

National Programme on Sustainable Consumption and Production (SCP) for Mauritius (2008-2013)

“Achieving More with Less”

VOLUME I

FINAL REPORT

Ministry of Environment and National Development

Unit in collaboration with UNEP

August 2008

With support from UNEP



Acknowledgement

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National Programme on Sustainable Consumption and Production (SCP) for Mauritius (2008-2013)

Table of Contents

Content	Page
Executive Summary	9
Chapter I - Introduction	16-27
1. Introduction	17
1.1 Background	17
1.2 Purpose and Benefits of the SCP Programme	19
1.3 Strategic Priorities of the SCP Programme	22
1.4 Methodology and Reports produced	23
Chapter II- Status of Consumption and Production Patterns	28- 47
2. Status of Consumption and Production Patterns	29
2.1 Consumption and Production Trends	29
2.1.1 Socio- Economic trends	29
2.1.2 Household income and expenditure	30
2.1.3 Domestic Material Consumption	31
2.1.4 Industrial production	32
2.1.5 Energy consumption	33
2.1.6 Greenhouse gas emissions	36
2.1.7 Water consumption	37
2.1.8 Waste generation and disposal methods	37
2.1.9 Transport	38
2.1.10 Land use and buildings	40
2.1.11 Tourism and IRS Development	41
2.1.12 Food production and consumption	41
2.1.13 Ecological footprint	42
2.2 SWOT Analysis	43
2.2.1 Status of sustainable production	43
2.2.2 Status of sustainable consumption	44
2.2.3 Swot analysis and conclusion	44
Chapter III- Strategic Framework and Instruments of Implementation of the SCP Programme	48-58
3. Strategic Framework and Instruments of Implementation of the SCP Programme	49
3.1 Existing strategies and policies	49
3.2 Strategic framework of the SCP programme	56

3.3 Instruments of the implementation of the programme	57
Chapter IV - Projects within the SCP Programme and Action Plans	59-81
4. Projects within the SCP Programme and Action Plans	60
Chapter V- Implementing the Programme and Recommendations	82- 94
5. Implementing the Programme and Action Plan and Recommendations	83
5.1 Monitoring, Evaluation and SCP indicators	83
5.2 Role of Key Stakeholders and Devising Participatory schemes	90
5.3 Specific Role of the Media	91
5.4 Management, Coordination and Funding of the Action Plan	92
5.5 Revising the Strategy and on-going consultation	94
Chapter VI - Conclusions	95-97
6. Conclusions	96
7. Index of key documents	98

List of Figures	Page
Figure 1.1: The Four phases of the Marrakech Process	18
Figure 1.2: SCP Objective of Decoupling	22
Figure 1.3: UNEP'S SCP Programme Development Process	27
Figure 2.1: Household Consumption Expenditure	31
Figure 2.2: GDP per capita	34
Figure 2.3: Energy Consumption (ktoe)	34
Figure 2.4: Share of fossil fuels (petroleum and coal)	35
Figure 2.5: Total Annual Electricity Production	35
Figure 2.6: Energy Efficiency of the Economy	36
Figure 2.7: Solid Waste Generation and GDP per capita	38
Figure 2.8: Number of cars and GDP per capita	39
Figure 2.9: Number of vehicles per km of road	39
Figure 2.10: Private car per 1000 households	40

List of Boxes	Page
Box 1: National Environment policy Section 7.8: Strategic Objective on Sustainable Production and Consumption	55

List of Tables	Page
Table 2.1: SWOT Analysis of Consumption and Production Patterns	44
Table 4.1: SCP Programme Component Projects	62
Table 4.2: Main Elements of Action Plan on Sustainable Energy Consumption	64
Table 4.3: Main Elements of Action Plan on Sustainable Water Consumption	66

Table 4.4: Main Elements of the Action Plan on Sustainable Buildings and Construction	67
Table 4.5: Main Elements of Action Plan on Integrated Waste Management and Recycling	71
Table 4.6: Main Elements of Action Plan on Sustainable Public Service Practices	73
Table 4.7: Main Elements of Action Plan on Improving Market supply and Demand of Sustainable Products	75
Table 4.8: Main Elements of Action Plan on Education and Communication for Sustainable Lifestyles	76
Table 4.9: Implementation Schedule of SCP projects	79
Table 5.1: Recommended set of 30 SCP indicators for Mauritius	89

ABBREVIATIONS

AHRIM: Association hôteliers et restaurateurs de L'île Maurice
AREU: Agricultural Research and Extension Unit
APEXHOM: Association Professionnelle des Producteurs/Exportateurs des Produits Horticoles de Maurice
CDM : Clean Development Mechanism
CEB: Central Electricity Board
CSR: Corporate Social Responsibility
CSO:Central Statistics Office
CWA:Central Water Authority
DOE: Department of Environment
DMC:Domestic Material Consumption
EF: Ecological footprint
EIA: Environmental Impact Assessment
EIP:Environment Investment Programme
EPA:Environment Protection Act(2002)
EPR: Extended Producer Responsibility
ESCO: Energy Service Companies
GDP: Gross Domestic Product
GEF: Global Environment Facility
GHG: Greenhouse gas
GWh: Gigawatt hour
ICT: Information and Communication Technology
ICZM: Integrated Coastal Zone Management
IRS: Integrated Resort Scheme
ISO: International Organization for Standardization
JEC:Joint Economic Council
JPOI: Johannesburg Plan of Implementation
kg: kilogramme
km: kilometres
Ktoe: Thousand tonne of oil equivalent
LCM: Life Cycle Management
LPG: Liquefied petroleum gas
MAAS: Multi-Annual Adaptation Strategy
MEPS: Minimum Energy Performance Standards
MID: Maurice Ile Durable
MOE: Ministry of Environment and National Development Unit
MOEd:Ministry of Education and Human Resources
MOF:Ministry of Finance and Economic Development
MOLG:Ministry of Local Government
MoU: Memorandum of Understanding
Mm₃: Million cubic metres
MPU: Ministry of Public Utilities
MPI:Ministry of Public Infrastructure , Land Transport and Shipping
MRC: Mauritius Research Council

MSB: Mauritius Standards Bureau
NCCRD: National Centre for Curriculum Research and Development
NDS: National Development Strategy
NDU: National Development Unit
NEAP: National Environment Action Plan
NEP: National Environment Policy
NES: National Environment Strategies
NGOs: Non Governmental Organisations
No. : Number
NPCC: National Productivity and Competitiveness Council
OECD: Organisation for Economic Co-operation and Development
PBB: Programme- Based Budgeting
QBTU: Quadrillion British Thermal Units
Rs : Mauritian Rupees
SC: Sustainable Consumption
SCP: Sustainable Consumption and Production
SEHDA: Small Enterprises and Handicraft Development Authority
SMEs: Small and Medium Enterprises
SP: Sustainable Production
Toe: Tonne of oil equivalent
TMRSU: Traffic Management and Road Safety Unit
UN: United Nations
UNDP: United Nations Development Programme
UNDESA: United Nations Department of Economics and Social Affairs
UNEP: United Nations Environment Programme
UOM: University of Mauritius
US\$: United States Dollar
VAT: Value Added Tax
WRU: Water Resources Unit
WSSD: World Summit on Sustainable Development
YFP: Year Framework of Programmes

Executive Summary

At the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, “changing unsustainable patterns of production and consumption” was singled out as one of the main elements of sustainable development. It was emphasized that all countries should promote sustainable consumption and production (SCP) patterns. SCP can be broadly defined as a holistic approach to minimizing negative environmental impacts from production and consumption in society. It can be considered as a practical implementation strategy to achieve sustainable development and can be viewed as the two legs on which sustainable development stands. In practical terms, SCP means **“getting more well-being from less”**.

The Johannesburg Plan of Implementation (JPOI) encourages the development of a 10-year framework of programmes (10-YFP) in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production. The “Marrakech Process” was launched at the first international expert meeting on the 10-YFP held in Marrakech, Morocco, 16-19 June 2003. The Marrakech Process, led by UNEP and UNDESA, includes regular global and regional expert meetings, voluntary task forces, development cooperation dialogue and other activities designed to promote progress on elaboration of the 10-YFP on SCP. Several regional and international meetings of the Marrakech Process pressed home the importance of supporting national SCP programmes as well as devising monitoring mechanisms and indicators to measure progress. It was agreed that to make SCP a reality, coordinated and integrated programmes were essential, considering in particular the cross-sectoral nature of consumption and production patterns.

Individual policies and activities-no matter how innovative - stand little chance of bringing about wholesale changes in consumption and production patterns. The reason for developing a National SCP Programme is the necessity to tackle the issue of SCP in a systematic and active way. As such, Mauritius has been selected as one of the pilot countries by UNEP to develop a National Programme on Sustainable Consumption and Production (SCP). A Memorandum of Understanding was signed between UNEP and the

Ministry of Environment and NDU in May 2007 for the elaboration of the programme by July 2008.

UNEP has produced the following report - “**Guidelines for National Programmes on Sustainable Consumption and Production**”. The guidelines recommend a 10-step process for developing and implementing national SCP programme and action plans and these have been followed for the development of this programme.

Analysis of consumption and production trends show that the environmental impacts from consumption and production activities have grown over the last two decades and are expected to intensify in the next decades with the same patterns of consumption and production. Current and projected production and consumption patterns are influenced by a number of driving forces, including rising per capita incomes, demographics and accompanying changes in lifestyles. Technology, institutions and infrastructure also play an important role in influencing consumption and behaviour.

Sustainable Production activities are mainly focused on the implementation of environment management systems (ISO 14000) in large companies or Green Globe certification in major hotels. However, action plans and policies remain to be established targeting all key sectors of the Mauritian Economy including especially the SMEs. As compared to many developing countries, there is no dedicated institution in Mauritius promoting the concept of cleaner production in Industry. More advanced sustainable production concepts such as Life Cycle Assessments and Eco-design are not applied. One of the main drivers for sustainable production is effective enforcement – however the latter needs to be strengthened and industry must realise that enforcement will in the medium to long term increase its competitiveness. Important stakeholders such as industry associations and financing institutions need to be more actively involved in cleaner production projects. The state of Sustainable Production (SP) may thus be described as being slowly in progress but yet having a long way to go before being widely adopted and fully integrated as an everyday practice in all businesses, including SMEs.

It is only recently through the National Environment Policy of 2007 that a policy framework for promoting Sustainable Consumption (SC) at the national level has been devised. Compared to SP, SC is a far less developed and recognized concept. SC is a relatively new concept and consumer activism is still focused on prices, quality and consumer safety. Sustainable consumption still needs to be mainstreamed in consumer organizations' activities. Tools to support or promote SC need to be strengthened.

Based on a scoping exercise which included focused interviews and a national workshop, the following strategic priorities form the focus of the SCP programme framework:

- Resources Use Efficiency with a Focus on Energy , Water and Sustainable Buildings and Construction
- Education and Communication for Sustainable Lifestyles
- Integrated Solid Waste management and Recycling
- Sustainable Public Service Practices
- Increase Market Supply and Demand for Sustainable Products

Multi-stakeholder working groups were constituted by the Ministry of Environment and NDU in order to develop the action plans on the priority areas. One principle that working groups adopted was to “make SCP visible at an early stage” by developing concrete pilot projects for implementation. Visible implementation of SCP activities at an early stage as possible is important, both to highlight and demonstrate the concept. As shown in the table below, the SCP programme encompasses 44 projects, each of which is to be led by the agency with most appropriate direct responsibility of the sector or resource.

SCP Programme Component Projects

A. Sustainable Energy Consumption

- 1 Develop MEPS for Key Household Appliances
 - 2 Phase out Incandescent Lamps
 - 3 Capacity Building of Energy Audit Providers and Promotion of Energy Service Companies
 - 4 Develop MEPS for Industrial Major Energy Consuming Equipment
 - 5 Mandatory Energy Auditing for high energy users
 - 6 Assist SMEs in carrying out Energy Audits
 - 7 Require Public Bodies to purchase only energy efficient lighting systems
 - 8 Increase consumer knowledge about Sustainable Driving and Energy Efficient Vehicles
 - 9 Survey on Vehicular Emissions and Capacity Building on Emission Testing
 - 10 Influence Consumer to transport modal shift and behavioural change
 - 11 Formulation of a Strategic Research Action Plan on Energy
-

B. Sustainable Water Consumption

- 1 Establish Water Efficient Plumbing codes and regulations
 - 2 Mandatory Water Efficiency Audits for high water users
 - 3 Development of Rain Water Harvesting Systems
 - 4 Sustain a National Awareness Campaign on Water Savings
-

C. Sustainable Buildings and Construction

- 1 Develop a Shared Vision
 - 2 Develop Guidelines and a Rating system
 - 3 Amendment of Building Regulations
 - 4 Develop Public and Financial Incentives
 - 5 Launch an Awards Program
 - 6 Initiate Demonstration Projects
 - 7 Develop Curriculum for Industry Professionals and Conduct Training Programs
 - 8 Education and Outreach
 - 9 Research and Development
-

D. Integrated Solid Waste Management and Recycling

- 1 Recycling of Supermarket Wastes with a focus on cardboards and plastics
- 2 Diversion of Organic Wastes from the Hotel Sector
- 3 Promotion of Backyard Composting
- 4 Elaboration of Integrated Waste Management Action Plans in all Local Authorities
- 5 Study on the Economic, Environmental and Social Benefits of Extended Producer Responsibility on certain key products

E. Sustainable Public Service Practices

- 1 Sustainable Government Procurement Framework
- 2 Monitoring Energy use and Performance in the public sector & Annual Reporting
- 3 Water savings in the Public sector
- 4 Sustainable Paper use in the Public Sector
- 5 Computer Refurbishment and Reuse
- 6 Implement Environmental Reporting in Government Departments

F Improve Market Supply and Demand of Sustainable Products and Services

- 1 Development of a National Eco-labelling Framework, with an initial focus on Agricultural and Food products
- 2 Promotion of Sustainable Products through financial incentives and improving their visibility.
- 3 Capacity Building of Industry in Life Cycle Management and Corporate Sustainability Reporting

G. Education and Communication for Sustainable Lifestyles

- 1 Sustain a National Awareness Campaign on Energy Savings
- 2 Training on YouthXchange
- 3 Develop Locally adapted Education Resource Materials on SCP
- 4 Capacity Building of NGOs on Sustainable Consumption
- 5 Develop an education resource material targeting SMEs on the benefits of resources efficiency
- 6 Launch Awards Programs recognising efforts towards Sustainable Lifestyles.

The total cost of the SCP programme is estimated to be approximately Rs 35 million with much of the expenditure falling in the first 3 years. The following mechanisms for funding the programme are:

- Direct funding by government organisations through the Programme-Based Budgeting (PBB) process and through taxation of various types by the Ministry of Finance and Economic Development
- Making use of the “Maurice Ile Durable” (MID) Fund for specific projects
- The SCP Action Plan is a sort of a “brokering system” and an ideal instrument to link the demand for SCP technical support and the supply of technical /financial services by development cooperation agencies.
- Liaising with Marrakech Task Forces to identify technical and financial support

- The UNEP centre on Sustainable Consumption and Production, based at Wuppertal Institute in Germany, will provide technical support and input to the MOE on developing the pilot projects into full project documents that could be submitted for fund mobilization by countries.
- Sponsorship by the private sector through their Corporate Social Responsibility (CSR) activities

SCP is a cross-sectoral issue that requires integration between different policy areas. It is recommended to have a dedicated National SCP Programme, as it encompasses economic and social issues besides environment issues. Besides its direct contribution towards promoting resource-efficiency at all levels of production and consumption, the development and implementation of the SCP Programme will also be instrumental in promoting synergies amongst the key development sectors outside the Ministry of Environment and NDU. By its cross-cutting nature, SCP have a major part to play in achieving a number of the national objectives adopted in different policy areas: economic objectives including job creation, environmental quality objectives, public health objectives, business sector objectives, energy and water savings and poverty reduction objectives.

Implementing the programme will be more challenging than developing it. The monitoring and evaluation of the national SCP Programme is a critical step. It demonstrates accountability of stakeholders concerned and demonstrates achievements and worthiness of the programme itself. Continuous monitoring of changes in consumption and production patterns (typically indicator based) needs to be differentiated from periodic evaluation of the programme itself. It is recommended to adopt a system of internal and budgetary reviews through the Programme Based Budgeting and Performance Monitoring Processes, as well as indicator-based quantitative monitoring where appropriate. Taking into account the priority areas of the SCP programme, a set of 30 SCP indicators are recommended. Recommendations are also made regarding participatory schemes for stakeholders, the specific role of the media, the management, coordination and revision of the Programme and for on-going consultation.

Lessons learnt from the pilots should help in sectoral policy and strategy review and ultimately in mainstreaming SCP in national policies and strategies. Public communication and advertising have a key role to make SCP understandable and fashionable. Communication campaigns on SCP will have to be devised so that it is understood in the context of other issues in which consumers are more interested such as climate change, economic growth and poverty reduction, etc.

The SCP Programme will be submitted for approval by Cabinet. The implementation agencies will then be able to complete detailed design and to take forward the implementation of the programme. It relies on effective partnerships between all stakeholders. The Advisory Committee set up by the MOE for the development of the SCP programme is to be re-named as the SCP implementation committee which will coordinate the implementation of projects. This committee will be reconstituted to comprise relevant implementing agencies and will meet on a regular basis to review progress on the programme implementation and to consider policy changes.

SCP is directly linked with many other development priorities, such as economic growth and competitiveness, job creation, environmental protection, water and energy security; poverty alleviation; health and education. The main benefit of an SCP programme is that it enables resource efficiency and help meets basic needs in a sustainable manner with a decoupling of economic growth from environmental degradation. The on-going restructuring of the economy of Mauritius offers an opportunity to establish more resource efficient, safe and sustainable production and consumption patterns. There are many promising opportunities to “leapfrog” and avoid many of the production and consumption-related problems common in developed countries. The SCP programme will enable this “leapfrogging” and will help in the implementation of the “Maurice Ile Durable” project initiated by the Prime Minister of the Republic of Mauritius.

Chapter I

Introduction

1. Introduction

1.1 Background

At the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, “changing unsustainable patterns of production and consumption” was singled out as one of the main elements of sustainable development, the others being poverty eradication and protecting and managing the natural resource base. WSSD called for fundamental changes in the way societies produce and consume goods and services. Moreover, it was emphasized that all countries should promote sustainable consumption and production (SCP) patterns, with developed countries taking the lead.

The Johannesburg Plan of Implementation (JPOI) encourages the development of a 10-year framework of programmes (10-YFP) in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production. The objective of this 10-YFP is to promote social and economic development within the carrying capacity of ecosystems by de-linking economic growth and environmental degradation through improving efficiency and sustainability in the use of resources and production processes and reducing resource degradation, pollution and waste. The JPOI calls for mobilization, from all sources, of financial and technical assistance and capacity-building to support developing countries in their efforts to promote more sustainable patterns of consumption and production. UNEP and UNDESA have been identified as the international lead agencies in promoting and developing the 10-YFP.

The “Marrakech Process” was launched at the first international expert meeting on the 10-YFP held in Marrakech, Morocco, 16-19 June 2003. The Marrakech Process includes regular global and regional expert meetings, voluntary task forces, development cooperation dialogue and other activities designed to promote progress on elaboration of the 10-YFP on SCP. The development of the Marrakech Process consists of the following four phases:

- Phase 1:** Organising regional consultations in all regions to promote awareness and identify priorities and needs for SCP (through regional expert meetings and national/regional roundtables)
- Phase 2:** Building regional strategies and implementation mechanisms with regional and national ownership
- Phase 3:** Implementing concrete projects and programmes on the regional, national and local levels to develop and/or improve SCP tools and methodologies (with the Marrakech Task Forces as the main mechanism and the cooperation Dialogue with development agencies)
- Phase 4:** Evaluating progress, exchanging information and experiences, and building international cooperation and coordination.

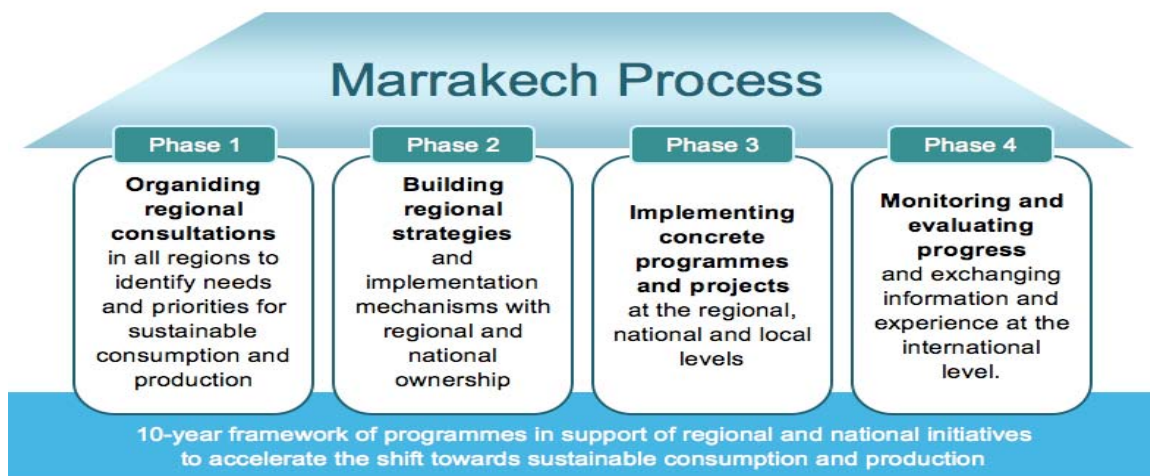


Figure1.1: The four phases of the Marrakech Process (Source: UNEP (2008))

Under the Marrakech Process, Marrakech Task Forces have been organised with the main objectives of:

- Supporting the implementation of concrete projects for SCP (Phase 3 of the Marrakech Process)
- Focus on specific SCP themes or sectors
- Strengthening North-South cooperation in the SCP implementation

These Task Forces are voluntary initiatives led by countries or groups of countries that – in cooperation with other partners – commit themselves to carrying out a set of activities which support the implementation of specific SCP projects. To date, seven Task Forces are active on the following themes:

- **Cooperation with Africa (hosted by Germany)**
- **Sustainable Products (hosted by the UK)**
- **Sustainable Lifestyles (hosted by Sweden)**
- **Sustainable Public Procurement (hosted by Switzerland)**
- **Sustainable Tourism (hosted by France)**
- **Sustainable Buildings and Construction (hosted by Finland)**
- **Education for Sustainable Consumption (hosted by Italy)**

Several regional and international meetings of the Marrakech Process pressed home the importance of supporting national SCP programmes as well as devising monitoring mechanisms and indicators to measure progress. It was agreed that to make SCP a reality, coordinated and integrated programmes were essential, considering in particular the cross-sectoral nature of consumption and production patterns. As such, Mauritius has been selected as one of the pilot countries by UNEP to develop a National Programme on Sustainable Consumption and Production (SCP). An MoU was signed between UNEP and the Ministry of Environment and NDU in May 2007 for the elaboration of the programme by July 2008. A Cabinet Information Paper on the SCP project was presented in Cabinet on 5th September 2007 so as to get the collaboration of various Ministries for the successful development, implementation and monitoring of this programme.

1.2 Purpose and Benefits of the SCP Programme

SCP can be defined as *“the production and use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the*

life cycle, so as not to jeopardise the ability to meet the needs of future generations.” (Norwegian Ministry of Environment, Oslo Symposium, 1994).

SCP can also be broadly defined as a holistic approach to minimizing negative environmental impacts from production and consumption in society. It can be considered as a practical implementation strategy to achieve sustainable development and can be viewed as the two legs on which sustainable development stands. In practical terms, this means “**getting more from less**”.

Many countries like Mauritius have instituted some policies and are carrying out some initiatives to promote sustainable consumption and cleaner production. However these actions are often not sufficiently coherent or are driven by an isolated strategy or programme. Some key challenges identified during the development of the SCP programme are as follows:

- There is generally a high concern on SCP among stakeholders but little implementation
- There are policies and initiatives but they are isolated. There is a need for coherence and coordination to integrate and work for the same target
- It is important to develop national dialogues and engage all stakeholders
- There is a lack of transversal cooperation in government
- There is a need to identify and communicate better the economic, social and environmental benefits.

Individual policies and activities-no matter how innovative-stand little chance of bringing about wholesale changes in consumption and production patterns. The reason for developing a National SCP Programme is the necessity to tackle the issue of SCP in a systematic and active way. A strategic programmatic approach can help balance the necessary interventions for the consumption and production of and market for goods and services. **The critical elements of an effective strategy should link long-term vision to medium-term targets and short-term action.** A national SCP programme is a tool

for informed decision making that provides a framework for systemic thought across sectors. Working in concert with other socio-economic and sector strategies, a SCP programme can help to institutionalise processes for resource allocation, monitoring, consultation, negotiation, mediation and consensus building on priority societal issues where interests differ. The SCP programme needs to adhere to the wider goals of poverty reduction and sustainable development.

Whereas in developed countries much of the focus for SCP policy and action needs to address high levels of consumption, SCP policy in developing countries like Mauritius needs to be more weighted to improving the efficiencies of production, consumption and resource use. A fundamental question for policy makers is “What is the cost of unsustainable consumption and production patterns in Mauritius?or “what is the cost of delayed action?” Some key facts are given below to illustrate the potential benefits of an SCP programme:-

- Wasted natural resources from manufacturing industries are estimated at about 5 to 10% of total manufacturing profit
- Energy efficiency can be increased by about 30% if all known cost-effective actions were taken by businesses and individuals
- The present annual cost of waste collection and disposal is about Rs 1500 per tonne of waste, not taking into account the value of resources lost.
- The annual cost of traffic congestion due to the absence of a sustainable transport system is estimated at more than Rs 2 billion rupees
- The cost of mobilizing 1000 litres of water through construction of dams and treatment plants is more than 3 times the water recovered through water efficiency measures
- Application of a World Bank tool-Cost of Environmental Degradation-in many countries has shown that environmental degradation cost between 2 to 5% of GDP

It should be recognized that **SCP is directly linked with many other development priorities, such as economic growth and competitiveness, job creation,**

environmental protection, water and energy security; poverty alleviation; health and education. The main benefit of an SCP programme is that it enables resource efficiency and helps in meeting basic needs in a sustainable manner with a decoupling of economic growth from environmental degradation (see Figure 1.2). The SCP programme will enable “leapfrogging” and will help in the implementation of the “Maurice Ile Durable” project initiated by the Prime Minister of the Republic of Mauritius.

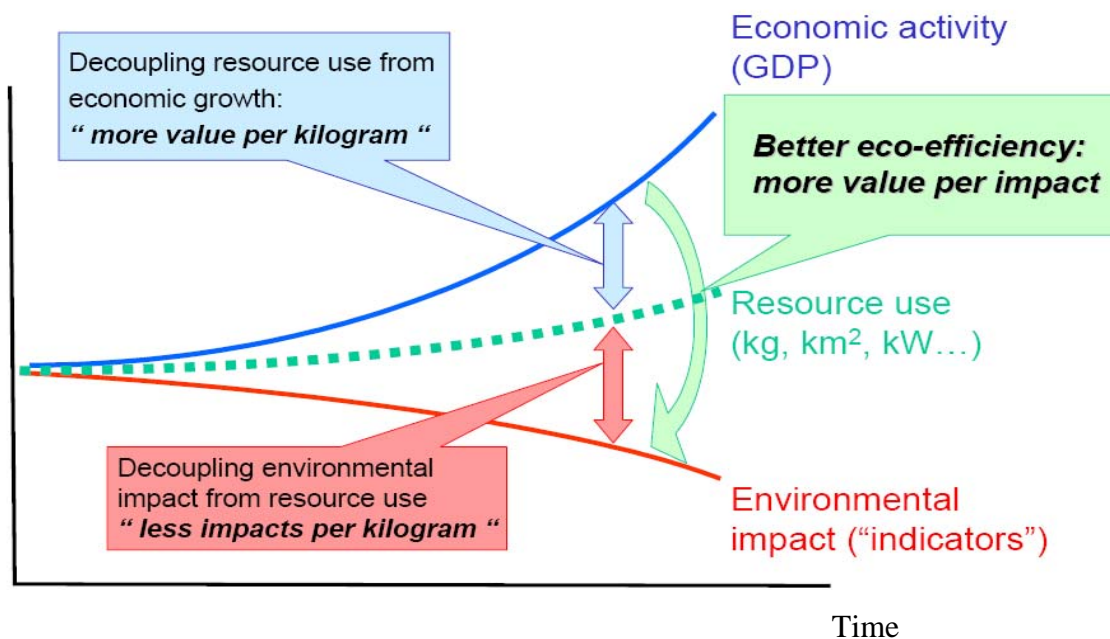


Figure 1.2: SCP Objective of Decoupling

1.3 Strategic Priorities for the SCP Programme

Strategic priorities of the SCP Programme have been selected based on the following criteria:

- Results of Consultation Exercises and Focused Interviews with key stakeholders
- Encouraging linkages between existing policies and programmes
- Avoiding duplication with existing strategies and programmes
- Accomplishing the objectives of Government and the UN
- Using the potential for significant progress in SCP
- Focusing initially and concentrating efforts

Based on the above, the following strategic priorities form the focus of a SCP framework that may bring the best possible effects:

Priority 1: Resources Use Efficiency with a Focus on Energy, Water and Sustainable Buildings and Construction

Priority 2: Education and Communication for Sustainable Lifestyles

Priority 3: Integrated Solid Waste Management and Recycling

Priority 4: Sustainable Public Service Practices

Priority 5: Increase Market Supply and Demand for Sustainable Products

1.4 Methodology and Reports Produced

- UNEP, with the financial support from the Government of UK, has produced the following report - “**Guidelines for National Programmes on Sustainable Consumption and Production**”. The guidelines recommend a 10-step process for developing and implementing national SCP programme and action plans (see Figure 1.3). The model highlights the importance of establishing a process of continuous improvement for the SCP programme and to consider communication, consultation and integration with existing strategies at each stage of the process. The steps are divided into three phases to develop, implement and monitor the programme. These steps have been followed for the development of this programme.

- In developing the national SCP programme, some key elements include:
 - (i) Initiate a multi-stakeholder process
 - (ii) Design effective actions and define clear objectives-A SCP programme is usually concentrated on a few initial key priority areas, as attempting to do everything at once is neither practical nor possible.
 - (iii) The programme must be based on comprehensive and reliable analysis
 - (iv) Define objectives, targets and indicators

- (v) Build the programme from existing national policies
 - (vi) Integrate it with existing national strategies such as NEAP or NDS
 - (vii) Develop Sectoral Action plans
 - (viii) Ensure management and coordination of the process (political, technical, participative and mobilization of resources)
- As per the first step of the guidelines, an Advisory Committee comprising relevant stakeholders has been set up to monitor the development and implementation of the SCP Programme. The Advisory group recommended a consultation exercise with key stakeholders in order to identify the key priority areas. It was proposed to conduct focused interviews of 30 individuals representing Government, NGOs, Business and Research to raise their awareness on SCP and to identify priority areas for the programme.
 - A scoping exercise consisting of a mapping exercise to identify existing SCP policies and activities in the country, potential SCP priority areas and actions, and links to existing national strategies and other mechanisms was conducted in November 2007. The Scoping exercise included focused interviews with key stakeholders in order to identify SCP priority areas for Mauritius.
 - A multi-stakeholder national workshop was held on 25-26th October 2007 to confirm the priority areas identified in the scoping exercise as well as to improve the understanding and appreciation of stakeholders on the importance of SCP.
 - Multi-stakeholder working groups were constituted by the Ministry of Environment and NDU in order to develop the action plans on the priority areas of :
 - Sustainable Energy Consumption
 - Sustainable Water Consumption
 - Sustainable Buildings and Construction
 - Integrated Solid Waste Management

- Sustainable Public Service Practices
- Education and Communication for Sustainable Lifestyles
- Increase the Market Supply and Demand for Sustainable Products

The objectives of the working groups were as follows:

- Select the specific areas on which each priority area will focus on , as well as identify barriers, potential gaps in policies and tools
- Define objectives and targets for the specific areas identified
- Define the activities required to achieve the targets
- Define who will implement the plan, time frame , costs and funding
- Define indicators for monitoring and implementation

Working groups developing specific action plans were chaired by the relevant responsible Ministry or organisation. About 75 people participated in the 7 working groups to develop the different Action Plans. **The action plans for the SCP priority areas are at Appendix I.**

- One principle that working groups adopted was to “make SCP visible at an early stage” by developing concrete pilot projects for implementation. Visible implementation of SCP activities at an early stage as possible is important, both to highlight and demonstrate the concept. Also the groups looked at the possibility of promoting linkages with the activities under the existing Marrakech Taskforces structure
- As part of the development of this National Programme on SCP , 2 demonstration projects have been undertaken:-
 - (i) Production and airing of TV and radio spots for raising public awareness on sustainable consumption. A multi-stakeholder Committee was set up under the aegis of the Ministry of Environment and NDU in order to brainstorm on the content of the spots.

- (ii) Report on Carbon Footprint and Resource Consumption of the Ministry of Environment 2007

A report on the outcome of these demonstration projects is included at Appendix II.

- The following reports have been prepared during the development of the SCP National Programme:
 - Proceedings of the First National Workshop on SCP(25-26 October 2007)
 - Scoping Report(November 2007)
 - Examples of International SCP Best Practices(November 2007)
 - Background Papers on the 7 SCP Priority Areas(February 2008)
 - SCP Action Plans for the 7 Priority Areas (June 2008)
 - Proceedings of the Second National Workshop on SCP (17 July 2008)

- This National programme on Sustainable Consumption and Production report presents the main findings made by the multi-stakeholder working groups and recommendations for the successful implementation of the programme. The appendices to this main SCP report should be referred to for further details during the implementation phase.

Appendices:

- Appendix I SCP Action Plans in Priority Areas
- Appendix II Demonstration Projects

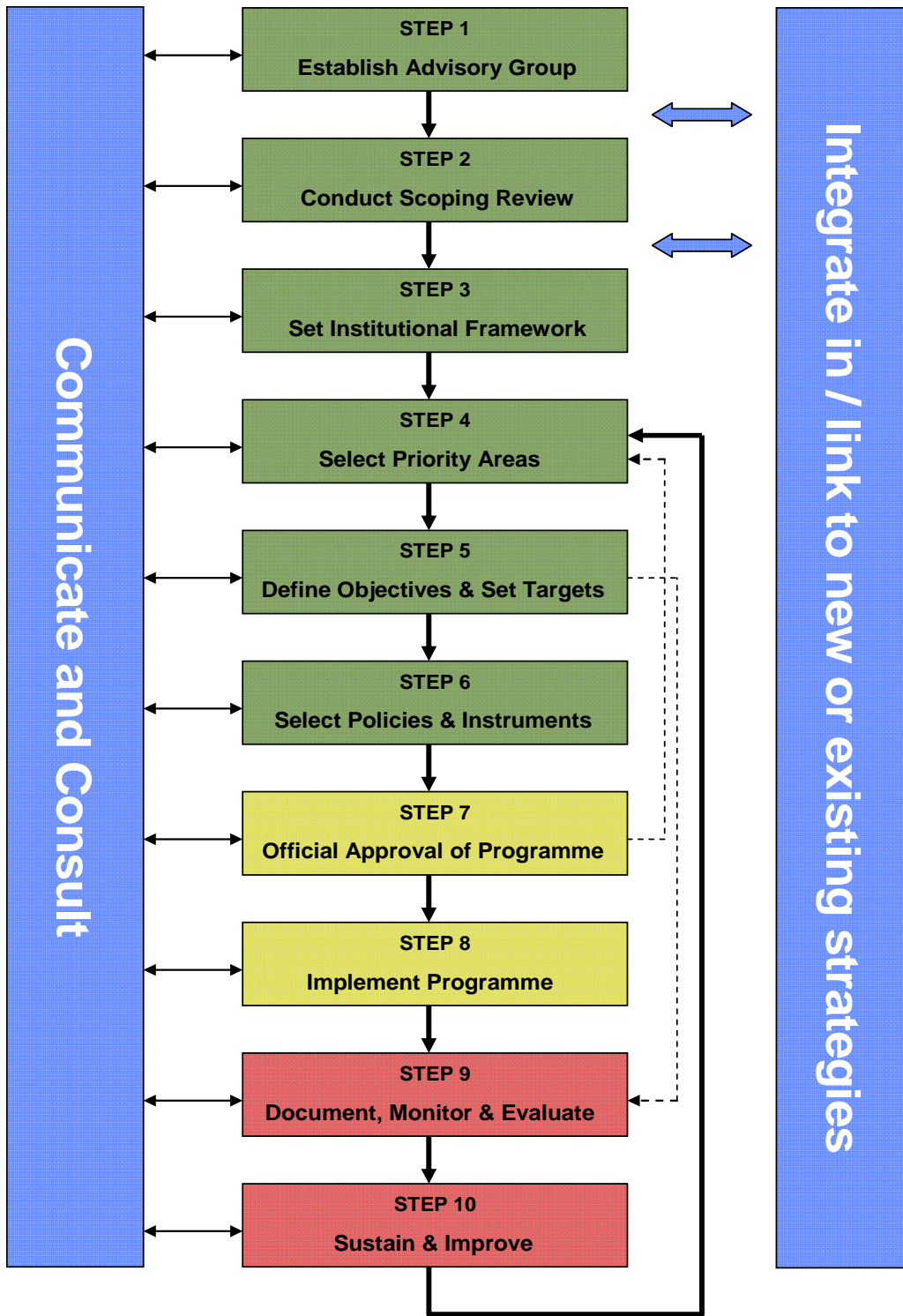


Figure 1.3: UNEP'S SCP Programme Development Process

Chapter II

**Status of Consumption
And
Production patterns**

2. Status of Consumption and Production Patterns

2.1 Consumption and Production Trends

Quantitative indicators can help to gauge whether we are moving closer to or farther away from sustainable consumption and production patterns and it is an important tool for stimulating debate and focusing attention. Below are trends in some key areas of consumption and production in Mauritius during the last two decades. The data are from Central Statistics Office (CSO) publications: the Demographic, Socio-Economic and Environmental Data (1996 to 2007) and the Digest of Environment Statistics (2006).

2.1.1 Socio-Economic Trends

In 2007, the population was estimated to be 1.26 million, growing at approximately 0.6% per year, which indicates an ageing population. Over the past fifteen years, Mauritius has achieved 5-6% annual economic growth and steady growth in per capita incomes. The per capita GDP increased from US\$ 3,595 in 1998 to US\$ 5,956 in 2007 and Mauritius is now classified as an upper middle income country. Agriculture, manufacturing, tourism, financial services and ICT constitute the main pillars of the economy. In 2007, more than two thirds (69.0%) of GDP was generated by the tertiary sector comprising the services industries, compared to slightly over a quarter (26.5%) by the secondary sector, that comprises of mostly manufacturing and construction. The remainder 4.5% was attributable to the primary sector consisting mainly of agricultural activities.

Income distribution is uneven, real wages have not been rising as fast as GDP and the gap between top and bottom incomes have recently been widening. The most recent Household Budget Survey (2006/07) conducted by the CSO showed that the proportion of poor households below the relative poverty line (set at the half median monthly household income per adult equivalent) increased from 7.7% in 2001/02 to 8.0% in 2006/07. The number of poor households increased from 23,700 in 2001/02 to 26,900 in 2006/07. Furthermore, the degree of inequality in income can also be measured by the Gini coefficient that ranges from 0 (complete equality) to 1 (complete inequality). This

coefficient increased from 0.371 in 2001/02 to 0.389 in 2006/07 indicating an increase in income inequality.

The end consumption of households is about 70 % of GDP and the state's consumption is about 15% of GDP, which means that the volume of "governmental" consumption has a high incentive potential for greening companies' production.

2.1.2 Household income and expenditure

A comparison of the results of the 2001/2002 and 2006/2007 Household Budget Survey indicates a tendency towards smaller households (average household size was 3.9 in 2001/2002 compared to 3.7 in 2006/07). The survey also showed that the average monthly expenditure was Rs 15, 188 in 2006/2007 compared to Rs 10,812 in 2001/02. Food and Non-Alcoholic beverages took the largest share of household consumption expenditure(30.0%) followed by Transport(15.0%), Housing, water, electricity, gas and other fuels (10.0%) and Alcoholic beverages and tobacco(10.0%). The remaining categories of expenditure including clothing, footwear, household equipment and maintenance, health, education, communication and recreation together accounted for the remaining 30.0%. Spending on recreation as share of disposable income increased from 4.6% in 2001/02 to 5.0% in 2006/2007. Figure 2.1 below shows the household consumption expenditure for year 2001/2002 and 2006/2007.

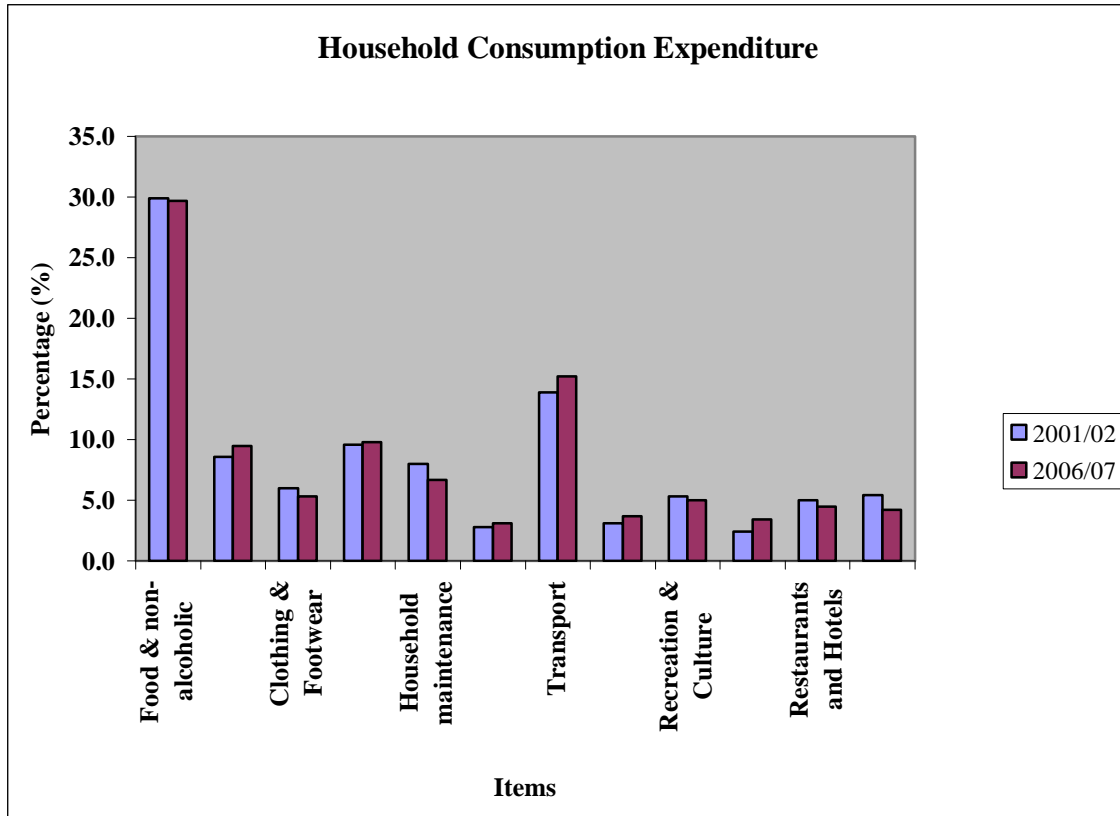


Figure 2.1: Household Consumption Expenditure

2.1.3 Domestic Material consumption

Imports of goods (excluding energy imports) increased from 3.7 million tonnes in 2000 to 4.6 million tonnes in 2006. The Domestic Material Consumption (DMC) accounts for all materials directly consumed by the economy in a country and is defined as all materials entering directly the national economy (used domestic extraction plus imports), minus the materials that are exported. In economic terms, it is related to the consumption activities of the residents of a national economy. In environmental terms, DMC is a proxy for potential environmental pressures on the domestic environment. It is considered as a good indicator for measuring the decoupling of economic growth and the use of natural resources and is nowadays compiled by all European statistical offices. Its compilation is laid down in a methodological guide by Eurostat (2001): *Economy-wide Material Flow Accounts and derived Indicators: A Methodological Guide*, Luxemburg (<http://europa.eu.int/comm/eurostat>).

The DMC per capita in Mauritius was estimated at about 9 tonnes in 2006 and increasing with time. In comparison, the DMC of industrialized countries ranges from 15 tonnes per capita in Japan to 26 tonnes in Australia, depending on the eco-efficiency of the economy.

The material intensity in Mauritius is about 1.5 tonnes DMC per US\$ 1000 of GDP, which is more than double of those in Europe (0.51 tonnes in UK or 0.45 tonnes in Netherlands), showing the potential for eco-efficiency.

2.1.4 Industrial production

In 2007, there were about 807 large manufacturing establishments (employing more than 10 persons as per definition of CSO) and 2500 registered SMEs (manufacturing enterprises that use production equipment with an aggregate value of less than Rs 10 million). Data about pollution and resource use in industrial companies, as well as industry sector specific data sets are not systematically collected and published in Mauritius. This absence of reliable data obstructs the development of realistic, targeted and effective policies on environmental management in industry and hinders measuring progress towards more sustainable industrial production. However, a few waste audits carried out in industry, especially in SMEs show that industrial progress has been slow in improving eco-efficiency.

ISO 14000 is a series of voluntary international standards on environmental management. It provides a framework for the development of an environmental management system, environmental auditing, environmental labeling, environmental performance evaluation and life cycle assessment. Only 10 enterprises in Mauritius are certified ISO 14001.

The level of innovations in the Mauritian economy, mainly industry, should be considered unsatisfactory. A reflection of this fact is the expenditure on Research &

Development as a share of GDP is only 0.3%, a tenth of that in high performing developed and developing economies and that purchase and use of foreign technologies is limited. Royalty and license payments were just US\$ 1.7 per capita compared to US\$ 2000 in Ireland.

2.1.5 Energy consumption

The annual primary energy requirement per capita has increased from 0.69 toe (tonnes of oil equivalent) in 1990 to 1.1 toe in 2007. The total primary energy requirement was 1379 ktoe in 2007. Mauritius is heavily dependent on imported fossil fuels for its energy needs. Around 82% of the total primary energy requirement was met by imported fuels (oil, LPG and coal) and the remaining 18% obtained from local sources (bagasse, hydro and fuel wood). The largest consumers of energy were the transport and manufacturing sectors which accounted for 47.9 % and 30.6% of the total energy consumption respectively. Household consumption accounted for about 12.9% of the total energy consumption.

The share of fossil fuels in the total energy requirement increased from 62% in 1992 to 82.2% in 2007. Programmes for increasing efficiency and expanding renewable energy are thus not keeping pace with increasing demand and economic growth.

The increase in electricity consumption is at a sustained rate of 5%. The share of electricity from renewable sources (bagasse and hydro) has decreased from 30% in 1996 to about 22.4% in 2007. The share of coal in electricity production rose to 40.3% in 2007 while contribution of fuel oil and diesel fell marginally to 37.2%.

The intensity of energy use is 0.54 toe per 1000 USD of GDP. This can be compared to 0.19 toe per 1000 USD in OECD countries or 0.17 toe per 1000 USD in EU-15. The potential for better energy productivity is evident from today's large gap between developed countries like Japan and Europe and Mauritius.

Figures 2.2 and 2.3 below show the increase in GDP per capita and the increase in energy consumption from 1992 to 2007 respectively.

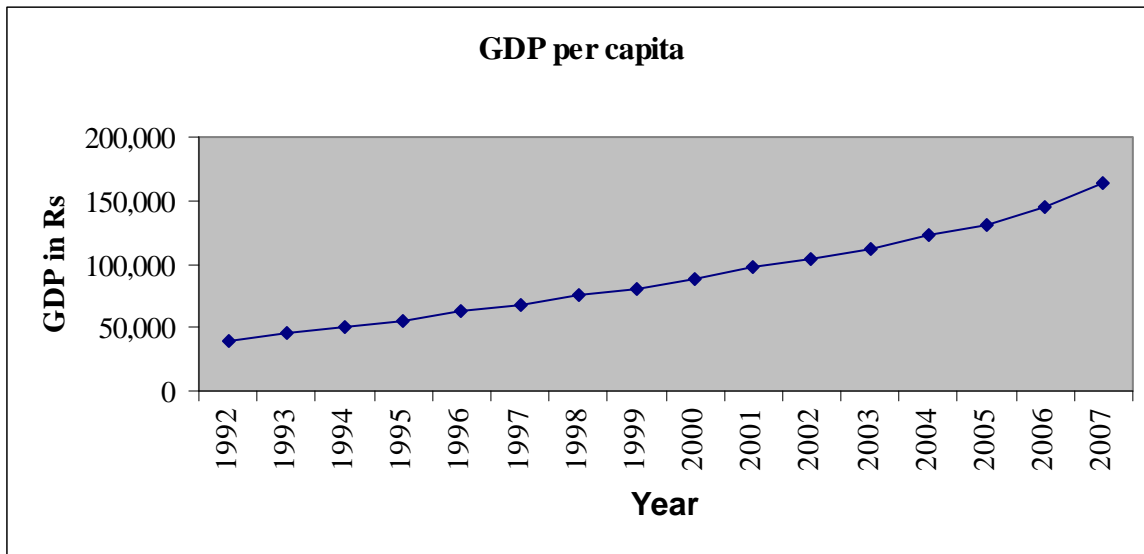


Figure 2.2: GDP per capita

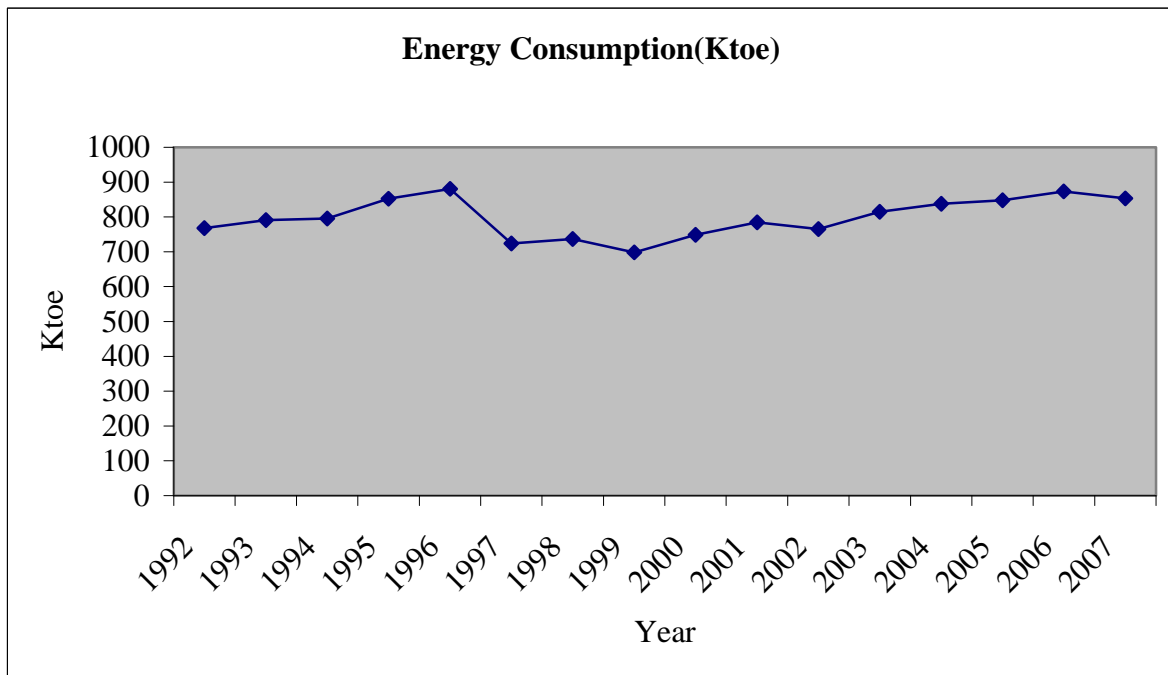


Figure 2.3: Energy Consumption (Ktoe)

Figures 2.4 and 2.5 below show the increase in the share of fossil fuels and total annual electricity production from 1992 to 2007 respectively.

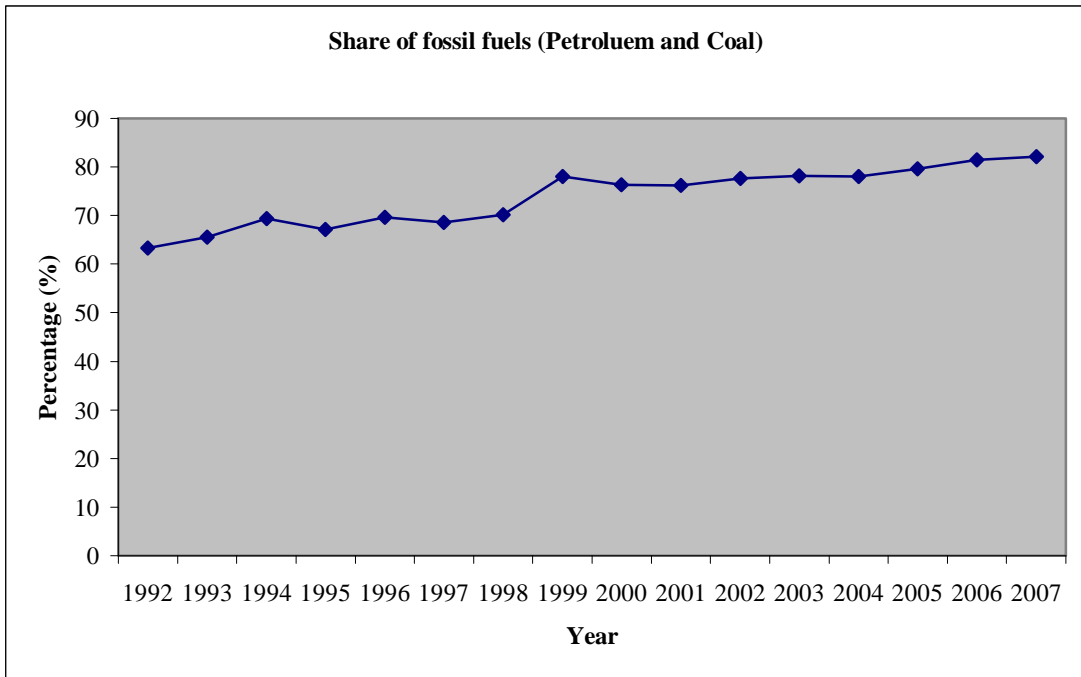


Figure 2.4: Share of fossil fuels (Petroleum and Coal)

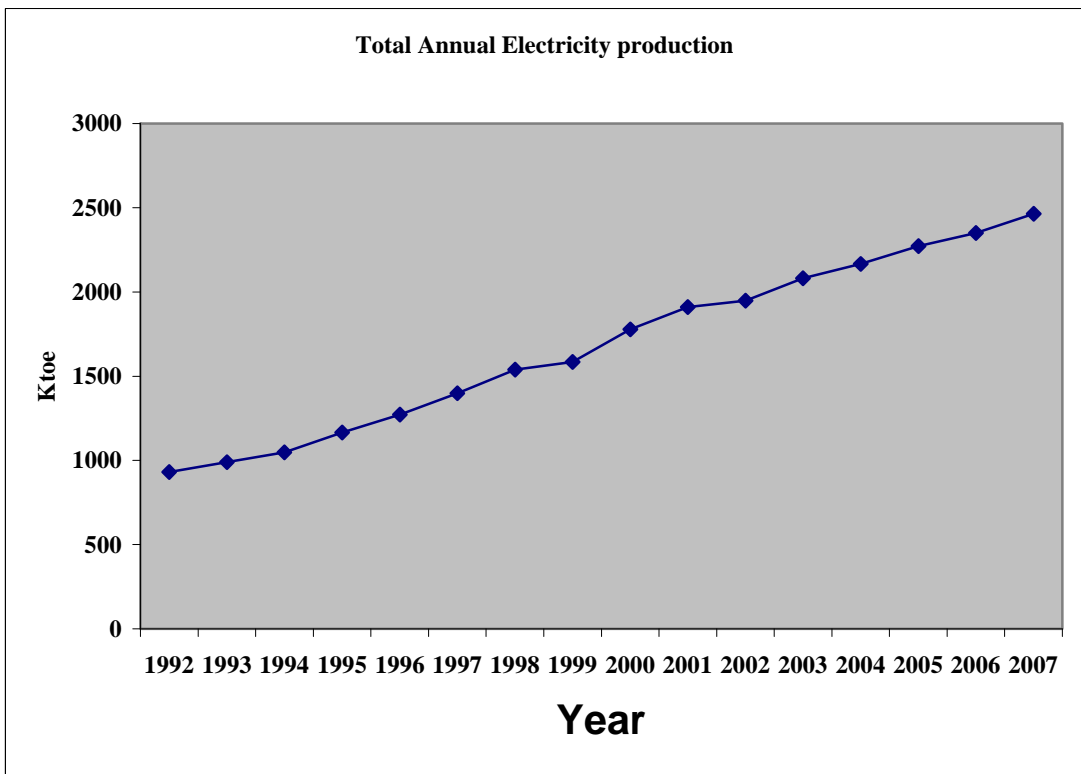


Figure 2.5: Total Annual Electricity Production

Figure 2.6 below compares the energy efficiency of Mauritius with Japan, Europe and the World.

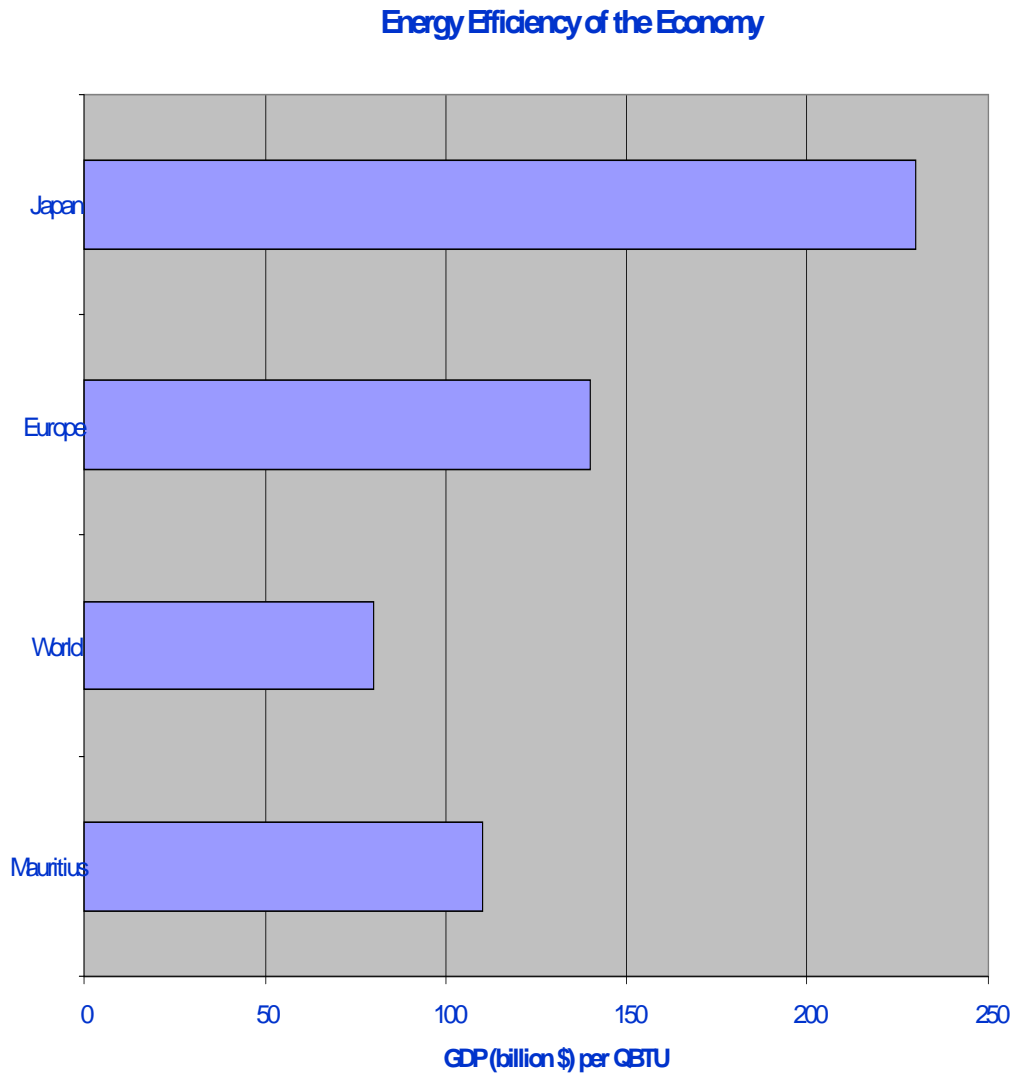


Figure 2.6: Energy Efficiency of the Economy

2.1.6 Greenhouse gas emissions

Net CO₂ emissions increased by 22% from 2000 to 2006 to reach 3.1 million tonnes (or about 3 tonnes per capita per year). The energy industries remain the principal source of CO₂ emissions (57%), followed by the transport sector (25%) and the manufacturing industries (12%).

2.1.7 Water consumption

Mauritius is classified as a water-stressed country. Usable freshwater potential estimated at 1300 Mm³ per year equivalent to 1083 m³/person/year, which puts Mauritius in the water-stressed category.

Water demand has increased by 56% from 1990 to 2006. The water demand in 2007 was estimated at 884 Mm³, of which 48% was used for irrigation, 28.7% for hydropower and 22.7% for domestic, industrial and tourism purposes. Around 87 % of total freshwater supply came from surface water and the remaining 13 % from groundwater.

During the period 1993 to 2007, the domestic per capita consumption of water has risen from 141 to 162 litres per day. With rising consumption, surface water supplies have to be supplemented by groundwater, which accounted for 53% of total potable consumption in 2007.

By 2040, total demand is projected at 1200 Mm³ per year, close to the utilizable renewable potential of 1300 Mm³. Thus, if more effective management is not introduced, demand threatens to outstrip supply within 50 years.

With climate change, a decrease in the overall amount of rainfall is expected. A decrease in the average amount of rainfall has already been noted over the past decade.

2.1.8 Waste Generation and disposal methods

Daily per capita waste generated increased from 0.7 in 1997 to 0.9 kg in 2007, such that our annual waste generation amounts currently to about 400,000 tonnes. The total amount of solid waste disposed at the Mare Chicose landfill went up from 180,788 tonnes in 1999 to 394,118 tonnes per year in 2007, representing a decrease of 3.2% from 2006.

Waste generation forecast made in 2004, projected a growth of 1% annually to reach about 398,000 tonnes in 2009 and about 510,000 tonnes in year 2034. However, from the

above figures, it is clear that we have already exceeded the 2009 projections. The cost of municipal waste management in 2005 was Rs 500 millions that is about Rs 1548 per household.

All wastes collected are compacted at transfer stations before being disposed to the sole disposal facility at Mare chicose. Recycling rates are still very low, which is not slowing the rate of growth of waste for final disposal. Only about 9 % of paper, 3% of plastics and 31% of textiles are recycled. Figure 2.7 below shows the increase in solid waste generation and GDP per capita from 1999 to 2007.

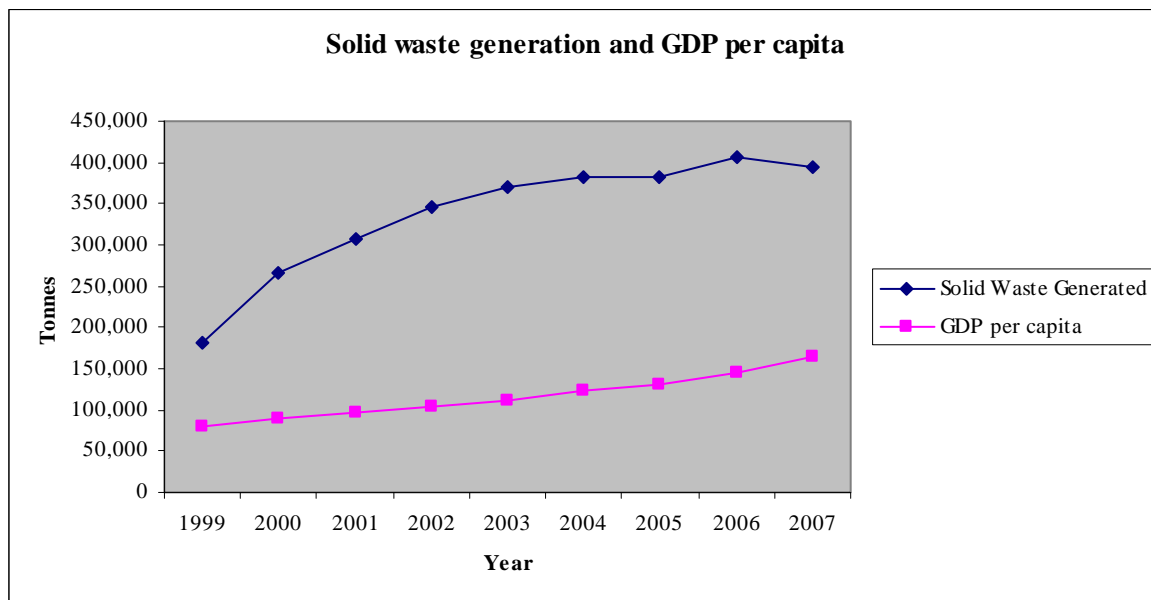


Figure 2.7: Solid Waste Generation and GDP per capita

2.1.9 Transport

The vehicular fleet has been growing at an average annual rate of around 5%. From 1990 to 2007, the total number of vehicles has gone up from 123,545 to 334,145, a rise of 63%. 30% of the vehicular fleet is private cars. Traffic congestion is a serious problem and the total cost to the economy of congestion is estimated to be about 1.3% of GDP. The density of vehicles has been considerably increasing and reached 165 vehicles per km of road in 2007 from 105 in 1996. The number of private cars per 1000 population rose from 28.5 in 1990 to 92.9 in 2007, representing an increase of 69%. This expansion in the

number of vehicles has also been accompanied by a corresponding growth in energy consumption and carbon dioxide emission in the transport sector.

Figures 2.8 below shows the increase in number of cars and GDP per capita from 1990 to 2006 and figure 2.9 shows the increase in number of vehicles per km of road from 2000 to 2007.

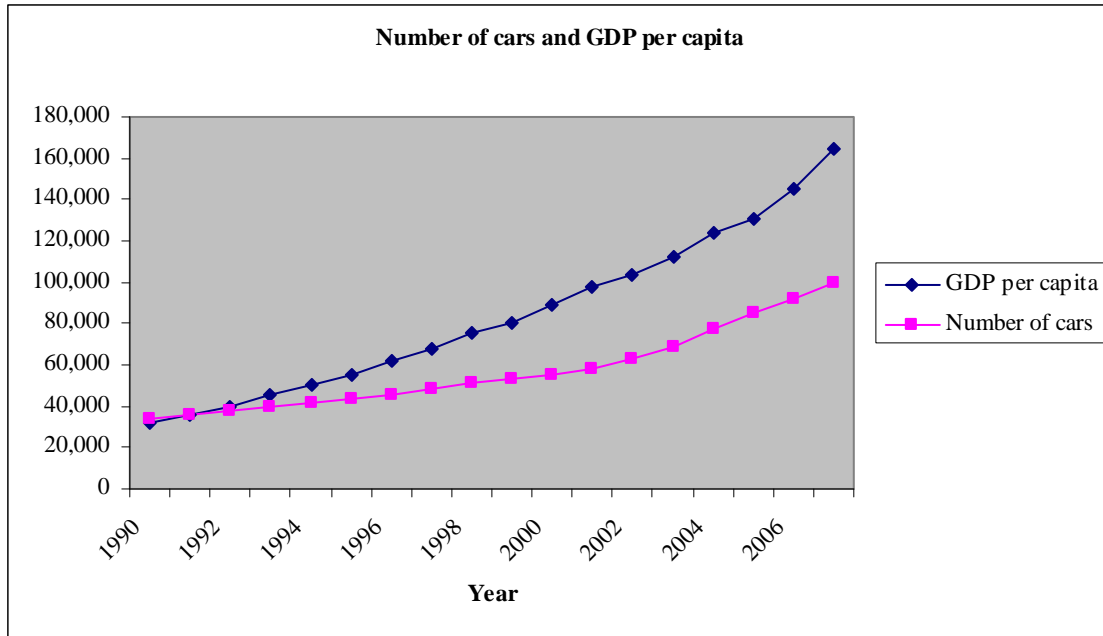


Figure 2.8: Number of cars and GDP per capita

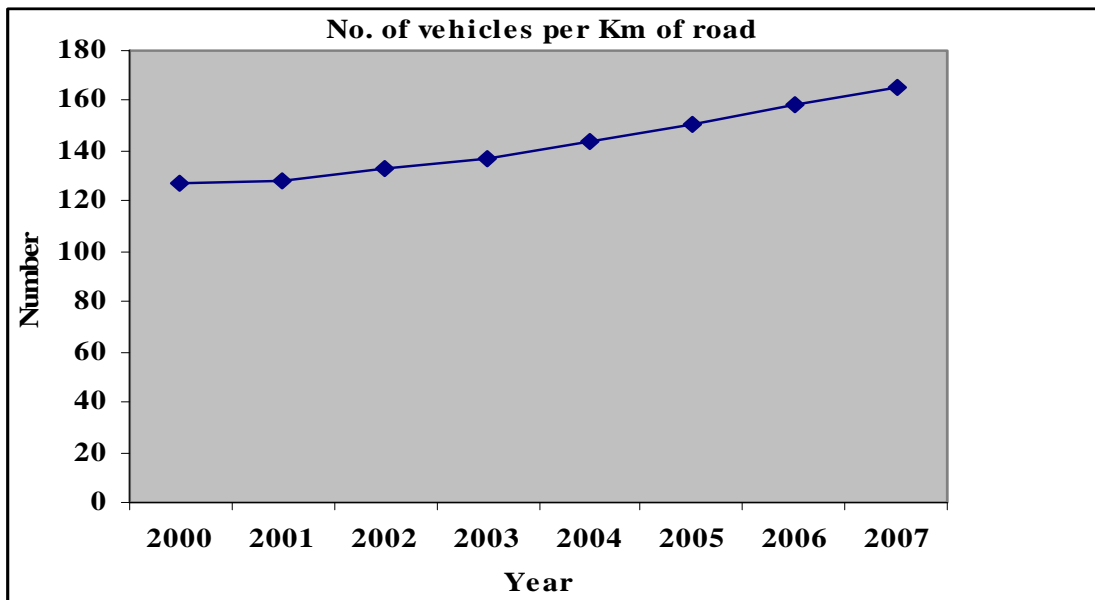


Figure 2.9: Number of vehicles per km of road

Figure 2.10 shows the increase in number of private cars per 1000 households from 1990 to 2006.

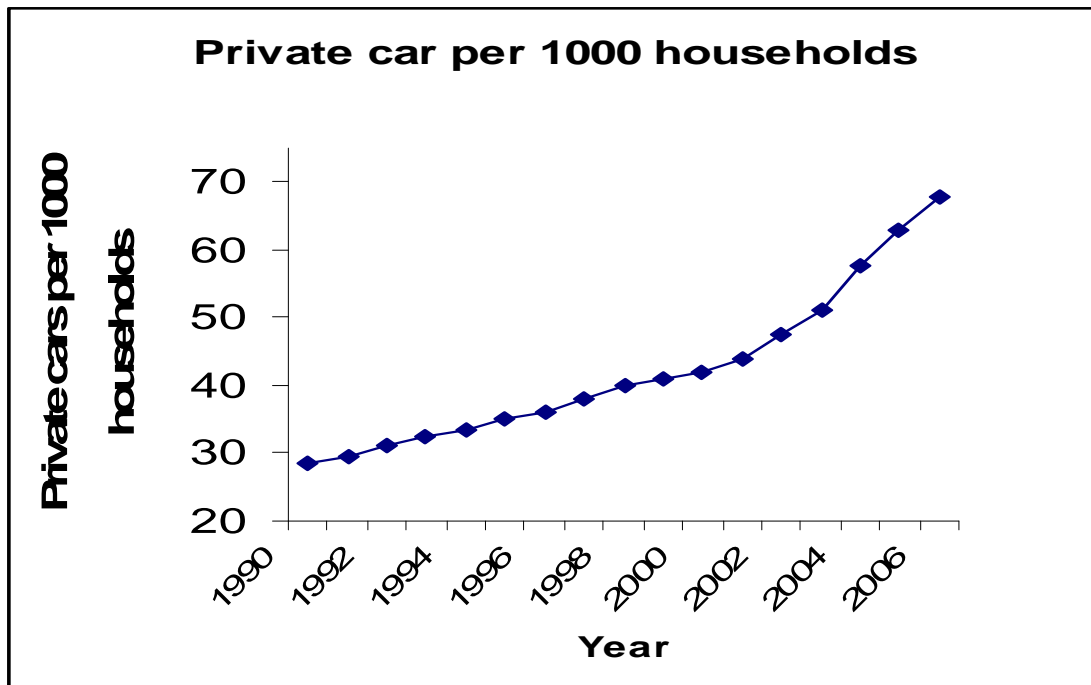


Figure 2.10: Private car per 1000 households

2.1.10 Land use and Buildings

From 1996 to 2007, the population density increased from 560 to 620 per km². Mauritius has one of the highest population density in the world, and is expected to rise by nearly a further quarter before leveling off in the middle of this century. This, together, with rising living standards, will put increasing pressure on the finite land space available. Housing and infrastructure development, new investment sectors, sugar sector reforms and tourism/IRS developments are bringing profound modifications to our land regime.

From 1995 to 2005, the proportion of land under sugarcane has decreased by 6 %, tobacco plantations has declined by 82 % and forestry by 17 %. Land used for other agricultural activities has increased by 33% while built- up areas has expanded by 28 %.

Of the future demand for land-use development, housing represents the largest single sector requirement. About 1000 ha of residential space are granted each year for development purposes.

Residential, public and commercial buildings account for a large part of material and energy use of the economy. An increasing population coupled with multiple economic activities, including tourism has given rise to a net increase of 28.4% in the number of buildings from 200,626 in 1990 to 257,521 in 2000.

2.1.11 Tourism and IRS Development

Land-take for tourism is a critical issue in tourism development in Mauritius. With about 906,971 tourists visiting Mauritius in 2007, the actual number of tourists is around 25 000 at a peak period, or about 2% of the population. In 2007, there were about 102 registered hotels in operation with a total room capacity of 10,857. With the new policy of Government to increase the number of tourists arrival to 2 million by 2015, this would imply about 70,000 tourists at any one time or the equivalent of 5% of the resident population.

According to 2000 figures, hotel sites occupy 41.9 kilometres of coastal zones which represent 13% of the total 322 km of coastline (compared to 9% in 1990). In terms of the length of sandy beaches, hotels occupy about 30% of the total.

2.1.12 Food production and consumption

On average, the total food requirement of the country is estimated at 686,000 tonnes annually, with a local production meeting only 23% of our consumption. The annual domestic demand for food crops ranges from 90,000 to 110,000 tonnes and a large amount of processed food is imported on a regular basis to meet local demands. The value of processed food imported on an annual basis is over Rs 761 millions and our total food import bill is Rs 12 billions per year.

The average annual production of food crop over the last 5 years amounts to 100,000 tonnes which are produced on some 3,500 ha of land (with approximately 2 crop cycles). With the new projection of tourist arrival, the natural increase of the population and introduction of novel crops, it is expected that demand for food crop will increase to 125, 000 tonnes with an additional land area of 1,100 ha.

The total amount of fertilizers and pesticides consumed by the agricultural sector (sugar cane and food crops) in 2006 was 48,109 tonnes and 2,000 tonnes respectively.

Organic farming is presently very limited in Mauritius. Though the market for organic products is currently experiencing rapid growth worldwide with the increasing consumer awareness on safer food and environment-friendly practices, it is still a new concept in Mauritius.

Products from slaughtered and live animals in Republic of Mauritius increased from 45,100 tonnes in 2000 to 54,400 tonnes in 2007. The dependency on imported meat and milk has been increasing over the last 5 years. In 2007, the local meat production was 44,362 tonnes and that of poultry was 40,160 tonnes and met only 6% of our requirement which amounted to 21,800 tonnes. In respect to poultry and egg demand, the country is self sufficient.

2.1.13 Ecological Footprint

The Ecological Footprint (EF) is a widely recognized indicator of human pressure on the environment. The EF of a nation is the amount of land area that would be required to produce the resources it consumes and to absorb the wastes it generates. The EF can be compared with the biologically productive capacity of the land and sea available to that country's population. In 2003, the available bio-capacity was 1.8 global hectares per capita of biologically productive area exists on our planet.

The Ecological Footprint of Mauritius was 1.9 global hectares per person in 2003 compared to 1.5 in 1995, representing an increase of about 25%.

2.2 SWOT Analysis

2.2.1 Status of Sustainable Production

Data about pollution and resource use in industrial companies, as well as industry sector specific data sets are not systematically collected and published in Mauritius. This absence of reliable data obstructs the development of realistic, targeted and effective policies on environmental management in industry and hinders measuring progress towards more sustainable industrial production.

Sustainable production activities are mainly focused on the implementation of environment management systems (ISO 14000) in large companies or Green Globe certification in major hotels. However, action plans and policies remain to be established targeting all key sectors of the Mauritian Economy. As compared to many developing countries, there is no dedicated institution in Mauritius promoting the concept of cleaner production in Industry. There must be greater penetration of cleaner production in industries, particularly in SMEs. Much needs to be done to train experts in identifying and formulating cleaner production investment projects to help in obtaining financing from funding institutions. More advanced sustainable production concepts such as Life Cycle Assessments and Eco-design are not applied. One of the main drivers for sustainable production is effective enforcement – however the latter needs to be strengthened and industry must realise that enforcement will in the medium to long term increase its competitiveness. Important stakeholders such as industry associations, financing institutions need to be more actively involved in cleaner production projects.

The state of Sustainable Production (SP) may thus be described as being slowly in progress but yet having a long way to go before being widely adopted and fully integrated as an everyday practice in all businesses, including SMEs.

2.2.2 Status of Sustainable Consumption

It is only recently through the National Environment Policy of 2007 that a policy framework for promoting Sustainable Consumption (SC) at the national level has been devised. Compared to SP, SC is a far less developed and recognized concept. One important explanation for the little attention paid by government to sustainable consumption is that consumption is often perceived as necessary for economic growth. More sustainable consumption is perceived by policy makers in the lowering of economic growth though the benefits resulting in reduced costs to society and sustainability achievement are being missed. Also, since SC is a relatively new concept, consumer activism is still focused on prices, quality and consumer safety. Sustainable consumption still needs to be mainstreamed in consumer organizations activities. Tools to support or promote SC need to be strengthened.

2.2.3 SWOT Analysis and Conclusion

Table 2.1: SWOT Analysis of Consumption and Production Patterns

Strengths	Weaknesses
<ul style="list-style-type: none"> - Already some on-going SCP type of projects (but which need to be scaled-up). - Increase of energy prices tends to tame consumption patterns. - A number of institutions which deal with innovation or knowledge creation exist (however the potential for SCP is not a priority in their mandate). - Increasing importance of the services sector in the economy which has less environmental impact/GDP output - Media coverage and potential influence on consumers 	<ul style="list-style-type: none"> - Environment continues to be perceived as an « add-on cost » of doing business - Lack of economic incentives to consumers for buying sustainable products - Demand-side management policies in energy and water sector poorly developed. - Energy Efficiency relatively low - Low development of renewable energy sources other than bagasse - Few companies holding environmental certifications. No eco-tourism facility has an environmental certification yet - Poor integration of SCP in EIAs

	<ul style="list-style-type: none"> - Limited ability of SMEs in industry, hotels and services sector to adopt cleaner production - Lack of demonstration projects/lack of experts in SCP - Limited enforcement capacity - Low level of waste recycling. Limited development of the extended producer responsibility policy. - Increasing use of private cars - Few research on Consumption and Production patterns - Lack of involvement of Consumer Associations/NGOs in SCP - Awareness/Educational campaigns on efficient resources use inadequate - Low level of awareness of public and policy makers on benefits of SCP
Opportunities	Threats
<ul style="list-style-type: none"> - Leapfrogging and avoid repeating the mistakes of developed countries - Integration of SCP into new policies currently being drafted - Introduction of new environmental policy tools (economic instruments, producer responsibility, Corporate Environmental Reporting, etc) - Inflow of environment friendly foreign investment - Sustainable Government practices - Increasing importance of CSR in business 	<ul style="list-style-type: none"> - Lack of political commitment for a SCP programme - Insufficient Capacity Building in SCP - Insufficient Research and Development expenditure on SCP - Lack of integration of SCP in educational curriculum - Lack of institutions supporting the execution of innovative projects in SCP - Increasing environmental pressure by consumers following the westernised model of consumption

<ul style="list-style-type: none"> - Use of NGOs expertise to promote SCP at local level - Development of a Waste Recycling plan at local levels - Setting up of a Cleaner production Centre - Increase of competition to force modernisation using best available environmentally friendly technologies - Eco-tourism development - Development of the ICT sector and e-government - Development of Sustainable New Cities - Taking advantage of CDM potential for renewable energy development - Job creation through an environment industry that develops around the SCP concept - National and international awareness of impacts of climate change and the food and energy crisis which is mobilizing political efforts to adopt sustainable practices. - Global and national efforts to leverage funding to support sustainable practices like new funding windows like the Adaptation Fund under the Kyoto Protocol and the Climate Investment Fund by the World Bank. 	<ul style="list-style-type: none"> - Weak media contribution to promoting SCP - Insufficient development of the system of environmental policy tools and implementation/enforcement. - Strategies or policies specifically targeting SCP may not develop due to the fact that SCP is not high on the political agenda and that there is a weak inter-sectoral and inter-ministerial coordination.
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The consumption and production trends presented in section 2.1 shows that the environmental impacts from consumption and production activities have grown over the last two decades and are expected to intensify in the next decades with the same patterns of consumption and production. Current and projected production and consumption

patterns are influenced by a number of driving forces, including rising per capita incomes, demographics and accompanying changes in lifestyles. Technology, institutions and infrastructure also play an important role in influencing consumption and behaviour.

In a nutshell, through a programme on SCP, we will have to answer the following questions:

Can we devise systems of consumption and production in Mauritius which are less resource intensive, but serve our needs and deliver better quality of life? If so, how can government, private sector and the general public facilitate the necessary transition? What incentive structures and institutional rules could be changed to favour more sustainable lifestyles on our small island?

Chapter III

Strategic Framework and Instruments of Implementation of the SCP Programme

3. Strategic Framework and Instruments of Implementation of the SCP Programme

3.1 Existing Strategies and Policies

- The present policies for environmental management are contained in several documents such as the National Environment Policy 2007, the National Environment Strategies 1999 and several sectoral action plans. The National Environment Policy developed by the MOE in 2007 includes section 7.8 which deals specifically with the issue of SCP (See Box 1).

- The National Environment Action Plan 1 (NEAP1) was formulated in 1988 focussing largely on developing a policy, legislation and institutional framework for environmental management in Mauritius and implemented with the Environment Investment Programme 1 (EIP1: 1988-1998). With the implementation of NES2 formulated in 1999 environmental concerns were integrated into main environment related sectors of national planning and development through a set of policies, strategies and EIPs (National Development Strategy 2003; National Forest Policy; Tourist master Plan; National Biodiversity Strategic Action Plan etc). One of the main output reports of the NES2 is the Second National Environmental Action Plan (NEAP2). In the last part of the NEAP2, a detailed implementation programme, the Second Environment Investment Programme (EIP2), has been developed for the first five years (2000-2005) of the NES2 which consists of an investment and implementation framework that includes project proposals, activities, costs, and responsibilities for 72 projects under 4 major programmes , namely:-
 - I. Overall Management and Coordination Programme (15 projects)
 - II. Resource Management Programme (24 projects)
 - III. Sector Management Programme (14 projects) , and
 - IV. Rodrigues Programme (19 projects)

Presently, 33 projects have been completed; works are on-going for 23 projects while 14 projects are yet to start. The implementation of 2 projects has been cancelled under EIP2. SMEC International PTY LTD (Snowy Mountains Engineering Corporation of Australia) has been appointed by the Ministry of Environment and NDU for the updating of the National Environment Strategies and review of the Implementation of the Second National Environmental Action Plan. A project entitled “**Facilitating Sustainable Environmental Practices**” has been identified as one of the 6 priority Environment Investment Programmes under the updating of the NES.

- The primary legislation encompassing all sectors is the Environment Protection Act 2002, whereby the Department of Environment has been vested with responsibilities for general environmental protection. Environmental management is not centralized and enforcement in environment concerns is handled by many agencies. Mauritius is planning the introduction of industrial waste audit regulations to encourage industries to self-regulate and adopt cleaner technologies, as a precursor to the eventual adoption of ISO 14 000 The Environment Protection Act 2002 as amended in 2008 makes provision to empower the Minister of Environment to make regulations in relation to SCP for:
 - the introduction of eco-labeling schemes for products
 - carrying out cleaner production opportunity assessments in industry
 - the introduction of producer and importer responsibility
- In the EU-Mauritius Country Strategy paper 2008-2013, the priority programmes identified by the Ministry of Environment comprise of three main components with an overall environmental management at capacity building in the environment sector, a resource management programme for developing the ICZM strategy and framework, and a sector programme aiming at reducing the environmental impacts of industry and development of adequate environmental industrial management including the setting up of the National Cleaner Production Centre.

- Promotion of SMEs through a business facilitation programme has been given priority by the government through the Business Facilitation (miscellaneous provisions) Act 2006 and a significant number of SMEs have been established over the last two years.
- The national tourism policy emphasizes low impact, high spending tourism. Selective, up-market, quality tourism is favoured, and although such tourism is not the only type, it constitutes the major segment of our tourists who stay in high class hotels. A Tourism Development Plan was prepared in 2000 whereby an objective of Mauritius acquiring a “Green Destination” status by 2020 was set. This would involve eliminating unsustainable environmental practices throughout the island, in hotels, businesses and the local community. Mauritius is relying on tourism to remain a strong growth pillar of the economy in the medium-term. The target is 2 million tourist arrivals by 2015, through an annual growth rate of 10%. To support this growth, international consultants have been appointed in April 2008 to develop the ‘Tourism Sector Strategy’ over the 2008 -2015 horizon. The strategy will address policy issues, capacity building, marketing brand, quality of service, greater involvement of stakeholders and infrastructure facility.
- An outline of Energy Policy 2007-2025 was prepared in April 2007. The target is that over the next 50 years Mauritius should be able to achieve about 70% self sufficiency in terms of energy supply through a progressive increase in the use of renewable energies. By 2025, renewables would account for about 44% in the electricity sector. Kantor Management Consultants has recently prepared the National Energy Policy for the country and the report is currently going through the approval process. Preparatory work on an Energy Efficiency Bill is ongoing which will look into energy efficiency standards for appliances, buildings, vehicles, etc.

- The need to develop a shared vision for managing water resources in a sustainable manner has been recognized and a National Water Policy is currently under preparation.
- A draft report on Strategic Options for crop diversification and livestock sector for the period 2007-2015 has been prepared by the Ministry of Agro-industry and Fisheries. Sustainable Agriculture policies including Organic agriculture and Good Agricultural Practices (GAP) have been formulated in the report.
- The Multi-Annual Adaptation Strategy- Action Plan 2006-2015: Safeguarding the future through consensus” (MAAS) aims to increase the competitiveness of the Mauritian sugarcane sector. The MAAS foresees among others a concentration of the industry, rightsizing of its labour force and optimizing the use of sugarcane by-products for energy production. The principal measures/intervention areas outlined by the MAAS include (1) improving the cost competitiveness of the sugar milling sector via mill centralization (2) increasing the contribution of the sugarcane cluster to national electricity production with the installation of new power plants in the remaining mills. Electricity will be generated using bagasse, one of the main by-products of sugarcane; the present production of 300 GWh (16% of national electricity output) will be doubled to 600 GWh; and (3) producing 30 million litres of ethanol from molasses in two of the four remaining sugar factories to be used locally for blending with gasoline. This would provide additional revenue to the sugar industry and reduce total gasoline imports.
- Budget 2008-2009: Building Green Mauritius - “Maurice Ile Durable”: In the 2008-2009 budget speech, the Minister of Finance announced the revamping of the National Energy Fund into a Maurice Ile Durable (MID) Fund. The Fund, which will be under the aegis of the Ministry of Public Utilities, will support efforts to protect the environment through recycling, encourage more efficient use of energy and increase the reliance on renewable energy. The Fund will mobilize

resources through taxes, government subsidies, development partners, carbon credits and the private sector, including airlines offsetting their carbon credits.

Key measures include:

- *A Wind Energy project at Bigara*
- *New hydro units at Midlands and La Nicoliere*
- *Landfill Gas to Electricity project at Mare Chicose*
- *Optimise the use of bagasse and cane field residues*
- *Setting up of an “Observatoire de l’Energie” and an information campaign*
- *Solar Water heater loan scheme*
- *Reduction of duty on solar water heater and spare parts*
- *Introduction of summer time(pilot project in 2008)*
- *Setting up of a solid waste recycling programme*
- *50% reduction of taxes on hybrid vehicles*
- *Presentation of an “Energy Efficiency Bill”*
- *Increase of Road Tax according to engine capacity*

Paragraph 149 and 150 of the Budget speech 2008/09 also specifies that

- All future government purchases of light bulbs will be of energy saving type
 - All sodium vapour lamps for street lighting will be replaced by energy efficiency lamps over the next 5 years
 - The use of Light Emitting Diode lamps will be explored
-
- The Enterprise Development Fund available through Enterprise Mauritius is specifically designed to assist qualifying businesses in Mauritius to access external resources and expertise not readily available to them. This support programme aims at overcoming organisational barriers to growth and competitiveness with particular emphasis on developing exports. The scheme supports the engagement of specialised advice and expertise to assist on well-defined mutually agreed priority projects or concepts that lead towards:
 - increased exports

- enhanced business capability
- increased profitability
- improved international competitiveness

The 2008-2009 Budgetary measures in respect of enterprise development and SMEs include the creation of a Manufacturing Adjustment and SME Development Fund, with an initial contribution of Rs 500 million, to help enhance the global competitiveness of Mauritian enterprises.

- Under the new regulations regarding payment of an Environment Protection Fee, hotels, guesthouses and tourist residences need to pay a fee of 0.85% of their monthly turnover to the Mauritius Revenue Authority. Premises used in connection with an enterprise engaged in stone crushing or in the manufacture or processing of aggregates, concrete blocks, pre-cast units, coral sand, rock sand or basalt sand need to pay a fee of 0.75% of their monthly turnover while companies dealing with the assembly and import of mobile phones, vehicle batteries and pneumatic tyres need to pay a fee of Rs 50 per unit imported or assembled locally. Other economic instruments which have been introduced to mobilize financial resources for environmental protection include the Rs 1.15 tax on plastic bags, the 15 cents environment tax on each litre of gasoline and diesel and the increase of the Road Tax according to engine capacity.

Box 1: National Environment Policy Section 7.8: Strategic Objective on Sustainable Production and Consumption

Objective

Achieve sustainable consumption and production patterns

National Targets

- (i) Set up and operationalise the National Cleaner Production Centre in the short term.
- (ii) Reduce significantly material and energy consumption within manufacturing organisations through eco-efficiency tools.
- (iii) Develop and implement market-based instruments to foster energy efficiency and increase the generation of renewable energy.
- (iv) Promote an Environment Industry contributing to the GDP in the short to medium term.
- (v) Ensure that the business sector has regular Environmental Reporting.
- (vi) Introduce a Government Green Procurement Policy.
- (vii) Promote green consumerism.
- (viii) Promote sustainable farming and develop a food security plan.
- (ix) Promote clean and affordable technology

Strategies and Policy Instruments

Government will

- Develop a 10-year framework of programmes in support of national initiatives to accelerate the shift towards sustainable consumption and production.
- Encourage industry to adopt cleaner production through applying regulations, using economic instruments; providing support measures and obtaining external assistance; encourage financial institutions to incorporate sustainable development considerations in their decision-making processes.
- Consider making Cleaner Production Opportunity Assessments mandatory through regulations.
- Provide consumers as well as producers with incentives to move towards more sustainable consumption patterns and lifestyle choices:
 - Lead by example through green procurement policies that promote the diffusion of environmentally sound goods and services;
 - Provide a consistent policy framework through awareness raising schemes;
 - Encourage community-based debates that question and challenge the sustainability of current production and consumption patterns.
- Strengthen the Enforcement Capacity for industrial pollution control.
- Design information and training programmes to assist SMEs to achieve sustainable production.
- Encourage industries to adopt voluntary policy instruments such as environmental management systems, Codes of Conduct, Certification and public environmental reporting, taking into account such initiatives such as the ISO Standards and the Global Reporting Initiative Guidelines on Sustainability reporting. Introduce an Environmental Reporting Award to give recognition to such companies.
- Develop an aggressive awareness raising campaign on the importance of sustainable production and consumption patterns, targeting among others our youth, through inter alia, education, public and consumer information, advertising and other media.
- Consider the use of Life Cycle Assessments and Product Service Systems tools in policy-making
- Consider the introduction of Eco-labelling schemes and Environmental Product Declarations as consumer information tools.

SCP is a cross-sectoral issue that requires integration between different policy areas. The strategic objective of the SCP Programme is to achieve sustainable consumption and production in the specific conditions of Mauritius as an essential precondition for achieving sustainable development. The SCP programme can either be a dedicated program on its own or viewed as a key component of the NES and NEAP.

It is recommended to have a dedicated National SCP Programme, as it encompasses economic and social issues besides environment issues. Besides its direct contribution towards promoting resource-efficiency at all levels of production and consumption, the development and implementation of the SCP Programme will also be instrumental in promoting synergies amongst the key development sectors outside the Ministry of Environment and NDU (see Figure 3.1).

The National SCP programme helps to institutionalise processes for resources allocation, monitoring, consultation, negotiation, mediation and consensus building on priority issues where interests may differ. By its cross-cutting nature, SCP have a major part to play in achieving a number of the national objectives adopted in different policy areas: economic objectives including job creation, environmental quality objectives, public health objectives, business sector objectives, energy and water savings and poverty reduction objectives.

Integrating with existing national level strategies



Figure 3.1: SCP Programme/ Action Plan creating synergies with other strategies

3.3 Instruments of the Implementation of the Programme

Normative Instruments (Obligations, limits, standards, prohibitions) such as requirements concerning appliances, building regulations, prohibition of import of unsustainable products or reduction of consumption and production of hazardous products. The normative instruments of SCP programmes should be simple, specific, comprehensible, practicable and enforceable.

Economic Instruments (taxes, fees, penalties, subsidies) stimulate sustainable practices and the import of sustainable products as well as the innovation of production processes and sound consumption. For example, reduced VAT on efficient appliances and vehicles is a marketing tool in many countries to influence consumer purchasers.

Informative Instruments are a prerequisite for the functioning of numerous other instruments, such as education and training. Information regarding the impacts of

products must be provided through eco-labelling, environment product declarations or consumer information campaigns

Education and Training is a long term instrument for the shaping of attitudes and value preferences of the society. Both the consumer and producer should be aware of the impacts of their behaviour that does not correspond with the principles of sustainable development and with SCP. It is necessary to ensure that all individuals, and children and youth in particular, are provided with sufficient information regarding sustainable development. This is a continuous, life long process covering the population from pre-school to adults.

Institutional Instruments (functions of public administration institutions in the areas of compliance, supervision and elimination of risks) should be effective and coordinated. The consumption of public institutions should serve as an example of sustainable consumption.

Voluntary Instruments include activities that business entities and other parties implement on the basis of their free, voluntary decision and that go beyond the framework of regulatory requirements. Examples: Green Procurement, Environment Management Systems, Corporate Sustainability Reporting etc.

Chapter IV

Projects within the SCP programme and Action Plans

4. Projects within the SCP programme and Action Plans

The SCP programme consists of specific projects in each of the strategic areas as identified during the scoping exercise. These projects are elaborated in the Appendix document: National Programme on Sustainable Consumption and Production for Mauritius, Volume II. The projects have been selected by the working groups on the basis of their cost-effectiveness and for opportunities of synergy and replicability.

As shown in Tables 4.1 to 4.8, the SCP programme encompasses 44 projects, each of which is to be led by the agency with most appropriate direct responsibility of the sector or resource. Priority actions are indicated by assigning a category of “urgent”, “high” or “medium” to the projects, where

- “urgent” indicates that a project should be completed within the first year of the implementation of the SCP programme because it is either essential for other projects or that it is easily implementable so as to make the SCP programme visible at an early stage
- “high” indicates that the project should be completed within the first three years given that the financial and institutional resources are not considered to be limiting factors
- “medium” indicates that a project probably cannot be tackled for at least three years either because the resources required will have to be mobilized initially or the project is not considered a high priority.

An implementation schedule for the projects has been provided in table 4.9 as per their priority.

The cost attributed to each project is only indicative based on the identification of major inputs and the exact costs are likely to alter once detailed project design is undertaken. The main assumptions made for the costing programme are as follows:

- Cost of an International Consultant, including subsistence and one return flight = US\$ 15,000 per month
- Cost of a National Consultant= US\$ 3000 per month
- Cost of an Awareness campaign, including TV spots =Rs 1 million
- Cost of a Training Workshop for 30 participants for 3 days = Rs 150,000
- Cost of Meetings for an Implementation Team, including stakeholder consultations =Rs 100,000

The total financial requirement for this SCP programme is estimated at Rs 35 million over a period of 5 years. This excludes costs associated with sustained awareness campaigns on energy and water efficiency, which is to be met through the contribution of the private sector, and projects where sources of funding are already available (such as the “Maurice Ile Durable” Fund). It also excludes costs associated for the establishment of a dedicated unit at the level of Ministry of Public Utilities for Water Auditing of Government buildings and for the appointment of Environment officers in all local authorities.

Table 4.1: SCP Programme Component Projects

A. Sustainable Energy Consumption

- 1 Develop MEPS for Key Household Appliances
 - 2 Phase out Incandescent Lamps
 - 3 Capacity Building of Energy Audit Providers and Promotion of Energy Service Companies
 - 4 Develop MEPS for Industrial Major Energy Consuming Equipment
 - 5 Mandatory Energy Auditing for high energy users
 - 6 Assist SMEs in carrying out Energy Audits
 - 7 Require Public Bodies to purchase only energy efficient lighting systems
 - 8 Increase consumer knowledge about Sustainable Driving and Energy Efficient Vehicles
 - 9 Survey on Vehicular Emissions and Capacity Building on Emission Testing
 - 10 Influence Consumer to transport modal shift and behavioural change
 - 11 Formulation of a Strategic Research Action Plan on Energy
-

B. Sustainable Water Consumption

- 1 Establish Water Efficient Plumbing codes and regulations
 - 2 Mandatory Water Efficiency Audits for high water users
 - 3 Development of Rain Water Harvesting Systems
 - 4 Sustain a National Awareness Campaign on Water Savings
-

C. Sustainable Buildings and Construction

- 1 Develop a Shared Vision
 - 2 Develop Guidelines and a Rating system
 - 3 Amendment of Building Regulations
 - 4 Develop Public and Financial Incentives
 - 5 Launch an Awards Program
 - 6 Initiate Demonstration Projects
 - 7 Develop Curriculum for Industry Professionals and Conduct Training Programs
 - 8 Education and Outreach
 - 9 Research and Development
-

D. Integrated Solid Waste Management and Recycling

- 1 Recycling of Supermarket Wastes with a focus on cardboards and plastics
- 2 Diversion of Organic Wastes from the Hotel Sector
- 3 Promotion of Backyard Composting
- 4 Elaboration of Integrated Waste Management Action Plans in all Local Authorities

- 5 Study on the Economic, Environmental and Social Benefits of Extended Producer Responsibility on certain key products
-

E. Sustainable Public Service Practices

- 1 Sustainable Government Procurement Framework
 - 2 Monitoring Energy use and Performance in the public sector & Annual Reporting
 - 3 Water savings in the Public sector
 - 4 Sustainable Paper use in the Public Sector
 - 5 Computer Refurbishment and Reuse
 - 6 Implement Environmental Reporting in Government Departments
-

F Improve Market Supply and Demand of Sustainable Products and Services

- 1 Development of a National Eco-labelling Framework, with an initial focus on Agricultural and Food products
 - 2 Promotion of Sustainable Products through financial incentives and improving their visibility
 - 3 Capacity Building of Industry in Life Cycle Management and Corporate Sustainability Reporting
-

G. Education and Communication for Sustainable Lifestyles

- 1 Sustain a National Awareness Campaign on Energy Savings
- 2 Training on YouthXchange
- 3 Develop Locally adapted Education Resource Materials on SCP
- 4 Capacity Building of NGOs on Sustainable Consumption
- 5 Develop an education resource material targeting SMEs on the benefits of resources efficiency
- 6 Launch Awards Programs recognising efforts towards Sustainable Lifestyles.

Table 4.2: Main elements of Action Plan on Sustainable Energy Consumption

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent: 0-1 yr High: 0-3 yrs Medium:> 3 yrs	Indicative Cost (Rs)
1. Develop MEPS for Key Household Appliances	Ministry of Public Utilities(MPU)	Average household electricity consumption	Urgent	Budget to be made available through UNDP funding of MPU project on Energy Labelling
2. Phasing Out of Incandescent Lamps	MPU and Ministry of Industry , SMEs, Commerce & Cooperatives (Commerce Division)	Average household electricity consumption	Medium	-
3. Capacity Building of Energy Audit Providers and Promotion of Energy Service Companies (ESCO)	NPCC and University of Mauritius	No. of trained Energy Auditors No. of ESCOs Reduction of Energy consumption in Industry and Government buildings	Urgent	Rs 3 million (includes recruitment of Consultants, training workshops and purchase of basic energy monitoring equipment)
4. Develop MEPS for Industrial major Energy Consuming Equipment ex: boilers, chillers, electric motors/machine	MPU in collaboration with a research institution	Reduction of Electricity consumption in specific industrial sectors	High	Rs 1 million
5.Regular Energy Auditing to be made mandatory for high energy users	MPU	Reduction of Energy consumption among high energy users	Medium	Rs 300,000 for the recruitment of a consultant to draft the Energy Audit Guidelines

Project	Implementation Agency(ies)	Measurable Outputs	Priority	Indicative cost (Rs)
6. Assist SMEs in carrying out energy audits with a targeted scheme	SEHDA, NPCC and Enterprise Mauritius	No. of SMEs conducting Energy Audits	Medium	Budgetary line to be identified through Enterprise Development Fund and SME Development fund
7. Require public bodies to purchase only energy efficient lighting as from 2010 when installing or replacing lighting	MPU and Ministry of Finance through the Sustainable Procurement Framework	Reduction of Electricity consumption in Government buildings	Medium	-
8. Increase Consumer Knowledge about benefits of Sustainable Driving, including providing tools for energy-efficient Vehicles Selection.	MPI (TMRSU to take the lead)	Reduction of Energy consumption in Transport Sector Sale of energy-efficient Vehicles	High	Rs 1 million for Awareness Campaigns
9. Survey on Vehicular Emissions and Capacity Building on Emission Testing	MOE, MPI and UOM	No. of trained personnel on Emission Testing % Vehicles not meeting emission standards	High	Rs 200,000
10. Influence the consumer to modal shift and behavioural change such as the Park and Ride Schemes, Incentives for car pooling, Bicycle use etc. through education and sensitization campaigns	MPI (TMRSU to take the lead)	% transport users using public transport Change in behaviour among consumers	Medium	Rs 1 million
11. Formulation of a Strategic Research Action Plan on Energy	MPU - Observatoire de L'Energie	Research results influencing policy making	High	Through the Budgetary provisions of the new Observatoire de l'Energie. Estimate of Rs 200, 000

Table 4.3: Main Elements of Action Plan on Sustainable Water Consumption

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
1. Establish Water Efficient Plumbing Codes and Regulations	MPU(WRU to take the lead)	Average water consumption in New Buildings	High	Rs 300,000 for the implementation team , development of an information website and a market survey
2. Mandatory Water Efficiency Audits for high water users.	MPU	No. of big consumers conducting Water Audits Water Consumption reduction among big water users	Medium	Cost for consultancy services , training and purchase of equipment estimated at Rs 2.5 million
3. Development of Rainwater Harvesting Systems	Ministry of Environment and NDU	No. of rainwater harvesting systems implemented and total volume of water saved Economic saving in households and institutions	High	Rs 2 million for pilot projects and awareness campaigns
4. Sustain a National Awareness Campaign on Water Savings	MPU(WRU) , MOE , CWA and JEC	Public Attitude towards water savings through surveys % Reduction in Average household and employee water consumption	Urgent	Rs 1.5 million for the start of the campaign Additional Funds to be identified in collaboration with private sector

TABLE 4.4: MAIN ELEMENTS OF THE ACTION PLAN ON SUSTAINABLE BUILDINGS AND CONSTRUCTION

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
1. Develop a shared vision	Ministry of Environment and NDU	Vision statement with definitions, goals, benefits and targets	Urgent	<p>Recruitment of an International Consultant for a period of 3 months who would be also be responsible for actions 2, 3, 7 and 8 described below, namely:-</p> <ul style="list-style-type: none"> -Develop the Guidelines and Assessment Criteria -Develop a curriculum and training resource materials for industry professionals -Conduct a Train the Trainers Workshop for CPD courses <p>This international consultant could also be assisted by a local consultant working on part time basis</p> <p>(Indicative cost: Rs 3 million)</p>

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
2. Develop Guidelines and a Rating System	Ministry of Environment and NDU	Set of Guidelines and rating system appropriate for the local context	High	Recruitment of a local/International Consultant See (1)
3. Amendment of Building Regulations	Ministry of Public Infrastructure, Land Transport & Shipping (Public Infrastructure Division)	Building Regulations Amended	High	Input from the Consultant working on Guidelines is required. This can be included in the TOR for the consultant See (1)
4. Develop Public and Private Financial Incentives	Ministry of Environment in collaboration with the Corporate Affairs Division of the Ministry of Industry, Small & Medium Enterprises, Commerce & Cooperatives (Industry and SME) and the Mauritius Bankers and Insurers Association	Public and Private Financial Incentives for Sustainable Buildings	High	Implementation Team (Rs 100,000)
5. Launch an Awards Program	Ministry of Environment & NDU/National Productivity and Competitiveness Council (NPCC)	No. of participants in the awards program	Medium	Prizes and Marketing campaign – Fund to be sought from sponsors - Rs 200, 000 for the implementation team and development of the award criteria

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
6. Initiate Demonstration Projects	National Housing Development Company Ltd in the first instance will initiate a demonstration project-but public and private organizations later would follow	No. of Demonstrable Sustainable Buildings	Medium	
7. Develop a Curriculum for Industry Professionals Conduct Training Programs for Industry Professionals	Task Force on Sustainable Buildings in collaboration with University of Mauritius and the Marrakech Task Force on Sustainable Buildings Task Force on Sustainable Buildings in collaboration with Industry Associations and the University of Mauritius Buildings	Curriculum relevant for the local context No. of training sessions conducted No of industry professionals with sufficient knowledge on Sustainable Buildings	High	Recruitment of a local/international consultant. This can be included in the TOR of the consultant recruited to develop the Guidelines See (1) Training of Trainers by an international consultant See(1)
8. Education and Outreach	Ministry of Environment & NDU/Task Force on Sustainable Buildings	Awareness on Sustainable Buildings	Medium	Communication Campaigns – Estimated Cost: Rs 1 million

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
9. Research and Development	University of Mauritius Mauritius Research Council	Analytical model for assessment of economic benefits of sustainable buildings Strategic Research Plan on Sustainable buildings	Medium	Funding for postgraduate study Estimated Cost: Rs 200, 000

Table 4.5: Main Elements of Action Plan on Integrated Solid Waste Management and Recycling

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
1. Recycling of Supermarket Wastes with a focus on Cardboard and Plastics through Voluntary Initiatives	Ministry of Local Government	No. of Supermarkets entering the Voluntary Agreement Amount of supermarket cardboard and plastic wastes recycled and taken out of the waste stream	Urgent	Rs 100,000 for implementation team and stakeholder consultations
2. Diversion of Organic Waste from the Hotel Sector to composting or Anaerobic Digestion through Voluntary Initiatives	Ministry of Local Government	No. of Hotels entering the voluntary agreement Amount of hotel organic wastes diverted from landfills	High	Rs 100,000 for implementation team and stakeholder consultations
3.Promotion of backyard composting - Develop Guidelines for Home Composting - Education and Awareness Campaign including pilot demonstration projects - Train the Trainers Workshops to develop a pool of Home Composting Specialists	MOLG and AREU and University of Mauritius MOLG and MOE AREU and University of Mauritius	Guidelines and link on website of MOLG developed No. of training conducted on backyard composting and no. of people trained No. of pilot demonstration projects implemented Sales of Composters Amount of Household Wastes Composted	High	Rs 100,000 for the development of the guidelines Rs 1.5 million for Awareness Raising Rs 400,000 for workshops to develop pool of compost specialists

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
4. Establishment of Integrated Waste Management system in all Municipalities and District Councils	Ministry of Local Government and Local Authorities	Elaboration of Action Plans in all Local Authorities	High	Rs 1.5 million
5. Study to Determine the Economic, Environmental and Social Benefits of Extended Producer Responsibility on certain key products.	Ministry of Local Government and Ministry of Environment	Feasibility Study and Action Plan for the introduction of the EPR concept	High	Rs 2 million for the recruitment of an international consultant on Extended Producer Responsibility for a period of 3 months

Table 4.6 : Main Elements of Action Plan on Sustainable Public Service Practices

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
1.Sustainable Government Procurement	Ministry of Finance and Economic Development	% of tenders where sustainability is a criterion	High	Funding for International Consultant Rs 2 million
2.Monitoring Energy use and Performance in the Public sector including Annual Reporting and Information Exchange	Ministry of Public Utilities through the Observatoire de L'Energie	No of government departments which have carried out energy use reporting and have energy management plans % reduction in electricity consumption in public institutions	Urgent	Funding for a local consultant through the budgeting line of the Observation de L'Energie Estimate of Rs 500,000
3.Water Savings in the Public Sector	Ministry of Public Utilities	% reduction in water consumption in public institutions	High	MPU to work out the budgetary requirements for the implementation of this sub-unit
4.Sustainable Paper Use	NPCC and Ministry of Local Government	% reduction in paper consumption in public institutions % paper recycled	Medium	Rs 500,000 for an awareness Campaign

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
5.Computer Refurbishment and Reuse	Ministry of Information Technology & Telecommunications ; Ministry of Social Security, National Solidarity and Senior Citizens Welfare & Reform Institutions	No of computers refurbished and distributed	Medium	Rs 200,000 for implementation team Private sector funds for computer refurbishment.
6.Implement Environmental Reporting in Government Departments	Ministry of Environment and NDU	No of Ministries/Departments carrying out environmental reporting	High	Rs 300,000

Table 4.7: Main Elements of Action Plan on Improving Market supply and Demand of Sustainable Products and Services

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
1. Development of a National Eco-Labeling framework with a focus on Agricultural and Food Products	MSB, AREU and APEXHOM	National guidelines for eco-label of agricultural products developed No of producers implementing eco-label guidelines Consumer Demand for Eco-labelled Products	High	Rs 3 million
2. Promotion of sustainable products through financial incentives and improving their visibility	Ministry of Environment and NDU	Sales of sustainable products	Urgent	Rs 500,000 including the development of a database and an information website on sustainable products and sensitization of retailers
3. Capacity Building of Industry in Life Cycle Management and Corporate Sustainability Reporting	MOE, University of Mauritius and private sector organizations	No of people trained on LCM and CSR No of businesses doing LCM and CSR	Medium	Rs 500,000

Table 4.8 : Main Elements of Action Plan on Education and Communication for Sustainable Lifestyles

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
1. Sustain a National Awareness Campaign on Energy savings	Ministry of Environment and National Development Unit (Environment Division), Ministry of Public Utilities, Joint Economic Council (This campaign will eventually be taken up by the Observatoire de L'Energie)	<ul style="list-style-type: none"> - Attitude Surveys on Energy Savings - Average household energy and water consumption; - Average employee energy and water consumption; - Number of people visiting information websites 	Urgent	Funds to be derived from Maurice Ile Durable Fund, Ministry of Environment, and private sector
2. Training on YouthXChange (YXC)	Ministry of Environment and National Development Unit	<ul style="list-style-type: none"> - Number of persons trained - Feedback from people trained and youth - No of youth who knows about the programme - Use of materials by NGOs, Teachers and media 	High	Recruitment of a resource person from UNEP Costs of training programmes and printing of resource materials Total cost estimated at Rs 500,000

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
3. Develop locally adapted education resource materials on SCP for use by schools and NGOs	Ministry of Environment and NDU for the non-formal Sector and the Ministry of Education and Human Resources for the formal Sector.	<ul style="list-style-type: none"> -Number of education resource materials improved/developed -Integration of sustainable consumption concepts in the curriculum - No of NGOs using the education resource materials 	Urgent	<p>Capacity Building of NCCRD panels on Sustainable Consumption</p> <p>Fees for developing adapted education materials and for printing</p> <p>Total Cost estimated at Rs 500,000</p>
4. Capacity Building and Increasing resources available to NGOs and SCP	Ministry of Environment and NDU and UNDP-GEF	<ul style="list-style-type: none"> - Number of NGOs trained - Quality of Project proposals on SCP from NGOs 	High	<p>Recruitment of a local Resource person for a 2 weeks period</p> <p>Costs for training programmes</p> <p>Total Cost estimated at Rs 500,000</p> <p>Additional Funds will be made available for the funding of pilot projects by NGOs through the UNDP GEF small grants program and the Ministry of Environment & NDU.</p> <p>A sum of Rs 2 million to be made available to the MOE for funding some pilot projects.</p>

Project	Implementation Agency(ies)	Measurable Outputs	Priority Urgent : 0-1 yr High : 0-3 yrs Medium > 3 yrs	Indicative Cost (Rs)
5. Develop an education resource material targeting SMEs showing the benefits of resources efficiency	National Productivity and Competitiveness Council (NPCC) and Small Enterprises and Handicraft Development Authority (SEHDA)	<ul style="list-style-type: none"> - Number of SMEs using the resource material - Resources Efficiency in SMEs using the calendar 	Medium	<p>Adaptation, Reproduction and Dissemination of the calendar and users guide for SMEs. The services of a local consultant on cleaner production is required.</p> <p>Total Cost estimated Rs 300,000</p>
6. Awards programs recognising efforts towards sustainable lifestyles	The Ministry of Environment and NDU; Rajiv Gandhi Science Centre and the NPCC	<ul style="list-style-type: none"> - Development of criteria and categories of awards - No of organisations and individuals participating in the Awards Program 	High	<p>Funds for Awards programs will be sought by the institutions launching them</p> <p>A sum of Rs 500,000 is required by the MOE for its awards program.</p>

Table 4.9: Implementation schedule of SCP projects

Urgent (0-1 year)

1. Develop Minimum Energy Performance Standards (MEPS) for Key Household Appliances
2. Capacity Building of Energy Audit Providers and Promotion of Energy Service Companies
3. Launch a National Awareness Campaign on Water Savings
4. Develop a Shared Vision for Sustainable Buildings
5. Recycling of Supermarket Wastes with a focus on Cardboard and Plastics
6. Monitoring Energy use and Performance in the Public sector including Annual Reporting and Information Exchange
7. Promotion of sustainable products through financial incentives and improving their visibility
8. Launch a National Awareness Campaign on Energy savings
9. Develop locally adapted education resource materials on SCP for use by schools and NGOs

High (0-3 years)

1. Develop MEPS for industrial major Energy Consuming Equipment ex: boilers, chillers, electric motors/machine
2. Increase consumer knowledge about benefits of sustainable driving, including providing tools for energy-efficient vehicles selection.
3. Survey on Vehicular Emissions and Capacity Building on emission testing
4. Formulation of a Strategic Research Action Plan on Energy
5. Establish Water Efficient Plumbing Codes and Regulations
6. Development of Rainwater Harvesting Systems
7. Develop Guidelines and a Rating System for Sustainable Buildings
8. Amendment of Building Regulations
9. Develop Public and Private Financial Incentives for Sustainable Buildings

10. Public and industry education on sustainable buildings
11. Diversion of Organic Waste from the Hotel Sector to composting or Anaerobic Digestion
12. Promotion of Backyard Composting
13. Establishment of Integrated Waste Management system in all Municipalities and District Councils
14. Study to Determine the Economic, Environmental and Social Benefits of Extended Producer Responsibility on certain key products.
15. Sustainable Government Procurement
16. Water Savings in the Public Sector
17. Implement Environmental Reporting in Government Departments
18. Development of a National Eco-Labeling framework with a focus on Agricultural and Food Products
19. Training on YouthXChange (YXC)
20. Capacity Building and Increasing resources available to NGOs on SCP
21. Awards programs recognizing efforts towards sustainable lifestyles

Medium (> 3 years)

1. Phasing Out of Incandescent Lamps
2. Regular Energy Auditing to be made mandatory for high energy users
3. Assist SMEs in carrying out energy audits with a targeted scheme
4. Require public bodies to purchase only energy efficient lighting as from 2010 when installing or replacing lighting
5. Influence the consumer to modal shift and behavioral change such as the Park and Ride Schemes, Incentives for car pooling, Bicycle use etc. through education and sensitization campaigns
6. Mandatory Water Efficiency Audits for high water users.
7. Launch an Awards Program and demonstration project for Sustainable Buildings
8. Education and Outreach on Sustainable Buildings
10. Research and Development on Sustainable Buildings

11. Sustainable Paper Use

12. Computer Refurbishment and Reuse

13. Capacity Building of Industry in Life Cycle Management and Corporate Sustainability Reporting

14. Develop an education resource material targeting SMEs showing the benefits of resources efficiency

CHAPTER V

Implementing the programme and recommendations

5. Implementing the Programme and Recommendations

Implementing the programme will be more challenging than developing it and it is important to consider the following:

- Link projects to existing funds / budgets
- Strive for the highest level of official approval
- Be practical so that SCP programmes do not get stalled
- Incorporate in or link to existing strategies
- Evaluate indicators and make continuous updates early in the process

5.1 Monitoring, Evaluation and SCP Indicators

The monitoring and evaluation of the national SCP Programme is a critical step. It demonstrates accountability of stakeholders concerned and demonstrates achievements and worthiness of the programme itself. Continuous monitoring of changes in consumption and production patterns (typically indicator based) needs to be differentiated from periodic evaluation of the programme itself.

The Ministry of Environment will need to measure the function and impact of the SCP activities and the level of success in meeting the defined targets. Once implementation gets under way the outcomes and impacts of the projects must be monitored. Some national indicators measuring outcomes and impacts relevant to SCP such as energy efficiency are already in existence and should be utilised or further developed. Other ways to monitor and evaluate the SCP programme include:

- A National Peer review: This voluntary form of monitoring facilitates dialogue and information sharing but can be resource intensive
- Internal Reviews: A review conducted by the implementing agencies can look at progress on the SCP commitments and target delivery and spur further action if targets are not being met. But it lacks the element of independence.

- External Auditing: This will make government bodies accountable for the SCP objectives and targets.
- Budgetary reviews: Government departments could account for their work on SCP through the Ministry of Finance and the Performance Based Budgetary system. This has the advantage of being able to argue for resource allocations on SCP projects. But this approach is not always able to consider other stakeholders.
- Indicator-based quantitative monitoring: This could be rigorous if indicators are linked to targets identified during the development of the action plans.
- Monitoring NEAP and other existing strategies: National Strategies such as the NEAP generally include some monitoring approaches and should be considered when monitoring the SCP programme. This will save on time and resources but the monitoring might not focus on the targets of the SCP programme.

A combination of the above named approaches would probably lead to the most desirable results. ***It is recommended to adopt a system of internal and budgetary reviews through the Programme Based Budgeting and Performance Monitoring Processes as well as indicator-based quantitative monitoring where appropriate.***

The development of effective SCP-related indicators has been recognized as a key enabler to the successful implementation of SCP programmes and projects. The primary focus of SCP-related indicators is on measuring progress towards more sustainable patterns of production and consumption. Recognising that what goes unmeasured is often ignored, indicators are an important tool both for indicating progress towards the specific objectives of a particular programme, and for prompting appropriate response strategies. In the context of SCP, indicators can also indicate whether a society's consumption and production patterns are bringing about more socially equitable and environmentally sustainable development. In that regard, indicators of SCP are inextricably linked to broader sets of indicators on environment and sustainable development, including poverty reduction.

One approach to indicator criteria is that developed by UNDESA, who have adapted the Bellagio Principles when developing their criteria for indicator selection. These criteria were largely used in the selection of SCP-relevant indicators for Mauritius and include:

- (i) national in scale
- (ii) relevant for measuring progress
- (iii) simple, clear and unambiguous
- (iv) realizable within capacities of national governments
- (v) conceptually well founded
- (vi) limited in number, but broad in coverage
- (vii) represent international consensus
- (viii) based on readily available data or could be made available at reasonable cost
- (ix) of known quality and updated at regular intervals.

One additional criterion when developing the set of indicators is that it should be linked to the national SCP programme. Whilst Mauritius currently already monitors a thorough mix of cross-cutting SCP-related indicators, there is no specific set of SCP indicators. The environment indicators from the Central Statistics Office are not necessarily included in the national strategies and action plans. A number of international organizations as well as some European countries have developed sets of indicators for SCP, mostly as part of broader indicator sets for environment and sustainable development. Some examples of sets of SCP indicators include:

- The United Nations Commission on Sustainable Development indicators of Consumption and Production patterns, finalized in 2006. It consists of a set of 12 SCP core indicators, which is part of a larger set of 96 indicators of sustainable development. These indicators are “direction-based” and have the potential to be linked to policy at the national level.
- Organisation for Economic Cooperation and Development (OECD) set of sustainable household consumption indicators in 1999. The framework includes a total of 45 indicators. The OECD is currently working on a new set of sustainable consumption

indicators. In 2002, the OECD also developed a detailed framework of 31 decoupling indicators.

- European Commission's Statistics Office (Eurostat) has developed a set of sustainable development indicators under 10 themes which include one on SCP.
- United Kingdom and Belgium set of sustainable development indicators include a set of 25 SCP indicators.

The above existing sets of SCP indicators include an emphasis on environmental and economic considerations with little attention to relevant social and international issues. It could also be important to consider other existing indicator sets on ecological footprints, quality of life and human development when measuring progress towards SCP. Furthermore, the indicators generally do not take account of environmental limits-a relative positive movement in a particular indicator may still represent an unsustainable situation. There is thus a need to further develop and expand the set of available indicators that reflect the ecological, social, economic and international dimensions of consumption and production patterns from which countries could select and adapt in creating their own indicator sets. To support developing countries, UNEP has prepared a guidance document that includes a framework and methodology for the selection of a set of developing-country relevant indicators.

Critical challenges in developing the set of SCP indicators for Mauritius include:-

- Keeping the indicators small in number while at the same time covering an adequate spectrum of issues and challenges
- Finding indicators that operate at national level but that influence individual production and consumption choices
- Providing meaningful information on trends to decision-makers , including a clear signal on whether development is heading in the right direction
- Identifying indicators that are measurable in the context of resource constraints that may impede access to useful data
- Finding an appropriate balance between indicators on absolute environmental limits and "efficiency-based" indicators

- Ensuring that there are sufficient resources for regular monitoring of the indicator.
- Linking to existing indicator sets-the SCP indicators should be in line with existing national indicator frameworks.

As per the UNEP Guidance Framework on SCP indicators for developing countries and the SCP Indicator Compass, four perspectives must be taken into consideration:

- Compliance: Indicators that reflect on compliance with national and international legislation relating to sustainable development, for example ‘Number of government pollution / waste / water control officers per number of companies and GDP’;
- Efficiency: Indicators that reflect on material, energy and water intensity of products and processes, for example ‘Waste and hazardous waste per unit product or turnover and by sector’;
- Connectivity: Indicators that reflect on individual, organisational and national access to information, knowledge, transportation, communications and other social networks, for example ‘Access to transport & communications networks (%)’;
- Critical stock: Indicators that reflect on the degree to which production and consumption systems are transforming to take account of the need to restore (or at least not systematically degrade) critical stocks of natural capital, for example ‘% contribution of small scale, local-level renewable energy initiatives to national energy supply’

Taking into account the above and the priority areas of the SCP programme identified during the Scoping exercise, a set of 30 SCP indicators are recommended in Table 5.1.

This SCP indicator set has also been proposed so as to spark interest among politicians and members of the public.

The timeframe for monitoring and reporting these indicators is on a yearly basis. Many of the indicators are either already being compiled by the Central Statistics Office or the information readily available from relevant Ministries. 12 indicators for which data will specifically have to be compiled by the relevant Ministries include:

- Investment in renewables as % of total energy investment(MPU)
- % post-consumer waste recycled(MOLG)
- Domestic Material intensity of consumption (tonnes per capita)(CSO)
- Annual withdrawal of ground and surface water as a percentage of total available water(MPU)
- Proportion of renewable sources per total supply of primary energy(MPU)
- % contribution of small scale local – level renewable energy initiatives to national energy supply(MPU)
- No of cases of non-compliance with standards or permit conditions(MOE)
- No of enforcement officers for the EPA and environmental laws per GDP(MOE)
- No of membership in social and environmental organizations (MOE)
- No of 100 largest company annual reports containing social and environmental information(MOE)
- CSR investment as % of profit or turnover(MOF)
- % people using public transportation networks (MPI)

Effective implementation of this SCP indicator framework is dependent upon the existence of an appropriate institutional structure and on access to sufficient human, technical and financial resources. A partnership approach must be established involving the participation of government, business and civil society organizations. ***The Ministry of Environment and NDU must set up a multi-stakeholder committee-which could be called a Monitoring and Evaluation Cell - to implement and improve this SCP indicator framework through a process of regular monitoring and evaluation.***

Table 5.1: Recommended set of 30 SCP indicators for Mauritius

Efficiency - Based	Critical Stock
<ul style="list-style-type: none"> - Energy Consumption per capita and GDP - GHG emissions per GDP by Sector - Investment in renewables as % of total energy investment - Water use and water withdrawals per GDP - Fertilizer and pesticide use per agricultural production - Waste to landfills and incinerator per GDP - Collected domestic waste per capita - % post-consumer waste recycled - Domestic energy consumption per capita - Domestic water consumption per capita - Material intensity of consumption (tonnes per capita) 	<ul style="list-style-type: none"> - Annual withdrawal of ground and surface water as a percentage of total available water - Proportion of renewable sources per total supply of primary energy - Catch per Fisherman-Day - Land use by category - Respiratory diseases registered in government hospitals - Water borne diseases registered in government hospitals - % contribution of small scale local – level renewable energy initiatives to national energy supply
Compliance	Connectivity
<ul style="list-style-type: none"> - No of cases of non-compliance with standards or permit conditions - No of enforcement officers for the EPA and environmental laws per GDP - No of community complaints regarding environmental conditions 	<ul style="list-style-type: none"> - Human development index (HDI) - Gini coefficient - Graduation from tertiary institutions - No of annual company reports containing social and environmental information - CSR investment as % of profit or turnover - No of companies certified ISO 14000 - % people using public transportation networks - Internet subscribers % - No of membership in social and environmental organizations

Increasing capacity to sustain mutually – beneficial relationships

Changing what is done and how it is done

5.2 Role of Key Stakeholders and Devising Participatory schemes

A SCP programme presupposes that efforts are informed by a holistic approach and build on cooperation between different sectors. This implies that responsibility lies with everyone: central government, local authorities, business sector, organisations, the research community and individuals/households.

Progress in introducing SCP is conditional on the cooperation of individual stakeholders.

The dialogue launched within the working groups has indicated that:

- It is necessary to clarify the terms and concepts associated with SCP
- Different point of view exist in respect of the policies and instruments supporting SCP; the principal objective of the discussion is to understand the approach of stakeholders and the values which they use as the point of departure-then it will be possible to agree on several priorities in which joint efforts will bring the greatest value added
- There are many examples of support for SCP, but the transfer of relevant information in this respect is inadequate.

It is recommended that the multi-stakeholder consultation process that started during the development of the programme be continued in the various Task Forces or Implementation teams.

It is recommended that the Ministry of Environment and NDU incorporates a link to SCP on the Ministry's website to include a database of on-going SCP activities and best practices. Examples of international best practices on SCP can also be disseminated on the website so as to stimulate debate and illustrate the potential of the SCP concept amongst stakeholders.

Another recommendation is that the Ministry of Environment and NDU, with the help of the University of Mauritius and the Mauritius Research Council, carry out amongst targeted groups annual surveys on their understanding and attitudes towards SCP issues. Simple methodologies for surveys will need to be devised for that purpose.

An Annual SCP Newsletter on on-going SCP Activities, Public Awareness Surveys and SCP Indicators must be prepared by the MOE for circulation to all stakeholders, including the media, so as to make stakeholders aware of the programme including the general public and to stimulate national debates on the consumption and production patterns and best practices that need to be scaled-up.

The activities organized by the MOE during the celebration of World Environment Day every year should include SCP as one of the main themes. The progress of the SCP programme should also be taken on board in the National Network on Sustainable Development.

5.3 Specific Role of the Media

The media are a means for the transfer of information to consumers – television, radio and the press are nowadays widely available and are the principal instrument for the dissemination of advertising and promotion of goods and services. The media and information play a key role in the area of educational and information activities in general, and in changing consumption patterns in particular. The problem is that the potential of this instrument is not being fully and actively exploited while problematic advertising is widespread.

It is very important for the success of a SCP programme to create the conditions that would make it possible to substantially extend the space available for SCP themes in the media, whether in the form of articles, discussions, advertisements

or TV spots and programmes. The MBC in particular should provide better conditions for topics of public benefit. Short informative practical messages on SCP themes at prime time are an effective tool. However the present advertising rates at prime time is a major constraint for sustained education and awareness raising campaigns.

It is recommended that high level discussions be held between Government and the MBC so that the space at prime time for SCP messages be made available on more advantageous terms. Alternatively Government can consider implementing a tax of 1% on advertising and use the money collected to produce and air adverts on sustainable lifestyles.

It is also recommended that the Ministry of Environment liaise regularly with newspapers journalists covering environment issues so as to communicate the objectives, targets and achievements of the SCP programme.

5.4 Management, Coordination and Funding of the Action Plan

For the effective management of the programme, it is essential to

- Clearly assign responsibilities for individual programmes
- Establish and train a dedicated team within the Department of Environment (DOE) to ensure overall coordination and to provide assistance to implementing Ministries
- Ensure a sustained capacity building effort on SCP
- Set achievable goals and monitor progress through regular reports that include progress against agreed indicators
- Provide financial support to concrete pilot projects

The above implies that the *SCP programme activities can best be implemented within a series of projects implemented by the relevant institutions and*

coordinated by a dedicated team within the DOE. It will be the responsibility of the implementing agencies for each programme to complete detailed project design and to take forward project implementation and they should be supported by the dedicated team within the DOE. It is recommended for the Ministries to designate a focal point for SCP that facilitates the inter-sectoral cooperation in the context of the implementation of the SCP program.

The coordinating body (MOE) and the implementing agencies need to continuously foster interest in the programme and its various actions. High level support and strong coordination are fundamental to the success of the SCP programme.

It is recommended that the Advisory Committee set up by the MOE for the development of the SCP programme be re-named as the SCP implementation committee which will coordinate the implementation of the projects. This committee will comprise relevant implementing agencies and will meet on a regular basis to review progress on the programme implementation and to consider policy changes.

The total cost of the SCP programme is estimated to be approximately Rs 35 million with much of the expenditure falling in the first 3 years. **The following mechanisms for funding the programme are:**

- Direct funding by government organisations through the programme-based budgeting process and through taxation of various types by the Ministry of Finance and Economic Development
- Making use of the “Maurice Ile Durable” Fund for specific projects
- The SCP Action Plan is a sort of a “brokering system” and an ideal instrument to link the demand for SCP technical support and the supply of technical /financial services by development cooperation agencies. There is a need to involve Development Cooperation Agencies to make sure that SCP is one of the criteria for funding.

- Liaising with the Marrakech Task Forces to identify opportunities for technical assistance and funding.
- UNEP is planning to provide an initial financial support to 3 pilot projects in Africa. Each project would be allocated a funding of about 25000 USD. Secondly the UNEP centre on Sustainable Consumption and Production, based at Wuppertal Institute in Germany will provide technical support and input to the MOE on developing the pilot projects into full project documents that could be submitted for fund mobilization by countries.
- Sponsorship by the private sector through their CSR activities

5.5 Revising the Strategy and on-going consultation

We live in a rapidly changing global community and in a rapidly developing country. Environmental issues evolve over time and scientific understanding of environmental matters improves. To devise an immutable SCP programme in this dynamic situation would be unwise. The SCP programme would require updating every five years in light of new knowledge and developments.

Also a periodic, high-level review of implementation of the different elements of the SCP programme through the Advisory committee is essential. This review can be submitted to Cabinet and this would enhance the accountability of the different public agencies responsible for implementation.

Chapter VI

Conclusions

6. Conclusions

SCP is about fulfilling our development aspirations on a more resource-efficient basis (decoupling economic growth from resource use and environmental degradation). The five key challenges to change unsustainable consumption and production patterns can be summarized as follows:

- Leveraging innovation: stimulating the development and commercialization of low carbon, energy and resource-efficient technologies, products and services as well as innovating for new institutional and social frameworks.
- Better products: creating a dynamic market for better performing products through incentives
- Efficient and Cleaner Production: increasing the eco-efficiency of Mauritian production, especially in SMEs
- Smarter Consumption: changing behaviors for sustainable lifestyles through education and awareness-raising
- Government and private sector providing the right infrastructures for sustainable lifestyles (such as mass transport systems, recycling centers, renewable energy etc)

The SCP programme aims at addressing the above challenges and to introduce a long-term process that has to be owned and led by national actors. Critical processes for the success of this programme are:

- the political process and the need of a strong political commitment from the top leadership as it helps with the integration process and the allocation of funds
- the participatory process and the need to develop mechanisms for participation such as roundtables, workshops, public consultations and multi-stakeholder dialogues, and
- the resource mobilisation process from both domestic and international sources.

The emphasis in the development of this SCP programme has been the identification of concrete SCP pilot projects for implementation so as to make SCP visible at an early

stage. Grass-root involvement is also necessary and there is a need to support community pressure groups promoting SCP through pilot projects. Lessons learnt from the pilots should help in sectoral policy and strategy review and ultimately in mainstreaming SCP in national policies & strategies.

Public communication and advertising have a key role to make SCP understandable and fashionable. Communication campaigns on SCP will have to be devised so that it is understood in the context of other issues in which consumers are more interested such as climate change, economic growth and poverty reduction etc.

The SCP Programme will be submitted for approval by Cabinet. The implementation agencies will then be able to complete detailed design and to take forward the implementation of the programme. It relies on effective partnerships between all stakeholders.

The on-going re-structuring of the economy of Mauritius offers an opportunity to establish more resource efficient, safe and sustainable production and consumption patterns. There are many promising opportunities to “leapfrog” and avoid many of the production and consumption-related problems common in developed countries. The SCP programme will enable this “leapfrogging” and help us to achieve **“more well being with less”**. It will help in the implementation of the “Maurice Ile Durable” project initiated by the Prime Minister of the Republic of Mauritius.

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For more information on the Marrakech Process please see:
<http://www.unep.fr/pc/sustain/10year/home.htm>