are overcome;
- Sustainable Cities – for purposes of fostering green urban development control in light of increasing urbanisation trends in the country;
- Sustainable sanitation facilities in rural settlements – in order to ensure that access to sanitation facilities in rural areas is not constrained by land-take pressure in light of the increasing population pressure on land for agricultural purposes;
- Sustainable Consumption and Production of Plastics – to supplement existing waste management efforts especially as pertains to plastics; and
- Education for Sustainable Consumption and Production – in order to build an SCP critical mass and the associated basic national capacity in the country.

A number of pilot projects were identified under the respective SCP project categories, and are to be used as catalysts to generate the necessary momentum required for rolling out the SCP programme.

The national SCP programme will be incorporated into the EDPRS II as way of raising the profile of SCP countrywide given its cross cutting nature as well leveraging the other benefits that come with the integration. For effective implementation of the programme, a National steering committee will be put in place and will be headed by the 10-YFP on SCP National focal point. Equally of importance are the funding, monitoring and evaluation mechanisms for the programme.

The SCP programme will have a five year time frame, with its monitoring cycle synchronised with that of EDPRS II. It will have to be formally approved before its integration into EDPRS II in December 2013.

1.0 GENERAL OVERVIEW

1.1 Introduction

Rwanda has undergone tremendous socio-economic transformation over the last decade, following on from the tragic events of the 1994 genocide which resulted in a massive drop in the country's Gross Domestic Product (GDP) as well as a large section of the population being plunged into poverty, among others. Since the year 2000, the country has been recognised as the tenth fastest growing economy in the world; it has posted an average real GDP of 8.2 percent; and over a million people were lifted out of poverty between the years 2006 and 2011 (Rwanda Budget Speech, 2013).

The country has also continued to register a considerable degree of progress in addressing the Millennium Development Goals (MDGs), which are key milestones that countries around the world committed themselves to as part of a concerted drive to address extreme poverty and its associated ills by 2015. The 2013 MDG report, that assesses Africa's progress towards attainment of the goals, cites Rwanda among the best performing countries based on certain targets and indicators of the respective MDGs. Those for which Rwanda is lauded for being 'on track' include; achieving universal primary education (goal 2), promoting gender equality and empowerment of women (goal 3), and combating HIV/AIDS, TB, malaria and other diseases.

The progress made on the MDG front has to a certain degree been enhanced by a number of other key interventions in Rwanda that are geared towards supporting sustainable national development. They include, the adoption of a National Environmental Policy; enactment of Organic Law No 04/2005 that determines the modalities of protection, conservation and promotion of Environment in Rwanda; establishment of the Rwanda Environment Management Authority (REMA) in April 2005; programmes aimed at reversing the effects of climate changes such those focusing on wetland and forest degradation; and the Resource Efficient and Cleaner Production (RECP) programme that has been used as the main instrument in bringing about a shift towards sustainable consumption and production patterns particularly in enterprises in Rwanda.

Despite the country's positive growth indicators, many challenges still lie ahead, especially as the country tries to transform its largely agrarian based subsistence economy into a middle income service based economy by the year 2020 as envisioned in the country's Vision 2020. The country will have to continuously examine its levels of production and consumption if its anticipated socio-economic transformation is to be sustainable in line with the tenets of sustainable development.

1.2 Status of Production and Consumption in Rwanda

Production and Consumption patterns are key drivers of a country's economy and go a long way in explaining a particular country's growth characteristics from a sustainability perspective.

Production *refers to the conversion of resources into usable products, which may be either goods or services; whilst* ***Consumption*** *refers to the expenditure during a particular period on goods and services used in satisfaction of needs and wants, or process in which the substance of a thing is completely destroyed and/or incorporated or transformed into something else* (UNEP 2010).

Some key patterns of production and consumption in Rwanda are discussed below.

1.2.1 Water resource use

Water is one of the basic needs required for mankind's survival and is a key input in the proper functioning of many process systems.

In Rwanda just like in many other countries, there has been and there continues to be an increase in demand for this essential resource, especially as Rwanda is considered a water scarce country with a per capital fresh water availability of less than 1,000m^3, which is a approximately a quarter of Africa's average (MINIRENA, 2011).

Data from the Electricity, Water and Sanitation Authority (EWSA) on some of the key water consumers, particularly industries and households, indicates an upward trend in demand for the resource (see Figure 1). However, it's important to note that the utilisation of this resource continues to be characterised by its inefficient use, with most of it being lost as runoff water as well as close to 30-40% of the piped water supply being lost in leakages due to inefficient water supply systems.

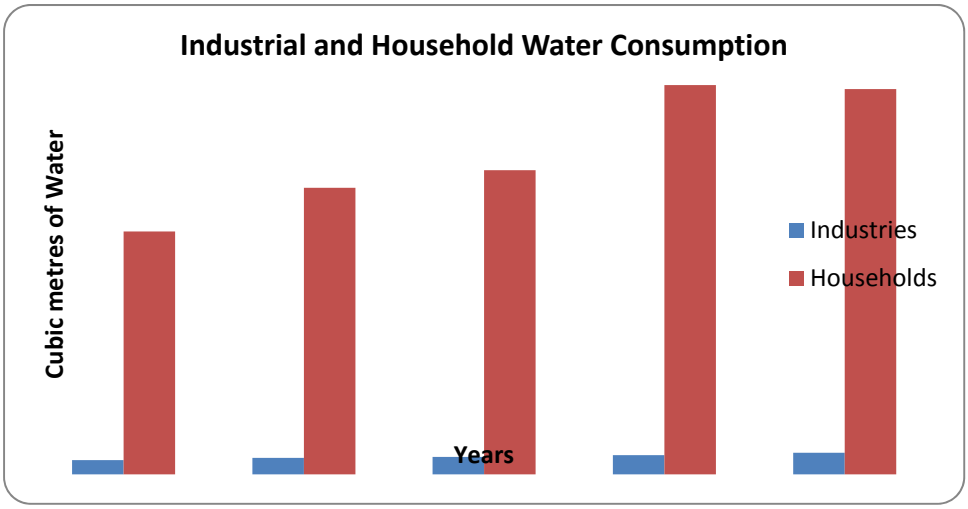

Figure 1: Industrial and Household water consumption patterns for Rwanda

1.2.2 Energy consumption

According to Rwanda's energy consumption figures, majority of the population relies on biomass for its energy needs, mainly for cooking. Biomass accounts for 85% of the primary energy used in the country (majority of households use this), with petroleum products and electricity making up the balance at 11% and 4%. Despite, the low contribution of electricity to the country's energy needs, it remains a key factor in determining levels of socio-economic transformation. In Rwanda's case, the current level of annual per capita electricity consumption which stands at 42Kwh falls short of both the Sub-Saharan Africa and developing country averages of 478Kwh and 1,200Kwh respectively (African Development Bank/Fund 2013).

Total installed power generation capacity currently stands at 110MW, with hydropower and thermal power accounting for 70MW and 40MW respectively. Thermal power is currently being used as a stop gap measure to plug the short fall in energy supply. Otherwise, it's not a sustainable source of energy given the inherent costs associated with running the thermal power plants. Therefore, the country intends to phase it out by 2015 as it expands its power generation potential towards 1,000MW by 2017, in line with its 7 year electricity development plan (2011-2017).

Equally, the impact of using biomass cannot be underestimated given the impact that it can have on deforestation rates and hence the reason as to why the country developed the Biomass energy strategy in 2009. The country plans to reduce the level of biomass consumption to 50% by 2020 and already a number of renewable energy initiatives such as the use of improved cooking stoves, construction of domestic biogas units, improvements in rural electrification through the use of grid and off-grid systems, should play a considerable role towards achieving that target.

On the whole, the demand for energy in Rwanda has been on the rise, and will continue to rise if the country is to meet its middle income status ambitions by the year 2020. Between 2008 and 2011, access to electricity increased by a massive 160% and peak demand is expected to continue its upward trend from 51MW that was projected in 2008 to 328MW in 2020 (African Development Bank/Fund 2013)

1.2.3 Agricultural production

Agriculture is the backbone of Rwanda's economy and contributes 32% towards its GDP and just over 80% of the population is employed in the sector. The country continues to spend consistently on agriculture and has surpassed the 10% Comprehensive Africa Agriculture Development Program (CAADP) requirement for public spending on agriculture over the last seven years with the exception of the year 2007 when it was 9% (The East African, 2013 (a)). CAAP aims to promote growth and poverty reduction.

Agricultural practices remain largely subsistence based (which is unsustainable), with a lot of pressure being exerted on land, especially given the country's high population density that makes it the highest in Africa at 416 inhabitants per km^2 (EDPRS II). Land is a major input in agricultural production and the Food and Agricultural Organisation

(FAO) estimates that a Rwandan household requires at least 0.9ha of land for agriculture to be able to embark on sustainable agriculture, which currently is not the case. The mean size of cultivated land for Rwanda stands at 0.59ha (EICV3 - Agriculture).

1.2.4 Greenhouse gas emissions

According to Rwanda's *National Strategy for Climate Change and Low Carbon Development* (2011), Rwanda has one of the lowest Greenhouse gas (GHG) emissions per capita in the world at 0.6 tCO_2e/person compared to a global average of 6.7 tCO_2e/person. However, like most nations around the world it has not been shielded from the negative effects of climate change such as the El Nino and La Nina phenomena related floods and droughts that have left devastation in certain parts of the country in recent years. The financial implication of the floods of 2007 on two of the districts in Rwanda is estimated to have been as high as USD22 Million (Republic of Rwanda, 2011).

Despite Rwanda's low GHG emissions per capita, there has been a gradual increase in the release of greenhouse gases to the extent that the country is now classified as a small contributor to global warming. This is indicated by a decline in the emission removal figures from the year 2000 to 2010 that were attributed to land use, land use change and Forestry (LULUCF). LULUCF net emissions stood at -14,238 kt and -1,866 kt for the years 2000 and 2010 respectively, with the negative values symbolising removals or sinks (IISD, 2013).

Studies carried out to assess the GHG contributions in Rwanda indicate that agriculture is the biggest contributor (emissions from cultivating soils), followed by energy demand (biomass combustion), industrial processes and energy supply (see Figure 2).

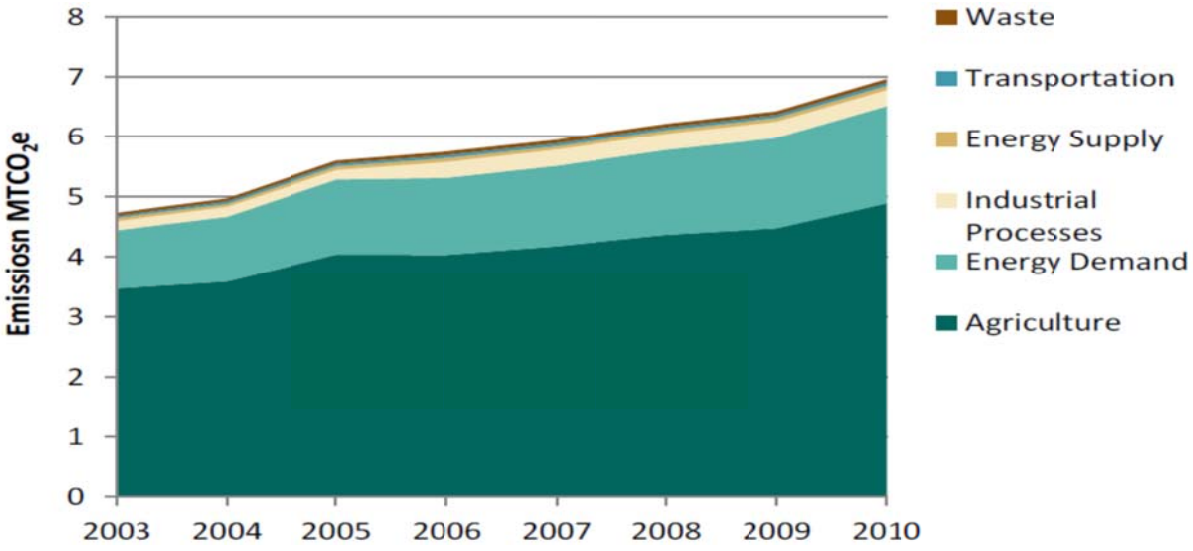

Figure 2: Total Emissions by Sector 2000 – 2010 (Excluding LULUCF)

Source: International Institute for Sustainable Development (2013)

1.2.5 Waste generation

Waste generation in the country has evolved with the changing economic patterns. This has resulted in changes in the composition of the waste stream which has traditionally been largely made up of organic/biodegradable wastes; to non-biodegradable and even hazardous fractions such as electronic waste (e-waste).

Rwanda like most countries in the developing world currently lacks the necessary waste management infrastructure such as, properly engineered landfills that are needed to cope with the increasing volumes of waste that are generated in all their forms. Only one landfill site exists in Kigali city and that is only capable of handling 400 tonnes of waste a day, most of which is not segregated, further compounding the waste management problem.

Therefore, in the absence of proper waste management systems, the responsibility for managing waste is left to individual households. This inevitably results in its improper handling and associated poor waste management problems that may include; poor sanitation and disease transmission. Figure 3 below shows some of main waste management methods practiced by households in Rwanda.

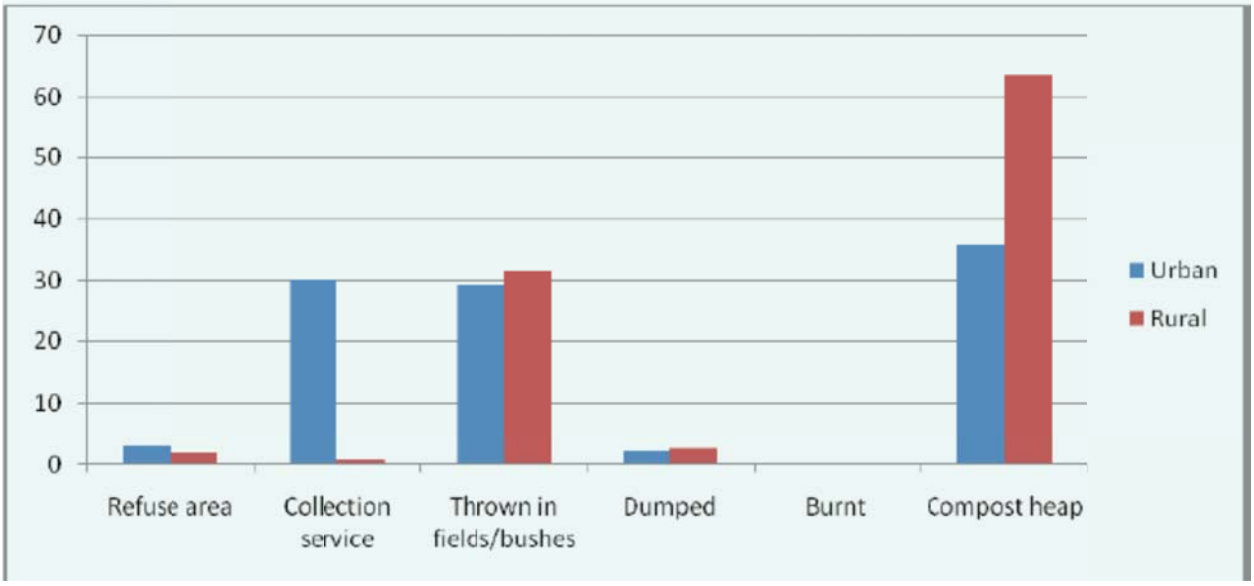

Figure 3: Main mode of rubbish disposal in Rwanda

Source: The Third Integrated Household Living Conditions Survey – Main Indicators Report

1.2.6 Purchase of consumption goods

There has been a gradual increase in the purchase of consumption goods as the country's economy has gradually improved. This is illustrated in Figure 4, based on national

household surveys (EICVs) that were conducted in 2005/06 (EICV2) and 2010/11 (EICV3). Both food and non-food consumption items continue to account for the largest percentage although there has been a considerable increase on the education side as well.

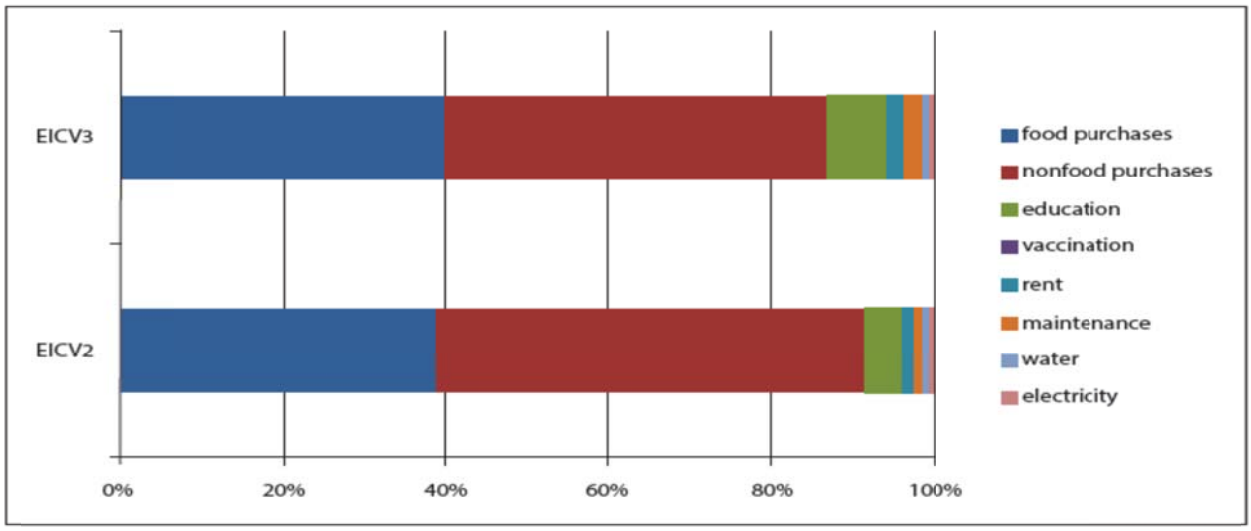

Figure 4: Shares of total purchases of consumption items at the national level in Rwanda

Source: ECIV2 and ECIV3

1.2.7 Manufacturing

Although Rwanda is well recognised as a competitive business destination as reflected in World Bank's 'Doing Business rankings' for 2013, its manufacturing sector only contributes 5% to the country's GDP and remains very small. That has meant that a large portion of the manufactured goods are mainly imports.

The country's manufacturing sector is mainly dominated by Agro-processing industries. These and other industries in Rwanda remain largely uncompetitive from a regional perspective solely due to the lack of adequate electricity supplies to run the industries. Not only is the current installed power generation capacity insufficient, but also the power in Rwanda costs $0.24/KWh compared with Kenya's $0.15/KWh, Uganda's $0.17/KWh and Tanzania's $0.05KWh (The East African, 2013(b)) making the tariff the highest in the East African region.

Therefore, the country has made energy one of its priorities and is exploring all viable energy generation options. Going forward, the country hopes to exploit manufacturing opportunities in five clusters (RDB, 2013) that include; Construction materials, Pharmaceutical products, Chemical & Chemical products, Packaging and paper products, and Electronic and Electrical equipment.

1.2.8 Ecological Footprint

An Ecological footprint is an environmental accounting tool that tries to assess the demands that a particular population exerts on nature. The footprint of a country, for

example, is the total area required to produce the food, fibre and timber that the nation consumes, absorb its waste, and provide space for its infrastructure (Global footprint network, 2006). A snapshot of Rwanda's ecological footprint over a 43 year period is shown in Figure 5.

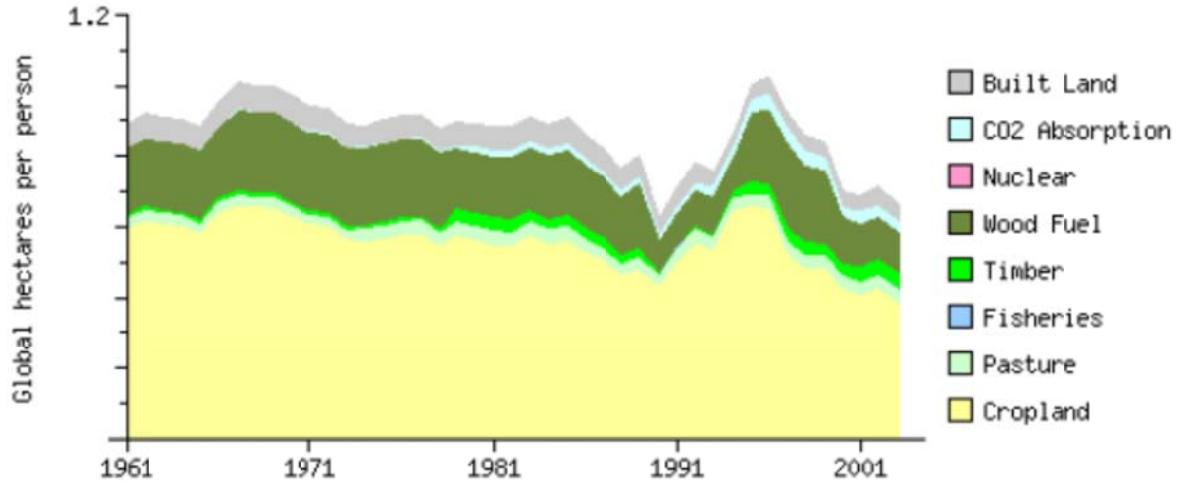

Figure 5: Components of the average per person Ecological footprint in Rwanda over a 43 year period.

Source: Global Footprint Network

The Ecological footprint is highest for cropland followed by wood fuel. In the case of the former it's mainly due to the fact that agriculture is the backbone of the economy with majority of the population earning their living from tilling their land on a subsistence basis. On the other hand, wood fuel and other forms of biomass make up 85% of the primary energy that is used in the country.

The above mentioned patterns of production and consumption are therefore not sustainable for Rwanda, especially when looked at from the perspective of the country's rapid population growth. It is therefore imperative for the country to consider a shift towards sustainable consumption and production as a key catalyst for sustainable development.

1.3 Sustainable Consumption and Production

Sustainable Consumption and Production (SCP) is the use of services and related products, which respond to basic needs and bring about a better quality of life while minimising the use of natural resources and toxic materials as well as emissions of waste and pollutants over the lifecycle of the service or product so as not to jeopardise the needs of future generations (Oslo Symposium, 1994).

It is important to note the SCP is hinged on four key principles (UNEP, 2011), namely;

i. The need to improve quality of life without increasing environmental degradation and without compromising the resource needs of future generations.
ii. Decoupling economic growth from environmental degradation through the reduction of material/energy intensity of current economic activities, and reducing emissions and waste from extraction, production, consumption and disposal; and promoting a shift of consumption patterns towards groups of goods and services of lower energy/material intensity without compromising quality of life.
iii. Applying life-cycle thinking when considering impacts from all life-cycle stages of the production and consumption process.
iv. Guarding against the rebound effect, where efficiency gains are cancelled out by resulting increases in production.

The debate around SCP can be traced back to the Rio Earth Summit in 1992, where it was recognised that for sustainable development to be achieved around the world, there was need to check consumption and production patterns of both developed and developing nations. Ten years later, the Johannesburg Plan of Implementation (JPOI) of the World Summit on Sustainable Development (WSSD) in its chapter III called upon the various stakeholders to develop 10-Year Framework Programmes (10-YFP) on SCP as part of a concerted drive towards SCP patterns.

Following on from the call to establish 10-YFP on SCP, the Marrakech Process (a Global and informal multi-stakeholder process launched in 2003 in response to chapter III) became a key vehicle for promoting the implementation of SCP and developing the 10-YFP on SCP in the period leading up to 2011, thereby fostering the development of a global multi-stakeholder platform for dialogue and cooperation to help implement SCP worldwide. The other outcomes of the process included the establishment of a number of SCP thematic task forces, SCP capacity building efforts as well as the promotion and implementation of SCP at regional, national and local level.

The task forces (see Figure 6) were very instrumental in propagating the SCP concept around the world, by demonstrating how it could be operationalised in different settings and contexts through the use of SCP tool kits in the areas of sustainable procurement, sustainable tourism, sustainable buildings and construction, sustainable products, education for sustainable consumption, and sustainable lifestyles.

Figure 6: Themes of the Marrakech Task Forces

Source: Marrakech Process Progress Report

The Task Force on cooperation with Africa was instrumental in helping a number of African countries implement the African 10-YFP on SCP. The African 10-YFP on SCP has become the basis for SCP development in Africa and is made up of four thematic areas, namely; Energy, Water and Sanitation, Habitat and Sustainable Urban development and Industrial development. The African 10-YFP on SCP was developed in 2003-2004 and formally launched in Addis Ababa in 2006, with the collaboration of the African Ministerial Conference on Environment (AMCEN), the New Partnership for Africa's Development (NEPAD), United Nations Economic Commission for Africa (UNECA), UNEP and United Nations Department of Economic and Social Affairs (UNDESA).

The thematic areas are in the context of the NEPAD Environmental Action Plan and regional poverty reduction priorities. However, the thematic areas and their respective priorities are due to be revised following the formal adoption of the Global 10-YFP on SCP (outlined in paragraph 226 of the Outcome Document "*The Future we Want)* as part of a global pact on sustainable consumption and production at RiO+20 in June 2012. It is worth noting that prior to the adoption of the global 10-YFP, Africa was the only region that had made headway in developing and implementing its 10-YFP on SCP.

Some of the projects and activities that have been implemented under the realm of the African 10-YFP on SCP by the respective task forces, but largely supported by the German Government funded Marrakech Task Force on cooperation with Africa (UNEP, 2012 (b)) working closely with the AMCEN secretariat include:

- Development and implementation of national and local SCP programmes in Burkina Faso, Egypt (Cairo), Ghana, Mauritius, Mozambique (Maputo), Rwanda, Tanzania, Uganda and Zambia;
- Demand-side management of energy use in Uganda and Zambia;
- African Beverage Industries Water Savings Initiative (ABIWSI) in Egypt, Ethiopia, Kenya, Rwanda, Tanzania, Uganda and Zimbabwe;
- Sustainable Buildings Policies for Developing Countries (SPoD) in Burkina Faso and Kenya;
- Promotion of the Resource Efficiency in Small and Medium sized Enterprises (PRE-SME) toolkit in Ethiopia, Ghana, Kenya, Rwanda, Tanzania and Uganda;
- Development and implementation of the African Eco-labelling Mechanism (AEM) and its Eco Mark Africa (EMA) in the region;
- Development of Integrated Solid Waste Management (ISWM) plans in Egypt, Ethiopia, Kenya, Mozambique, Lesotho and Zimbabwe, as well as household waste management in Burkina Faso;
- Promotion of a shift towards sustainable tourism in the African region;
- Development and implementation of Sustainable Public Procurement (SPP) policies in Ethiopia, Ghana, Mauritius, Tanzania, Tunisia and Uganda; and
- Mainstreaming of SCP in Burkina Faso, Benin, Cote d'Ivoire, Ghana, Kenya, Mali, Mauritius, Niger, Senegal, Tanzania, Togo, Uganda, Zambia and Rwanda.

The Marrakech process ended with the formal adoption of the global 10-YFP on SCP in 2011. The global 10-YFP aims to further accelerate the shift towards SCP by addressing the following objectives (UNEP 2013);

- *Supporting regional and national policies and initiatives to accelerate the shift towards SCP, contributing to resource efficiency and decoupling economic growth from environmental degradation and resource use, while creating new job/market opportunities and contributing to poverty eradication and social development;*
- *Mainstreaming SCP into sustainable development policies, programmes and strategies, as appropriate, including into poverty reduction strategies;*
- *Providing financial and technical assistance and capacity building to developing countries, supporting the implementation of SCP activities at the regional and national levels; and*
- *Enabling all stakeholders to share information and knowledge on SCP tools, initiatives and best practices, raising awareness and enhancing cooperation and development of new partnerships including public-private partnerships*.

Rwanda stands to benefit immensely by having a National SCP programme in place to further enhance its economic development and poverty reduction initiatives as enshrined in Economic Development and Poverty Reduction Strategy Phase II (EDPRS II) and its vision for transitioning to a middle income economy by the year 2020.

That is because SCP is closely linked with poverty eradication, especially when you consider the role it can play in addressing the aims of sustainable development as well as the Millennium Development Goals (MDGs). Also worth noting is the highly complementary nature of the indicator sets of both SCP and the MDGs, with MDGs 1 to 6 and 8 taking into account most of the social and economic dimensions of development, with MDG 7 on environmental sustainability being more highly focused on SCP related indicators (UNEP, 2012 (c)). Generally, from a poverty eradication perspective, SCP can be perceived as a cost effective vehicle for delivering on the MDGs by bringing forth more products and services in a cleaner and safer way while optimising or using fewer materials and less energy.

1.4 Existing Sustainable Consumption and Production Initiatives in Rwanda

SCP is not an entirely new concept in Rwanda. In fact, the country has been undertaking a number of interventions in the SCP arena although they may not have been labeled as such. Those worth highlighting include but are not limited to the following:

1.4.1 Resource Efficient and Cleaner Production Programme

The Resource Efficient and Cleaner Production (RECP) Programme is a preventive environmental strategy that is being spearheaded around the world through a joint UNEP and United Nations Industrial Development Organisation (UNIDO) collaborative effort. It builds on an earlier preventive environmental strategy called Cleaner Production; *which is applied to processes, products and services so as to increase efficiency and reduce risks to humans and the environment*.

Resource efficiency and Cleaner production are complementary of each other and RECP helps to address sustainability aspects through the following:

- Production efficiency – Optimisation of productive use of natural resources (materials, energy and water);
- Environmental management – Minimisation of impacts on the environment and nature through reduction of wastes and emissions; and
- Human Development – Minimisation of risks to people and communities and support for their development.

Since 2005 when RECP was introduced it Rwanda, it has been and continues to be the most direct form of applying SCP in the country largely through a collaborative effort of Rwanda Environment Management Authority (REMA), Ministry of Trade and Industry (MINICOM) and the Rwanda Resource Efficient and Cleaner Production Centre

(RRECPC). Some of the RECP interventions have included; awareness raising and training programmes in Cleaner Production (CP) for local experts in 2008 and 2009 as part of efforts to build a national capacity in CP, In-plant assessments in five industries, and implementation of sub-component 2.2 of the Lake Victoria Environmental Management Project Phase II that is aimed at addressing industrial pollution challenges and unsustainable consumption patterns of resources by industries in the Lake Victoria basin.

It is worth noting that the high degree of relevance that the Government of Rwanda attaches to RECP has culminated in the development of a guidance document on '*Mainstreaming Resource Efficient and Cleaner Production in Policies and Strategies of Rwanda'* that was formally launched in April 2013. Some of its key recommendations that are of relevance from an SCP perspective include:

- Ensuring that the mainstreaming of RECP follows a programmatic approach of mainstreaming environmental sustainability and RECP in national policy and strategy frameworks entailing, the identification of strategic entry points; mainstreaming into the policy process; and building implementation support;
- As part of institution and policy integration, there is need to facilitate the implementation of the EDPRS on a resource efficient basis by mainstreaming RECP in the development of the relevant Sectoral Strategic Plans that are executed through Sector-Wide Approaches (SWAPs) facilitated by the Sectoral Working Groups (SWGs);
- Provide special considerations for green economy sectors as part of economic and fiscal incentives, including renewable resource based production such as organic farming and provision of environmental management services, with a purpose of creating green jobs and contributing to the low carbon and resource efficient economy;
- Put in place capacity building measures as well as support Small and Medium Enterprises (SMEs) by enhancing the capacities of technical service institutions and programmes, including and institutionally regularised national RECP centre, energy and water and sanitation service companies, the Private Sector Federation, the planned Business Development Centres (BDCs) and demonstration centres and other industry support centres, in providing technical information and support to SMEs on the application of clean technologies and the development and implementation of resource efficient industrial improvement programmes; and
- Foster information and public education by promoting the integration of subjects related to RECP in the curriculum of universities and the relevant technical and vocational education and training programmes and support continuous RECP education programmes targeting key economic sectors and community groups.

1.4.2 National Domestic Biogas Programme

The Programme was started by the Ministry of Infrastructure (MININFRA) in 2007 with technical assistance from the Netherlands Development Organisation (SNV) and funding from the German Technical Cooperation (GTZ). From the outset, the main objective of the programme was energy security at household level through use of biogas as a source of fuel, not forgetting the other benefits that come with having a biogas digester such as reduced indoor air pollution, reduced deforestation rates through substitution of wood fuel with biogas, and availability of biogas digester slurry for use as manure. Schools, prisons, hospitals, and individual households are some of the key areas where biogas interventions have been rolled out. The government hopes to have installed up to 5,000 biogas digesters in households by 2014.

1.4.3 Clean Development Mechanism

The Clean Development Mechanism (CDM) is one of three flexible emission reduction mechanisms that were introduced by the United Nations Kyoto Protocol on climate change. The Kyoto protocol introduced emission reduction targets for industrialised countries. Rwanda ratified the protocol on 22nd July 2004.

Among the goals that CDM is meant to achieve include; assisting countries without emission targets to achieve sustainable development. These are mainly the developing countries, and to assist countries that have binding emissions targets to offset their emissions against CDM projects (carbon reduction projects) in developing countries.

As of January 2013, Rwanda had registered six CDM projects with the CDM Executive Board, with the Rwanda's Compact Fluorescent Lamp (CFL) distribution project expecting to reduce 18,579 tonnes of Carbon dioxide equivalent per year (tco2e/yr) as Certified Emission Reductions (CERs). The CERs have been purchased by the World Bank over a 10 year crediting period.

1.4.4 Umuganda

Umuganda which in Kinyarwanda is translated as 'coming together in common purpose to achieve an outcome' has been used to Rwanda's advantage to develop a community work based programme of the same name. The community work programme involves mobilising members of public on the last Saturday of every month to carry out a number of community development initiatives that have a sustainable development focus. The programme requires mandatory participation of all Rwandan's between the ages of 18-65 and close to 80% of these have been known to participate.

Some of the SCP related interventions of the Umuganda programme have included; wetland rehabilitation and creation of highly productive agricultural plots (Rwandapedia). The monetary value attributed to the Umuganda programme since 2007 has been estimated to be just over $60 million.

1.4.5 Africa Beverage Industry Water Saving Initiative

The Africa Beverage Industry Water Saving Initiative (ABIWSI) which has since evolved into the Africa Industry Water Saving Initiative (AfIWSI) is the brainchild of UNEP. It is aimed at water use efficiency in beverage industries in Africa given that beverage industries tend to be water intensive entities coupled with the fact that the specific water consumption of such industries tends to be higher than industry best practices. The ABIWSI interventions have been undertaken in three industries in Rwanda under the direction of RRECPC.

1.4.6 Environmental Education for Sustainable Development

Among the key initiatives under this, has been the development of an Environmental Education for Sustainable Development (EESD) strategy as well as Guidelines for infusing Education for Sustainable development into schools in Rwanda. Some of the target beneficiaries that REMA has engaged with as part of awareness raising efforts on sustainable development include the environment club at Kigali Institute of Science and Technology (KIST).

1.4.7 Fund for Environment and Climate Change (FONERWA)

Environmentally sustainable, climate resilient and green economic growth, are highlighted among the development priorities of the Government of Rwanda in the EDPRS II. The government working closely with development partners has set up a sustainable financing mechanism; Fund for Environment and Climate Change (FONERWA), so to ensure that the afore-mentioned elements that are integral to sustainable development are realized.

According to the FONERWA coordinator, projects that respond to national priorities are eligible for the funding and a call for proposals is sent out every three months. Among the other criteria that potential projects must meet to be eligible for funding include; sustainability, value for money, creation of green jobs, and a co-finance contribution. FONERWA has already carried out trainings for prospective recipients so as to ensure that they have the capacity to develop bankable proposals. The deadline for the first set of funding proposals closed in July 2013.

£22.5 million has already been committed by the UK's Department for International Development (DFID), to be spent by March 2015.

1.4.8 Environmental Management Systems

Environmental management systems (EMSs) are an essential element in addressing SCP, given their focus on continuous environmental improvement as pertains to environmental aspects and impacts. In Rwanda, a number of organisations already have these systems as an integral part of their operations, as well as the associated environmental policies that drive and sustain them. Business entities such a Bralirwa brewery which is also registered

on the Rwanda Stock Exchange already have a robust EMS in place that is certified to the ISO 14001:2004 International standard.

1.4.9 Environmental Assessments and Audits

Environmental Assessments and are major tool in identifying and predicting the environmental impacts that are likely to be associated with a particular policy, plan, programme and project so that appropriate preventive or remedial measures can be put in place. Environmental Audits are mainly concerned with verifying the environmental compliance status of a particular organisation's operations with regulatory requirements as well as any associated environmental risks that may be associated with the organisations.

Environmental Assessments, particularly Environmental Impact Assessments (EIAs) are by the far the most commonly used form of assessment. The function of administering them has been delegated to RDB by REMA and for every investment for which EIA may be a requirement, the exercise has to be carried out and to date a number of them have been conducted, with the EIA team at RDB doing the necessary review before formal approval can be granted. Environmental Audits on the other hand have largely remained a post-EIA tool as well as an environmental compliance tool and this component is largely overseen by REMA.

1.4.10 SolaRwanda Programme

The programme that is scheduled to last for four years (2012-2015) is being implemented by EWSA with the support of the World Bank and the Nordic Development Fund. Its main purpose is to ease the load on the electricity grid through the installation of solar water heaters in homes as a substitute for the electricity operated water heaters that tend to consume a lot of electricity.

It is projected that up to 12,000 solar water heaters will be installed over the 4-year period thereby realising annual electricity savings of 23,328Mwh. The solar water heating units will be provided at a subsidised rate with the recipients expected to have fully paid up for them within 2 years of their installation. In order to ensure the efficient running of the units, EWSA will provide an after sales maintenance service for a period of 10 years. A number of residential homes have already benefited from the solar water heating initiative.

1.4.11 Improved Cook Stove Programme

A number of improved cook stove projects have been implemented by organisations in Rwanda. Improved cook stoves when compared to the traditional 3-stone stove, come with a number of advantages from an environmental and social impact point of view. The degree of indoor air pollution attributed to them is very low; they use less biomass and so help to check deforestation rates; and their fuel use efficiency means that they are a good

mechanism for realising energy savings for the end user and thereby cutting down on their fuel expenses.

Most of the above initiatives, although contributing to the realisation of SCP, have not been based on a holistic approach and at best their interventions have been adhoc. Therefore, by having a national SCP programme for Rwanda in place, SCP interventions can be better coordinated and ultimately bring about a major shift in SCP patterns.

2.0 POLICY AND INSTITUTIONAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

There are a number of policies and strategies, as well as institutions that are of relevance to the promotion of sustainable development in Rwanda. Some of these are as presented below.

2.1 National Policies and Strategies

2.1.1 Rwanda Vision 2020

Vision 2020 is a long term development strategy that aims to transform Rwanda from a subsistence agrarian based economy into a middle income economy by the year 2020. Some of the key targets of the vision include; a per capita income of US$ 900, poverty level of 30% and an average life expectancy of 55 years.

Among the visions key objectives in the need for; promotion of macro-economic stability and wealth creation to reduce aid dependency, transformation from an agrarian to a knowledge-based economy, and creation of a productive middle class and fostering entrepreneurship.

The aspirations of the vision are anchored on six key pillars which are interlinked with three cross cutting issues. The pillars are; Good governance and a capable state, human resource development and a knowledge based economy, a private sector-led economy, Infrastructure development, productive and market oriented agriculture, and regional and international economic integration. The cross cutting areas of the vision include; Gender equality, protection of the environment and sustainable natural resource management, and science and technology including ICT.

2.1.2 Economic Development and Poverty Reduction Strategy II (EDPRSII)

EDPRS II is a five year plan (2013-2018) that is supposed to guide the implementation of Rwanda's vision 2020. The goal of EDPRS II which is in tandem with Vision 2020 is: "*Accelerating progress to middle income status and better quality of life for all Rwandan's through sustained growth of 11.5% and accelerated reduction of poverty to less than 30% of the population*". The strategy builds on the lessons learned from EDPRS I (2008-2012).

EDPRS II has four thematic areas each with a number of priority areas. The four areas are:

- **Economic transformation** for accelerated economic restructuring and growth striving for middle income country status;
- **Rural development** to address the needs of the vast majority of the population and ensure sustainable poverty reduction and rural livelihoods;

- **Productivity and Youth employment** to ensure that growth and rural development are underpinned by appropriate skills and productive employment, especially for a growing cohort of youth; and
- **Accountable Governance**, to underpin improved service delivery and citizen participation in the development process.

2.2 Sectoral Policies and Strategies

2.2.1 National Policy on Environment

The essential objectives of the policy are hinged on the twin issues of; fighting poverty, long term planning, and protection and management of natural resources. *The overall objective of the policy is the improvement of man's wellbeing, the judicious utilisation of natural resources, and the protection and rational management of ecosystems for sustainable and fair development.*

The policy goes further to pronounce itself on sustainable development interventions in the various sectors through its multi-sectoral policy statements. The policy statements include those for population and land use management; natural resources; socio-economic sectors; atmosphere, climate and disasters; and gender, youth and environment.

2.2.2 National Energy Policy and Strategy

Sustainable development is an underlying theme of the policy and this is well articulated in the vision, mission and key objectives of the policy. The vision of the energy sector is to: *contribute effectively to the growth of the national economy and thereby improve the standard of living for the entire nation in a sustainable and environmentally sound manner*. The mission on the other hand is concerned with the creation of the necessary conditions for the provision of: *sufficient, safe, reliable, efficient, cost effective and environmentally appropriate energy services to households and all economic sectors on a sustainable basis.*

The objectives of the policy include;

- Ensuring the availability of sufficient, reliable and affordable energy supplies for all Rwandans;
- Promoting the rational and efficient use of energy; and
- Establishing environmentally sound and sustainable systems of energy production, procurement, transportation, distribution and end-use.

2.2.3 National Policy and Strategy for Water Supply and Sanitation Services

The goal of the policy which is in resonance with the principles of sustainable development is: *to ensure sustainable and affordable access to safe water supply,*

sanitation and waste management services for all Rwandans, as a contribution to poverty reduction, public health, economic development and environmental protection.

The specific objectives of the policy which are considered under the *water supply*, *sanitation* and *institution sector framework* themes include;

- Raising rural water supply coverage to 85% by 2012 and to 100% by 2020 by assisting the Districts to plan, design, finance and implement infrastructure projects;
- Ensuring sustainable functionality of rural water supply infrastructure by developing effective management structures and well-regulated public-private partnership (PPP) arrangements;
- Ensuring safe, reliable and affordable urban water supply services for all (100% services coverage by 2012) while strengthening the financial viability of the utility;
- Raise household sanitation coverage to 65% by 2012 and 100% by 2020, and promote hygiene behaviour change;
- Implement improved sanitation for schools, health facilities and other public institutions and locations;
- Develop safe, well-regulated and affordable off-site sanitation services (sewerage and sludge collection, treatment and re-use/disposal) for densely populated areas;
- Enhance storm water management to mitigate impacts on properties, infrastructure, human health and environment;
- Implement integrated solid waste management in ways that are protective to human health and the environment; and
- Develop the sector's institutional and capacity building framework.

2.2.4 National Agricultural Policy

The National Agricultural Policy of 2004 has a major underlying theme of bringing about economic transformation through a shift from subsistence agriculture to market oriented agricultural practices that are more sustainable. At the heart of the transformation is the need for agricultural research and extension services.

Other areas that are singled out for attention in the policy include; areas experiencing chronic food insecurity, soil and water conservation, small livestock acquisition by farmers and the provision of training in animal production, crop and livestock disease control, and input distribution (mainly fertilisers) by various players under the supervision of the ministry of Agriculture (MINAGRI).

2.2.5 Public Transport Policy and Strategy for Rwanda

The policy recognises the importance that an efficient transport system can play towards the realisation of sustainable economic growth. The main objective of the policy is: *to reduce traffic congestion, energy use and pollution, thereby increasing mobility and accessibility of people and goods by developing an appropriate public transport system*

for Rwanda, which in turn would contribute more efficiently to the growth of the national economy, to economic development and to poverty reduction.

Among some of its key sustainable development objectives include;

- To suggest a number of alternative integrated public transport development strategies to alleviate the most urgent problems related to operational management;
- To suggest an appropriate operation and management system for public transport;
- To implement the land use plan for a transit oriented development; and
- To devise appropriate public transport infrastructure development and operational management programs for urgent, medium and long term basis.

2.2.6 National Industrial Policy

The vision of the policy is for Rwanda to have: *competitive industrial and advanced service sectors producing over $1.5 billion of exports by 2020, while increasing the number of off-farm jobs.*

The goals of the policy are in line with those that are stipulated in Vision 2020, while the objectives of the policy are based on three industrialisation pillars (increased domestic production, export competitiveness and an enabling environment). The respective objectives which build on the afore-mentioned pillars and that are also a basis for Rwanda's sustainable industrialisation include;

- Increased domestic production for local consumption;
- Improving Rwanda's export competitiveness; and
- Creating an enabling environment for Rwanda's industrialisation.

2.2.7 Rwanda Education Policy

The objectives of the policy set a good basis for capacity building as pertains to sustainable development. Key among the objectives or those that are closely linked with sustainable development include;

- The need to ensure that education is available and accessible to all Rwandese;
- Improving the quality and relevance of all education;
- Teaching the relevance of science and technology with a particular emphasis on ICT; and
- The need to inculcate in children and sensitise them on the importance of environment, hygiene and health, and protection against HIV/AIDS.

The policy is one of the drivers of Environmental Education for Sustainable Development interventions in the country which are aimed as sustainable development and its principles.

2.2.8 Rwanda Biodiversity Policy

The main goal of the policy is: *to conserve Rwanda's biological diversity, to sustain the integrity, health and productivity of its ecosystems and ecological processes, whilst providing lasting development benefits to the nation through the ecologically sustainable, socially equitable, and economically efficient use of natural resources.*

Sustainable use of Rwanda's natural resources is highlighted as one of the key principles of the policy. For that to happen, the policy proposes the need to: maintain the ecological integrity of the natural resources; minimising or avoiding the risk of irreversible change induced by humans; adequate investments to ensure conservation and sustainable use of biodiversity; and avoiding or minimising adverse impacts of the use of non-renewable resources on biodiversity.

2.2.9 Plan for Strategic Transformation of Agriculture–Phase II (PSTA II)

The Strategic plan is meant to serve as Rwanda's main strategy for addressing food security and agriculture for the period spanning (2009-2012). It highlights a number of key issues that need to be addressed if the targeted levels of agricultural growth that the country has set itself are to be realised.

Some of the key programmes of the policy of which some have a direct focus on sustainable development include; intensification and development of sustainable production systems, support to the professionalisation of producers, promotion of commodity chains and agribusiness development, and institutional development. The strategy builds on a similar programme PSTA I that was initiated in 2004 and covered the period (2004-2008). PSTA II is the main instrument that is used to operationalise the National Agricultural Policy.

2.2.10 National Strategy for Climate Change and Low Carbon Development

The main focus of the strategy is to guide the process of mainstreaming climate resilience and low carbon development into the main sectors of the economy as part of the implementation of Vision 2050 (Rwanda to be a developed climate-resilient, low carbon economy by 2050).

The guiding principles of the vision include;

- Economic growth and poverty reduction;
- Sustainability of the environment and natural resources;
- Welfare and wellness of all citizens in a growing population;
- Good Regional and Global Citizenship; and
- Gender equality and equity.

The strategy has a number of strategic objectives, and fourteen sustainable development programmes of action. Sustainable intensification of small scale farming; sustainable land use management; a low carbon energy grid; Green industry and private sector development; ecotourism; and sustainable forestry, are among some of the programmes of action.

2.2.11 Environmental Education for Sustainable Development Strategy

The strategy aims to provide an enabling environment and capacity for all sectors and stakeholders to effectively contribute towards the achievement of sustainable development. Among the main issues that the strategy requires the various sectors in Rwanda to address include; improving quality of education by addressing sustainable development and sustainability aspects, orientation of education towards sustainable development, public understanding and awareness of sustainability, and capacity building for education for sustainable development.

Key objectives of the strategy are:

- To promote education and awareness so as to increase public participation in sustainable development;
- Capacity building for future leaders to have the commitment and ability to work to ensure sustainable development;
- Integrate environment and sustainability issues in the school curriculum to improve the quality of learning and make it relevant to the needs of the society;
- Capacity building for the media to report and communicate sustainable development information required to address pertinent sustainable development challenges; and
- Enhance the quality and relevance of higher education to respond to local sustainable development challenges.

2.3 Institutional Framework

2.3.1 Ministry of Finance and Economic Planning (MINECOFIN)

The Ministry was formed in 1997 following the merger of the ministry of finance with that of planning. The mission of the ministry is: *to raise sustainable growth, economic opportunities, and living standards,* while its vision is: *to develop Rwanda into a country free of poverty.* Some of its sustainable development goals include; contributing towards increased productivity of the economy, employment opportunities, the investment climate, and the quality of public investments; and contributing to increased living standards of the population and human development within a sustainable environment.

2.3.2 Ministry of Natural Resources (MINIRENA)

The Ministry is at the fore front of the promotion of sustainable development as is articulated in its mission: *ensuring the protection and conservation of the environment and ensure optimal and rational utilisation of natural resources for sustainable national development.* REMA and RNRA are two lead agencies that are under the ministry.

The main functions of the ministry are: The development and dissemination of sector policies, strategies and programmes; regulatory oversight of the sector and related sub-sectors through the development of the necessary legal and regulatory framework aimed at ensuring rational utilisation of natural resources as well as their protection and conservation; developing the necessary institutional and human resource capacity necessary for the proper functioning of the environment and natural resource sector and related sub-sectors; monitoring and evaluation of the sector and sub-sector policies, strategies and programmes; and institution oversight.

2.3.3 Ministry of Trade and Industry (MINICOM)

The Ministry's vision is: *to achieve accelerated and sustained economic growth led by a dynamic and competitive private sector.* The institution is also at the helm of ensuring that Rwanda achieves its desired socio-economic transformation through sustained industrial growth.

Some of the ministry's key objectives include;

- Creating a business environment conducive to growth and the protection of consumers;
- Increasing the share of services and manufacturing in GDP;
- Supporting private sector growth and job creation with a focus on SMEs;
- Promoting trade integration into regional and global markets with a focus on improving Rwanda's trade balance; and
- Building an effective human resource base and institutional capacity for delivery.

Rwanda Bureau of Standards and Rwanda Cooperative Agency are some of the lead agencies under MINICOM.

MINICOM has been at the fore front of promoting SCP in Rwanda through its Rwanda Resource Efficient and Cleaner Production Centre (RRECPC) joint project with UNIDO that was established in 2008. RRECPC is currently hosted by the Private Sector Federation (PSF) of Rwanda. Through this project; awareness raising, technical advice, Cleaner Production in-plant assessments, and RECP related trainings have been conducted.

2.3.4 Ministry of Infrastructure (MININFRA)

The mission and purpose of the Ministry is: *to ensure the sustainable development of infrastructure and contribute to economic growth with a view to enhancing the quality of life of the population.* Environmental sustainability is among the core functions of the ministry, especially as pertains to infrastructure development. There a number of lead agencies under the Ministry, namely; Road Maintenance Fund (RMF); Office National des Transports en Commune (ONATRACOM); Rwandan Civil Aviation Authority (RCAA); EWSA; Rwanda Transport Development Agency (RTDA) and Rwanda Housing Authority (RHA).

2.3.5 Ministry of Local Government (MINALOC)

The main mission of the Ministry is: *promoting the wellbeing of the population through good governance, community development and social affairs.* There are five core programmes that the ministry oversees, namely; Good governance, decentralisation, community development, local finance, and social protection. Through the decentralisation process which gives some powers to local governments (Districts), the ministry is able to ensure that the planning, reporting and monitoring requirements of the local governments are in line with certain sustainable development criteria as contained in the district development plans. Therefore, MINALOC is very influential in process of cascading the sustainable development agenda to the local governments.

2.3.6 Ministry of Education (MINEDUC)

The Ministry's mission is: *to transform the Rwandan citizen into skilled human capital for socio-economic development of the country by ensuring equitable access to quality education focusing on combating illiteracy, promotion of science and technology, critical thinking and positive values.* The ministry is instrumental in the promotion of sustainable development practices in schools, particularly through its role in the environmental education for sustainable development national curriculum development process. Some of the lead agencies under the ministry include; the Workforce Development Authority (WDA), Institute of Scientific and Technological Research (IRST), the Rwanda National Commission for UNESCO, Higher Education Council, and Institutions of Higher Learning.

2.3.7 Ministry of Agriculture and Animal Resources (MINAGRI)

The Ministry is tasked with overseeing the agricultural sector and its vision is: *to modernise agriculture and livestock to achieve food security.* The ministry's key plans of action as part of interventions in the sector revolve around four programmes, namely: Intensification and development of sustainable production systems; support for producer professionalisation; promotion of product chains and agro-industry development; and institutional development.

2.3.8 Ministry of Gender and Family Promotion (MIGEPROF)

The Ministry's main role is to facilitate the implementation of the National Gender Policy and Plan of Action so to ensure effective gender mainstreaming and full participation of women in all activities related to socio-economic development of the nation. Gender is recognised as a crosscutting issue and therefore the ministry has to ensure that it's mainstreamed in all sectors.

2.3.9 Rwanda Environment Management Authority (REMA)

REMA is one of the lead agencies under MINIRENA. Its mandate is to oversee the management of environmental issues in the country. This includes but is not limited to capacity building in sustainable development through avenues such as the environmental education for sustainable development strategy coupled with the necessary legal and regulatory enforcement measures.

2.3.10 Rwanda Natural Resources Authority (RNRA)

RNRA is a lead agency under the ministry of natural resources that works closely with its sister agency, REMA. It's tasked with the management of promotion of natural resources, principally; land, water, forests, mines and geology. It also plays a key role in the supervision, monitoring and implementation of issues relating to the promotion and protection of natural resources in interventions of all the other institutions in Rwanda.

2.3.11 Energy and Water Sanitation Authority (EWSA)

EWSA is an agency under MININFRA that is in charge of matters to do with energy, water and sanitation in Rwanda. Its mission is to create conditions for the provision of sufficient, safe, reliable, efficient, cost-effective and environmentally appropriate energy, water and sanitation services to households and to all economic sectors on a sustainable basis. It has a vision with a sustainable development focus; *contributing effectively to the growth of the national economy and thereby improve the standard of living for the entire nation in a sustainable and environmentally sound manner.*

2.3.12 Rwanda Development Board (RDB)

RDB is the lead agency responsible for coordinating investment related interventions in Rwanda as well as providing export support to the private sector, business registration, environmental and tax advice, among others. Its vision and mission are: *to transform Rwanda into a dynamic global hub for business, investment, and innovation; and fast tracking economic development in Rwanda by enabling private sector growth.* RDB plays a key role is sustainable development in Rwanda by ensuring that investments in the country conform to good environmental management practices by being subjected to the Environmental Impact Assessment (EIA) process. Although the organic law entrusts administration of EIA matters with REMA, EIA matters have been delegated to the RDB

one-stop centre by REMA as part of process of centralisation of investment related regulatory services so that investors benefit from an efficient service regime.

2.3.13 Private Sector Federation (PSF)

PSF is a private sector member based institution that represents the interests of the private sector. PSF consists of a number of chambers including those of mines, industry, among others, and provides training and capacity building services to its members as well as advocating for the needs of its members. PSF is well placed to influence SCP in the country through the production and consumption patterns of its members.

2.3.14 Workforce Development Authority (WDA)

WDA is one of the lead agencies under MINEDUC whose vision and mission are: *to become a regional centre of excellence in workforce development, and to promote, facilitate, and guide the development and upgrading of skills and competencies of the national workforce in order to enhance competitiveness and employability.* WDA has a major role to play in the development of 'Green jobs' skill sets which are essential for green growth and sustainable development in general.

2.3.15 Districts

Under the decentralisation process, Districts are entrusted with certain environmental management powers, thereby having a positive influence on sustainable development. Some of roles played by districts under the this arrangement include; implementation of land use plans from the point of view of environmental protection and natural resources conservation, addressing matters to do with pollution control, promoting the rational use of water and energy, to mention but a few.

2.3.16 Academia

Academic institutions in Rwanda have a role to play in promoting sustainable development. Notable interventions include the Centre of Environment, Entrepreneurship and Sustainable Development at the University of Rwanda main campus, and the School of Architecture and Environmental Design at the College of Science and Technology of the University of Rwanda. It is worth noting that the College of Science and Technology has instituted sustainable development related courses such as Environmental Technology, Environmental Chemistry and Environmental Design.

2.3.17 Civil Society Organisations (CSOs)

CSOs have an important to role to play in the sustainable development debate in Rwanda through advocacy and influencing policies that are geared towards the promotion of sustainable development. One particular CSO that is currently involved in promotion of sustainable development is the Rwanda Initiative for Sustainable Development (RISD)

whose main focus is land advocacy, policy research and capacity building. RISD works closely with REMA under the natural resources and environment working group.

3.0 DEVELOPMENT OF THE NATIONAL SCP PROGRAMME FOR RWANDA

3.1 Methodology

Although there are various reasons behind the need to set up a National SCP programme, the major ones according to UNEP include the following:

- The highly focused nature of SCP makes it relatively easy to communicate and implement;
- SCP stands out as one of the key pillars of sustainable development;
- SCP integrates issues of supply and demand in a coherent market strategy;
- The life cycle thinking approach entailed in SCP avoids burden-shifting into other phases of the life cycle;
- The concept seeks to achieve "win-win" outcomes through a multi-stakeholder setting;
- SCP is a good avenue for resource mobilisation, such as funds from donors for projects;
- SCP targets business and industry which are key players in achieving sustainable development; and
- SCP initiatives can create jobs and investment and encourage social and business innovation.

The above reasons go a long way towards informing the national SCP development process.

The methodology used for developing the National SCP programme for Rwanda was based on the ten step process for SCP programme development as laid out in the UNEP "Guidelines for National Programmes on Sustainable Consumption and Production". The individual steps are:

i. Establishing an advisory group to manage the SCP process.
ii. Conducting a scoping review of the main related SCP needs, problems and challenges.
iii. Formalising the institutional framework for the SCP process.
iv. Selecting priority areas to be targeted by the SCP programme.
v. Defining objectives and setting targets to monitor and evaluate the SCP programme.
vi. Selecting policies and initiatives for supporting the SCP objectives and targets.
vii. Official approval of the SCP programme.
viii. Implementation of the SCP programme.
ix. Document, monitor and evaluate the SCP programme.
x. Sustain and improve the SCP programme as part of an ongoing process of continuous improvement.

The above steps are summarised in Figure 7 which indicates their inter-linkages and their respective phases.

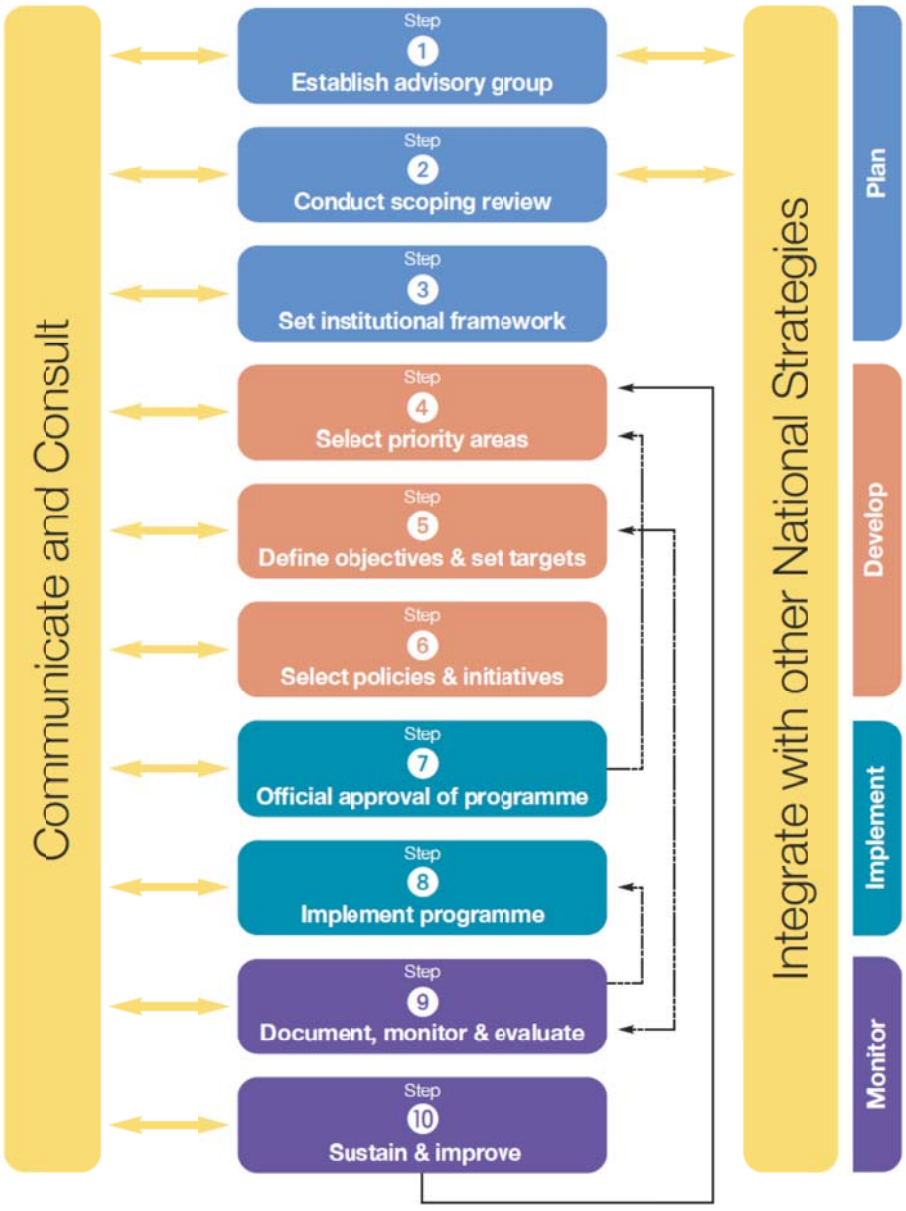

Figure 7: The SCP Programme Development Process (UNEP 2008)

The process of developing the national SCP programme is supposed to allow for flexibility in as far as the steps that are to be followed is concerned. Therefore, as part of the process of developing this national SCP programme, the process kicked off with the conducting of a scoping review since an advisory group for guiding the SCP process had not been formed.

Scoping commenced in July 2013 and entailed the review of existing programmes, policies and institutional arrangements for the promotion of sustainable development as

well as the possibility of integrating the SCP programme in existing national policy frameworks. Another key aspect of the scoping process was the stakeholder identification and engagement process (See Annex I for a list of stakeholders that were consulted) that was aimed at enlightening key stakeholders on the SCP concept as well as soliciting for their views on potential SCP projects that would subsequently inform step 4 (selecting priority areas) of the SCP programme development process.

The stakeholder engagement process was based on interviews which were mainly conducted at national level and it is also worth noting that regional entities involved in the promotion of SCP were also consulted. Some of the common issues that emerged from the stakeholder consultation processes both during the scoping, and validation of this programme document, that warrant priority status in as far as the SCP situation in Rwanda is concerned are as presented below.

- Demand side management of Energy Consumption;
- A need for Sustainable Cities;
- Sustainable Sanitation facilities in rural settlements;
- Sustainable Consumption and Production of Plastics; and
- Education for Sustainable Consumption and Production.

Demand side management of energy consumption which entails aspects such as energy efficiency and demand response is seen as a key intervention that can help spur the country's socio-economic transformation. This is especially important given Rwanda's current limited electricity generation capacity. By having a number of business entities, institutions and other organisations embrace demand side management measures, the foregone energy can then be used for further interconnectivity of the economy which it is hoped will in turn lead to increased productivity, owing to the linkage between connectivity and productivity.

Sustainable cities are a key requirement for Rwanda given the current urbanisation problems that the capital city, Kigali, is facing that include slums, poor infrastructure, among others. According to UN Habitat, Kigali city's urbanisation rate currently stands at 9% compared to 4.8% for the entire country. In essence, most of the pressure is being exerted on Kigali city. Therefore, although urbanisation is associated with upward mobility from a socio-economic standpoint, it tends to be associated with increased patterns of consumption which may not be in tandem with the prevailing production patterns required to sustain it. Therefore by implementing a sustainable city model or models the incorporated aspects of green economy and low carbon modes of growth, Rwanda will be able to realise its urbanisation plan that is premised on the concept of organised growth.

The ***Sustainable sanitation facilities in rural settlements*** are aimed at ensuring that the sanitation needs of the country's high rural population are met as part of a sustainable sanitation infrastructure approach that is focuses on efficient use of land. This is on account of the country's high rural population density which is among the highest in the world and calling of efficient land utilisation.

The ***Sustainable Consumption and Production of Plastics*** intervention is aimed at the sustainable management of plastics related wastes. This is supposed to enhance the country's already existing efforts in the area of plastics waste management, by providing complementary alternative solutions.

Education for Sustainable Consumption is a key avenue for raising awareness on SCP matters within the country. Sustained efforts will build the necessary critical mass that is needed to bring about the necessary shift towards SCP by way of behavioural change.

The SCP projects that were selected based on the above issues are discussed in the subsequent sections. The same applies to the subsequent SCP programme development process steps. In developing the national SCP programme, some alternatives had to be considered with regards to the type of national SCP programme as discussed below.

3.2 National SCP Programme options

3.2.1 Stand-alone Programme

The national SCP programme for Rwanda could be developed as a stand-alone programme. In this case the programme would either focus on a sectoral/issue-based plan or alternatively on a particular action plan/strategy. The downside of this option is that the programme will not tie in with most of the Government of Rwanda's priorities thereby not enjoying the necessary government support and political buy-in.

3.2.2 Integrated Programme

An integrated national SCP programme entails having sectoral/issue-based plans and action plans/strategies being integrated into a major national level framework such as the national sustainable development strategy (NSDS), national environmental action plan (NEAP), national development plan (NDP) or poverty reduction strategy papers (PRSP) as depicted in Figure 8.

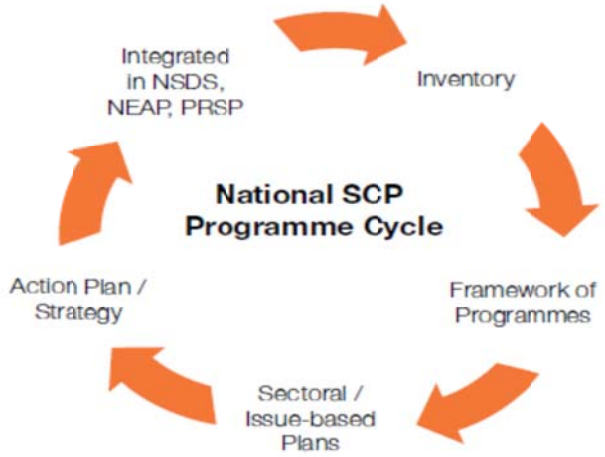

Figure 8: National SCP Programme Cycle (UNEP 2008)

Some of the advantages of having an integrated national SCP programme are that, implementation costs are likely to be reduced especially if the national strategy it's to be tied in with is new; monitoring mechanisms for the national strategy that may already be in place can be leveraged to reflect those objectives and targets of the national SCP programme; and it may be easier to obtain official approval (step 7 in Figure 7) of the national SCP programme by virtue of its being linked to a national sustainable development strategy or national development plan thereby also raising the profile of the national SCP programme.

Good case studies of integration of SCP programmes (UNEP, 2012 (a)) into national strategies in Africa include;

- Mauritius' National Programme on SCP that was developed by the Ministry of Environment and Sustainable Development in collaboration with UNEP. The programme was structured around the priority areas of: energy, water, change in lifestyle, and mode of production and consumption. The afore-mentioned interventions are aimed at contributing towards the country's goal of becoming a sustainable island. The programme is comprised of 44 projects that are to be implemented over a five year cycle by 14 lead agencies.
- Tanzania's National Action Plan on SCP which was developed in 2008 based on the country' strategy for Growth and Poverty Reduction. Its key focal areas or priorities include; energy efficiency, water and sanitation, habitat and urban sustainable development, industrial development, as well as other crosscutting issues. The targets for the programme are monitored as part of its National strategy for Growth and Poverty Reduction.
- South Africa's National Framework for Sustainable development that was finalised in 2008 which proposes a national vision, principles and areas for strategic intervention that will enable and guide the development of the national strategy and action plan. The five strategic areas that have been earmarked for intervention are: enhancing systems for integrated planning and implementation; sustaining ecosystems and using natural resources efficiently; economic development via investing in sustainable infrastructure; creating sustainable human settlements; and responding appropriately to emerging human development, economic and environmental challenges.
- In the case of Ghana, the Sustainable Development Action Plan which also doubles as the National Programme on SCP, provides the basis for action on SCP as well as the development of related policies and projects in that area. Its key focus areas are: education, energy, water and sanitation, and urban and industrial development.
- Zambia's Vision 2030 is the main framework for steering the country towards its sustainable development aspirations. It entails key policies into which SCP aspects are embedded. Some of its SCP pilot activities are focused on: demand-side management of energy and water use, integrated waste management, and sustainable agriculture.

In Rwanda's case, the proposed national SCP programme will be an integrated one. It will be integrated into EDPRS II as a cross-cutting issue given the cross cutting nature of SCP. This will entail the Sector Working Groups (SWGs) having to incorporate SCP interventions into their sector strategic plans as well as district development plans, and eventually having them scrutinised by MINECOFIN before being incorporated into EDPRS II during the annual budget review cycle in December 2013.

4.0 SUSTAINABLE DEVELOPMENT PRIORITIES

4.1 Priority areas in Rwanda's EDPRS II

In line with the national SCP development process that requires the selection of priority areas where SCP interventions are to be applied, it is important that the priorities that are selected respond to each country's development needs and specific conditions.

Rwanda's priorities for the next five years (2013-2018) are embedded in its EDPRS II. An overview of the priority areas contained therein coupled with their respective thematic areas is as shown in Table 1.

Some of the sustainable development priority areas in EDPRS II can be considered as good drivers for fostering a shift towards SCP. Notable examples include; increasing the domestic interconnectivity of the Rwandan economy through investing in hard and soft infrastructure, pursuing a 'green economy' approach to transformation, integrated approach to land use and rural settlements, and mainstreaming environmental sustainability into productive and social sectors.

Table 1: EDPRS II Thematic Areas and Priorities

Thematic Area	Priorities
1. Economic Transformation for Rapid Growth	– Increasing the domestic interconnectivity of the economy through investments in hard and soft infrastructure. – Increasing the external connectivity of the economy and boosting exports. – Transforming the private sector by increasing investments in priority sectors. – Transforming the economic geography of Rwanda by facilitating and managing urbanisation and promoting secondary cities as poles of economic growth. – Pursuing a 'green economy' approach to economic transformation.
2. Rural Development	– Integrated approach to land use and rural settlements. – Increasing the productivity of agriculture. – Enabling graduation from extreme poverty. – Connecting rural communities to economic opportunity through improved infrastructure.
3. Productivity and Youth Employment Creation	– Improving skills and attitudes. – Applying technology and ICT. – Enhancing entrepreneurship and business development. – Improving labour market interventions.
4. Accountable Governance	– Strengthening citizen participation in delivery and demand for accountability. – Service delivery.

In addition to the above four thematic areas, EDPRS II addresses Foundational[1] and Cross Cutting[2] issues as indicated in Boxes 1 and 2 respectively.

Box 1: Foundational Issues in EDPRS II

[1] Long term priorities where considerable progress has already been made in EDPRS I that shall continue to be of focus for the nation as a basis of laying a firm foundation for the emerging priorities designed and implemented under the thematic areas.

[2] Issues that have been mainstreamed in all other sector strategies and district plans over the duration of EDPRS II.

Box 2: Cross Cutting Issues in EDPRS II

a) Capacity building: through prioritising institutional and individual capacity development within sectors and Districts to deliver under each of the thematic areas and foundational issues.

b) Environment and climate change: major areas of attention will be mainstreaming environmental sustainability into productive and social sectors and reducing vulnerability to climate change.

c) Gender and family: The main issue include reducing poverty levels among men and women, malnutrition, reducing gender based violence and other related conflicts at both family and community level.

d) Regional integration: This will be explored for increased access to trade, finance, legislation, health regulation, agricultural standards, environmental safeguards and education qualifications.

e) HIV/AIDS and NCDs through regular sensitisation regarding HIV, voluntary counseling, testing, prevention of mother to child transmission, condom distribution.

f) Disaster management includes investment in rapid response disaster management equipment, early warning systems and awareness campaigns.

g) Disability & Social Inclusion include accessible infrastructure and information, media practitioners will develop standards for reporting news accessible to people with disabilities.

5.0 SCP PRIORITIES FOR RWANDA

5.1 Priority areas selected for inclusion in National SCP Programme

The SCP priority areas were selected following the identification of potential SCP project categories during the stakeholder engagement process coupled with the country's socio-economic aspirations as outlined in EDPRS II, see Table 2.

Table 2: SCP Priority areas and SCP Project Categories

Priority areas	SCP Project Categories
Increase the domestic interconnectivity of the Rwandan economy through investing in hard and soft infrastructure	Demand-side management of Energy Consumption
Pursue a 'green economy' approach to transformation	Sustainable Cities; Sustainable Consumption and Production of Plastics
Integrated approach to land use and rural settlements.	Sustainable Sanitation facilities in rural settlements
Mainstreaming environmental sustainability into productive and social sectors	Education for Sustainable Consumption and Production

The SCP projects are supposed to serve as a way of bringing to fruition the anticipated benefits of the national SCP programme highlighted in sub-section 3.1.
Some of the proposed initiatives under the respective SCP project categories are as listed below.

Demand side management of Energy Consumption

i. Energy efficiency in medium and heavy energy consuming enterprises.
ii. Installation of energy efficient public infrastructure.
iii. Mainstreaming energy efficiency in public procurement guidelines (Green procurement and Capacity building).
iv. Mainstream Energy Efficiency in policy instruments.

Sustainable Cities

i. Develop a 'Sustainable building' rating scheme for cities.
ii. Facilitate the implementation of Green cities.
iii. Monitor vehicular emissions in cities.
iv. Introduce Green planning policy obligations for city developers.

v. Introduce a congestion charge for heavy goods vehicles passing through cities at peak times.

Sustainable Sanitation facilities in rural settlements

i. Construction of Bio-toilets.
ii. Construction of toilets for the disabled.
iii. Construction of water borne toilets that utilise harvested rainwater.

Sustainable Consumption and Production of Plastics

i. Manufacture of Environmentally friendly plastic packaging for value added products.
ii. Research and Development into the manufacture of biodegradable plastics using agricultural products such as starch and vegetable oil residues.
iii. Establishment of plastic recycling plants.
iv. Construction of public infrastructure from recycled plastic.

Education for Sustainable Consumption and Production

i. Establishment of SCP in Science Clubs in Schools.
ii. Incorporation of SCP in the science curriculum of schools.
iii. Developing National SCP indicators.
iv. Developing a National SCP award scheme.

As a way of ensuring that the necessary momentum to bring about a shift in SCP patterns is generated in the shortest time possible, the SCP projects were considered on their basis for being able to bring about "win-win" outcomes in the short-to-medium (1 to 3 years) term over the five year duration of the national SCP programme which is in synchrony with that of EDPRS II.

6.0 SCP PILOT ACTIVITIES

6.1 Selection Criteria

As part of the process of identifying specific SCP pilot activities that are to be implemented under the respective SCP project categories, key criteria that the respective pilot activities needed to meet were considered.

Impact – Some considerable change should be expected as a result of the project activities in relation to the project goals.

Replication Potential – The pilot activities should have the potential to act as a good model for propagating the SCP concept throughout the country.

Up scaling potential – It should be possible to expand the scale of the pilot activities to increase their desired impact.

Capital Investment – The initial investment required for the pilot activities should be of either 'low' to 'medium' cost and with favourable payback periods or considerable benefits.

Monitoring – Readily verifiable SCP indicators for tracking progress of the project activities.

Sustainability – Potential of the positive changes brought about by the pilot activities continuing in the longer term.

Based on the stakeholder engagement process coupled with the above criteria, a number of pilot activities were identified, namely;

- Promotion of Energy Efficiency in medium and heavy energy consuming enterprises;
- Construction of Bio-toilets in rural settlements;
- Manufacture of Environmentally friendly packaging for value-added products; and
- Establishment of SCP in Science Clubs in Schools.

The rationale for selecting the above pilot activities is given in the overview below.

6.2 Overview of Pilot Activities

An overview of the above mentioned pilot activities is as given below. Their respective log frames can be found in Annex 2.

6.2.1 Promotion of Energy Efficiency in medium and heavy energy consuming enterprises

Energy efficiency in Rwandan enterprises will make the enterprises more competitive as a result of reduced energy losses. The initiative will also free up some of the energy for other sectors that are currently constrained by the current energy deficit in the country. This is supposed to serve as a short-term measure as more energy sources come on line to plug the current energy deficit. Currently, the bulk of the key energy consuming enterprises are the agro-processing based ones although as part of the proposed pilot activities it is hoped that energy efficiency initiatives will be extended to heavy energy consumers such as cement, steel, and mining. MINICOM, PSF and EWSA identified energy efficiency as a key SCP intervention.

Responsible agencies: MININIFRA, MINICOM

6.2.2 Construction of Bio-toilets in rural settlements

The construction of communal bio-toilets in rural settlements is supposed to check the unsustainable land use practices associated with land-take for sanitation facilities. The conventional practice has been the use of pit latrines that are then abandoned or decommissioned once they have filled up.

The proposed intervention will provide a sustainable solution to rural settlement inhabitants in that it will:

- Provide a sustainable solution for treating human waste in a biogas digester;
- The gas generated in the biogas digester will be used for the dual purpose of cooking/heating as well as community lighting;
- Biogas will substitute woody biomass as a source of energy as the latter is the driving force behind the high deforestation rates; and
- The digestate or slurry from the biogas digester is a good fertiliser that can be used to enhance soil fertility thereby boosting agricultural yields rural settlements.

Responsible agencies: MININFRA, MINIRENA, MINALOC, RNRA, MINAGRI

6.2.3 Manufacture of Environmentally friendly plastic packaging for value added products

Consultations with MINECOFIN, MINICOM and PSF, highlighted the need for sustainable packaging as the long term solution to the competitiveness and productivity of Rwanda's enterprises, especially those that are engaged in export. In their view the law

banning the importation and use of plastic bags that was passed in 2008 has had a serious impact on the competitiveness of Rwandan enterprises at the regional level.

A testimony given by a large Rwandan Agri-processing company (Private Sector Federation, 2013) takes issue with the strict packaging requirements in the country which have made the cost of products imported from neighbouring countries where the requirements are not as stringent, cheaper relative to theirs. The company therefore calls for reasonable packaging requirements.

The proposed pilot activity therefore intends to build on Rwanda's position against plastics by also positioning Rwanda as a pioneer in promoting environmentally friendly packaging alternatives that will increase the competitiveness and productivity of its enterprises.

Responsible agencies: REMA, MINICOM, MINAGRI, FONERWA, MINIRENA

6.2.4 Establishment of SCP Clubs in Schools

In order to ensure that the desired shift towards SCP patterns is achieved, there is need to build a basic national capacity in SCP. Education is the ideal avenue for such an intervention. The proposed pilot activity aims to integrate SCP as one of the programmes in the already existing 'Science Clubs in Schools' set up.

Responsible agencies: MINEDUC, REMA, MINIRENA

7.0 SCP PROGRAMME IMPLEMENTATION

7.1 Implementation Mechanism

For the National SCP programme to achieve its desired results, its implementation will need to be overseen by a well-coordinated National Steering Committee. The committee will among other things be tasked with, seeking official approval for the programme; forging partnerships with other SCP promoting entities such as the Global 10-YFP on SCP Secretariat hosted by UNEP and the African Roundtable on Sustainable Consumption and Production (ARSCP); mobilising resources for the programme; and factoring the necessary adjustments into the programme as the need may warrant.

The committee shall be headed by the National focal point on 10-YFP on SCP assisted by representatives from Government institutions, the private sector, civil society, academia, and the donor community. The structure of the implementation committee is summarised in Figure 9. The other key roles of the 10-YFP on SCP National focal point are to ensure contact and coordination with the Board and the Secretariat of the Global 10-YFP on SCP; to support the implementation of the 10-YFP on SCP; and to liaise with an Inter-Ministerial committee on SCP.

The Inter-Ministerial committee will be expected to develop a comprehensive strategy and secure the necessary political buy-in to ensure that SCP becomes a major pillar in the promotion of sustainable development in Rwanda. Ideally the Inter-Ministerial committee should comprise of representatives from the line ministries of the agencies that will be involved in the implementation of the SCP programme as well as the Minister for Finance and Economic Planning.

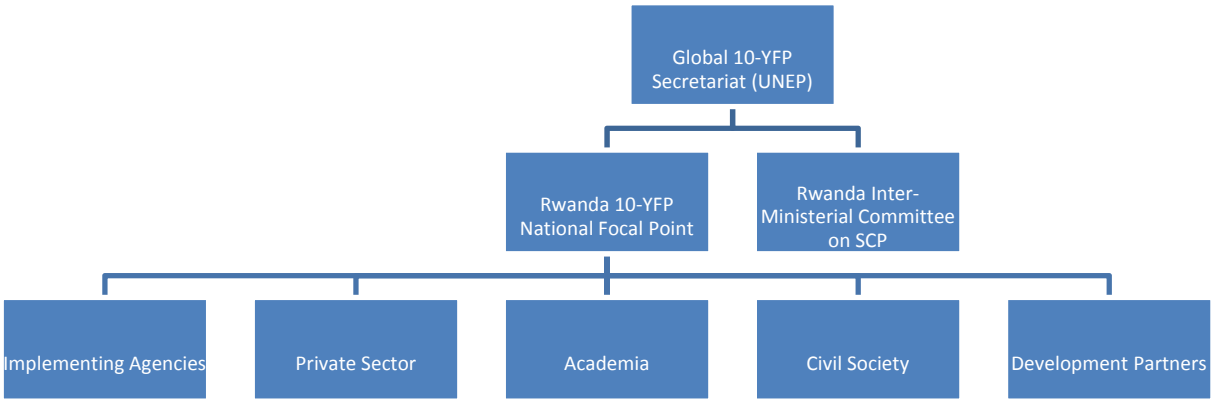

Figure 9: National SCP Programme Steering Committee structure

The steering committee members could be drawn from the following entities, partly due to their traditional association with SCP coupled with their lead roles in implementing some of the projects contained in the programme, namely; MINECOFIN, REMA, MINEDUC, FONERWA, MININFRA, RDB, MINICOM, RRECPC, MINALOC, MINAGRI, PSF, MINIRENA, RNRA, PSF, RBS, MINISANTE, University of Rwanda, Civil Society and a representative from the Donor Working Group.

Effective implementation of the programme will to a certain extent require certain National SCP programme policy instruments to be in place. These may include;

- Normative instruments such as laws, regulations and standards that can drive a shift towards SCP;
- Economic instruments that may have an influence on SCP that may entail, taxes, fees, penalties and subsidies;
- Informative instruments including but not limited to, print media, music dance and drama, radio spots, and TV advertisements;
- Education and training;
- Institutional arrangements geared towards SCP such as sustainable public procurement; and
- Voluntary agreements that may include, design for sustainability, carbon footprinting etc.

Prior to the implementation of the National SCP programme, national and provincial roundtables on SCP will have to be held as part of the process of raising awareness on SCP and laying the ground for the proposed SCP interventions.

7.2 Funding Mechanism

The degree to which the SCP programme and its associated pilot activities will be implemented very much hinges on the level of financial resources that can be mobilised. Below is an estimated budget for implementing the programme.

NATIONAL SCP PROGRAMME BUDGET:

Activity/Output	Timing	Amount in US$
1. Programme Coordination.	January 2014 - December 2018	300,000
2. Implementation of four (4) pilot SCP activities.	January 2014 – December 2014	300,000
3. Implementation of sixteen (16) SCP projects and Scaling up pilot activities.	July 2014 – December 2018	1,000,000
4. National SCP Awareness Workshops.	January 2014 – December 2018	100,000
5. Dissemination of SCP Programme outcomes through print and electronic media.	January 2015 – December 2018	150,000
6. Programme support consultancy services.	January 2014 – December 2018	100,000
7. Transport and Logistics	January 2014 – December 2018	50,000
	Grand Total	**2,000,000**

Some of the proposed resources mobilisation strategies for financing the programme include the following:

- Applying for funds from the FONERWA fund to the programme;
- Accessing pilot project finance from UNEP and other development partners by furnishing them with concept notes;
- Applying for SCP financing from the Global 10-YFP Trust fund through the 10-YFP on SCP National focal point;
- Some of the projects components in the programme have already been allocated budgets in EDPRS II and so would need to be realigned accordingly in the sector strategic plans. An example is the 'piloting of a Green city' and the associated development of secondary cities;
- Certain projects could be realigned to fit into ongoing SCP initiatives such the low carbon project and RECP projects being implemented by RRECPC. The energy efficiency pilot project could fit in here;
- Other projects could be developed as Public Private Partnerships (PPPs). An example being the manufacture of biodegradable plastic packaging where the government could team up with PSF and its members;

- Projects such as the construction of Bio-toilets could be financed wholly by the private sector on a Build Operate and Transfer (BOT) basis as has happened in Ghana; and
- CDM finance could also be leveraged for some of the energy efficiency projects or those that are involved considerable reductions in carbon emissions.

The estimated budget for implementing the programme is estimated at Two Million United States Dollars **($2,000,000**) over the 5 years duration of the programme.

7.3 Monitoring and Evaluation Mechanism

Monitoring and Evaluation are key elements in assessing the effectiveness of the programmes as well as for accountability purposes. The former should be done on a continuous basis with special attention being focused on the process, contents or products as well as outcomes and impacts; while the latter needs to be done periodically. Although and array of methods could be deployed for purposes of monitoring and evaluation or a combination thereof, the fact that the national SCP programme is integrated into EDPRS II, its monitoring and evaluation will be synchronised with that of EDPRS II. This will help save on resources. It is also important to note that good monitoring and evaluation must have an avenue for communicating the results of the process as a way of fostering continuous improvement.

8.0 CONCLUSIONS

The National SCP programme will go a long way towards cementing the existing SCP interventions in the country and the wider sustainable development ones. Its integration into EDPRS II is likely to raise the profile of SCP coupled with the necessary political buy-in that is fundamental in promoting the concept. It is anticipated that during the next EDPRS II budget revision, the programme will be incorporated into it; depending on how quickly official approval can be secured. Lastly, the extent to which SCP takes root in the country will greatly depend on a basic national capacity in SCP being built coupled with the mobilisation of the necessary funds for implementing the programme.

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ANNEXES

Annex 1: Institutions and Persons Consulted

Institutions	Person(s) Consulted
Rwanda Environment Management Authority (REMA)	Mr. Robert. N. Duhuze, Director Environmental Regulation and Pollution Control Unit; Dr. Dennis Rugege, UNDP Technical Advisor
Rwanda Development Board (RDB)	Mr. Innocent Gashugi, Senior Environmental Engineer, Investment Implementation Division
Ministry of Finance and Economic Planning (MINECOFIN)	Mr. Leonard. M. Rugwabiza, Director General for National Planning and Research; Ms. Ariane Zingiro, Focal point for Environment and Natural Resources Sector
Ministry of Infrastructure (MININFRA)	Dr. Antje Ilberg, Urban Planning and Housing Development Expert; Ms. Christine Umubyeyi, Water and Sanitation Engineer/Local Counterpart; Mr. Taylor Higaniro, Energy/Local Counterpart; Ms. Immaculate Mbabazi, Urban Planning and Housing Development/Local Counterpart
Ministry of Education (MINEDUC)	Ms. Sylvie Uwimbabazi, Director Cross Cutting Programmes
Ministry of Trade and Industry (MINICOM)	Mr. Alex Ruzibukira, Director General for Industry and SMEs
Ministry of Gender and Family Promotion (MIGEPROF)	Mr. Alex Twahirwa, Gender Advisor
National Institute of Statistics of Rwanda (NISR)	Mr. Jean-Claude Nyirimanzi,Statistician
Electricity Water and Sanitation Authority (EWSA)	Mr. Charles Nyirahuku, Acting Director, Energy Development Division
Private Sector Federation (PSF)	Mr. Antoine Manzi, Head of Advocacy, Communication and Labour relations
Rwanda Resource Efficient and Cleaner Production Centre (RRECPC)	Mr. Steven Niyonzima, National Coordinator; Mr. Olivier Mbera, National Expert
Fund for Environment and Climate Change (FONERWA)	Mr. Alex Mulisa, Coordinator
Rwanda Initiative for Sustainable Development (RISD)	Mr. Linus Pott, GIZ Technical Advisor; Mr. Simon Daale James, Program Coordinator
United Nations Environment Programme Regional Office for Africa (UNEP/ROA)	Dr. Patrick Mwesigye, Regional Coordinator, Resource Efficiency
African Roundtable on Sustainable Consumption and Production (ARSCP)	Mr. Andrew Kitenge, Executive Secretary

Annex 2: SCP Pilot Projects Log Frames

Pilot Activity: Promotion of Energy Efficiency in Medium and Heavy Energy Consuming Enterprises

Goal	Indicators	Means of Verification	Risks and Assumptions
Increased connectivity of the Rwandan economy through investing in hard and soft infrastructure.	- Energy efficiency infrastructure	- Share of Energy efficiency investments in the national economy	- More subsidies and incentives are extended to energy efficiency interventions
Purpose/Objective			
Efficient utilisation of energy by enterprises in order to boost economic growth	- Reduced energy consumption by enterprises	- Specific energy consumption benchmarks	- Link between energy efficiency and competitiveness is well articulated
Outputs			
1. List of medium and heavy energy consuming enterprises. 2. Energy audit reports. 3. Energy efficient technology/equipment	- Classification of enterprises based on energy consumption. - Number of energy audit reports - Energy efficient technology installed.	- Energy consumption data - Energy audit records - Onsite observations	- Timely delivery of reports - Technology transfer delays
Activities			
1. Identification of medium and heavy energy consuming enterprises. 2. SCP awareness raising sessions in enterprises. 3. Energy Audits in enterprises. 4. Implementation of energy audit findings.	- Number of enterprises identified - Number of SCP awareness sessions conducted - Number of energy audits conducted - Number of energy efficiency programmes in enterprises	- Energy consumption fact sheets - SCP awareness session attendance records - Energy audit records - Energy management plan	- Insufficient funds or lack of finance - Insufficient energy auditing expertise - Insufficient data - Lack of top management commitment and middle management inertia in enterprises due to other competing interests

Pilot Activity: Construction of Bio-toilets in rural settlements

Goal	Indicators	Means of Verification	Risks and Assumptions
Integrated approach to land use and rural settlements	- Increased access to improved sanitation infrastructure for rural households	- Household sanitation survey records	- Functional land use planning systems in rural settlements
Purpose/Objective			
Availability of sustainable sanitation facilities in order to improve access to sanitation facilities in rural settlements	- Households with access to improved sanitation facilities	- Household sanitation survey records	- Anticipated number of users will tie in with the capacity design aspects of the Biogas digester.
Outputs:			
1. Bio-toilet	- Presence of Bio-toilet - Presence of Biogas - Presence of digestate from the biogas digester	- Construction specifications - Use of biogas cooking and lighting - Use of digestate as fertiliser	- The biogas that is produced will be used for cooking by the community members
Activities:			
1. Land acquisition 2. Generating Bio-toilet design plans 3. Construction of Bio-toilet 4. Operation of Bio-toilet	- Size of land purchased - Bio-toilet designs - Construction site - Number of people using Bio-toilet	- Land acquisition agreements - Approved building plans - Household surveys	- A nominal fee will be charged for using the Bio-toilet for sustainability reasons. - Reluctance in willingness to pay for using the Bio-toilet.

Pilot Activity: Manufacture of Environmentally friendly Plastic Packaging for value added products

Goal	Indicators	Means of Verification	Risks and Assumptions
Pursue a 'green economy' approach to transformation	- Increased level of Green investments	- Contribution of Green investments to GDP - Investment records at RDB	- Increased funding and incentives for Green investments
Purpose/Objective			
Sustainable packaging of value added products in order to improve their competitiveness	- Competitiveness of value added products	- Value of packaged valued added products products	- Improved packaging will increase competitiveness of value added products
Outputs:			
1. Feasibility study report 2. Environmentally friendly Plastic Packaging	- Copy of the report - Plastic Packaging	- Review in relation to the Terms of reference - Conformity tests by Rwanda Bureau of Standards	- Timely delivery of report - Availability of appropriate Environmentally friendly plastic testing technology - Proper handling and use of plastic
Activities:			
1. Commission Feasibility study on Manufacture of Environmentally friendly Plastics 2. Deployment of appropriate technology and inputs 3. Operation of Environmentally friendly Plastic pilot plant	- Feasibility study contract - Presence of equipment and associated expertise on site - Consumption of inputs and generation of products	- Terms of reference for the study - Procurement documents and personnel skill sets - Plant Production records	- Efficient technology transfer - Cost effectiveness of Environmentally friendly plastic packaging - Relaxation of the legal and regulatory requirements on plastic packaging

Pilot Activity: Establishment of SCP in Science Clubs in Schools

Goal	Indicators	Means of Verification	Risks and Assumptions
Mainstreaming environmental sustainability in productive and social sectors	- Sector policies and strategies - School Syllabus and Curriculum	- Environmental Sustainability mainstreaming guidelines	- Mainstreaming not properly done due to the cross cutting nature of environmental sustainability
Purpose/Objective			
Promote SCP in schools in order to achieve a shift towards sustainable development	- SCP School competitions - Communication of SCP in schools - Practical application of SCP	- SCP awards - SCP communication media such as Music, Dance and Drama - SCP practices in schools coupled with behavioural change aspects	- SCP will appeal to the Youth in Rwanda
Outputs:			
1. SCP IEC materials	- Availability of SCP IEC materials - Number of active Science Clubs promoting SCP	- Practical application of SCP concepts in schools - Use of SCP IEC materials - Science Club Membership registers	- Timely delivery of IEC materials
Activities:			
1. Identify SCP candidate schools (primary and secondary). 2. SCP awareness raising sessions the candidate schools. 3. Develop SCP Information Education and Communication (IEC) materials for schools.	- 2 Science Clubs (one primary and one secondary school) hosting schools in each of the provinces of Rwanda - Number of Science Clubs registered	- Record of provinces selected to pilot SCP in Science Clubs and their respective schools - Attendance records for SCP awareness sessions - School Science Club registration records	- Delay in identifying SCP candidate schools - Existing Clubs in schools with competing interests - Lack of the necessary resources to implement certain practical aspects of SCP