THE REPUBLIC OF UGANDA

Ministry of Tourism, Trade and Industry

NATIONAL PROGRAMME ON

SUSTAINABLE CONSUMPTION AND PRODUCTION

Prepared by

Uganda Cleaner Production Centre

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List of Acronyms

10-YFP	Ten Year Framework Programme
AMCEN	African Ministerial Conference on Environment
ARSCP	African Roundtable on Sustainable Consumption and Production
CBOs	Community Based Organizations
CDM	Clean Development Mechanism
GEF	Global Environment Facility
JPOI	Johannesburg Plan of Implementation
LPG	Liquefied Petroleum Gas
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MEMD	Ministry of Energy and Mineral Development.
MLWE	Ministry of Lands, Water & Environment
MOES	Ministry of Education & Sports
MOH	Ministry of Health
MTTI	Ministry of Tourism Trade and Industry
NEMA	National Environment Management Authority
NGOs	Non-Governmental Organizations
SCP	Sustainable Consumption and Production
UCPC	Uganda Cleaner Production Centre
UNBS	Uganda National Bureau of Standards
UN-DESA	United Nations-Department of Economic and Social Affairs
UNEP	United Nations Environment Programme

Executive Summary

Unsustainable consumption and production is responsible for land degradation, air and water pollution, resource depletion and the associated ecological and social challenges that characterize Uganda today. The World Summit on Sustainable Development held in Johannesburg, South Africa in 2002 re-emphasized the fact that unsustainable patterns of consumption and production are the key primary causes of environmental degradation. The summit therefore concluded that promoting sustainable consumption and production will protect the environment and improve human well-being.

One of the outputs of the summit, the Johannesburg Plan of Implementation (2002), called for the development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production patterns.

At the regional level, the African Union in consultation with the African Ministerial Conference on Environment (AMCEN), developed its 10 Year Framework of Programmes (10-YFP) on Sustainable Consumption and Production (SCP). The purpose of the 10-Year Framework of Programmes is to promote and facilitate international cooperation among countries, international organizations, the private sector, environmental and consumer organizations and other non-governmental organizations to support regional and national initiatives in accelerating the shift towards sustainable consumption and production. The process of developing the African 10 Year Framework Programme on SCP was facilitated by UNEP and UN-DESA in close consultation with the Secretariats of the AMCEN and the African Roundtable on Sustainable Consumption and Production (ARSCP). The African 10-YFP underlines the importance of relating the principle of sustainable consumption and production with the challenge of meeting basic needs of the people.

As part of the implementation mechanism under the international Marrakech Process on the 10-YFP on SCP, the Federal Government of Germany took the lead to establish the

Marrakech Taskforce on Cooperation with Africa. One of its key activities is to assist African countries, including Uganda, and cities to develop their programmes on sustainable consumption and production.

Section 1.1 of this document briefly describes Uganda's location, its population and macroeconomic picture. Subsequent sections 1.2 and 1.3 discuss the status of the SCP concept at both continental and global levels.

Section 1.4 analyses the status of SCP in Uganda and outlines the key initiatives undertaken. It also highlights the key issues addressed under the sustainable consumption aspects of SCP. Basing on big number of initiatives already in place for sustainable production, it is evident that, over the years, sustainable consumption has been down played, while putting emphasis on sustainable production. The section briefly tackles the major policy and institutional arrangements for sustainable development in Uganda.

Section 1.5 addresses sustainable development strategies and policy frameworks. It also identifies Uganda's Sustainable Development Priorities and their relevance to sustainable consumption and production. Identification of sectoral policies and other regulatory provisions relevant to sustainable consumption and production was based on the Four Thematic areas as identified at the First Expert Meeting on Sustainable Consumption and Production that was held in Casablanca 19-20 May, 2004 and the Expert Meeting in Nairobi in Febriary 2005. These include: Energy, Water and Sanitation, Urban Development and Industrial Development.

Chapter 2 spells out the sustainable consumption and production priorities. With reference to the African 10-YFP, a list of sustainable consumption and production priorities for Uganda have been drawn and specific actions/activities for sustainable consumption and production have been identified.

Chapter 3 discusses sustainable development priorities for Uganda and locates the key sustainable consumption and production challenges in overall development framework.

Chapter 4 presents sustainable consumption and production priorities and proposes pilot activities for the promotion of sustainable consumption and production. Pilot activities were selected on the basis of their relevance to national needs: potential to provide synergy to existing initiatives; relevance to SCP programme of the Africa region; potential to deliver quick impacts with multiplier effects; existence of capacity to implement within existing infrastructure; and more importantly being part of the global process supported by donor communities.

Basing on the four thematic areas of the African 10-YFP on SCP, a total of nine pilot activities have been proposed including one on education which is an indispensable component of the other pilot activities. These are: *Demand-side Management on Energy Use; Demand-Side Management on Water Use and Water Harvesting; Integrated Solid Waste Management Programme; Sustainable Building and Construction; Sustainable Manufacturing; Sustainable Tourism; Education for Sustainable Consumption.*
The profile for the proposed pilot activities defining the objectives of the activities to be undertaken, specific activities, results/outcomes and targeted groups/sector is also provided.

Chapter 5 addresses Implementation and Monitoring. In this chapter, the implementation mechanism for each activity is elaborated by identifying implementing institutions, the verifiable indicators to facilitate the monitoring process and possible sources of funds.
Project concept notes for each pilot activity are provided in chapter six.

1. GENERAL OVERVIEW

The World Summit on Sustainable Development held in Johannesburg in 2002 re-emphasized the fact that unsustainable patterns of consumption and production are the key primary causes of environmental degradation. Unsustainable consumption and production causes land degradation, air and water pollution and resource depletion and the associated ecological and social challenges. The summit therefore concluded that promoting sustainable consumption and production (SCP) will protect the environment and improve human well-being.

The summit acknowledged that SCP is about reducing our environmental impacts, while maintaining or improving economic outputs and standards of living. Sustainable consumption and production maximizes business' potential to transform environmental challenges into economic opportunities and provides a better deal for consumers. The challenge of sustainable consumption and production is how to improve the overall environmental performance of products throughout their life-cycle, how to boost the demand for better products and production technologies and how to help consumers make informed choices.

In view of the above challenges, an international expert meeting was held in Marrakech (2003) to follow up the issues raised in Johannesburg, and to elaborate a Global Framework for Action on Sustainable Consumption and Production. Another follow up meeting was held in Costa Rica in September 2005. This particular meeting endorsed the need for governments to develop national 10 year action programs on sustainable consumption and production. The meeting recommended the development of flexible national guidelines on the subject, and requested that specific support for selected countries to develop programs on sustainable consumption and production be provided.
This particular recommendation has been followed up by a number of national governments and inter-governmental stakeholders. This national program document on sustainable consumption and production is Uganda’s response to the aforementioned recommendation. The development of the program document is supported by UNEP’s

Division of Technology, Industry and Economics through UNEP's Regional Office for Africa in collaboration with the Uganda Cleaner Production Centre (UCPC).

1.1. UGANDA'S PROFILE

Uganda is a landlocked country bordered by Kenya in the east, Sudan in the north, the Democratic Republic of the Congo in the west, Rwanda in the southwest and Tanzania in the south. The country along with four others forms the East African Community, a trading block of approximately 150 million people. Uganda's total land area is 241,559 sq km. About 37,000 sq km of this area is occupied by open water while the rest is land. The southern part of the country includes a substantial portion of Lake Victoria, which it shares with Kenya and Tanzania.

Uganda is located on the East African plateau, averaging about 1,100 metres (3,609 ft) above sea level. The plateau generally slopes downwards to the Sudan explaining the northerly tendency of most river flows in the country. Although generally equatorial, the climate is not uniform since the altitude modifies the climate. Uganda's elevation, soil types and predominantly warm and wet climate impart a huge agricultural potential to the country. They also explain the country's large variety of forests, grasslands and wildlife reserves. Uganda has a total population of about 32 million people. Over 80 per cent of the population live in rural areas and directly survive off the environment and natural resource base.

Uganda suffered political turmoil and devastating economic drawbacks between 1971 and 1986. This extended period of regression left Uganda as one of the world's poorest countries. The country however commenced wide ranging economic reforms including liberalization of key markets and sectors, prices and privatized public enterprises beginning 1987. These reforms have improved economic performance and sustained economic at about 7 per cent per annum for the last ten years.

Economic growth has however not led to widespread poverty reduction. Whereas an average annual economic growth rate of over 7 per cent was sustained since 2000, poverty levels on the converse, increased by 3.8 per cent over the same period. This contradiction is attributed to a number of reasons. First, most economic growth involved short-term exploitation of depletable natural resources including forests, fisheries and soils. Economic growth also engendered direct environmental costs including pollution, and also suffered distributional inefficiencies. This lack of a sustainable premise for economic development is responsible for the rising awareness of sustainable consumption and production in Uganda.

1.2. GLOBAL PERSPECTIVE OF SUSTAINABLE CONSUMPTION AND PRODUCTION

The United Nations Conference on Environment and Development (UNCED) in June 1992 generated the first key strides on sustainable consumption and production at the global level. The key policy output from the conference, also known as Agenda 21 called for the creation of the Commission on Sustainable Development (CSD) to ensure effective follow-up to UNCED, enhance international cooperation, and examine progress in implementing Agenda 21 at the local, national, regional and international levels. Chapter Four of Agenda 21 highlighted unsustainable patterns of consumption and production as principle causes of environmental degradation and resource over-use. The chapter therefore proposed that national policies and strategies that promote sustainable consumption and production be developed.

The CSD held its first substantive session in June 1993 and has since met annually. At its third session, in 1995, the CSD adopted an International Work Programme on Changing Consumption and Production Patterns, which addressed among others, trends in consumption and production patterns; the impacts on developing countries of changes in consumption patterns; policy measures to change consumption and production patterns; voluntary commitments from countries; indicators for measuring changes in consumption and production patterns; and revision of the UN Guidelines for Consumer Protection.

The World Summit on Sustainable Development (WSSD, 2002) also known as Rio+10 held in Johannesburg, South Africa further examined and discussed the issue of sustainable consumption and production. The summit discussed and adopted two main policy documents including the Johannesburg Plan of Implementation (JPOI) and the Johannesburg Declaration on Sustainable Development. The JPOI was designed as a framework for action to implement the UNCED commitments, and also included a number of new agreements. Among the commitments was action to encourage and promote the initiatives to accelerate the shift towards SCP. The Marrakech Process followed, as a global and informal multi-stakeholder process to support SCP policies and capacity building, and provide inputs for the elaboration of a 10 Year Framework of Programs on SCP. It has facilitated international, regional and national dialogue and cooperation on SCP issues among representatives of all levels of government, major groups, UN agencies, and other stakeholders. As part of the Marrakech Process, UNEP has developed guidelines for national SCP programmes and supported the mainstreaming of SCP in national development strategies. It has also supported the development of SCP programmes at the national level in Brazil, Burkina Faso, Colombia, Cote d'Ivoire, Croatia, Dominica, Ecuador, Ghana, Indonesia, Kazakhstan, Mali, Mauritius, Senegal, St Lucia, Tanzania, Uganda, Zambia, and two strategies at city level: in Maputo, Mozambique, and Cairo, Egypt.

Recognizing that consumption and production patterns are increasingly global and that international co-operation is needed to address them in cost-effective ways, the World Summit on Sustainable Development called for the "development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production patterns that will promote social and economic development within the carrying capacity of ecosystems." The Marrakech Process is an international effort to formulate the 10-year Framework of Programmes on SCP.

This 10-year framework of programmes on sustainable consumption and production focuses on the promotion of social and economic development within the carrying

capacity of ecosystems by delinking economic growth from environmental degradation through improved sustainability of resource use; an increase in processes for efficient production; and reductions in resource degradation, pollution and waste generation. It further calls for integrating the issue of consumption and production patterns into sustainable development policies. Ten thematic areas have been identified to promote sustainable consumption and production in public and private sector organizations. The thematic areas are outlined below:

Table 1: Ten thematic areas for the promotion of sustainable consumption and production in public and private sector Organizations

Thematic Area	SCP Aspects of emphasis
1. Business and Corporate Social Responsibility	Sharing emerging best practices, developing and promoting materials to build the capacities of managers and employees, inspiring partnership innovation and improving understanding of key corporate responsibility issues on the global sustainable development agenda.
2. Resource Efficient and Cleaner Production (RECP)	Promotion of RECP specifically to advance; • Production efficiency – through optimization of productive use of natural resources (materials, energy, water) at all stages of the production cycle; • Environmental management – through minimization of adverse impacts of industrial production systems on nature and the environment; • Human development – through minimization of risks to people and communities, and support their development.
3. Communications	Work with the media and other linkage agencies to raise general awareness on sustainable consumption and promote sustainable consumption patterns including promotion of products, services and campaigns that foster sustainable consumption through workshops, meetings, publications, websites etc.
4. Sustainable product design	This focuses on cleaner production and eco-efficient industrial systems with

Thematic Area	SCP Aspects of emphasis
	emphasis on products (ecodesign) then to product-systems (incorporating transport, logistics, end-of-life collection and component re-use or materials recycling and to sustainable innovation (design for sustainability).
5 Education and Capacity Building	Focuses on creation of a new culture in the new generation of citizens which integrates sustainability in human personal and professional decisions. It provides innovative tools to communicate and learn about SCP, with national and local authorities, business organizations, teachers, vocational school and trainers as the target audience.
6. Life Cycle and Resource Management	This concept has been developed for dissemination for adoption in production systems and product design. In addition to the traditional focus on production sites and manufacturing processes, it also takes into account environmental, social and economic impact of a product over its entire life cycle, including the consumption and end of use phase. The producers are expected to take responsibility for their products from cradle to grave, through development of products that have improved performance throughout all stages of the product life cycle. The purpose of this integrated product policy is to reduce the product's resource use and emissions to the environment as well as improve its socio-economic

Thematic Area	SCP Aspects of emphasis
	performance throughout the life cycle.
7. Safer production	The purpose of this initiative is to minimize the occurrence and harmful effects of technological accidents and environmental emergencies. This is achieved through identification and creation of awareness of risks in an industrialized community and initiation of measures for risk reduction and mitigation, and to develop coordinated preparedness between the industry, the local authorities and the local communities.
8. Sustainable consumption	Supplements production process-oriented activities with activities on the demand side. It promotes addressing issues of consumption and production in an integrated manner as two sides of the same sustainability coin. It is based on the principle that consumption patterns are the result of choices and activities of a wide variety of actors including business, government and individual households. Influencing these choices implies stimulating and facilitating new economic opportunities – better products and services – and altering the current infrastructure and regulatory framework that lock consumers into unsustainable consumption.
9. Eco-labelling	This is an initiative for seeking mutual recognition of eco-labelling and using it as a certification tool for compliance of a product or service provided to eco-

Thematic Area	SCP Aspects of emphasis
	efficient production processes and eco-design of the product or service. This initiative is meant to support industry and government stakeholders in various countries to have their key export products awarded with the Eco-label through capacity building and technical assistance.
10. Sustainable Public Procurement	This is a tool to allow governments to leverage public spending (between 15 to 25% of GDP) in order to promote social, environmental and economic policies through creation of markets for appropriate technologies and innovative solutions. It takes the form of: • Facilitation of global consensus on integration of sustainable development considerations in procurement; • Fostering information exchange on experiences and best practices; • Provision of practical tools for capacity building in sustainable procurement.

1.4. AFRICAN PERSPECTIVE OF SUSTAINABLE CONSUMPTION AND PRODUCTION

The African region through mobilization by AMCEN and NEPAD has been actively engaged in the discussions on sustainable consumption and production. Africa hosted the World Summit on Sustainable Development in Johannesburg in 2002 and articulated herself in the Johannesburg Declaration on sustainable development. Africa has also developed its 10-Year Framework of Programmes on Sustainable Consumption and Production. The process of developing the framework programme was facilitated by UNEP and UN-DESA in close consultation with the Secretariats of AMCEN and ARSCP. The African 10-YFP underlines the importance of relating the principle of sustainable consumption and production with the challenge of meeting basic needs of the people on the continent from an African perspective.

This document, the Uganda Sustainable Consumption and Production Country Programme is an effort to translate to the national level, the commitments and aspirations of the 10-YFP on SCP. It has been prepared based on the UNEP guidelines for national SCP programmes and mainstreaming of SCP in national development strategies developed as part of the Marrakech Process.

1.4. STATUS OF SUSTAINABLE CONSUMPTION AND PRODUCTION IN UGANDA

Uganda actively participated in the United Nations Conference on Environment and Development (UNCED) in 1992 and officially endorsed Agenda 21, the key policy output of the conference: Agenda 21, in Chapter 4, encourages countries to promote sustainable consumption and production technologies. Following her endorsement of Agenda 21 therefore, Government of Uganda advocated for the introduction of cleaner production methods across all key sectors of the economy. Cleaner production methodologies demonstrate how scientific and technological innovations influence the production cycle in ways that benefit the environment. The section below highlights some of the major sustainable production and consumption initiatives in Uganda.

1.4.1. SUSTAINABLE PRODUCTION INITIATIVES

The last ten years have seen the emergence of a number of sustainable production initiatives. Most of the initiatives have focused on reducing pollution and increasing resource use efficiency. The key sustainable production initiatives in Uganda may be clustered into five areas including cleaner production practices, sustainable cities program, urban transport reforms, bio-mass co-generation and dissemination programs on efficient cooking stoves. The following section highlights the key achievements under each cluster.

(a) Cleaner Production Practices

The primary government initiative in the area of cleaner production is the Uganda Cleaner Production Centre (UCPC). UCPC was established in 2001, as a joint effort of the Government of Uganda and the United Nations Industrial Development Organisation (UNIDO). The main objective of UCPC is to introduce cleaner production practices at the enterprise level. UCPC provides advice, technical assistance and professional training in cleaner production and good environmental management practices. It also focuses on eco-design as a strategy in product development. The eco-design strategy is based on the premise that sustainable product development helps companies to improve the

environmental performance of their products whilst reducing the financial, health and safety costs of production.

The major programmes at the Cleaner Production Centre include the ECO-Benefits Programme, CP financing, eco-design and product innovation and ISO 14001 certification. The ECO-Benefits Programme has proved to be a good engine for introducing and implementing CP at the enterprise level and helps companies to reduce the costs of production, provides company staff with technical know-how and on the job training in order to enable companies to keep improving continuously through their own in-house capacities.

Through this programme, UCPC also creates awareness about cleaner production in various institutions and to the public by presenting case studies (for example companies successfully implementing cleaner production and the resultant benefits). In 2004, the UCPC also undertook training in ISO 14001 certification programmes. Under the ISO 14001 Certification Programme, 15 participants from the enterprises and consultancy firms were trained and are now capable of guiding enterprises to certification level. The involvement of consultancy firms in UCPC programmes has created good working relations between UCPC and other professionals in the country.

Prior to the establishment of the Uganda Cleaner Production Centre Government had initiated a number of reforms to improve environment management in general and cleaner production in particular. The Government of Uganda through the National Environment Act Cap 153 established the National Environmental Management Authority (NEMA) in 1995 whose mandate is to coordinate, supervise and monitor all matters on the environment in Uganda. Part VIII of the statute emphasizes the need for SMEs and other establishments to practice cleaner production in order to prevent pollution and minimise waste generation. NEMA has since developed and published a number of standards, regulations and guidelines aimed at improving the environment. The key standards, regulations and guidelines include the Environmental Impact Assessment (EIA) regulations (1998), waste management regulations (1999), standards

for the discharge of effluent into water and on land (1999), standards on noise control, standards for the management of soil quality (2000) and regulations for the control of smoking in public places.

(b) Sustainable Cities Program

A number of Ugandan cities and municipalities such as Kampala, Jinja and Gulu are participating in participatory environmental planning activities under the African Sustainable Cities Network that was itself established in 1995. The network that is established under the overall framework of LA21 aims to assist the local authorities of Kampala, Jinja and Gulu to move beyond general sustainable development planning to actually apply LA21 planning methods to tackle priority urban community problems including solid waste management, poverty, water and sanitation problems and urban housing.

In line with the above initiative, the Government of Uganda in cooperation with the Cities Alliance launched the Uganda National Urban Forum on 6 May 2010. The national forum aims at establishing a national consensus to deal with the challenges and the opportunities of a rapidly urbanising economy. Under the theme "Sustainable Urbanisation: A Collective Responsibility", the Uganda National Urban Forum (UNUF) is designed to "contribute towards the promotion of sustainable development in Uganda through enhancing continuous cooperation and networking, advocacy and lobbying, research and training and access to support priority programmes in Uganda."

(c) Urban Transport Reforms

Urban transport reforms are not unique to Uganda as they are a derivative of the public sector reforms (PSR) that have taken place all over the world since the mid-1980s. Special focus is however placed on the road sub-sector as it is the most dominant mode of transport in Uganda.

The key reforms cover the infrastructure, policy and institutional spheres including creation of new road management institutions like UNRA, regulation of traffic flow,

creation of pedestrian walkways, bicycle lanes and traffic control sections all aimed at easing traffic congestion and lowering the carbon foot print of the road transport sector in Uganda.

(d) Biomass Co-generation

The policy focus in the energy sub-sector is to improve utilisation of energy resources with a view to ensuring energy security, a cleaner environment and sustained economic growth. A number of initiatives to achieve the above have therefore been implemented in the sector. One of the initiatives is biomass co-generation. Biomass co-generation involves the production of electricity through steam generation by burning biomass including farm waste and bagasse. The key players in the co-generation sub-industry in Uganda include the Sugar Corporation of Uganda Limited (SCOUL) (5 MW), Kinyara Sugar Works Limited (7 MW) and Kakira Sugar Works (30 MW) with a total power generation capacity of about 40 MW. The primary objective of co-generation is to satisfy local needs. All three co-generation facilities however, have arrangements to supply excess power to the national grid to off-set power shortages particularly during peak periods.

(e) Dissemination Programs on Efficient Cooking Stoves

A number of players are involved in this initiative, particularly from the civil society fraternity. The target beneficiaries of the programs are middle to low income households as well as small businesses and institutions that use biomass energy for cooking and baking. The technologies have also been commercialized particularly by the Joint Energy and Environment Project (JEEP) who make and sell energy efficient cook-stoves, and build energy efficient kitchens.

Other initiatives include:

i) **Transformation of conventional agricultural production into an organic farming system**

Uganda has taken important steps in transforming conventional agricultural production into an organic farming system and now has the most developed sector of certified organic production in Africa. Major organic products include coffee, cotton, dried bananas, paw paws, pineapples, passion, fruits, chillies, ginger and sesame.

Certified organic exports increased from US$3.7 million in 2003/4, to US$6.2 million in 2004/05, before rising to US$22.8 million in 2007/8. In addition to export earnings, organic agriculture has a positive effect on the environment and soil fertility and has the potential to increase the yields and incomes of farmers, thus contributing to poverty reduction and sustainable rural development.

Effective enforcement of standards in organic agriculture sub sector provides opportunities for increasing sustainable production, improving quality and safety, and accessing higher value markets.

2) **Improvement in Information and Communications Technology**

This has facilitated the promotion of e-transactions in government ministries, departments and agencies e.g. Short Message Service (SMS) and email access of examination performance from UNEB and Makerere University, Change of payment policy from issuance of cheques to electronic funds transfer system among others. This has resulted into saving on utilization of paper to print the cheques. Similarly the adoption of direct electronic loading of airtime (known as easy load) is a positive undertaking towards sustainable production.

1.4.2. SUSTAINABLE CONSUMPTION

The area of sustainable consumption is slowly taking root among the consumption community in Uganda. Consumers are increasingly paying attention to the quality and safety aspects of products in addition to prices. Increasingly, more people are now paying

attention to pertinent features like labels, data sheets, chemical composition, product efficiency, and disposal after use and effects on the environment(whether friendly or hazardous). More sensitisation, capacity development and technical assistance is however still critical to improve people's appreciation of eco-labels and other certification systems.

A number of initiatives in the area of sustainable consumption may be highlighted. The Uganda National Bureau of Standards, the Uganda Manufactures Association and Kampala City Traders Association (KACITA) have been promoting the adoption of a range of environmental management systems (EMS) including ISO 14000 certification by both government and the private sector. The energy sector for instance initiated sustainable energy consumption measures including cutting of energy losses, reduction of power consumption for lighting and training of managers on energy efficiency. There have been specific government programs to shift consumer usage away from ordinary incandescent light bulbs to compact fluorescent lamps.

These government initiatives already have positive impacts.

Unsustainable consumption patterns however remain widespread at the household, business and government levels. An audit and documentation of these patterns needs to be done to help us understand this problem better.

1.5. POLICY AND INSTITUTIONAL ARRANGEMENTS FOR SUSTAINABLE DEVELOPMENT

The institutional framework for environmental management in Uganda is at two levels. The national level framework comprises a network of lead agencies co-ordinated by the National Environment Management Authority (NEMA) through the Policy Committee on the Environment (PCE). The PCE is a sub-committee of cabinet comprising eleven ministers of environment and natural resource related ministries under the chairmanship of the Prime Minister. The main function of the PCE is to provide overall policy oversight for environment management in Uganda.

The National Environment Management Authority provides the secretariat function of the Policy Committee on the Environment, and is also charged with the overall coordination, monitoring, supervision and regulation of all matters on the environment in Uganda. NEMA is presided over by a Board of Directors drawn from relevant government departments, civil society and NGOs.

The national level framework is supported by lower vertical networks of local government institutions including District Environment Committees, sub-county, parish and village/local environment committees. The District Environment Officer provides the necessary technical backstopping at this level.

Most key line ministries, departments and government agencies now have environment units charged with integrating environment and sustainable development concerns in the policies, plans and programs of their respective sectors. The following institutions have fully functional environment offices: Uganda National Roads Authority, Uganda Investment Authority, Electricity Regulatory Authority, Rural Electrification Agency, Petroleum Exploration and Production Department, Uganda Electricity Transmission Company Limited etc. The table below provides a summary of the mandates and activities of national institutions with relevance to environmental management in general and sustainable production and consumption in particular.

Table 2: Some of the Institutions with relevance to Sustainable Consumption and Production

Institution		Mandated Roles and Responsibilities the Economy	Specific Relevance to Implementation of a National SCP Programme
1	Ministry of Trade Tourism and Industry	Supervisory oversight of tourism and industrial sectors. It is partly responsible for formulation of the SCP national policy.	It is partly responsible for formulation of the SCP national policy. It is instrumental in the development and implementation of the SCP country programme
2	Ministry of Finance, Planning and Economic Development	Macro-economic policy and planning and management, resource mobilization and public expenditure management	It needs to be brought on board to champion mainstreaming of SCP in macro-economic policy, planning, management and public expenditure management.
3	Ministry of Energy and Mineral Development	Establishment, promotion of the development, strategic management and safeguard of the rational and sustainable exploitation and utilization of energy and mineral resources for social and economic development	It should contribute to adoption of the SCP concept to foster rational and sustainable exploitation and utilization of energy and mineral resources
5	Directorate of Water Development and Directorate of Water Resources Management, Ministry of Water and Environment	They are the main operational department for water resources management. They cover among others, water quality monitoring and pollution control (in collaboration with NEMA). They issue water abstraction and wastewater discharge permits according to the rules in the Water Act, Cap. 152 and the Water Resources Regulation (1998).	Sustainable water quality and resources utilization management should be harmonized with the SCP concept through mutual interface with SCP programme development and implementation
6	Ministry of Education and Sports	It provides oversight in providing support, guidance, regulation and promotion of quality education and sports in Uganda from pre-primary to university and tertiary level and both formal and non-formal.	Mainstreaming of SCP in education curriculum is a key intervention for propagation of SCP in the education learning processes. There is a need to work with MoES in this respect.
7	National Planning Authority	It is the principal statutory agency responsible for coordination of national and decentralized development planning	The National Development Plan 2010/11-2014/15 maps out economic activities to be

Institution		Mandated Roles and Responsibilities the Economy	Specific Relevance to Implementation of a National SCP Programme
		and management processes and production of comprehensive integrated National Development Plans for Uganda	implemented in all the sectors of the economy. Interface with UCPC is necessary for mainstreaming SCP in these sectors.
8	Uganda Investment Authority	Uganda Investment Authority (UIA) was first established by the Investment Code (1991). Section 19 Part 2 (d) of the Code	Stipulates that 'an investment license may also contain an understanding by the investor to take steps to ensure that operations of his/her business do not cause injury to the ecology or the environment.
9	Uganda National Bureau of Standards	It is a government agency mandated to develop and promote standardization, quality assurance, laboratory testing and metrology.	Standardization and quality assurance are some of the ingredients of efficient product development which is one of the key thematic areas of intervention of SCP. Collaboration with UCPC in this respect is important.
10	Electricity Regulatory Authority	Regulation of generation, transmission, sale export, import and distribution of electrical energy in Uganda.	Contribution to mainstreaming energy efficiency in investment, generation, transmission, distribution and consumption
11	National Water and Sewerage Corporation	To operate and provide water and sewerage services in areas entrusted to it, on a sound, commercial and viable basis.	Water quality is a key objective of NWSC's activities. This interfaces with efficient utilization of natural resources under SCP.
12	Uganda Industrial Research Institute	A government lead agency for undertaking applied research and development and/or acquisition of appropriate technology in order to create a strong, effective and competitive industrial sector in Uganda.	UIRI can work with the UCPC to mainstream SCP in applied research and development and/or acquisition of appropriate technology.
13	Private Sector Foundation Uganda	A Uganda private sector apex body whose aim is to strengthen the private sector through policy advocacy; representation of private sector concerns on regional and local forums and capacity building.	It provides a good forum for propagating SCP among members who cut across all the productive sectors of the economy.

Institution		Mandated Roles and Responsibilities the Economy	Specific Relevance to Implementation of a National SCP Programme
14	Uganda Manufacturers Association	Promotes, protects and coordinates the interests of industrialists in Uganda	Initiates discussions and exchanges information amongst members on industrial issues, including SCP

2. SUSTAINABLE DEVELOPMENT POLICIES AND STRATEGIES

2.1. NATIONAL DEVELOPMENT STRATEGIES

The National Development Plan (NDP) 2010/11-2014/15 provides the main economic development framework for Uganda. The plan's vision is a transformed society and a prosperous country based on sustained growth, employment and socio-economic transformation for all.

The NDP addresses structural bottlenecks in the economy in order to accelerate socio-economic transformation for prosperity. The key NDP interventions aim at: creating employment, raising per capita income levels, improving the labour force distribution in line with sectoral GDP shares, raising Uganda's human development and gender equality indicators and improving Uganda's competitiveness to middle income country levels.

The development approach of the NDP intertwines economic growth and poverty eradication and emphasizes a quasi-market environment where the private sector is expected to remain the main engine of growth and development. The NDP also emphasizes the need for strong sustainability content in the plan and includes a comprehensive list of environmental sustainability indicators in its monitoring and evaluation plan (M&E plan).

2.2. NATIONAL POLICIES

a) The National Environment Management Policy 1994

Uganda initiated a National Environment Action Planning process (NEAP) in 1992 following the Rio Earth Summit in June of the same year. Through the NEAP, Uganda

committed itself on the principles of sustainable development and proposed a National Environment Management Policy to guide the country on the sustainable development path. One of the tasks spelt out in the policy was to provide for an effective management system to facilitate the collection, storage, analysis and dissemination of environment information among others. The National Environment Management Policy enabled the formulation of the National Environment Act, Cap. 153. In Section 7, subsection 1 of the Act, one of the functions of the National Environment Management Authority (NEMA) is to prepare and disseminate a National State of Environment report once in every two years. Districts are also mandated under this same law to produce District State of Environment reports (DSOERs) annually. The 2000, 2002, 2004/05 and 2006/07 reports have been warning on the declining per capita arable land because of the increasing population. This calls for an urgent need to continuously review and refocus the country's development strategy so as to bring about the overall goal of sustainable development as is pursued by Government. Sustainable development is synonymous with sustainable consumption and production in general and sustainable environment management in particular.

b) The Forestry Policy 2001

The National Forest Policy and Plan are important policy documents for Uganda with respect to sustainable development. Uganda's forest resources are ideally suited to contribute to poverty eradication, wealth creation and the modernization of the country. There is an urgent need to green Uganda by establishing new forest resources and rehabilitating degraded areas. Maintaining forest cover will help to conserve biodiversity and provide vital ecological services, such as soil and water protection. By addressing the ways that forestry can benefit people throughout Uganda, the government is fostering a common interest in its development, and a sense of inclusion across all groups and localities.

The Vision for Uganda's Forests is *"a Sufficiently Forested, Ecologically Stable and Economically Prosperous Uganda"*. The new Forestry Policy was developed to provide a new political direction to this vision. The vision outlined above implies an end state of

sustainably managed forests, woodlands and trees, providing ecological and social services, producing economic goods for present and future generations of Ugandans, and making a contribution to the global community. In achieving this, a wider range of types of ownership, access and management of forest resources are envisaged – these include government, local communities, the private sector and non-governmental organisations. In the implementation of this policy, there is a need to mainstream resource efficient consumption and production with specific focus on optimization of productive use of natural resources and environmental management.

c) Energy Policy 2002

The overall policy goal of the energy sector in Uganda is "to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner**"**. This goal is consistent with sustainable consumption and production.

In pursuit of this overall goal, the energy sector has various strategic objectives that include the following:

- To establish the availability, potential and demand of the various energy resources in the country.
- To increase access to modern affordable and reliable energy services as a contribution to poverty eradication.
- To improve governance and administration
- To stimulate economic development and.
- To manage energy related environmental impacts.

d) The Renewable Energy Policy 2007

With specific reference to Energy Efficiency and Renewable Energy Sub-sectors, the Government is focusing on the establishment of an energy efficiency law while taking into account the experience of other countries on this matter. The Government also plans to put in place a regulatory system which is consistent with the existing industry and market structures. This will go along the way in complementing sustainable consumption and production in the sector.

Renewable energy on its part has key sustainable consumption and production implications. The Government of Uganda has developed a Renewable Energy Policy 2007. The renewable energy policy vision is “to make modern renewable energy a substantial part of the national energy consumption” while the overall policy goal is “to increase the use of modern renewable energy, from the current 4% to 61% of the total energy consumption by the year 2017”.

The Renewable Energy policy’s objective is to diversify the energy supply sources and technologies in the country. Specifically, the policy goal is to increase use of modern renewable energy from the 4% to 61% of the total energy consumption by the year 2017. (*Source: Renewable Energy Policy for Uganda, 2007).* The energy sources of focus include; small renewable energy, solar energy, bio-fuels and bio-mass.

There are other sector policies that contribute to the promotion of resource efficient consumption and production with specific focus on optimization of the use of natural resources and environmental management. These are summarised in Table 2 on Sustainable Development Priorities at Sectoral Level

3.3. SUSTAINABLE DEVELOPMENT PRIORITIES

Sustainable development priorities which are relevant to the promotion of sustainable consumption and production have been identified from the priority areas mentioned in subsection 2.0. These are presented in the form of a matrix as shown in Table 3 below**.** The table also provides information on respective key actions/activities and their relevance to sustainable consumption and production.

Table 3: Sustainable Development Priorities

Strategies/ Policies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
National Development Vision (2035)	Transforming Uganda from a least developed country to a middle- income country by the year 2025. <u>Specific Objectives:</u> High quality livelihood Peace, stability and unity Good governance A well-educated and learned society Strong and competitive economy	a)Sound Macroeconomic Management	a) Formulation of sound macroeconomic policy b) Reorienting the role of the government and enhancement of its core competence in providing leadership.	The Strategy is in conformity with the African SCP programme in the coverage of priority sectors under the strategic options for economy and development. Development has its linkages to nature's limits. It is therefore of paramount importance that equitable access to the constrained resources is ensured and that technological efforts are reoriented to relieve the existing pressure on the natural resources. This can be ably achieved through the promotion of SCP
		b)Infrastructure development	Promotion of private sector and community investment in infrastructure development including rural road network, energy, water and telecommunications to stimulate local and foreign investment and create wealth and employment opportunities.	
		c)Science and technology education	Promotion of the application of science and technology in enhancing productivity through continuous learning and publicity campaigns.	
		d) Information and communication technologies (ICTs)	Promotion of information and communication technologies for enhancement of productivity and competitiveness.	

Strategies/ Policies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
		e)Domestic resources	Promoting the utilization of domestic resources (natural, human and financial).	
National Development Plan (NDP 2010/11-2014/15)	Economic growth and reduction of poverty	a) Sound economic management b) Sustainable and broad based growth	a) Pursuing prudent fiscal and monetary policies to stimulate increased production a) Strengthening the link between agriculture and industry b)Promoting appropriate production and processing technology c) Increasing productivity and profitability in agriculture through technological innovations d) Promoting use of appropriate and environmentally friendly technologies.	Poverty reduction is well linked with environmental protection. It provides the guidelines to promote coherence among the different policy planning processes and this ensures that national strategic policy planning processes are more efficient and mutually supportive, as well as reduce poverty more effectively. Thus enhancing SCP
National Environmental Policy	a) To ensure sustainability, security and equitable use of resources. b)	a) Abate land degradation that may lead to loss of soil productivity b) Ensuring accessibility to good	a) Ensuring the mainstreaming of environmental considerations in sectoral policies and programmes. b) Promotion of environmentally	The policy is significantly in conformity with the African Programme on SCP and it is intended to be a guide to action of programmes like SCP and projects for environmental conservation.

Strategies/ Policies	Objectives	Priority areas	Key actions/activities	Relevance to SCP
	o prevent and control degradation of land, water, vegetation, and air. c) o raise public awareness and understanding of the essential linkages between environment and development. d) o promote international cooperation on the environmental agenda.	quality water for urban and rural inhabitants. c) Environmental Pollution d) Loss of wildlife habitats and biodiversity e) Deterioration of aquatic systems f) Deforestation	sound technologies (EST). c) Promoting efficient use of resources	

3.4. Sector Specific Policies

The matrix below highlights relevant sectoral policies as identified in various meetings on SCP and in the context of the Africa Ten Year Framework Program (10-YFP)

Table 4: Sector Specific Policies and their Implications for SCP

Policy		SCP Implications of the Policy
1	The Water Policy 1995	The Government's overall policy is to manage and develop the water resources in a sustainable manner to ensure adequate quantity and quality. The Water Sectors' goal and strategy include systems sustainability enhanced by community participation, capacity building and a demand driven approach. The National Water Policy addresses three sub-sector issues namely: (i) Water Resource Management, (ii) Provision of Water Supplies in Rural areas and Urban Centres. (iii) Provision of Water and Sanitation Services. The objective of the policy for Water Resources Management is to develop a comprehensive framework for promoting the optimal, sustainable and equitable development and use of water resources for the benefit of the present and the future generation, based on a clear set of guiding principles. For Rural Water Supply the objective is to improve health and alleviate poverty of the rural population through improved access to adequate and safe water. Urban Water Supply and Sewerage aims at setting a framework for achieving an efficient development and management of Urban Water Supply and Development Services. Promotion of resource efficient consumption and production is a key interface of this policy with the national sustainable consumption and production programme. Actions linking the Water Policy with the national programme have been provided for.
2	The National Wetlands Management Policy 1996	The National Wetlands Policy sets five goals: a) To establish principles by which wetlands resources can be optimally used now and in the future; b) To end practices which reduce wetland productivity; c) To maintain the biological diversity of natural and semi-natural wetlands; d) To maintain wetland functions and values; and e) To integrate wetland concerns into planning and decision-making of other sectors. These goals are intended to be achieved in the context of the following principles:

Policy		SCP Implications of the Policy
		Wetlands form an integral part of the environment and should be managed as such taking into account the need for conservation and those for national development; Wetland management should involve all concerned parties and especially local governments through a system of co-ordination and inclusion; and There is a need to create awareness and to change popular perceptions in order to achieve sustainable management of wetlands. Consequently the policy recommends that: a) There should be no net drainage of wetlands unless more important environmental management requirements exist; b) Activities which are compatible with the sustainable utilisation of wetlands should be permitted; c) Wetland developers should carry out environmental impact assessments (EIAs) and audits; d) The optimum diversity of users and uses should be maintained in a wetland; and e) Rehabilitation and restoration of previously drained or modified wetlands should be undertaken where appropriate. The National Wetlands Policy has a potential conflict with other existing policies. A case in point is the policy and mandate of the Ministry for Agriculture, which focuses on food security and agricultural expansion, with no references to ecological sensitive areas like wetlands. Sustainable consumption and production is a critical factor that reconciles these conflicting interests as it advocates for sustainable use of wetlands by ensuring compatibility of agricultural activities with wetlands sustainability.
3	The Wildlife Policy 1996	In 1995, the Government adopted the Uganda Wildlife Policy which was followed in 1996 by the enactment of the Uganda Wildlife Statute. The policy and the law brought changes in the existing institutional structure by bringing the management of all wildlife resources (except forests and wetlands) under the newly created Uganda Wildlife Authority. From the management point of view, community participation in management decisions and activities was increased. At the same time room was created for the private sector to participate in management and sustainable utilisation of wildlife resources by the granting of wildlife use rights - a new concept in Ugandan law. The new policy and law also sought to implement Uganda's outstanding obligation under various international treaties including the Convention on International Trade in Endangered Species of Fauna and Flora 1972 (CITES) the Convention on Migratory species of Wild Animals 1979 (CMS) and the Convention on Biological Diversity, 1992. Protected areas management for sustainable use is a key element of the policy. This is in line with the sustainable consumption and production concept.
4	The Fisheries	The national vision for Uganda's fisheries sector is, "*an ensured sustainable exploitation of the fishery resources at the highest possible levels, thereby*

Policy		SCP Implications of the Policy
	Policy 2000	*maintaining fish availability for both present and future generations without degrading the environment".* The National Fisheries Policy provides strategies to ensure sustainable exploitation of the fisheries resources at the highest possible levels, thereby maintaining fish availability for both present and future generations without undermining the environment. The general principal is that government should be provided with a flexible system of managing, utilizing and conserving the fisheries resources of Uganda together with an institutional structure to achieve the same. Promotion of resource efficient consumption and production is of key relevance with specific focus on optimization of productive use of natural resources and environmental management.
5	The Forestry Policy 2001	Uganda's forest resources are ideally suited to contribute to poverty eradication, wealth creation and the modernization of the country. There is an urgent need to green Uganda by establishing new forest resources and rehabilitating degraded areas. Maintaining forest cover will help to conserve biodiversity and provide vital ecological services, such as soil and water protection. By addressing the ways that forestry can benefit people throughout Uganda, the government is fostering a common interest in its development, and a sense of inclusion across all groups and localities. The Vision for Uganda's Forests is *"a Sufficiently Forested, Ecologically Stable And Economically Prosperous Uganda"*. The new Forestry Policy was developed to provide a new political direction to this vision. The policy addresses the needs of all those involved in the forest sector, and provides a sector-wide perspective on the way forward for the development of forestry in Uganda. In the implementation of this policy, there is a need to mainstream resource efficient consumption and production with specific focus on optimization of productive use of forests as natural resources.
6	The Land Use Policy 2008	The National Land Use Policy has the theme "Land Use Policy to Support Modernisation through Planned Land Use, Urbanisation, Industrialization and a Developed Service Sector." The goal of the policy is aimed at achieving sustainable and equitable socio-economic development through optimal land management and utilization in Uganda. Research has been identified as critical for higher yields to improve output per acre in an effort to put land to optimal use for the 3 land uses: economic production like grazing, cultivation, human settlement and ensuring sustainable use of the environment to avoid self-destruction. The policy is also meant to address wastage of land through irrational use and fragmentation which is a hindrance to development. Protection of the environment

Policy		SCP Implications of the Policy
		in balance with industrialization and urbanization is also a key issue of the policy to ensure continuity and sustainable use of resources. The policy is relevant to and provides an opportunity for mainstreaming of SCP through land conservation while maximizing productivity.
8	The National Water Policy (1999)	Principles of the water for production strategy 2003-2015 include the following: a) The basic criterion for planning and development of water for production as a demand driven negotiation approach with priority on smallholder technologies; b) Involvement of users in the choice of technology and emphasis placed on technologies that respond to farmers' needs; and c) Management and sustainability of facilities developed for water management owned by the users. A number of reforms have been implemented in the water for production sub sector. These include adoption of the following strategies for development of the country water resources: a) Building a high level of institutional coordination among government and other stakeholders; and, b) Targeting poverty reduction through improved access to water for production through capacity building and dissemination of water management technologies There is need to promote resource efficient consumption and production of water for production. It is necessary to promote optimization of productive use of water.
10	National Industrial Policy 2008	The Industrial Policy envisages building the industrial sector into a modern, competitive and dynamic sector fully integrated into the domestic, regional and global economies. The policy looks at the extent to which industrialization fulfils its role and contributes to the overall development of the country depending on the strategies and policies which Uganda pursues. Consequently the main focus of this will be: a) Exploiting and developing natural domestic resource-based industries such as petroleum, cement, and fertilizers industries, and promoting competitive industries that use local raw materials. b) Agro-processing, focusing on food processing, leather and leather products, textiles and garments, sugar, dairy products, and value addition in niche exports. c) Knowledge-based industries such as ICT, all centres, and pharmaceuticals that exploit knowledge in science, technology, and innovation. d) Engineering for capital goods, agricultural implementation, construction materials, and fabrication/Jua Kali operations. The main mission of the National Industrial Policy is to contribute towards

Policy		SCP Implications of the Policy
		achievement of the overall national long-term development goals as enshrined in the vision to enhance sustainable development of the industrial sector. The implementation of this broad policy calls for careful consideration of relevant actions that can be adopted from each of the 10 sustainable consumption and production themes outlined in 1.2.2 above to make the industrial sector development responsive to the SCP priorities.
11	Tourism Policy 2006	The tourism policy aims at creating a policy framework to move tourism into a major economic sector in Uganda. The mandate of the sector is "to sustainably maximize the economic values of the tourism, wildlife, historical and cultural heritage sector of the economy, through promotion of foreign and local investments to ensure that tourism becomes a key means of poverty eradication in Uganda". The resource base for tourism development is hotel infrastructure investment and natural resources, i.e. fauna and flora. Implementation of the policy calls for mainstreaming of resource efficient and cleaner Production in construction of buildings, management and sustainable use of natural resources (materials, energy, water).

4.0. SUSTAINABLE CONSUMPTION AND PRODUCTION PRIORITIES

4.1. NATIONAL PRIORITIES

The national list of Sustainable Consumption and Production priorities for Uganda in the context of the African 10-YFP has been drawn with reference to the list of priorities already discussed in the previous chapters. Specific actions/activities for sustainable consumption and production have been identified to elaborate the identified priorities. Implementation of these activities will lead to sustainable resource management. The funds accruing from the savings can be invested in other development programmes. Table 8 provides a matrix giving strategic actions to be undertaken, their expected outcomes, specific interventions (activities) and their respective outputs.

Table 5: Preliminary list of SCP priority actions for Uganda in line with the African 10-YFP

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs
Sustainable Consumption and Production policy advocacy	Cross-cutting SCP policy and practices	Advocate for SCP mainstreaming in government policy framework of all the sectors of the economy	Policy advocacy paper
		Advocacy for policy to ban use of non-biodegradable packaging materials	Policy approved for enactment of relevant law
		Development and implementation of advocacy and promotion of programmes for ridding the environment of non-biodegradable waste	Advocacy and promotion of programmes
		Develop a strategy to advocate for government policy to support collective investment in joint Cleaner Production systems	SCP systems joint investment advocacy strategy
		Advocate for new Government policy to establish incentive programmes for transformation of traditional production methods to modern Cleaner Production technology.	Government SCP incentive policy
Policy advice and development	Wide public awareness of SCP	Carry out research and network with international Cleaner Production initiatives to access and share information on developments and emerging best practices on Sustainable Consumption and Production	Research reports and reference materials and databases
		Develop and implement advocacy programmes for political goodwill to implement Sustainable Consumption and Production practices.	SCP advocacy programmes
Resource mobilization of financing for Cleaner Production investments	SCP mainstreamed in public service delivery, business activities and household practices	Develop and market funding programs and proposals to seek funding for specific Cleaner Production initiatives that should be undertaken to promote adoption of cleaner production systems and practices in the country.	Funding programmes and proposals

Table 6: Promotion of SCP strategy in enterprises in harmony with local conditions

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs
Public education and awareness	SCP mainstreamed in public service delivery, business activities and household practices	Undertake stakeholder consultation workshops for each of the key sectors in the economy where Cleaner Production practices need to be adopted.	Sector-specific SCP action plans
		Develop TV and radio programmes to create awareness of Sustainable Consumption and Production.	TV and radio programmes
Raise awareness of Sustainable Consumption and Production benefits and advantages		Carry out print and press media advertising programmes to provide Sustainable Consumption and Production psychological visibility in the minds of the public.	SCP information and advertising materials
	SCP mainstreamed in public service delivery, business activities and household practices	Develop and disseminate customised information, education and communication materials targeting specific categories of stakeholders in the economy	SCP IEC materials
		Carry out Sustainable Consumption and Production exhibitions during key business and agricultural exhibition like national UMA and agricultural exhibitions.	SCP exhibitions
		Design and implement consumer awareness programmes to promote Cleaner Production	Consumer awareness programmes
Demonstration of Cleaner Production effectiveness through in-plant Cleaner Production assessment and demonstration projects	Cleaner Production responsive enterprise production and management practices	Develop and implement programme for in-plant Cleaner Production assessment in strategic sectors and production enterprises.	Sector-specific in-plant Cleaner Production assessment programmes
		Design and implement Cleaner Production effectiveness demonstration projects in strategic sectors and	CP demonstration projects

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs
		institutions/production enterprises.	
Information exchange and dissemination of technical information as part of an international network for access to latest Cleaner Production information	Accessible SCP knowledge base	Guide the country to espouse international Sustainable Consumption and Production standards and best practices	Resource centre for CP references and databases.
		Coordinate with other continental and international advocacy bodies responsible for advocacy and promotion of Sustainable Consumption and Production	Reports of coordination meetings and conferences
		Coordinate with national stakeholders (the public, private and civil society) to disseminate and exchange information on cleaner production developments and trends	Reports of coordination meetings and workshops
Commitment and partnership building	SCP practices diffused in all facets of society	Work with private sector to develop cleaner production investment programmes for implementation using the public-private-partnership development and management	SCP Public-Private-Partnership investment programmes
		Develop and implement a university research programme for renewable energy and other clean production initiatives	University research programme for renewable energy and other clean production initiatives
Technical Assistance Provision	SCP practices diffused in all production sectors of the economy	Development and dissemination of standard guidelines for cleaner production in all the production sectors.	Sector-specific SCP standard guidelines
		Support initiatives for establishment of disposal facilities to encourage cleaner production.	Establishment of disposal facilities Initiative
		Technical assistance for adoption of Cleaner Production technology and practices.	Technical assistance programme

Table 7: Develop local capacity to create and meet national SCP demand

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs
Strengthening institutional structures and arrangements for promotion of SCP	SCP institutionalized in all sectors of the economy	An institutional rationalization review shall be undertaken for purposes of identifying institutions that are to champion promotion and roll-out of Sustainable Consumption and Production.	SCP roll-out champion institutions
		Establishment of industry Cleaner Production standards/benchmarks	Cleaner Production standards
		Transformation of Uganda Cleaner Production Centre into a Trust	Uganda Cleaner Production Trust
		Organise sector clusters for promotion of Cleaner Production mainstreaming	SCP sector clusters
		Develop and implement a Sustainable Consumption and Production mainstreaming strategy and institutional arrangements:	SCP mainstreaming strategy
		Legal framework and institutional arrangements for compliance and enforcement	Legal framework and enforcement institutional arrangements
Training of Local expertise and building local capacity for SCP	SCP certification of goods and services from all sectors	Designing and implementing training programmes and accreditation systems SCP management in the country	approved training programmes and accreditation system
		Establishment of research and training programmes for adoption of new production technologies that foster cleaner production practices.	Approved SCP adoption research and training programmes
		Put in place a programme for international benchmarking of Sustainable Consumption and Production promotion	SCP international benchmarking programme
		Develop and implement a mentoring and support monitoring programme for all the relevant sectors of the economy to adopt cleaner production best practices.	Approved mentoring and support programme
Investment in SCP demonstration	SCP practices widely adopted in	Invest in infrastructure (including office premises), facilities, equipment and tools for implementing the	SCP capacity building infrastructure, facilities,

equipment and tools for training and capacity building	the economy	planned series of training and capacity building programmes	equipment and tools
		Assessment of human resource capacity requirements and addressing any gaps in both skills (quality) and numbers (quantity).	SCP Human resource development programme
		An institutional rationalization review shall be undertaken for purposes of identifying institutions that are to champion promotion and roll-out of Sustainable Consumption and Production.	SCP roll-out champion institutions

4.2. PILOT ACTIVITIES FOR PROMOTION OF SUSTAINABLE CONSUMPTION AND PRODUCTION

Pilot activities for the promotion of Sustainable Consumption and Production have been selected on the basis of a variety of factors namely:

- Relevance to national needs;
- Potential to provide synergy to existing initiatives;
- Relevance to SCP programme of the Africa region;
- Potential to deliver quick impacts with multiplier effects;
- Existence of capacity to implement within existing infrastructure;
- And more importantly being part of the global process supported by donor communities.

Based on the four thematic areas of the African 10-Year Programme on Sustainable Consumption and Production, a total of nine pilot activities have been identified including one on education which is an indispensable component of the other pilot activities:

Table 8: Identified Pilot SCP Activities

Thematic Area	**Pilot Activity**
Energy	Demand-side Management on Energy Use
Water and Sanitation	Demand-Side Management on Water Use and Water Harvesting
Habitat and Sustainable Urban Development	Pilot Activity A: Integrated Solid Waste Management Programme
	Pilot Activity B: Sustainable Building and Construction
	Pilot Activity C : Cleaner City-Vehicle Emissions

Industrial Development	Pilot Activity A: Sustainable Manufacturing
	Pilot Activity: B: Sustainable Tourism
	Pilot Activity C: Sustainable Agriculture
Cross-cutting Area:	Education for Sustainable Consumption

These pilot activities are further illustrated in a matrix. The matrix provides a profile for the proposed pilot activities for the promotion of sustainable consumption and production in Uganda. It defines the objective of the activity to be undertaken, specific activities, results/outcomes and targeted groups/sectors.

Table 9: Profile of pilot activities for the promotion of sustainable consumption and production

Pilot activity	Objective	Activities	Results/Outcomes
Demand-side management programme on energy use	To promote energy efficiency and conservation in residential houses and service enterprises	• Identify the key areas which have significant energy loss; • Develop the major steps and practices that need to be adopted to address the inefficiency points; • Conduct public awareness and education programmes to promote energy efficient use and practices; • Provide targeted facility and technical support to communities and entities that have high potential saving; • Promote use of safe fuel specifications; • Promote efficient boiler design in industrial applications/operations and develop code of conduct for boiler operations.	• Increased ability of providing electricity to more people with the available capacity; • Household and business benefit from reduction of electricity bill; • Reduction of greenhouse gas from supplementary diesel-based generation; • Increased use of renewable energies; • Reduction on the emissions of sulphur dioxide and lead plus their associated health impact; • Reduction in boiler operation cost as well as in energy utilization and emission.
Demand- side management on water uses and water harvesting	To improve the availability of water and promote efficient utilization of water	• Identify the key areas which have significant water loss & water wastage; • Develop the major steps and practices that need to be adopted to address the inefficiency points; • Conduct public awareness and education programmes to promote efficient use and practices; • Encourage institutions and households to collect rain water for domestic utility;	• Improved awareness about water as an important resource; • Increased ability of providing water to more people with the available capacity; • Household and business benefit from reduction of water consumption; • Possibility for avoiding water scarcity and stress;

Pilot activity	Objective	Activities	Results/Outcomes
		• Promote water pricing that encourages efficient water use; • Promotion of community-managed water supply systems to act as watch dog on vandalism; • Promote the use of recycled water for irrigation after treatment.	• Improved use and maintenance of protected wells and boreholes.
Integrated Solid Waste Management Programme	To address the growing problem of waste management on an integrated basis that results in environmental and socio-economic benefits	• Conduct the characterization of waste streams with a focus on identifying the potential for reduction, recycling and reuse; • Promote segregation of waste at the source and waste-to-resource conversion activities including composting; • Promote an integrated mechanism for the effective collection and transfer of waste; • Promote the appropriate waste treatment and disposal method including non-combustible treatment methods and incineration for hazardous waste; • Promote effective and efficient hospital waste incineration design practices;	• Improved awareness about waste generation and its impacts; • Adoption of integrated waste management by local authorities; • Improved health and sanitation condition; • Creation of employment and income generation for local communities; • Encouragement of organic farming; • Increased life-span of existing landfills; • Reduction in emission of toxic pollutants; • Enhanced capacity in managing hospital waste.

Pilot activity	Objective	Activities	Results/Outcomes
		• Develop code of conduct for hospital waste incineration; • Conduct public awareness and education on the '3-R' principles; • Establish and enforce policy on Solid Waste Management (SWM); • Establish control measure for plastic waste and encourage recycling methods of utilization.	
A programme on sustainable building and construction (SBC)	To ensure the development of the building and construction sector on a sustainable basis	• Identify locally available knowledge on sustainable building and promote their replication; • Promote the introduction of sustainable building and construction principles and approaches in institutions of higher learning curriculum; • Conduct on-job training for practicing engineers and designers both in private and public institutions; • Promote resource efficient building materials through public procurement and infrastructure developers; • Collaboration with the taskforce on SBC and the Sustainable Building and Construction Initiative; • Promote use of safe construction materials; • Enhance vertical and horizontal	• Improved resource efficiency over the life cycle of a building; • Health benefits from improved in-house conditions; • Engineers and designers with improved skills and knowledge about SBC; • Possible economic savings and benefits; • Reduction in generation of hazardous waste.

Pilot activity	Objective	Activities	Results/Outcomes
		institutional linkages in working practices.	
Cleaner Vehicular Emissions in cities	To reduce emissions from use of vehicles in Cities	• Conduct sample surveys on main trends in urban transportation systems e.g. number of vehicles, types and makes, movement patterns – rush hours etc.; • Identify and prioritize list of options to address problems of traffic congestion and to limit resulting air-pollution; • Promote use of alternative fuel systems such as natural gas or biofuels; • Promote use of cleaner fuel specifications; • Promote use of catalytic converters • Establish incentives for positive behaviour such as use of cleaner fuels, catalytic converters etc.; • Enhance management of traffic congestion • Introduce standards and regular car inspection system; • Encourage use of public transport services against use of private cars; • Monitor and evaluate urban air pollution due to vehicular emission.	• Reduction on air emissions and pollution; • Increased efficiency of transport services; • Health benefits from improved air quality.
Sustainable Manufacturing	To enhance the efficiency of resource consumption in the manufacturing	• Carry out Cleaner Production Assessments in industries in different sectors; • Prepare industry specific Environmental Management Plans;	• Improvement of industry image to the public and consumers in general; • Reduction of environmental pollution and degradation;

Pilot activity	Objective	Activities	Results/Outcomes
	sector so as to minimize adverse environmental impacts and increase productivity	• Develop/adopt a code of conduct that could be abided by the industry; • Promote labelling and recognition mechanisms that recognizes continuous improvement by the manufacturing industry; • Promote product Life cycle Assessment in the sector; • Establish a National Industrial Pollution Profile; • Promote ISO- certification in the sector industries (ISO 9001:2000, ISO 14001:2004, OHSAS 18001); • Conduct awareness seminars for all target groups.	• Savings realized by industry due to improved productivity; • Increased awareness on LCA among industrialists; • Extended/enhanced local and export market share/opportunity.
Sustainable Tourism programme	To enhance the national benefits to be obtained from the development of the Tourism sector on a sustainable basis	• Identify the key issues and hot spots related to the sector; • Build upon the work of existing initiatives including the Tour Operator's Initiative; • Conduct training and education on sustainable tourism practices and approaches targeting both operators and tourists; • Develop/adopt a code of conduct that could be abided by the industry; • Promote labelling and recognition mechanisms that recognizes continuous improvement; • Promote sustainable building and design	• Improvement in the general awareness of the public and sector operators; • Reduction of environmental pollution and degradation; • Improved profile of the tourism sector which leads to national economic benefit; • Possibilities of new business development including community-based businesses.

Pilot activity	Objective	Activities	Results/Outcomes
		in the sector; • Collaborate with the Marrakech Taskforce on Sustainable Tourism; • Promote service provided to tourists.	
Education for sustainable consumption and production	To develop a new culture of consumption and production that is sustainable	• Develop locally adopted education materials on sustainable consumption and production; • Disseminate the education materials with a primary target on primary and secondary school students; • Facilitate establishment of sustainable consumption and production clubs in schools, wards, streets, villages and post-secondary school institutions; • Promote general public awareness through media programmes and public events; • Integrate SCP in School Curricular.	• Increased public awareness about sustainable consumption and production; • Creation of a new generation that could serve as change agent within the society; • Development of a sustainable consumption and production culture.
Programme on Sustainable Agriculture	To promote sustainable agriculture	• Identify key areas which have significant environmental impacts; • Develop major steps that need to be adopted to address the impacts; • Enhance extension services; • Encourage and promote organic farming; • Promote value addition for agricultural products and by-products; • Assess and identify best practices for energy efficiency and renewable energy technologies in agriculture;	• Reduction of impacts on the environment; • Efficiency utilisation of inputs and other resources improved; • Increased productivity and lower energy costs; • Increased use of renewable energy technologies in agricultural sector; • Increased availability of micro-credit financing for agricultural inputs;

Pilot activity	Objective	Activities	Results/Outcomes
		• Promote financial mechanisms and capacity building for peasant communities to enable adoption of renewable energy technologies; • Promote innovative links between peasant communities and donors, technology providers to enhance access to renewable energy technologies.	• Increased incomes and savings in agricultural activities.

5.0. IMPLEMENTATION AND MONITORING ARRANGEMENTS

The implementation of the proposed pilot initiatives will involve the following:

a) Identification of implementing institutions. This will require consultations and setting working modalities with the identified institutions.
b) Identification of funders – the prospects of funding shall be explored with the national budget, donor agencies, development agencies, small grants programmes.

Table 11 elaborates the implementation mechanism for each activity by identifying implementing institutions, the verifiable indicators to facilitate the monitoring process and possible sources of funds. The verifiable indicators given are measurable and therefore can provide performance achievements.

Table 10: Implementation and monitoring mechanisms for the pilot activities

Pilot activity	Implementing institutions	Verifiable indicators	Possible source of funding
Demand-side Management Programme on Energy Use	Ministry of Energy, ERA, UMEME, Uganda Electricity Generation Company Limited	• Number of institutions and households covered by the programme • Total KWh of electricity saved • The economic saving per household and institutions • Number of fuel specifications adopted • Number of industries having efficient boiler design and practicing code of conduct	• Local/national budget • International donor/development agencies • Multilateral/international companies • Small grant programmes
Education for Sustainable Consumption and Production	Ministry of Education, NGOs, Universities and tertiary institutions	• Number of students and public reached by the programme • Number of SCP clubs established • SCP-related initiatives undertaken	• Local/national budget • Bilateral/development agencies • Small grant programmes
Integrated Solid Waste Management Programme	Ministry of Water and Environment Local Government Agencies, CBOs, NGOs, NEMA	• The volume of waste taken out of the stream • The value made out of recycling and reusing waste • The number of employments generated through recycling • The number of cases/fines for littering and pollution • The number of reported medical cases related to environmental hygiene • The number of people reached through the awareness programme • The number of hospitals having effective and efficient incinerators and practicing the code of conduct	• Local /national budget • Small grant programmes • Bilateral/ development agencies • Multilateral/international companies
Demand- Side Management on Water uses and Rain Water	Ministry of Water and Environment, Local Government Agencies, NGOs,	• Number of institutions and households covered by the programme • Total water volume saved and collected through harvesting;	• Local government/ national budget • International donor agencies • Small grants

Pilot activity	Implementing institutions	Verifiable indicators	Possible source of funding
Harvesting	CBOs, National Water and Sewerage Corporation	• Number of wells protected and Boreholes Availed • The economic saving per household and institutions • Volume of recycled water reused for different purposes	• NGOs
A programme on Sustainable Building and Construction	Ministry of Works Housing and Urban Development, Public Universities and Tertiary Training Institutions, National Statistics Bureau	• Number of graduates with sufficient knowledge on SBC • Number of professionals participated in the on-job training • Number of locally available knowledge and practices identified and promoted • Total volume of savings on resource over a life cycle of building; • The number of dwellers in slums	• Local government/ national budget • International Donor agencies/grants • Small grants
Programme on Sustainable Agriculture	Peasants, Ministry of Agriculture, Animal and Fisheries, Agricultural thru NAADS/ NARO etc Research Institutions, Agricultural Extension Officers, NGOs, CBOs	• Number of farmers/peasants sensitized and trained • Use of chemical agricultural inputs reduced • Reduced loss of soil fertility • Improvement in yields per unit area • Number of renewable energy technologies adopted by agricultural communities • Number of financing programmes for adoption of renewable technologies	• Local/national • Small grants programme • Bilateral/development agencies • Multilateral/international companies • Grants from international donor/development agencies
Sustainable Manufacturing Programme	NEMA, Ministry of Tourism Trade and Industry, Uganda National Bureau of Standards (UNBS), Uganda Manufacturers	• Number of industries assessed • Number of Cleaner Production Options generated • The amount of savings on resource-use realized from implementation of CP options • Increase in productivity or reduced quantity of resource used per unit output • Number of industries that will have developed	• Local government/national budget • Bilateral/development agencies • Small grant programmes • International donor agencies/ grants

Pilot activity	Implementing institutions	Verifiable indicators	Possible source of funding
	Association (UMA)	Environment Management Plans • Number of industries recognized as cleaner performers or champions • Number of industries adopting certifiable Environment Management Systems (ISO 9001:2000, ISO 14001:2004, OHSAS 18001); • Number of industries committed to LCA approach • Number of ISO-certified industries	
Sustainable Tourism Programme	Ministry of Tourism Trade and Industry , UTB Uganda Wildlife Authority (UWA),tour operators	• Number of operators signed-up for the code of conduct • The amount of savings (energy, water) realized from improvement programmes • Number of operators recognized as champions • Results of survey on the perception of the destination by tourists	• Local government/ national budget • Bilateral/development agencies • Donor agencies • NGOs/grants
Programme on Cleaner Vehicular Emissions	Ministry of Works and Transport, NEMA City Council, Municipalities, Transporters, Commuter Operators (UTODA /UB0A)	• Pollution levels reduced • Improved air quality • Increased efficiency of transport services • Improved health of people • Economic out-put improved due to transport efficiency • Ease of movement of traffic in target urban areas	• local/national • Bilateral/development agencies • Small grants • Multilateral/international companies/bodies

6.0. Indicative Programme Activity Details

Indicative activities for delivering advocacy, promotion and capacity building and promoting SCP in Uganda in the context of the African 10 YFP have been assessed and are hereby proposed:

6.1. SCP Advocacy, Promotion and Capacity Building Programme

	Programme
1	Promotion of SCP Supportive Government Policies In Harmony With Local Conditions
2	Promotion of SCP Strategy In Enterprises In Harmony With Local Conditions
3	Local Capacity To Create And Meet National Cleaner Production Demand

6.2. Pilot Activities for the Promotion of Sustainable Consumption and Production

	Pilot Activity
1	Demand-side Management Programme on Energy Use
2	Education for Sustainable Consumption and Production
3	Integrated Solid Waste Management Programme
4	Demand- Side Management on Water uses and Rain Water Harvesting
5	A programme on Sustainable Building and Construction
6	Programme on Sustainable Agriculture
7	Sustainable Manufacturing Programme
8	Sustainable Tourism Programme
9	Programme on Cleaner Vehicular Emissions

6.1 SCP Advocacy and Promotion Programme

6.1.1 Promotion of SCP Supportive Government Policies in Harmony with Local Conditions

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
Sustainable Consumption and Production policy advocacy	Cross-cutting SCP policy and practices	Advocate for SCP mainstreaming in government policy framework of all the sectors of the economy	Policy advocacy paper	Consultancy to develop Policy advocacy paper
				Stakeholder holder consultation workshop
				Submission to Cabinet and follow up *(staff time only)*
		Advocacy for policy to ban use of non-biodegradable packaging materials	Policy approved for enactment of relevant law	Hold stakeholder meetings to agree on law enactment follow-up agenda*(staff time only)*
				Follow up enactment of law and regulations*(staff time only)*
		Development and implementation of advocacy and promotion of programmes for ridding the environment of non-biodegradable waste	Advocacy and promotion of programmes	Design advocacy and promotion programmes *(staff time only)*
				Design, print and disseminate information materials
				Prepare press materials
				Plan and run annual media programmes
		Develop a strategy to advocate for government policy to support collective investment in joint Cleaner Production	SCP systems joint investment advocacy strategy	Consultancy to develop SCP systems joint investment advocacy strategy
				Stakeholder holder consultation workshop
				4 Advocacy meetings and 4 workshops annually

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
		systems		
		Advocate for new Government policy to establish incentive programmes for transformation of traditional production methods to modern Cleaner Production technology.	Government SCP incentive policy	Consultancy to develop policy proposal paper Stakeholder holder consultation workshop to review paper National workshop to present policy proposals
Policy advice and development	Wide public awareness of SCP	Carry out research and network with international Cleaner Production initiatives to access and share information on developments and emerging best practices on Sustainable Consumption and Production	Research reports and reference materials and databases	Consultancy to carry out research in 2 topical areas per year 2 Stakeholder workshops to review research reports Annual subscriptions to reference materials and database sources 2-person team attendance of 2 international SCP fora
		Develop and implement advocacy programmes for political goodwill to implement	SCP advocacy programmes	Design advocacy and promotion programmes *(Staff, 2 yearly review)* Design, print and disseminate information materials*(2 yearly)* Prepare press materials *(Annually)* Plan and run annual media programmes *(Annually)*

Strategic Action	**Expected Outcome**	**Specific Interventions (Activities)** Sustainable Consumption and Production practices.	**Outputs**	**Methodology For Implementation**
Resource mobilization of financing for Cleaner Production investments	SCP mainstreamed in public service delivery, business activities and household practices	Develop and market funding programs and proposals to seek funding for specific Cleaner Production initiatives that should be undertaken to promote adoption of cleaner production systems and practices in the country.	Funding programmes and proposals	Consultancy to development Funding Programmes and proposals Stakeholder holder consultation workshop to review proposals National workshop to present to GoU and donor agencies Outward visits to make presentation to UNEP etc

6.1.2 Promotion of SCP Strategy in Enterprises in Harmony with Local Conditions

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
Public education and awareness	SCP exhibited in public service delivery, business activities and household practices	Undertake stakeholder consultation workshops for each of the key sectors in the economy where Cleaner Production practices need to be adopted.	Sector-specific SCP action plans	2 Consultancies to develop 2 sector plans per year*(w.e.f Yr 3)*
				2 Inceptive stakeholder workshop to discuss sector framework
				2 Sector plans validation workshops
				Printing and dissemination of sector plans
		Develop TV and radio programmes to create awareness of Sustainable Consumption and Production.	TV and radio programmes	Develop TV and Radio programmes
				Hold regular (monthly) TV and Radio shows
		Carry out print and press media advertising programmes to provide Sustainable Consumption and Production psychological visibility in the minds of the public.	SCP information and advertising materials	Consultancy to develop SCP information and advertising materials *(every 2 years)*
				Information printed and disseminated*(every 2 years)*
				Advertising subscriptions made in press media.
Raise awareness of Sustainable	SCP exhibited in	Develop and disseminate customised	SCP IEC materials	Consultancy to develop National IEC SCP strategy.
				Develop IEC materials

Strategic Action	**Expected Outcome**	**Specific Interventions (Activities)**	**Outputs**	**Methodology For Implementation**
Consumption and Production benefits and advantages	public service delivery, business activities and household practices.	information, education and communication materials targeting specific categories of stakeholders in the economy		Design and print IEC materials
				Disseminate customised IEC materials to target stakeholder groups
		Carry out Sustainable Consumption and Production exhibitions during key business and agricultural exhibition like national UMA and agricultural exhibitions.	SCP exhibitions	Develop SCP exhibition materials, items and sites
				Participate in 4 Business and agricultural exhibitions per year
		Design and implement consumer awareness programmes to promote Cleaner Production	Consumer awareness programmes	Design comprehensive consumer awareness programmes *(staff time only)*
				Carry out 4 consumer awareness workshops per year
				Hold 1 monthly TV and Radio sensitisation programmes.
Demonstration Of Cleaner Production effectiveness through in-plant Cleaner Production assessment and demonstration	Cleaner Production responsive enterprise production and management practices	Develop and implement programme for in-plant Cleaner Production assessment in strategic sectors and production enterprises.	Sector-specific in-plant Cleaner Production assessment programmes and reports	Consultancy to develop 5-year sector-specific in-plant Cleaner Production assessment programmes
				Hold 2 sector-specific workshops to launch roll-out of programme.
				Carry out CP assessments in 2 sectors per year *(staff time + fieldwork costs)*

Strategic Action	**Expected Outcome**	**Specific Interventions (Activities)**	**Outputs**	**Methodology For Implementation**
projects		Design and implement Cleaner Production effectiveness demonstration projects in strategic sectors and institutions/production enterprises.	CP demonstration projects	Consultancy to design CP demonstration project profiles
				Hold 2 sector-specific workshops to sensitise stakeholders about the projects
				Implement 2 SCP demonstration projects per year
Information exchange and dissemination of technical information as part of an international network for access to latest Cleaner Production information	Accessible SCP knowledge base	Guide the country to espouse international Sustainable Consumption and Production standards and best practices	Resource centre for CP references and databases.	Procure facilities, equipment and materials for resource centre
				Carry out research on SCP standards and best practices, prepare and disseminate info. Materials (staff time only + fieldwork costs)
				Annual subscriptions to reference materials and database sources
				2-person team attendance of 2 international SCP foras
		Coordinate with other continental and international advocacy bodies responsible for advocacy and promotion of Sustainable Consumption and Production	Reports of coordination meetings and conferences	2-person team attendance of coordination meetings and conferences 3 times a year
				2-person, 2 2-week study tours per year
				Regular electronic information exchanges(only e-connectivity)
		Coordinate with national stakeholders (the public, private and civil society) to disseminate and exchange information	Reports of coordination meetings and workshops	Develop national SCP stakeholder coordination agenda (staff time only for meetings)
				3 stakeholder SCP review workshops per year
				Regular coordination meetings*(staff time only)*
				Regular electronic information exchanges *(staff time only)*

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
		on cleaner production developments and trends		
Commitment and partnership building	SCP practices diffused in all facets of society	Work with private sector to develop SCP investment programmes for implementation using the public-private-partnership (PPP) development and management	SCP Public-Private-Partnership investment programmes	Consultancy to facilitate development of SCP PPP investment programmes
				Stakeholder workshop to discuss SCP PPP investment programme
				Implement 2 SCP PPP investment projects per year
		Develop and implement a university research programme for renewable energy and other clean production initiatives	University research programme for renewable energy and other clean production initiatives	Consultancy to develop university research programme
				Mobilise SCP research grants(travel for international presentations)
				Implement SCP research grants*(staff time only)*
				Hold stakeholder research dissemination workshops
Technical Assistance Provision	SCP practices diffused in all production sectors of the economy	Development and dissemination of standard guidelines for cleaner production in all the production sectors.	Sector-specific SCP standard guidelines	Consultancy to develop sector-specific SCP standard guidelines for 2 sectors per year
				Print SCP standard guidelines for 2 sector per year
				Hold 2 stakeholder workshop to disseminate guidelines
		Support initiatives for establishment of	Establishment of	Consultancy to develop initiative for establishment of disposal facilities

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
		disposal facilities to encourage cleaner production.	disposal facilities Initiative	Stakeholder workshop to discuss initiative for establishment of disposal facilities
				Mobilisation of grant to support establishment of disposal facilities initiative (staff time only)
				Implement initiative for establishment of disposal facilities
		Technical assistance for adoption of Cleaner Production technology and practices.	Technical assistance programme	Consultancy to develop technical assistance programme
				Stakeholder workshop to discuss TA programme and implementation modalities
				Implement 2 TA contracts per year

6.1.3 Develop Local Capacity to Create and Meet National Cleaner Production Demand

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
Strengthening institutional structures and arrangements for promotion of Cleaner Production	SCP institutionalized in all sectors of the economy	An institutional rationalization review shall be undertaken for purposes of identifying institutions that are to champion promotion and roll-out of Sustainable Consumption and Production.	SCP roll-out champion institutions	Hold a sensitization workshop for key SCP mainstreaming institutions
				Develop a rationalization paper for discussion by Steering Committee
				Hold stakeholder meetings to map out agenda for SCP promotion
		Establishment of industry Cleaner Production standards/benchmarks	Cleaner Production standards	Consultancy to develop cleaner Production standards
				Printing and dissemination of Cleaner Production standards
				Hold 2 stakeholder sensitisation workshops every year
		Transformation of Uganda Cleaner Production Centre into a Trust	Uganda Cleaner Production Trust	Consultancy to develop strategic plan
				Consultancy to develop institutional structure, policies and procedures
				Restructuring of UCPC into Trust (Human Resource rationalisation etc.).
				Launch Uganda Cleaner Production Trust.
		Organise sector clusters for promotion of	SCP sector clusters	SCP sector clusters established and training conducted *(staff time)*

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
		Cleaner Production mainstreaming		Develop/customise SCP sector cluster training materials*(staff time)*
				Hold 6 2-monthly 2-day cluster training workshops per year
		Develop and implement a Sustainable Consumption and Production mainstreaming strategy and institutional arrangements	SCP mainstreaming strategy	Develop SCP mainstreaming strategy, programmes and institutional arrangements.(*staff time)*
				Develop and print mainstreaming information materials
				Hold sensitization workshop
		Legal framework and institutional arrangements for compliance and enforcement	Legal framework and enforcement institutional arrangements	Hold 2 SCP sensitization workshops for Policy makers & Parliamentarians in years 1 & 2
				Follow-up legislation process with MTTI
				Develop regulations for application of the law
				Print and disseminate the Statute and regulations
Training of Local expertise and building local capacity for Cleaner Production	SCP certification of goods and services from all sectors	Designing and implementing training programmes and accreditation systems Cleaner Production management in the country	Approved training programmes and accreditation system	Work with UNBS to design of Certification, Standards and Accreditation system (staff time)
				Stakeholder consultations on adoption of Certification, Standards and Accreditation system
				Consultancy to develop guidelines for implementation of Certification, Standards and Accreditation system
				Implementation of Certification, Standards and Accreditation system *(staff time only)*
		Establishment of research and training	Approved SCP adoption	Consultancy to develop an SCP research and training programmes

Strategic Action	Expected Outcome	Specific Interventions (Activities)	Outputs	Methodology For Implementation
		programmes for adoption of new production technologies that foster cleaner production practices.	research and training programmes	Hold stakeholder consultation workshop with relevant institutions
				Market the SCP research and training programme for funding *(Staff time only+ travel costs)*
				Develop SCP research and training programme management policies and procedures*(Consultancy)*
				Implement SCP research and training programme
		Put in place a programme for international benchmarking of Sustainable Consumption and Production promotion	SCP international benchmarking programme	Develop SCP International benchmarking programme *(staff time only)*
				Develop institutional modalities for management of the international benchmarking programme *(Staff time only)*
				Attend out-bound international fora on SET development and management *(2 2-person out-bound trade fair events)*
				Hold in-bound SCP international fora *(Conference hosting costs)*
		Develop and implement a mentoring and support monitoring programme for all the relevant sectors of the economy to adopt cleaner production best practices.	Approved mentoring and support programme	Develop an SCP mentoring and support programme *(Staff time only)*
				Develop guidelines for implementing the SCP mentoring and support programme *(Staff time only)*
				Implement the SCP mentoring and support programme *(Short-term Technical Assistance to 4 institutions per year)*
Investment in Cleaner Production	SCP practices widely	Invest in infrastructure (including office premises), facilities,	SCP capacity building infrastructure,	Development of UCPC own office and training complex
				Procure and install SCP capacity facilities,

Strategic Action	**Expected Outcome**	**Specific Interventions (Activities)**	**Outputs**	**Methodology For Implementation**
demonstration equipment and tools for training and capacity building	adopted in the economy	equipment and tools for implementing the planned series of training and capacity building programmes	facilities, equipment and tools	equipment and tools
				SCP capacity building infrastructure, facilities, equipment and tools procured and commissioned
		Assessment of human resource capacity requirements and addressing any gaps in both skills (quality) and numbers (quantity).	SCP Human resource development programme	Consultancy to carry out an SCP capacity and skills needs assessment
				Work with NPA to develop a national SCP Human resource development plan*(staff time only)*
				Hold stakeholder consultation workshop for implementation of SCP HR plan
				Develop funding proposal for SCP Human resource development programme *(staff time only)*
				Launch and implement SCP Human resource development programme

6.2 Costing of the Pilot Activities for the Promotion of Sustainable Consumption and Production

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
1. Demand-side management programme on energy use	To promote energy efficiency and conservation in residential houses and service enterprises	Identify the key areas which have significant energy loss;	Research costs (transport, allowances)	• Increased ability of providing electricity to more people with the available capacity; • Household and business benefit from reduction of electricity bill; • Reduction of greenhouse gas from supplementary diesel-based generation; • Increased use of renewable energies; • Reduction on the emissions of sulphur dioxide and lead plus their associated health impact; • Reduction in boiler operation cost as well as in energy utilization and emission.
		Develop the major steps and practices that need to be adopted to address the inefficiency points;	Staff deskwork effort only	
		Conduct public awareness and education programmes to promote energy efficient use and practices;	-TV, Radio, Press Public awareness programs. -Information materials -Country-wide Awareness workshops	
		Provide targeted facility and technical support to communities and entities that have high potential saving;	- Capital investments in facilities for 10 communities/entities - Technical Assistance to 10 communities/entities	
		Promote use of safe fuel specifications;	-TV, Radio, Press Public awareness programs. -Information materials	
		Promote efficient boiler design in industrial applications/operations and develop code of conduct for boiler operations.	-Manufacturing facilities sensitization workshops in 5 urban centres -Mentoring and technical support	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
2. Demand-side management on water uses and water harvesting	To improve the availability of water and promote efficient utilization of water	Identify the key areas which have significant water loss & water wastage;	Research costs (transport, allowances)	• Improved awareness about water as an important resource; • Increased ability of providing water to more people with the available capacity; • Household and business benefit from reduction of water consumption; • Possibility for avoiding water scarcity and stress; • Improved use and maintenance of protected wells and boreholes.
		Develop the major steps and practices that need to be adopted to address the inefficiency points;	Staff deskwork effort only	
		Conduct public awareness and education programmes to promote efficient use and practices;	-TV, Radio, Press Public awareness programs. -Information materials -Country-wide Awareness workshops	
		Encourage institutions and households to collect rain water for domestic utility;	-TV, Radio, Press Public awareness programs. -Information materials	
		Promote water pricing that encourages efficient water use;	-Exploratory visits to water processing and packing industries -Stakeholder consultation workshops in key urban centres	
		Promotion of community-managed water supply systems to act as watch dog on vandalism;	-TV, Radio, Press Public awareness programs. -Information materials	
		Promote the use of recycled water for irrigation after	-TV, Radio, Press Public awareness programs.	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
		treatment.	-Information materials -Country-wide Awareness workshops	
3. Integrated Solid Waste Management Programme	To address the growing problem of waste management on an integrated basis that results in environmental and socio-economic benefits	Conduct the characterization of waste streams with a focus on identifying the potential for reduction, recycling and reuse;	-TV, Radio, Press Public awareness programs. -Information materials -Awareness workshops in key urban centres	• Improved awareness about waste generation and its impacts; • Adoption of integrated waste management by local authorities; • Improved health and sanitation condition; • Creation of employment and income generation for local communities; • Encouragement of organic farming; • Increased life-span of existing landfills; • Reduction in emission of toxic pollutants; • Enhanced capacity in managing hospital waste.
		Promote segregation of waste at the source and waste-to-resource conversion activities including composting;	-TV, Radio, Press Public awareness programs. -Information materials -Awareness workshops in key urban centres	
		Promote an integrated mechanism for the effective collection and transfer of waste;	-Capacity building initiatives with key urban centres	
		Promote the appropriate waste treatment and disposal method including non-combustible treatment methods and incineration for hazardous waste;	-Capacity building initiatives with key urban centres and institutions	
		Promote effective and efficient hospital waste incineration design practices;	-Capacity building initiatives with key hospitals	
		Develop code of conduct for hospital waste incineration;	-Development of guidelines -Printing and dissemination of	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
			information materials	
		Conduct public awareness and education on the '**3-R**' principles;	-TV, Radio, Press Public awareness programs. -Information materials	
		Establish and enforce policy on Solid Waste Management (SWM);	-Develop policy of SWM -Hold stakeholder workshops -Print and disseminate information materials	
		Establish control measure for plastic waste and encourage recycling methods of utilization.	-Develop policy of SWM -Hold stakeholder workshops -Print and disseminate information materials	
4. A programme on sustainable building and construction	To ensure the development of the building and construction sector on a sustainable basis	Identify locally available knowledge on sustainable building and promote their replication;	-Consultancy to undertake research -stakeholder validation workshop	• Improved resource efficiency over the life cycle of a building; • Health benefits from improved in-house conditions; • Engineers and designers with improved skills and knowledge about SBC; • Possible economic savings and benefits; • Reduction in generation of
		Promote the introduction of sustainable building and construction principles and approaches in institutions of higher learning curriculum;	-Consultancy to develop materials to streamlining in curriculum -4 Materials development workshops	
		Conduct on-job training for practicing engineers and designers both in private and public institutions;	-On-job training programmes for practicing engineers -Mentoring and technical	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
			support	hazardous waste.
		Promote resource efficient building materials through public procurement and infrastructure developers;	-Sensitisation workshops -Information materials development and dissemination	
		Collaboration with the taskforce on SBC and the Sustainable Building and Construction Initiative;	-Information exchange -Subscriptions to journals and databases -Sponsorships to conference	
		Promote use of safe construction materials;	-Construction and building TV, Radio, Press Public awareness programs. -Information materials	
		Enhance vertical and horizontal institutional linkages in working practices.	-Linkage activities with other institutions in the building and construction sector	
5. Cleaner Vehicular Emissions in cities	To reduce emissions from use of vehicles in Cities	Conduct sample surveys on main trends in urban transportation systems e.g. number of vehicles, types and makes, movement patterns – rush hours etc.;	- Consultancy to conduct sample surveys -Stakeholder validation workshops -Printing and dissemination of reports	• Reduction on air emissions and pollution, • Increased efficiency of transport services • Health benefits from improved air quality
		Identify and prioritize list of options to address problems of traffic congestion and to limit	Research costs (transport, allowances)	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
		resulting air-pollution;		
		Promote use of alternative fuel systems such as natural gas or biofuels;	-TV, Radio, Press Public awareness programs. -Information materials	
		Promote use of cleaner fuel specifications;	-TV, Radio, Press Public awareness programs. -Information materials	
		Promote use of catalytic converters	-TV, Radio, Press Public awareness programs. -Information materials	
		Establish incentives for positive behaviour such as use of cleaner fuels, catalytic converters etc.;	-Development of incentive policy and scheme -Fund and manage incentive scheme	
		Enhance management of traffic congestion	-Provide technical assistance -Provide equipment and materials	
		Introduce standards and regular car inspection system;	-TV, Radio, Press Public awareness programs. -Information materials	
		Encourage use of public transport services against use of private cars;	-TV, Radio, Press Public awareness programs. -Information materials	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
		Monitor and evaluate urban air pollution due to vehicular emission.	- Consultancy to conduct sample surveys -Stakeholder validation workshops -Printing and dissemination of reports	
6.Sustainable Manufacturing	To enhance the efficiency of resource consumption in the manufacturing sector so as to minimize adverse environmental impacts and increase productivity	Carry out Cleaner Production Assessments in industries in different sectors;	-Consultancy to undertake pollution profiling -Stakeholder validation workshop -Report printing and dissemination	• Improvement of industry image to the public and consumers in general; • Reduction of environmental pollution and degradation; • Savings realized by industry due to improved productivity; • Increased awareness on LCA among industrialists; • Extended/enhanced local and export market share/opportunity.
		Prepare industry specific Environmental Management Plans;	Consultancy support to facilitate preparation of plans	
		Develop/adopt a code of conduct that could be abided by the industry;	-Development of guidelines -Printing and dissemination of information materials -Stakeholder workshop	
		Promote labelling and recognition mechanisms that recognizes continuous improvement by the manufacturing industry;	-TV, Radio, Press Public awareness programs. -Information materials -Awareness workshops in key sectors	
		Promote product Life cycle Assessment in the sector;	-Hold consultations with key players in the sector	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
			(Staff effort only)	
		Establish a National Industrial Pollution Profile;	-Consultancy to undertake pollution profiling -Stakeholder validation workshop -Report printing and dissemination	
		Promote ISO- certification in the sector industries (ISO 9001:2000, ISO 14001:2004, OHSAS 18001);	-Capacity building training for ISO certification -Support for acquisition of certification	
		Conduct awareness seminars for all target groups.	Awareness seminars	
6. Sustainable Tourism programme	To enhance the national benefits to be obtained from the development of the Tourism sector on a sustainable basis	Identify the key issues and hot spots related to the sector;	Research costs (transport, allowances)	• Improvement in the general awareness of the public and sector operators; • Reduction of environmental pollution and degradation; • Improved profile of the tourism sector which leads to national economic benefit; • Possibilities of new business development including community-based businesses.
		Build upon the work of existing initiatives including the Tour Operator's Initiative;	Staff deskwork effort only	
		Conduct training and education on sustainable tourism practices and approaches targeting both operators and tourists;	-TV, Radio, Press Public awareness programs. -Information materials -Country-wide Awareness workshops	
		Develop/adopt a code of conduct that could be abided by the industry;	-Develop policy of SWM -Hold stakeholder workshops	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
			-Print and disseminate information materials	
		Promote labelling and recognition mechanisms that recognizes continuous improvement;	-TV, Radio, Press Public awareness programs. -Information materials	
		Promote sustainable building and design in the sector;	-Building and construction sector sensitization workshops in 5 urban centres -Mentoring and technical support	
		Collaborate with the Marrakech Taskforce on Sustainable Tourism;	-Information exchange -Subscriptions to journals and databases -Sponsorships to conference	
		Promote service provided to tourists.	-Capacity building initiatives with key tour associations and operators	
7.Education for sustainable consumption and production	To develop a new culture of consumption and production that is	Develop locally adopted education materials on sustainable consumption and production;	-Consultancy to develop materials -4 Materials development workshops	• Increased public awareness about sustainable consumption and production; • Creation of a new generation that could serve
		Disseminate the education materials with a primary target on primary and secondary school	-Printing and dissemination of education materials	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
	sustainable	students;		as change agent within the society; • Development of a sustainable consumption and production culture.
		Facilitate establishment of sustainable consumption and production clubs in schools, wards, streets, villages and post-secondary school institutions;	Grants for establishment of SCP clubs	
		Promote general public awareness through media programmes and public events;	-TV, Radio, Press Public awareness programs. -Information materials -Country-wide Awareness workshops	
		Integrate SCP in School Curricular.	-Consultancy to develop materials -4 Materials development workshops	
7. Programme on Sustainable Agriculture	To promote sustainable agriculture	Identify key areas which have significant environmental impacts;	Research costs (transport, allowances)	• Reduction of impacts on the environment; • Efficiency utilisation of inputs and other resources improved; • Increased productivity and lower energy costs; • Increased use of renewable energy technologies in agricultural sector; • Increased availability of micro-credit financing for agricultural inputs;
		Develop major steps that need to be adopted to address the impacts;	Staff deskwork effort only	
		Enhance extension services;	Provides technical assistance	
		Encourage and promote organic farming;	-TV, Radio, Press Public awareness programs. -Information materials -Country-wide Awareness workshops	

Pilot activity	Objective	Activities	Method of implementation	Results/Outcomes
		Promote value addition for agricultural products and by-products;	-TV, Radio, Press Public awareness programs. -Information materials -Country-wide Awareness workshops	• Increased incomes and savings in agricultural activities.
		Assess and identify best practices for energy efficiency and renewable energy technologies in agriculture;	-Carry out baseline assessments. -Hold stakeholder workshops	
		Promote financial mechanisms and capacity building for peasant communities to enable adoption of renewable energy technologies;	-Undertake linkage activities with renewable energy institutions to promote financial mechanisms -Carry out capacity building activities in rural communities	
		Promote innovative links between peasant communities and donors, technology providers to enhance access to renewable energy technologies.	-Undertake linkage activities with renewable energy institutions to promote financial mechanisms -Carry out sensitization workshops in rural communities	

APPENDICES

Appendix 1 – Concept notes on pilot initiatives for promotion of Sustainable Consumption and Production

Pilot activities were selected on the bases of their:

- Relevance to national needs;
- Potential to provide synergy to existing initiatives;
- Relevance to SCP programme of the Africa region;
- Potential to deliver quick impacts with multiplier effects;
- Existence of capacity to implement within existing infrastructure;
- And more importantly being part of the global process supported by donor communities.

Basing on the four thematic areas of the African 10-Year Programme on Sustainable Consumption and Production, a total of nine pilot activities have been proposed including one on education which is an indispensable component of the other pilot activities. These are: Demand-side Management on Energy Use; Demand-Side Management on Water Use and Water Harvesting; Integrated Solid Waste Management Programme; Sustainable Building and Construction; Sustainable Manufacturing; Sustainable Tourism; Education for Sustainable Consumption.

Project Concept Note 1 - Demand-Side Management Programme on Energy Use

1. BACKGROUND

Energy, an input necessary for the achievement of development goals is envisaged by the Government as critical. Currently, Uganda's energy consumption matrix stands at about 93% biomass, 5% petroleum products and 2% of electricity produced from two large

hydro dams. The total generation capacity of electricity in the country is 326 MW. However, only 6% of the total population is estimated to have access to electricity of which only 1% comprises the rural population. Further, over 95% of Uganda's population depends on biomass for their energy yet the cost of improved household and institutional stoves remain higher than many communities can afford.

An unsustainable situation, created by the heavy dependence on fuel wood and charcoal biomass poses long-term consequences on the environment in the areas where most of these products are harvested.

Electricity supply is mainly from hydropower with thermal sources (diesel) playing an increasingly important role especially with reduction in generation of hydropower due to reduced water levels in Lake Victoria and the rapid rise in the demand for electricity. There is a big shortfall between hydropower generation and demand which has led to the concerted Government efforts to promote

a) Energy efficiency and management practices as a means to reduce, unnecessary consumption and save on energy resources; and
b) Adoption of other renewable energy sources especially by household to reduce demand on hydropower.

2. Objectives

2.1 National Objectives

To increase access to modern, affordable and reliable energy services as a contribution to poverty eradication, so as to ensure an efficient and environmentally sound energy system.

2.2 SCP Objectives

The objectives of the SCP interventions are to introduce and promote demand-side energy management measures that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of

waste and pollutants over the life cycle, so as not to jeopardize the ability to meet the energy needs of future generations.

3. Activities and duration

A wide range of activities have been considered in looking at potential energy efficiency and energy conservation measures. However, the activities proposed below have been selected due to their appropriateness as well as the level of complementarities that they bring to on going national efforts and activities:

a) Baseline energy audit to identify key areas with significant energy losses and to develop major initiatives and practices to rectify energy inefficiency problems.
b) Raising public awareness and conducting educational programmes to promote energy efficient use and conservation practices.
c) Advocacy for energy efficient appliances including energy efficient light bulbs and appliances.
d) Production of posters and simple manuals for schools and other institutions on basic housekeeping measures to conserve energy and improve energy efficiency.
e) Provision of targeted facility and technical support to communities and entities that have high energy saving potential through the establishment of two or three pilot projects within a school or public institution to practically demonstrate the energy efficiency benefits.
f) Assist SMEs in carrying out energy audits.
g) Require public bodies to purchase only energy efficient lighting as from 2010 when installing or phasing out of incandescent lighting.
h) Increase Consumer Knowledge about benefits of Sustainable Driving, including providing tools for energy-efficient Vehicles Selection.
i) Formulation of a Strategic Research Action Plan on Energy

4. Inputs

In terms of Expertise, inputs into the project will consist of international consultants and national experts for SCP activities, energy efficiency and conservation issues. A core

team will be constituted which will run project activities in a phased approach. The Uganda Cleaner Production Centre, which is responsible for coordination of the different pilot activities, will also coordinate other inputs such as transport, communications, office facilities etc. through a system of pooled resources.

5. Outcomes

a) Increased awareness and application by communities of energy efficiency measures
b) Increased ability to serve more electricity customers within the available capacity
c) Reduction of electricity bills for both business and residential consumers
d) Reduction of greenhouse gas emissions from supplementary diesel-based generation
e) The pilot activity is expected to lead to the development of a national SCP programme for energy efficiency

6. Target Groups

Local residents in areas with significant energy losses, hotels and related service industries, municipality and public sector institutions including hospitals, schools, manufacturing industries and SMEs will all benefit from the programme in terms of cost reduction and energy savings.

7. Verifiable Indicators

a) The number of institutions and households covered by the programme
b) Total KWh of electricity saved through implementing measures
c) Economic saving per household and institution
d) Number of energy efficient appliances purchased by general public

8. Project Management

The Uganda Cleaner Production Centre will coordinate the SCP programme for energy working in close collaboration with key actors from the Ministry for Energy and Mineral

Development, Uganda Manufacturers' Association, Electricity Regulatory Authority, UMEME, Uganda Electricity Consumers Association and Uganda Renewable Energy Agency.

Project Concept Note 2 - Demand-Side Management on Water use and Water Harvesting

1. Background

Populations and government authorities are faced with significant challenges in enabling access to safe water as well as in its efficient utilization. Uganda is endowed with numerous water bodies including lakes, swamps and rivers. Almost 20% of the area of the country is open water. These include George and Kyoga lakes, and parts of the lakes Victoria, Edward and Albert. These lakes and most of Uganda's rivers form parts of the basin of the upper River Nile, which leaves Lake Victoria and flows northwards to Nimule on the Sudan frontier. The shorelines of open water bodies have been progressively receding while some of the rivers tend to be seasonal, almost drying up during the dry season.

This cycle repeats itself with increasingly adverse effects due to continued depletion of vegetative cover in catchment areas and along the banks of rivers and streams, due to increased agricultural activity. Most of the population lives in the rural areas with a lower percentage of persons living in urban areas. The urban centres contain a mix of developed and undeveloped areas which have limited access to water supply and services.

The Poverty Eradication Action Plan of Uganda estimated that from 2001 to 2015, about US$1.4 billion, or US$92 million per year, was needed to increase water supply coverage up to 95%. Access to an improved water source increased from 44% in 1990 to 60% in 2004. At the same time, sanitation coverage has increased slightly from 42% to 43%. Generally, coverage in rural areas, where 88% of the population lives, is lower than in urban areas. The most common technology options for rural water supply are protected springs, boreholes, protected wells, and gravity flow schemes. Those who do not have access to an improved source of water supply have to rely on unsafe sources

such as rivers, lakes, and unprotected wells. One indicator of poor access and/or quality is that water-borne diseases have been identified as the main cause of infant mortality.

According to the Ministry of Water and Environment (MWE), access to functioning water sources varies considerably among districts, from 12% to 95%. The national government aims to reach universal water supply and sanitation coverage in urban areas and 77% water supply and 95% sanitation coverage by 2015.

2. Objectives

2.1 National Objectives

The Joint Water and Sanitation Sector Programme Support is aligned to the PEAP sector objectives and its pillars 2 (Enhancing production, competitiveness, and incomes) and 5 (Human development). Altogether, US$150 million are to be spent under the program, which started in 2008 and is expected to run for five years. The major development partner involved in the program is the Danish International Development Agency (DANIDA), which alone provides US$66 million. The other partners are the African Development Bank (US$27 million), the Austrian Development Agency (ADA) (US$19 million), the Swedish International Development Cooperation Agency (SIDA) (US$14 million), the Department for International Development, United Kingdom (DFID) (US$10 million), the European Union (US$9 million) and the German Deutsche Gesellschaft für Technische Zusammenarbeitand KfW (US$6 million).

The program aims to support the achievement of the sector targets. It intends to serve about 1,410,000 people in rural areas, 373,000 people in rural growth centres (RGCs) (communities with a population between 2,000 and 5,000 people), and 155,000 in small towns directly with water and to give them access to basic sanitation and hygiene facilities. Besides the extension of water supply and sanitation in rural areas, RGCs, and small towns, the program includes components (i) water resources management, (ii) sector program support for capacity building, and (iii) sector reforms and water for production.

2.2 SCP Objectives

Realizing that the above targets involve putting up large investments for setting up additional infrastructure as well as for the overhauling/revamping of the current delivery systems, SCP objectives are intended to complement the above efforts by improving and increasing the availability of existing water resources through demand-side management of the available water resources. This will be achieved through the promotion of efficient water utilization and conservation measures.

3. Activities and duration

Amongst the various components of SCP interventions that have been discussed at various fora, a few core activities have been singled out here as being relevant interventions within the SCP context. These are as follows:

a) Preliminary survey to identify key areas with significant water losses and identification and development of the major steps to be undertaken to address the existing inefficiencies.
b) Sustain a National Awareness Campaign on Water Saving to promote efficient water use and best practices.
c) Development of Rainwater Harvesting Systems in institutions, schools and households to collect and store rainwater for domestic use, water for irrigation and gardening. An incentive scheme can be established to reward and recognise outstanding efforts and exhibition of best practices.
d) Promotion of community-managed water supply systems and formation of local water management committees to enhance ownership and contribution to community projects.
e) Establish Water Efficient Plumbing Codes and Regulations.

The pilot activity will have a duration of 18 months.

4. Inputs

In terms of expertise, inputs into the project will consist of international consultants and national experts on SCP activities as well as experts on water resources management and utilization. A core team will be constituted which will run project activities in a phased approach. Additional inputs for all pilot activities will be made available through a pool to be coordinated by the Uganda Cleaner Production Centre.

5. Outcomes

A brief baseline report giving highlights of the areas in which significant water losses are occurring.

a) Increased levels of awareness amongst the targeted communities on SCP issues and the importance of using water more effectively.
b) Increased ability to provide water to more people within the available supply capacity as a direct outcome.
c) Increased possibility to lower costs for water bills and service due to increased numbers of customers.
d) Avoidance of water scarcity and stress during low season.
e) Increased number of local water management committees
f) An average water consumption in new buildings

6. Target Groups

Local Governments and service providers will benefit from better revenues, whilst local communities. Schools and Public Institutions in target areas will benefit from increased availability of water supplies.

7. Verifiable Indicators

Performance indicators to be used include:

1. The number of institutions and households to be covered by the programme
2. Total volumes of water saved and collected through harvesting
3. Economic savings on a per household and institution basis

4. Volume of recycled water used for different purposes
5. Reduction in the rate of vandalism

8. Project management and coordination

The Uganda Cleaner Production Centre is central in its role for coordination of SCP activities within the country. Management supporting roles will be provided by the Ministry of Water and Environment, Ministry of Tourism, Trade and Industry, Ministry of Local Government, NGOs and CBOs in the respective target areas.

Project Concept Note 3 - Integrated Solid Waste Management

1. Background

Uganda, like many other African countries is faced with challenges in the area of solid waste management. Rapidly growing and unplanned urban settlements provide a formidable challenge to the management of solid waste in urban areas. Each household in Uganda generates approximately one tonne of domestic waste per year!

Urban domestic waste management is drawing increasing attention, as citizens observe that too much garbage is lying uncollected in the streets, dustbins, causing inconvenience and environmental pollution, and being a risk for public health. Although government authorities apply all the means at their disposal, the piles of wastes only seem to grow from day to day.

In Kampala city alone domestic waste generation rates range between 0.5kg and 1kg per capita per day. The population of Kampala City and its suburbs is estimated at 1.5 million. The estimate of waste per capita generation per day is 0.5kg. This makes the total collection to be 1.5 million x 0.5kg = 750,000kg per day or 750 tonnes generated per day. Domestic waste generation is higher among high income earners populations. On average the collection is 45-50% of this and so on a daily basis collection amounts to 375 tonnes or 37,500kg of waste collected a day from Kampala.

In composition, plastics under which polythene falls account for 1.6% with the highest being 73.8% for vegetable matter with the rest being tree cuttings, glass, metals, paper, etc. Kampala city generates 800tons of domestic waste per day. On the management however, the dumping is done by the K.C.C. at Mpererwe, a landfill made in 1996 after the former one at Lweza and Lubigi.

A comprehensive study was carried out in 1990. The findings are contained in a report called Solid Waste Disposal–Kampala final report which was prepared by Environmental Resource Limited (ERL). This report led to the formulation of the solid waste component of Uganda first urban project.

Waste composition according to ERL in Kampala was as below

Vegetable Matter	73.8%
Paper	5.4%
Sawdust	1.7%
Plastic	1.6%
Metal	3.1%
Glass	0.9%
Tree cuttings	8.0%
Street debris	5.5%

The average per capita waste generation was 0.8kg per person per day.

Although organic fractions make up the largest composition in the solid waste stream, it is the plastics that are considered to be most problematic. In particular plastic bags are considered to be a great nuisance, as they easily clutter up beaches, streets, gutters and often are the cause of death for livestock who happen to ingest them.

In African countries including Uganda, the plastics industry is rapidly expanding with packaging products for households, containers, bottling, piping and bags. This growth has significant impact on the environment as society adapts itself to more and more plastics packaging of products. Since plastics are mostly non-biodegradable, they tend to remain conspicuous in the environment for long periods of time. Governments have taken

various steps to try to arrest the problems before they become out of hand. Some of the steps have included placing a ban on local production of film plastic of thickness less than 30 microns.

2. Objectives

2.1 National Objectives

- To reduce 85% of nylon bags used in supermarkets and trade centres by 2025 and to ensure that 100% of urban areas have solid waste recycling systems and implement sorting at household level.
- By 2050, all types of generated solid wastes will be collected, reused, recycled and treated by modern, environmentally-friendly technologies, which are suitable with the local context, and the land filled waste will be minimized to the lowest amount.

2.2. SCP Objectives

To strengthen the national capacity for solid waste management in Uganda, through developing waste programs that include components such as waste minimization, recycling and reuse, and informal sector micro enterprises that link income generation to environmental protection.

3. Activities and duration

The activities listed below will help to complement previous and on-going efforts aimed at addressing some of the key issues in solid waste management.

a) Establish baselines for characterization of current waste streams in order to identify potential for reduction, reuse and recycling activities.

b) Advocate for segregation of waste at source and waste-to-resource conversion activities including composting and production of biogas from organic waste fractions as well as recycling of plastics.
c) Promote integrated mechanism for effective collection and transfer of waste.
d) Promote appropriate disposal methods including proper handling of hazardous waste.
e) Sensitize the public on the 3-R principle (Reduce, Reuse and Recycle) through education and participation in community clean up and pilot activities.
f) Put in place a national solid waste management policy coupled with a tax waive on solid waste management facilities.

4. Inputs

Expert inputs into the project will consist of international consultants, national experts for SCP activities and solid waste and environmental management experts. Experts in biogas production, composting and in plastics recycling. A core team will be constituted which will run project activities through a phased approach. Additional inputs for the pilot activities will be made available from a pool of resources to be managed and coordinated by the Uganda Cleaner Production Centre.

5. Outcomes

a) Improved awareness on waste generation and its impacts on the environment and society.
b) Adoption of integrated approaches to solid waste management by local authorities and communities.
c) Improved health and sanitation conditions including changes in waste disposal practices by communities.
d) Creation of sustainable income and employment generation opportunities for communities as a result of ownership of solid waste management cycle.
e) Increase in organic farming practices.

f) Increased life-spans and better management for existing dumpsites.
g) Development of a national SCP programme from the pilot.

6. Target Groups

Target groups consist of local Government authorities, communities and households, SMEs and businesses, service institutions, recycling enterprises, NGOs, CBOs and waste handlers.

7. Verifiable Indicators

a) Volume of waste taken out of the stream
b) Extent of value addition activities in recycling and reuse of waste
c) Levels of employment generated in recycling/reuse sector

8. Project Management

The Uganda Cleaner Production Centre will coordinate the SCP programme for integrated solid waste management working in close collaboration with key actors from NEMA, LGs, municipalities, NGOs, CBOs and the recipient industries.

Project Concept Note 4 - Sustainable Manufacturing

1. Background

Uganda's economy is largely dependent on the low-productivity agricultural sector which accounts for approximately 23 per cent of the GDP. Between 2000/01 and 2008/09, the share of agriculture to GDP fell rapidly while that of industry registered notable growth between 2004/2005 and 2007/2008 before converging with the share of agriculture in 2008/2009 at about 23 per cent.

2. Objectives

2.1. National Objectives

National Industrial Development objectives are to transform the Ugandan economy from a largely agricultural-based economy to a semi-industrialized one. This focus is guided by the theme of the National Development Plan 2010 – 2014/15 of growth, employment and social economic transformation for prosperity. This medium term strategy is a part of the progressive efforts to realize the National Vision 2035 in 5-year planning and implementation cycles. The contribution of the NDP to the socio-economic transformation will be demonstrated by improved employment levels, higher per capita income, improved labour force distribution in line with sectoral GDP shares, substantially improved human resource development and gender equality indicators, and the country's competitiveness position, among others.

2.2. SCP Objectives

To promote a *business practice of the industrial sector, which expands all the company's processes and decisions into the social and natural environments it operates in and affects, with the explicit objective of reducing or eliminating any negative impact, while pursuing the desired level of technological and economic performance.*

3. Activities and duration

SCP activities for Sustainable manufacturing are as follows:

a) Promotion of the introduction and adoption of sustainable consumption and production approaches for groups of SMEs engaged in various production and processing activities.
b) Promotion of the introduction of SCP principles and approaches in the curricula of higher learning institutions.
c) Conduct on-the-job training, including presentation of case studies at workshops and seminars for production managers and personnel in industrial establishments.
d) Introduction of eco-labelling practices for goods and services produced under SCP principles.

4. Inputs

Project inputs consist of international and national expertise in SCP, industrial processing and environment. Additional inputs for the pilot activities will be managed and coordinated by the Uganda Cleaner Production Centre through a system of pooled resources for the various pilots.

5. Outcomes

a) Improved general awareness of SME manufacturing sector on the need for integrating SCP approaches in their activities.
b) Increased adoption of more efficient and environmentally friendly production techniques and processes by SMEs.
c) Improved profile and cleaner environment in overall manufacturing sector leading to lower production and processing costs.
d) Improved occupational health and safety in the manufacturing sector.
e) Economic gains in manufacturing and processing due to reduced overall costs of production.

6. Target Groups

Groups targeted by the programme include SMEs engaged in manufacturing and processing activities, the informal sector, and Ministry of Industry, Trade and Marketing and local communities in the vicinity of production facilities.

7. Verifiable Indicators

a) Number of SMEs in manufacturing sector participating in awareness/training programmes on SCP.
b) Amount of savings in terms of resource and raw materials consumption (e.g. energy, water) realized in industrial SME units and informal sector through introduction of SCP practices.
c) Number of waste minimization and recycling programmes initiated by SMEs in industrial sector.
d) Reduction in the number of incidences related to occupational health and safety.
e) Reduction in medical expenses resulting from improved work environment.
f) Reduced pollution level especially from gaseous emissions of CO_X, NO_X and SO_X.

8. Project Management

The Uganda Cleaner Production Centre will retain the coordination role for the activity in close collaboration with the Ministry of Tourism, Trade and Industry, Industry Sector Associations such as UMA, USSIA and Uganda Leather and Allied Industries Association, the Environment Department of Ministry of Water and Environment and National Environment Management Authority.

Project Concept Note 5 - Sustainable Tourism

1. Background

The Tourism sector in Uganda has vast potential and presents highly lucrative opportunities. Some of the unique country attributes available for exploitation include:

- Enhanced ecological and climatic effect, leading to the country's unusual natural and cultural endowment.
- Unique and rich ecology, high occurrence of rare, endemic and restricted species (fauna and flora).
- Very healthy population of over 5,950 chimpanzees.
- The rare and endangered mountain gorillas - *Gorilla gorilla beringei.*
- Record of 1,006 species of birds (over 10% of worlds total), over 4,600 plant species.

The overall sector is growing fast with rapid expansion in the areas of eco-tourism, community tourism, gorilla tracking, mountain climbing, game hunting and wildlife safaris in the National Parks and game reserves. The share of tourism in GDP measured by the share of hotels and restaurants in GDP was 1.1 per cent in 1988 and 1.9 per cent in 1997, rising to about 4 per cent in 2008.

The Government has progressively developed the necessary infrastructure i.e. efficient transport and communications in order to enable the proper exploitation of the potential in the sector. Against this background, however, are the concerns about the effects of rapid expansion on the environment and natural habitats of wildlife, flora and local communities such as those that live in areas adjacent to wildlife reserves or fishing village communities along the lake shorelines.

2. Objectives

2.1. National Objectives

To sustainably maximize the economic values of the tourism, wildlife, historical and cultural heritage sector of the economy, through promotion of foreign and local

investments to ensure that tourism becomes a key means of poverty eradication in Uganda.

National objectives are to enable the development of sustainable and quality tourism that is culturally and socially acceptable and contributing significantly to the economic development of the country.

2.2. SCP Objectives

SCP objectives aim to increase the contribution of tourism to GDP and employment while promoting sustainable development of Uganda's wild life resources and cultural heritage.

3. Activities and duration

Key SCP activities within the sustainable tourism programme are as follows:

a) Preliminary identification of the hot spots related to the tourism sector.
b) Conduct training on sustainable tourism practice and approaches targeting operators and tourists.
c) Develop and adopt a code of conduct that could be abided to by the industry.
d) Promote labelling and recognition mechanisms for continuous improvement.
e) Promote Sustainable building and design in the sector.

4. Inputs

Project inputs consist of international and national expertise in SCP, tourism industry, environment and wildlife management; additional inputs for the pilot activities will be managed and coordinated by the Uganda Cleaner Production Centre through a system of pooled resources for the various pilots.

5. Outcomes

a) Improved general awareness of the public and tourism sector players on the need for integrating SCP approaches in their activities.
b) Reduction or retardation of environmental pollution and degradation as well as destruction of natural habitats.
c) Improved profile and perception of the tourism sector leading to enhanced economic benefits.
d) Increased potential for participation of communities (urban and rural) in sustainable tourism activities.

6. Target Groups

Groups targeted by the programme include tourism operators and hotels, Ministry of Lands, Housing and Urban Development, Ministry of Energy and Mineral Development, Ministry of Tourism, Trade and Industry, Uganda Tourist Board, tourists and local communities in the main tourist sites.

7. Verifiable Indicators

a) Number of operators signed up for established code of conduct.
b) Amount of savings in terms of resources (e.g. energy, water) realized through improvement programmes.
c) Number of operators recognized as champions.
d) Results of surveys on perception of destination by tourists.

8. Project Management

The Uganda Cleaner Production Centre will coordinate the activity in close collaboration with the Uganda Tourist Board, the Ministry of Lands, Housing and Urban Development, the Ministry of Energy and Mineral Development and the Ministry of Tourism, Trade and Industry, local Governments, associations of tourism operators and local communities. In addition, the project management will also seek to coordinate with the "Tour Operator's initiative" to be established and the Marrakech Taskforce on Sustainable Tourism.

Project Concept Note 6 - Sustainable Buildings and Construction (SBC)

1. Background

Due to a countrywide increase in the cost of building materials, the cost of homes is continually rising. Additionally, many low-income families have trouble accessing bank credit for home construction. Over a half of all households in Uganda have only one bedroom and typically three to four people share this room. 38 per cent of the population lives in grass thatched huts. Habitat Uganda helps these families by building with them in stages Simple, decent and affordable homes with ventilated improved pit latrines and adjacent shower stalls have been built in Uganda.

However, just like other developing countries, Uganda has faced a number of challenges in the implementation of the Habitat Agenda some of which include:

- Poverty and unemployment which negatively affect and incapacitate most households in their efforts to improve their housing conditions and quality of life; and
- Institutional weaknesses caused by inadequate capacity at all levels among stakeholders.

These challenges are evidenced by the limited available infrastructure, large unplanned and un-serviced human settlements as well as lack of affordable technologies and building materials. Although Uganda has a lot of indigenous materials that could potentially be utilized by the construction industry, these materials remain out of reach for the majority of Ugandans due to their inhibitive costs and this partly explains the rapid growth of slum areas in most urban cities and towns.

2. Objectives

2.1 National Objectives

The Government aims to transform people's lives and communities by providing affordable and well-built housing in order to develop sustainable human settlements as well as ensuring proper management of the environment.

. 2.2 SCP Objectives

To ensure that building and construction is carried out sustainably so as to reduce the overall impact of the built environment on human health and the natural environment through the efficient utilization of energy, water, and other resources, protection of occupant health and improving employee productivity as well as reduction of waste, pollution and environmental degradation.

3. Activities and duration

SCP activities for Sustainable building and construction are as follows:

a) Identifying and promoting replication of locally available knowledge and practices for sustainable building.
b) Promotion of the introduction of sustainable building and construction principles and approaches in the curricula of higher learning institutions.
c) Conduct on-job training, workshops and seminars for practicing engineers and designers in private and public institutions.
d) Promote resource efficient building materials through public procurement and infrastructure developers.

4. Inputs

Project inputs consist of international and national expertise on SCP, in particular on building and construction materials, with emphasis on low-cost local materials; Project equipment consisting of project vehicles, office equipment including computers, photocopier, telephone and fax machines and internet services.

5. Outcomes

a) Improved resource efficiency and use over the life cycle of buildings.
b) Health benefits from improved housing conditions.
c) Improved skills and knowledge among engineers, artisans and designers on SBC issues.
d) Economic savings and benefits from SBC application.

6. Target Groups

Universities, research and development institutions; professional associations of architects and engineers, urban planning departments; construction industry sector and regulatory institutions.

7. Verifiable Indicators

a) Numbers of graduates in architecture and construction/civil engineering with sufficient knowledge of Sustainable Buildings and Construction.
b) Numbers of professionals participating in on-job training, workshops and seminars on Sustainable Buildings and Construction.
c) Number of locally available practices identified and promoted through the Sustainable Buildings and Construction approach.
d) Number of slum dwellers in urban centres.

8. Project Management

The project will be coordinated by the Uganda Cleaner Production Centre in close collaboration with Ministry for Lands, Housing and Urban Development, National Housing and Construction Company Limited, National Materials Testing Laboratories, local governments, national environment management authority, international and national NGOs and CBOs for habitats and human settlements. The project management will also seek to develop close collaboration and links with the Taskforce on SBC and the Sustainable Buildings and Construction Initiative to be established.

Project Concept Note 7 - Education for Sustainable Consumption and Production

1. Background

Uganda, like other developing countries, is facing increasing pressure on its resources partly due to climate change effects, increasing socio-economic activities and environment degradation of water catchment areas and forests. It is also clear that countries like Uganda are the most vulnerable when it comes to the effects of extreme weather including prolonged droughts and severe rainfall and flooding.

Analysis of the relevance of sustainable consumption and production to the economy above reveals that it is a cross-cutting phenomenon which touches all the facets of the economic livelihoods of the people. The phenomenon needs to be adopted and mainstreamed in all economic activities in all the sectors in the economy and the way of life of the population. The Government consequently understands the urgency of creating awareness among its citizens on the concept of sustainable consumption and production.

2. Objectives

To foster greater knowledge of emerging best practices in SCP and identification of underlying success factors, as a starting point for achieving widespread replication and mainstreaming of SCP, which is in turn conditional for advancing sustainable development and addressing urgent environmental and resource challenges in Uganda.

3. Activities and duration

The activities to be undertaken are aimed at ensuring that the general public and, in particular, key players in sensitive areas such as communities near water catchment areas and forest reserves, are sensitized to the importance of applying the key principles in sustainable consumption and production. Activities selected are as follows:

a) Development of locally adopted educational materials on Sustainable consumption and production for use in academic institutions and NGOs.
b) Dissemination of the educational materials amongst primary and secondary school students.
c) Facilitate establishment of Sustainable consumption and production clubs in schools.
d) Promotion of general public awareness through media programmes and public events.
e) Awarding programs that recognise efforts towards sustainable lifestyles.
f) Sustaining a National Awareness Campaign on Energy savings.
g) Develop an education resource material targeting SMEs showing the benefits of resources efficiency.
h) Capacity Building and Increasing resources available to NGOs and SCP.

4. Inputs

Inputs for the project will consist of expertise (international and national). Other inputs such as transport, communications and office facilities will be accessed from a pool of resources to be coordinated by the Cleaner Production Centre.

5. Outcomes

a) Increased public awareness on sustainable consumption and production issues.
b) Creation of new, young generation which can serve as change agent within society.
c) Development of a sustainable consumption and production culture.

6. Target Groups

General public, primary and secondary schools, media professionals, NGOs and CBOs.

7. Verifiable Indicators

a) Number of students and members of the public reached by the programme.

b) Number of SCP clubs established.
c) Number of SCP-related initiatives undertaken.

8. Project Management

The project will be coordinated through the Uganda Cleaner Production Centre which will work in close collaboration with other stakeholders including the Department of Environment Management in the Ministry of Water and Environment, the National Environment Management Authority, Ministry of Education and Sports, local governments, environment NGOs and CBOs.

Project Concept Note 8 - Cleaner City - Vehicle Emissions

1. Background

Road transport is the most dominant mode of transport in Uganda. The road transport system in Uganda comprises about 10,000 km of classified main roads (trunk, secondary and tertiary), about 25,000 km of district (feeder) roads, 2,800 km of urban roads, and 30,000 km of community access roads.

Following the divestiture of Uganda Transport Corporation in 1990, public passenger transport is entirely by the private sector using buses, mini buses and cars. However, the mini vans dominate the city services whereas buses, which operate alongside mini vans, dominate the long distance routes.

To today, the transport sector has been characterized by a recent rapid increase in the number of privately-owned vehicles in the major cities and towns. In particular, Kampala city is subjected to very frequent traffic jams and congestion as people make their way to and from work and schools during peak traffic hours. This situation has led to the inevitable increase in smog and polluted air resulting from vehicle congestion and emissions. There is a need to look at options that will enable the urban areas to cope with some of the rapid changes in the urban environment.

2. Objectives

2.1 National Objectives

In light of the rapid urbanization trends in most of the major municipalities in Uganda, the Government has initiated a number of nation-wide and urban-level programmes which are aimed at addressing the issues of sustainability in urban areas and in particular, the challenges faced in ensuring easy and efficient transportation while maintaining the quality of the environment.

2.2 SCP Objectives

To promote measures and technologies within the urban transportation sector that will pay adequate attention to issues of sustainability and the impact on the environment. There is need to replace mini vans (14-seater) with large bus services since mini buses have been observed to; be heavy polluters, cause overcrowding, costly and difficult to manage .

3. Activities and duration

Key SCP activities for the cleaner city-vehicles programme are as follows:

a) Preliminary assessment of urban transport problems including status of on-going initiatives such as replacement of mini vans with large bus services.
b) Collection of sample data on trends on increase in number of city vehicles, vehicle movement patterns including peak traffic hours.
c) Identify and review various options to address problems of traffic congestion and limit/reduce resulting air pollution.
d) Promote feasible options for fuel switching such as LPG, CNG and bio-fuels for transportation.
e) Explore the options of using CDM as a tool to leverage financing for implementing key emissions reduction projects.

f) Assess the feasibility of putting in place taxation policies that prohibit importation of old motor vehicles beyond a specific year of manufacture.
g) Coordinate and link with agencies and institutions in other countries that have already undertaken similar measures.
h) Preparation of educational and awareness publications on the various options for dissemination to the general public.

The pilot project is envisaged to have 24-month duration.

4. Inputs

Project inputs consist of international and national expertise in SCP, urban transport, energy and environment; additional inputs for the pilot activities will be managed and coordinated by the Cleaner Production Centre through a system of pooled resources for the various pilots.

5. Outcomes

a) Improved general awareness of the general public on sustainable transport and cleaner technology options for the transport sector.
b) Reduction or retardation of environmental pollution and degradation in terms of air quality in urban areas.
c) Improved profile as well as economic benefits from adoption of efficient and less expensive technology options.

6. Target Groups

Groups targeted by the programme include individual vehicle owners, mass transport and cargo operators. Ministry of Works and Transport, the Department of Environment Management in the Ministry of Water and Environment, National Environment Management Authority, the Transport Licensing Board and Ministry of Finance, Planning and Economic Development, urban residents and communities.

7. Verifiable Indicators

a) Change in noticeable level of emissions and air quality during peak hours.
b) Number of urban transporters implementing measures to improve vehicle emissions.
c) Measure of economic benefits derived from implementing vehicle improvement/efficiency measures.
d) Level of savings passed on to urban public transport passengers.

8. Project Management

The Uganda Cleaner Production Centre will coordinate the SCP programme for cleaner city-vehicle emissions working in close collaboration with key actors from the Department of Environment Management in the Ministry of Water and Environment, National Environment Management Authority, the Transport Licensing Board and the Ministry of Finance, Planning and Economic Development as well as urban residents and communities, transport associations (UTODA etc), and NGOs.

Project Concept Note 9 - Sustainable Agriculture

1. Background

In Uganda, over 80% of the population is employed in Agriculture .This agriculture involves farming practices that are highly labour-intensive. Achieving more sustainable consumption and production in the agricultural sector requires a coherent response to the intimate linkages between agricultural production, agro-ecosystems and the people who rely on them, and also the concerns and preferences of a growing number of consumers. Less input intensive and more resource efficient agriculture offers a means to strengthen the competitiveness of the agricultural sector. It can also improve living conditions and economic opportunities in rural areas, including for the poor, by reducing production costs and developing new markets for sustainable products.

2. Objectives

2.1 National Objectives

To transform subsistence agriculture to commercial production so as to support the national development goal of poverty eradication, by providing an enabling environment in which a profitable, competitive, dynamic and sustainable agricultural and agro-industrial sector can develop.

2.2 SCP Objectives

SCP objectives are aimed at ensuring integrated systems of plant and animal production practices that will over the long term satisfy human food and fiber needs, enhance environmental quality, the natural resource base upon which the agricultural economy depends and consequently improve the quality of life for farmers and society as a whole.

3. Activities and duration

SCP activities for sustainable agriculture include the following:

a) Identification and promotion of renewable energy technologies suitable for various farming activities.
b) Promotion and sensitize Government, Micro-financing for implementation of renewable energy technologies suited for farming establishments including micro-window power, solar power, biomass and micro hydropower.
c) Promote adoption of bio-fuel technology for farm equipment and machinery.
d) Promote expansion of value chains such as industrial uses for cassava, bio-fuels and ethanol production, coconut products and by-products.

4. Inputs

Inputs for the project will consist of expertise (international and national). Other inputs such as transport, communications and office facilities will be accessed from a pool of resources to be coordinated by the Cleaner Production Centre.

5. Outcomes

a) Increased awareness amongst rural communities on the applicability of renewable energy technologies.
b) Increased utilization of renewable energy technologies in rural and farm establishments.
c) Increased involvement of donor, NGO and micro-finance institutions in establishment of small-scale renewable energy projects.
d) Increased production of a wide range of industrial products including bio-fuels from raw materials such as cassava, fruit wastes and coconuts.

6. Target Groups

Rural and farm communities, local Government authorities, NGOs and CBOs, and micro-finance institutions.

7. Verifiable Indicators

a) Number of rural communities sensitized to renewable energy technology options in target area.
b) Number of renewable energy technologies adopted and installed in target rural areas.
c) Number of industrial products and by-products being produced in target areas.

8. Project Management

The project will be coordinated through the Uganda Cleaner Production Centre which will work in close collaboration with other stakeholders including the Ministry of Agriculture, Animal Industry and Fisheries, universities offering agricultural courses like Makerere University and Busitema University, Research Organisations like National Agricultural Research Organisation and Biotech Laboratories, National Agricultural Advisory Services (NAADS), donor programmes like USAID, NGOs and CBOs.

Appendix 2 - List of Stakeholders Contacted and Consulted

1. Mr. John Byaruhanga, Ministry of Finance, Planning and Economic Development
2. Mr. Abemigisha Gadson, Ministry of Finance, Planning and Economic Development
3. Mr. Kibahiganira James, Ministry of Finance, Planning and Economic Development

4. Eng. Dr. Frank Ssebowa, Chief Executive Officer, Electricity Regulatory Authority
5. Mr. Walusimbi Mpanga – Rotarian in charge of Environment, Kiwatule Rotary Club
6. Mr. Muwanga Peter – Leather Technologist, Uganda Leather and Allied Industries Association
7. Mr. Kulumba Samuel Zirimenya, Leather Technologist/Technician Bukalasa Agricultural College
8. Mr. Mwebe, Chairman Uganda Leather and Allied Industries Association, National Leather Expert
9. Mr. Nalumenya James, Uganda Gatsby Trust
10. Ms. Grace Angela Kirabo – Ag. Centre Manager, Textile Institute and Development Agency
11. Mr. Solomon Musanah Nicholas – Production Coordinator, Textile Institute and Development Agency
12. Ms. Mafabi Rita – Supervisor, Production and Weaving, Textile Institute and Development Agency
13. Eron Wanyama, Textile Technology student, Kyambogo University
14. Textile Institute and Development Agency
15. Mr. Mabala Commissioner, Housing and Urban Development Department, Ministry of Lands, Housing and Urban Development.
16. Mr. Isingoma Banaabe, Ministry of Energy and Minerals Development
17. Mr. Moses Ogwal, Director Policy Advocacy, Private Sector Foundation Uganda
18. Mr. Charles Omagino, Director SME Department, Uganda Investment Authority
19. Mr. Mutambi, Assistant Commissioner, Ministry of Tourism Trade and Industry
20. Mr. Joseph Ssekandi, Membership Development Officer, USSIA
21. Mr. Japhes Mukiibo – Biimbwa – Partnership Counterpart Officer/Executive Secretary, USSIA