

Republic of Mauritius

National Synthesis Report 2012









Prime Minister Republic of Mauritius

Foreword

The National Synthesis Report 2012, prepared in the context of the United Nations Conference on Sustainable Development (RIO+20), highlights the major milestones that Mauritius has achieved in its quest for sustainable development. The Report gives an overview of the measures taken for national economic development, while sustaining the country's natural environment and ensuring optimum welfare of its people. It also charts the way forward.

Twenty years ago, the international community was convened in Rio de Janeiro, to address urgent problems relating to environmental protection and socio-economic development. In June this year, world leaders will report on progress made at national level and discuss ways to enhance sustainable development, the green economy and the eradication of poverty, amongst other issues.

Mauritius, a Small Island Developing State with limited resource base, made the choice to follow the path of sustainability since the early 90s. We know that there can be no sustainable development without poverty alleviation, a healthy environment, a well-educated population, lasting prosperity and equity. Good governance, transparency and fairness have always been high on our development agenda.

Mauritius has a culture of meaningful and constructive stakeholder participation and involvement in the decision-making process. There is a strong focus on public-private partnership and close collaboration with civil society in nation building.

The "Maurice Ile Durable (MID)" project which defines the vision of modern and sustainable society is being implemented in a participative and democratic manner, reflecting the aspirations of the population. My Government is committed to integrating Sustainable Development concepts and norms into its overall policies. The MID vision will be further translated into concrete actions through the MID National Policy, a 10-year strategic framework and a 3-year Action Plan by July 2012.

We look forward to the outcome of the RIO+20 Conference to guide us in our efforts towards improving governance and in meeting the new and emerging challenges of sustainable development.

Dr the Hon Navinchandra Ramgoolam, GCSK, FRCP Prime Minister

10 May 2012

Preface by the Minister of Environment and Sustainable Development

Twenty years after the 1992 Rio Earth Summit, nations are again on the road to Rio for the United Nations Conference on Sustainable Development (Rio+20). This major global conference to be held from 20 - 22 June 2012 in Brazil is pursuant to the United Nations General Assembly Resolution 64/236.

The expectations of Rio+20 are three-fold, namely: to secure renewed political commitment for sustainable development, to assess progress made and take stock of gaps and challenges in the implementation of the recommendations of major sustainable development summits, and to address new and emerging challenges.

The Rio+20 Conference will focus on how to build a green economy to achieve sustainable development through improved coordination. Participants from governments, private sector, NGOs and other stakeholders will meet in Rio for a decisive push towards sustainable development.

At national level, preparations for Rio+20 started last year with an assessment of progress achieved since the Earth Summit of 1992. In fact, progress in sustainable development has been prevalent across all sectors and the development of coherent policies and strategies that espouse the values and principles of sustainable development. As part of our commitments taken at World Summit on Sustainable Development held in Johannesburg in 2002, we have developed a National Programme on Sustainable Consumption and Production for Mauritius in 2008 and initiatives are being implemented. In line with Government's Maurice Ile Durable concept, we are in the process of developing a ten-year strategy and action plan to help meet our sustainable development objectives.

I strongly believe that Rio+20 will provide a new and historic opportunity to define pathways to a more sustainable world. However, to achieve this goal, efficient and effective contributions from national governments and international funding are crucial. Therefore, in addition to summarising Mauritius' progress since 1992, this National Synthesis Report also recommends how to further advance towards sustainable development with special focus on the Rio+20 themes. Most importantly, it is imperative to have effective means of implementation, including technology transfer and capacity building as well as financial resources mobilisation so as to deliver a sustainable 21st century and greener economies globally.

Hon. Devanand Virahsawmy, GOSK, FCCA Minister of Environment & Sustainable Development

10 May 2012

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List of Abbreviations

ACP African Caribbean Pacific

AFD Agence Française de Développement APRM African Peer Review Mechanism BPoA Barbados Programme of Action

CO₂ Carbon dioxide

CPE Certificate of Primary Education
CSR Corporate Social Responsibility

EIP Environment Investment Programme

EPA Environment Protection Act

EU European Union

FAO Food and Agricultural Organisation

GDP Gross Domestic Product GEF Global Environment Fund HSC Higher School Certificate

ICT Information and Communication Technology

IPR Intellectual Property Rights

MEO Mauritius Environment Outlook Report

MID Maurice Ile Durable

NDS National Development Strategy
 NEAP National Environmental Action Plan
 NEF National Empowerment Foundation
 NES National Environmental Strategies
 NGO Non-Governmental Organisation

OECD Organisation for Economic Cooperation and Development

SADC Southern African Development Community

SC School Certificate

SD Sustainable Development
SIDS Small Island Developing States

UNDESA United Nations Department of Economic and Social Affairs

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNESCO United Nations Education, Scientific and Cultural Organisation
UNFCCC United Nations Framework Convention on Climate Change
UNIDO United Nations Industrial Development Organisation

UoM University of Mauritius

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Executive Summary

Twenty years after the 1992 United Nations Conference on Environment and Development (Rio Earth Summit), the global community will meet again in Rio to take stock of progress achieved by countries in fulfilling the commitments taken at the Earth Summit. The United Nations Conference on Sustainable Development (Rio+20 Conference), which will be held in Rio de Janeiro, Brazil in June 2012, aims to assess progress and address implementation gaps and emerging challenges. It will do so in the context of two themes: "a green economy in the context of sustainable development and poverty eradication" and "the institutional framework for sustainable development".

This National Synthesis Report is the outcome of the national preparatory and consultative process. It has been prepared on the basis of the findings of a stocktaking exercise conducted through a desk review of existing national documents and a series of consultations with key stakeholders.

The Republic of Mauritius is anchored on a strong democratic foundation. The system of Government is based on the United Kingdom Westminster model of parliamentary democracy. All ministries have the responsibility of implementing sustainable development. In spite of its small size, a limited natural resource base and remoteness from world markets, Mauritius has achieved remarkable success over the years. This progress has been possible through massive investment in all sectors coupled with institutional and economic reforms. However, the country has successively been facing a number of threats linked to the end of trade preferences, namely the dismantling of the Multi-fibre Agreement in 2005 and the 36% reduction on guaranteed sugar price. The country is also facing the impacts of global shocks linked to the volatility of energy and food prices as well as from the global economic and the prevailing Euro Zone crises.

In 2005, as part of a vast economic reform, the Government of Mauritius embarked on a comprehensive four-plank 10-year reform programme aimed at fiscal consolidation and public sector efficiency, promoting trade competitiveness and investment opportunities and democratising the economy through participation, social inclusion and sustainability to boost economic growth.

Two consecutive National Environmental Strategies have helped the country ensure environmental sustainability by mainstreaming environmental concerns into economic and social development. The National Environmental Strategies have also helped the country in defining the institutional and legal frameworks to ensure environmental protection and pollution control. The Environment Protection Act together with a series of environmental laws, form a very comprehensive legislative framework dealing with management and protection of the environment, and promotion of sustainable development. Other projects and programmes have also been implemented to ensure good environmental performance.

Mauritius has a well-established welfare system. Free health care services and education to the population have contributed significantly to the economic and social advancement of the country. Support to inclusive development, gender equality and women empowerment is being addressed through the development of strategies, action plans and activities geared to meet the social targets set by Government. To facilitate social integration and empowerment of vulnerable groups, a new Ministry of Social Integration and Economic Empowerment has been set up in 2010.

The challenges for Mauritius include the need to reduce its heavy dependence on food and oil imports by encouraging local food production and developing local renewable energy sources. Other measures include ensuring an adequate supply of clean water to all its citizens in the context of a changing climate, curbing the increasing incidence of non-communicable and other diseases, alleviating poverty and decreasing social exclusion and sustaining free and quality education. At the same time, the country has to build extra resilience to counter further external shocks (including climate change), to protect its physical, social and cultural environments, to preserve its native biodiversity, to establish a strong research and technology development culture and to explore the new opportunities offered in the marine and other emerging sectors. To face these major challenges, Mauritius, as a small island developing state, has to rely on support from its development partners and international agencies,, and the collaboration of friendly countries through bilateral and multilateral cooperation. In order to face new and looming challenges and crises and to enable the transition to a green economy, eradicate poverty and achieve sustainable development, there is need for substantive amounts of additional resources.

Government is putting strong emphasis on greening the economy and implementing various sustainable development programmes such as: improving energy efficiency, increasing the share of renewable energy, alleviating poverty and setting up other social programmes. A number of sectoral strategies and action plans have been developed and are being implemented to achieve environmental sustainability in various sectors namely: land, biodiversity, forests, wastewater, solid waste, coastal zone management, tourism and energy among others. However, capacity and financial constraints are major drawbacks to implementation.

New challenges call for enhanced integration and cooperation among ministries, holistic and coherent policies in order to realise the opportunities that a transition to a green economy could provide. There is a need to identify enabling elements that can facilitate integration on a sustained basis. Achieving expected benefits depends on more effective linkages between policies and their implementation, as well as better coordination among government departments, local authorities, the private sector, civil society organizations and the community at large. Improved knowledge is essential for effective implementation of policies. As a result, continuous capacity development and institutional strengthening are necessary to reinforce human resources for sustainable development.

There is strong political will and commitment to further advance sustainable development. Maurice Ile Durable (MID) is the new long-term vision for achieving sustainable development and making Mauritius a model of sustainable development, particularly in the context of SIDS. The MID encapsulates five major themes: Energy, Education, Environment, Equity and Employment (the 5Es). Presently, the MID policy, strategy and action plan, which form part of the sustainable development framework, are being developed.

The MID framework will be a major turning point for Mauritius to move resolutely and steadily towards sustainable development and a greener economy. However to enable this transition, the country will need technical and financial assistance including private investments as well as funding from international sources. Concerted efforts and actions of the global community is a pre-requisite for achieving sustainable development goals.

Introduction

At the 1992 United Nations Conference on Environment and Development (Earth Summit) held in Rio de Janeiro, Brazil, Governments adopted sustainable development as the new development paradigm to address environment and development issues in a holistic and integrated manner. The Earth Summit had three major outcomes:

- the Rio Declaration on Environment and Development consisting of 27 principles to ensure sustainable development governance;
- Agenda 21, the blueprint of action to guide future sustainable development around the world;
 and
- three global conventions on climate change, biodiversity and desertification.

The international community also formally recognised the specificities of Small Island Developing States (SIDS). This led to the 1994 Global Conference on the Sustainable Development of SIDS and resulted in the adoption of the Barbados Programme of Action for the Sustainable Development of SIDS (BPoA). The 2005 Mauritius International Meeting, which resulted in the Mauritius Strategy for Implementation, strengthened commitment of the international community to support sustainable development implementation in SIDS.

Twenty years after the Earth Summit, progress to successfully implement sustainable development worldwide is still short of expectations. Food security, the energy crisis, climate change and the financial and economic shocks are exacerbating progress in sustainable development implementation. In such a situation, SIDS are more vulnerable.

The United Nations Conference on Sustainable Development (Rio+20) offers a unique opportunity for the international community to secure renewed political commitment for sustainable development. The institutional framework pertaining to sustainable development has to be reviewed and strengthened to address implementation gaps and emerging challenges. This will be done in the context of the two themes: "a green economy in the context of sustainable development and poverty eradication" and "the institutional framework for sustainable development".

Mauritius is strongly committed and actively engaged in the implementation of the recommendations of the Earth Summit. For our national preparatory process for Rio+20, there has been strong involvement of all stakeholders such as governmental institutions, the private sector and the civil society. This National Synthesis Report is the outcome of a stocktaking exercise and it reflects a situational analysis of sustainable development in Mauritius. It also highlights gaps and challenges that have stalled progress and suggests the way forward to enhance the institutional framework, address poverty alleviation and greening of the economy.

1. SITUATIONAL ANALYSIS

1.1 Economy

The past decades have seen important changes in the way Mauritius is approaching its future and sustainable development has now firmly emerged as the paradigm in which the country's future is rooted (Ministry of Environment and Sustainable Development, 2011). In the mid 1990s, Mauritius embarked on a radical transformation from a sugar-textiles-tourism economy to a high-tech, innovative financial and business services hub. The roadmap was the "Vision 2020: The National Long-Term Perspective Study", a plan which became the core development strategy of every government since 1997 (World Bank, 2007). The plan favours the interactions between the economy and the environment, and sets out a scenario for development based on gains in agricultural efficiency, tourism, industrial production, and development of financial and value-added services. The Government's Development Strategy thus aimed at transforming Mauritius into a globally competitive economy through diversification into a sugarcane industry, tourism, export-oriented manufacturing, export services, financial services, renewable energy and Information and Communication Technology (ICT).

Two subsequent action plans were prepared to implement Vision 2020, namely "Into the 3rd Millennium" and the "New Economic Agenda". As a result, the sugar and textile sectors were restructured; an offshore financial sector was established utilizing a network of double tax treaties; firms upgraded their technologies, some with assistance from the Technology Diffusion Scheme; the telecommunications system was strengthened and liberalised; new incentive schemes were offered to IT and pioneer firms; a Cyber Park was established, state secondary school capacity was doubled; port facilities were modernised and a Freeport was established, among others (World Bank, 2007).

Since the 1990s, successive governments moved in the direction of openness, diversification and service sector development. In 2006, a package of policies and institutional reforms were announced, deepening many of the efforts initiated in the preceding years. The strategy was articulated around four themes: enhancing competitiveness; consolidating fiscal performance and improving public sector efficiency; improving the business climate and widening the circle of opportunity through participation, social inclusion and sustainability. The economy reacted favourably to the reforms by displaying recovering growth and employment, which helped to consolidate consensus and public support around the government's program. Implementation of institutional and policy reforms have been very successful, and fundamental improvements to the macroeconomic policy framework and to the overall regulatory environment have taken place (World Bank, 2010).

Despite the inherent constraints of a small island state and a resource-scarce economy, the country has achieved remarkable economic success over the years. The Mauritian economy is one of the fastest growing in Sub-Saharan Africa and is classified by the World Bank as an upper-middle income economy. As from 2006 to 2008, annual GDP growth rate has been in the order of 5% to 6%, and the per capita income increased to US\$ 7,500.

However, this progress has been at the expense of significant financial investments for the importation of basic needy items, which have resulted in the increase of food and energy import bills and a worsening trade deficit. In addition, the major challenge facing the country remains its vulnerability to external shocks. The specificities associated with being a SIDS makes the country highly vulnerable to exogenous economic shocks, changing global climate, and shifts in primary production. As gauged by an

openness ratio – measured in terms of total visible trade to GDP – of around 120%, Mauritius has a relatively high degree of reliance on international trade and this dependence on external markets poses a major challenge to the country. Considering the notable linkages of the Mauritian economy with European countries, the downturn in economic activity in the latter is likely to further affect the Republic. Mauritius' trade deficit is widening sharply year after year, mainly due to rising fuel and food costs. The deficit widened throughout 2010 and from January to September 2011, the trade deficit was 5.3% higher than for the corresponding period of 2010 (Statistics Mauritius, 2011). The balance of trade deficit is anticipated to deteriorate to nearly Rs 83 billion in 2012 – representing some 24% of GDP – in line with further pressures on the terms of trade amidst adverse exchange rate dynamics on international markets and indications that oil prices could remain elevated due to supply-side developments.

With the new millennium crises and its vulnerability as a SIDS to these external shocks, Mauritius depends heavily on the support of its regional and international development partners to promote sustainable development with the appropriate interactions between the economy and the environment.

1.2 Environment

The Ministry of Environment and Sustainable Development is the apex ministry for environmental management in Mauritius. Since 2010, the portfolio of the Ministry of Environment has been broadened to include Sustainable Development. The Ministry of Environment and Sustainable Development works in close collaboration with other technical-line ministries, also known as Enforcing Agencies, to ensure environmental protection and management.

The Environment Protection Act (EPA) 2002 is the main legislative framework to support environmental management in Mauritius. It provides a whole range of tools from command and control (standards and regulations), economic instruments (levies), development control (Environment Impact Assessment and Preliminary Environment Report) and other voluntary tools (Environment Management Systems, awareness-raising and sensitisation, among others). The EPA 2002 also makes provision for appropriate platforms/fora at different levels to support environmental management and good environmental governance. Such fora include the National Environment Commission, the National Network for Sustainable Development, the Environment Coordination Committee, the Environment Impact Assessment Committee, and the Multilateral Environmental Agreements Coordination Committee. These fora are based on broad-based stakeholder participation, including the private sector and civil society. Environmental management in Mauritius therefore reflects transparency and good governance.

Environmental sustainability in Mauritius is based on the Rio Principles which include the precautionary principle, the prevention approach, the polluter pays principle, environmental education and awareness as well as environmental governance and accountability.

A first National Environment Strategy and Action Plan (NES 1 & NEAP 1) were developed in 1988 for the period 1988 - 1998. The NEAP 1 developed the policy, institutional and legislative framework for environmental management in the country and was implemented within the first Environment Investment Programme (EIP 1). Priority areas for environmental protection and management under the NEAP 1 also included physical planning, water resources management, biodiversity conservation and restoration, solid waste management and sanitation, amongst others.

A second NES and NEAP were then developed for the period 1999 - 2009. NES 2 and NEAP 2 focused on projects geared towards improving environmental quality. Projects such as monitoring of water resources, setting up of a cleaner production centre, a framework for Integrated Coastal Zone Management, the demarcation of Environmentally Sensitive Areas, development of an Environment Information System and industrial management, were given high priority. In a second phase, projects were geared towards integrated air quality management, industrial pollution prevention, quality and ecological assessment of fresh water bodies, facilitation of sustainable environmental practices, reforming environmental management framework, capacity building of environmental agencies, and environmental education awareness and community empowerment.

Sectoral policies have also been developed across various thematic areas such as energy, coastal zone management, land, biodiversity, forests, wastewater, solid waste, and tourism among others. Some of these policies include: the National Biodiversity Strategy & Action Plan (2006-2015), the National Forestry Policy (2006), the Long Term Energy Strategy (2009-2025), the Islets National Park Strategic Plan (2004) and the National Programme on Sustainable Consumption and Production (2008-2013) for Mauritius.

Water

Mauritius is a water-stressed country and water scarcity is a serious constraint for sustainable development of the island. The observed decrease in rainfall, increase in rainfall variability, increase in the occurrence of high-intensity rainfall and the shift in the onset of the summer rains have impacted negatively on the country's water resources. Since the past two decades, significant investment has been made to increase supply and improve water quality. An Integrated Water Resources Management Plan is being developed to improve water management.

Land use planning

The National Development Strategy (NDS) was approved in 2003 and promulgated in 2004 through the Planning and Development Act 2004. Policies and recommendations of the NDS were successfully translated into local development plans in 2006, and are regularly reviewed to be in line with Government's socio-economic objectives. A series of Planning Policy Guidance have been prepared to assist stakeholders in complying with the principles of good design, appropriate siting and location of activities. The ongoing Land Administration, Valuation and Information Management System programme is aimed at establishing the foundation of a modern and effective land administration and management system for Mauritius. The UNDP/GEF/FAO funded Sustainable Land Management programme completed in 2011 will contribute to the long term goal of maintaining productivity and ecological functions of agricultural, pasture, forest and other terrestrial ecosystems in Mauritius and Rodrigues.

Energy

Mauritius is still heavily dependent on fossil fuels. In 2009, 82.5% of the total primary energy requirement was met by imported fuels, while the remaining 17.5% was supplied by local renewable sources such as bagasse, hydro, wind and fuel wood. Import of coal has considerably increased (from 8% to 27%) and the largest consumers of energy are the transport and manufacturing sectors, which, in 2009, accounted for 48.4 % and 27.7% of the total energy consumption, respectively. A Long Term Energy Strategy (2009-2025) has been developed to ensure energy security and promote the use of renewable energy. A target of achieving 35% renewable energy by 2025 has been set. An Energy

Efficiency Management Office has been set up to promote efficient use of energy, reduce carbon emission and protect the environment.

Biodiversity

Mauritius is characterized by a high level of endemism and has the third most endangered flora in the world. The extent of forest cover for Mauritius is around 30% and native forest is less than 2% of the total area of the island. Policies and Strategies for the conservation and sustainable use of biodiversity have been adopted and are at various stages of development. The National Biodiversity Strategic Action Plan (2006-2015); the National Invasive Alien Species Strategy and Action Plan (2009-2018), Islet National Park Strategic Plan (2004) and Management Plans for offshore islets are the main strategies that are in place for biodiversity protection. As a small island developing states Mauritius has so far saved three endemic bird species (Kestrel, Pink Pigeon, and Echo parakeet) from the brink of extinction, proclaimed three Ramsar sites of international importance, ten national parks and will be rehabilitating 400 ha of invaded forests into native forests under the Protected Area Network Project.

Coastal zone management

The management tool for regulating large scale development in the coastal zone is already in effect. Many coastal activities are regulated through the Environment Impact Assessment/Preliminary Environment Report mechanism as well as the Building and Land Use Permit requirements, which also take into consideration the provisions of the Planning Policy Guidelines, Outline Schemes on setbacks, plot coverage and development density of coastal development. An Integrated Coastal Zone Management Framework for the Republic of Mauritius is also under implementation to ensure effective management of the coastal zone. A number of projects have been implemented to abate the impacts of erosion in the coastal areas and to date beach re-profiling/restoration works have been carried out.

Other actions taken to protect and manage coastal and marine resources include the banning of coral sand extraction in 2001, coastal rehabilitation, coral reef and lagoonal water quality monitoring and creation of fishing reserves and marine protected areas. Mauritius has, during the past two decades, progressively established a system of marine protected areas to include fishing reserves, marine parks and marine reserves in the waters around Mauritius and Rodrigues, with a view to manage, conserve marine resources, ecosystems, natural habitats and species biodiversity and to enhance fish productivity. The Republic of Mauritius has, so far, proclaimed six Fishing Reserves and two Marine Parks.

Sustainable Consumption and Production

A National Programme on Sustainable Consumption and Production (2008 - 2013) for Mauritius is currently being implemented. Developed following an extensive consultation process, the overall objective of this programme is to change energy consumption patterns, encourage technological shifts and behavioural change, increase resource efficiency, change consumption patterns and increase the demand and supply of sustainable products and services in the market. At mid-way of its mandate, some 24 projects have been initiated and are being implemented by respective implementing agencies.

• Climate Change

As a SIDS, Mauritius is particularly vulnerable to climate change impacts. The setting up of the National Climate Committee way back in 1991 demonstrates the importance placed by Government on climate change issues. The National Climate Change Action Plan, which was developed in 1998, detailed a number of mitigation and adaptation actions to be taken across various sectors. A major programme of action is the Africa Adaptation Programme, which aims at creating the enabling environment needed to develop, implement, manage, and monitor long-term and costeffective adaptation policies and plans, as well as strengthen knowledge and capacities to meet the climate change challenge. The Africa Adaptation Programme will also mainstream climate change adaptation considerations into core development

Box 2.1: Climate Change in Mauritius

- Average temperatures increased by 0.74°C on high ground and by 1.1°C in coastal areas, compared to 1961 - 1990 long term mean.
- 0.5-1.0°C warming observed in Rodrigues, St Brandon and Agalega.
- Decreasing trend in annual rainfall of around 8% over Mauritius since the 1950s has been recorded.
- Rate of sea level rise (measured in Port Louis) has averaged 3.8 mm/year over the last five years.
- Since 1975, there has been an increasing trend in the number of intense cyclones (gusts above 165 km/hr).
- Mauritius will be further water

policies, strategies and plans for disaster risk reduction, agriculture, environment, fisheries, tourism, water, education and finance. Mauritius is preparing its Second Technology Needs Assessment, whose key aim is to bridge the gap between identification of appropriate technologies and design of action plans that would enable Mauritius to reduce greenhouse gas emissions and support adaptation.

1.3 Social

The Mauritian Government has, over the years, been investing in its human capital. In that respect, Mauritius spends about 50 % of its budget on a comprehensive welfare system comprising of free education. free health care. universal contributory pension for the elderly and a number of schemes for vulnerable groups. In addition, income support programmes, such as free public transport for students and the elderly have also been established, and subsidies on basic commodities such as rice, flour and cooking gas have been maintained. In fact, subsidies and other transfers (in terms of percentage of expenses) which stood at 25.69% in 1990 reached 30.97% in 2009 (World Bank, 2010). Innovative strategies and policies have been implemented in different sectors in order to promote social advancement. It is to be noted that the tax rate in Mauritius is relatively low compared to other countries, with the overall tax revenue accounting for about 19% of the GDP.

Box 2.2: Key Indicators in the Education Sector

	1991	2011
Primary Education		
Number of Primary	272	305
Schools		
Gross Enrolment Rate	99.4%	100%
Secondary Education		
Number of Secondary	122	185
Schools		
Gross Enrolment Ratio	48.5	70%
Pass Rate at SC	62.7%	77.8%
Tertiary Education	2000	2010
Gross Tertiary	15.1%	45%
Enrolment Ratio		
Tertiary level	16735	44334
enrolment		
UOM enrolment	4930	10564

(Sources: UNESCO, 2001; Tertiary Education Commission, 2010; Statistics Mauritius, 2011)

In the educational field, Mauritius established free primary schooling in the 1940s, free secondary schooling as from 1977 and free post secondary education as from 1988. Primary education was made compulsory in 1993 and then extended till the age of 16 in 2005. The provision of free public transport to all students at primary, secondary and tertiary levels in 2005 has also been a major step towards removing barriers impeding access to education. These policy decisions coupled, with massive investment in the sector, have resulted in significant progress in the educational sector at all levels (Box 2.2).

As far as gender parity is concerned, the position of women in Mauritian society has significantly improved over the past two decades. Mauritius ranked 11th out of 102 non-OECD countries on the Social Institution and Gender Index in 2009 (OECD, 2010). With regards to education, for instance, girls consistently perform better than boys, and this performance gap has been increasing over time at both primary and secondary schools (doubled at the primary level over the period 1990 to 2010). The Gender Parity Index in secondary enrolment increased from 1.0 in 1990 to 1.1 in 2010, showing larger disparity in favour of girls (Statistics Mauritius, 2010). At tertiary level, the gross enrolment rate stood at 16.04 in 2009, up from 3.56% in 1992. Of this, the women enrolment rate, which stood at 2.99% in 1992, reached 17.57% in 2009 (World Bank, 2010). This improved position and status of women in Mauritian society has been the result of a number of measures taken over the years. The National Gender Action Plan of 1999, for instance, led to the development and implementation of the Gender and Development project during 1999-2003, whose aim was to enhance capacity for policy making, gender analysis and monitoring expertise to ensure gender mainstreaming. The Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women was signed in 2001 and ratified in 2008, and Mauritius has also endorsed the forward-looking strategies emanating from the Nairobi Conference. In addition, a number of other important legislations have been enacted, such as the Protection from Domestic Violence Act (1997), the Protection of Human Rights Act (1998), the Sex Discrimination Act (2002) and the Equal Opportunities Act (2011).

With regards to poverty eradication, significant progress has been noted over the years. In 1975, 40% of Mauritian households were below the presumed poverty line. This figure decreased to 11% in 1991/92 and in 2010 absolute poverty was less than 2% (Statistics Mauritius, 2011). This has been the result of a number of poverty alleviation measures implemented over the years. A full-fledged Ministry of Social Integration and Economic Empowerment was set up in 2010 to enhance the quality and standards of living of all vulnerable persons through greater social justice and human development. The vision of the Ministry of Social Integration and Economic Empowerment is to meet the target of the Government, as per the Millennium Development Goals, of halving the number of absolute poor by 2015.

In this respect, the National Empowerment Foundation which is the implementation arm of the Ministry of Social Integration and Economic Empowerment implements programmes and projects to support vulnerable persons and families to move out of poverty, empower them with a view to facilitate their integration into the mainstreams society. It provides a range of programmes and activities that include placement and training, housing and community empowerment and child and family development.

Over the past two decades, Government has made sustained efforts to extend house ownership to the maximum of households in Mauritius, guided by the policy of 'un toit pour tous' (a roof for everyone). While 76% of people owned their homes in 1990, this figure had increased to 87% in 2000, and 90% in

2008 (Population and Housing Census, 2000; APRM, 2010). Government policy aims at providing decent, strong and adequate housing for each household, facilitating access to residential land and private property to the Mauritian population, and creating appropriate infrastructure and services in all residential areas. In addition, a policy for low-cost housing to assist economically disadvantaged groups to become home-owners was set up by the State through the creation of the National Housing Development Company in 1991 and the establishment of the Social Housing Development Fund. The Social Housing Development Fund will provide funding for the construction of social housing as well as the associated infrastructure services. By 2011, the National Housing Development Company had built more than 11,000 homes, for a total investment of Rs 3.5 billion.

Government policy to encourage the private sector to take a more active role as a development partner took the form of a provision in the 2009 Finance Bill for the imposition of a mandatory 2% Corporate Social Responsibility (CSR) levy on all profit-making organisations. Businesses can opt between establishing their own CSR programmes in areas identified by the State, or contribute directly to a CSR Fund set up by the Ministry of Finance and Economic Development. The business-NGO partnership has been reinforced through this process. Since January 2012, companies are required to spend 50% of their CSR Fund on four pre-identified priority areas, namely social housing, alleviation of absolute poverty and community empowerment, welfare of children from vulnerable groups, and prevention of non-communicable diseases.

1.4 Maurice Ile Durable - The Sustainable Development Model for Mauritius

Maurice Ile Durable (MID) was launched by the Prime Minister in 2008. It is a societal project that seeks to transform the environment, economic and social landscape of Mauritius. The MID initiative will enhance coherence in the national development agenda and promote inclusive growth by ensuring that all the pillars of sustainable development are taken into consideration. MID rests on 5 designated thematic areas: the 5 E's (Energy, Environment, Education, Employment and Equity).

The MID policy, strategy and action plan are being developed in a participative democracy mode with the first step having been recommendations produced from a bottom-up approach. These recommendations along with the sectoral policies and strategies are being considered for the preparation of a coherent 10-year strategy and a 3-year costed action plan. This ambitious action plan will be ready by August 2012 for implementation as from 2013.

With MID, the portfolio of the Ministry of Environment has been broadened to include Sustainable Development. A Commission on MID has been set up at the Prime Minister's Office to collaborate with the Ministry of Environment and Sustainable Development. Furthermore, a Strategic Committee, under the aegis of the Prime Minister's Office, has been set up with members from key ministries and parastatals, the private sector and civil society.

While the costed action plan is being prepared, several projects to promote sustainable development are already being funded through the MID Fund, which is a dedicated fund set up by government to finance sustainable development projects and initiatives in Mauritius. The MID Fund was kick started in 2008, three months after it was first announced by the Prime Minister, with a seed money of Rs. 1.3 billion (USD \$40 million) from the national budget. A first series of projects included provision of partial grants to targeted individuals for purchase of solar water heaters, the use of Compact Fluorescent

Lamps for public lighting, incentives to Small Independent Power Producers and setting up of a wind farm in Rodrigues among others.

The formulation of the MID framework has been recognised by the International Community and the Government of Mauritius has benefited from technical support from development partners such as the UNDP, AFD and EU Commission. Furthermore, a lot of attention is being focused on the MID initiative at the international level as it showcases Mauritius as a model of sustainable development, especially among the SIDS and developing countries. The implementation of the costed MID action plan, which will also pave the way towards a green economy, will be a real challenge as it will require significant additional resources in terms of financial, human, technical and technological capacity.

1.5 Collaboration with UN Agencies

Since 1992, the UNDP, being a GEF agency, has enabled the execution of several key projects including the restoration of Round Island, More recently, the UNDP contribution was key to the preparation of the Grid Code for Small Independent Power Producers, with the result that today any citizen can produce electricity from renewable sources and sell to the grid. The intervention of UNDP has led to concrete outcomes such as the coming into function of the Energy Efficiency Management Office and the improvement in the energy intensity of the country by 1.5% over the past decade. From a broader perspective, the UN Agencies have a range of activities under way in line with "Maurice Ile Durable", in the field of sustainable consumption and production, energy efficiency, renewable energy, and climate change adaptation.

1.6 Regional and International Cooperation

Mauritius is party to several regional blocks, the Southern African Development Community, Common Market for Eastern and Southern Africa, the Indian Ocean Rim-Association for Regional Cooperation and the Indian Ocean Commission. One of the objectives of these blocks is to create the environment for encouraging cross-border trade and investment.

A number of international development partners are currently supporting the Republic of Mauritius to implement programmes in various sectors of relevance to sustainable development and green economy. Their support is both at a strategic level as well as at an operational level. In particular, Mauritius has benefited from the financial and technical support of several key international development partners such as the United Nations and its agencies, the European Union, the Agence Française de Développement, the Agence de Francophonie, the Commonwealth Secretariat, the World Bank, the International Monetary Fund and the Japanese International Cooperation Agency as well as bilateral partners such as Government of Japan, Government of India and Government of China. The country has also benefited from the Global Environment Fund to implement projects in climate change adaptation, biodiversity conservation, land management and management of chemicals. The Small Grant Programme under the Global Environment Facility has enabled the implementation of several small scale projects at community level, thus empowering local communities and NGOs for sustainable development implementation. A list of projects supported by development partners is at Annex I.

2. GAPS AND CHALLENGES

Despite the constraints of a small island developing state, Mauritius has been able to achieve a remarkably resilient and stable economy, a well established welfare system and a sound educational system. However, in spite of the massive investment and the commitment of the Government and the stakeholders, there is still a number of gaps and challenges prevailing in the different sectors.

2.1 The MID and other action plans

The forthcoming MID Policy, Strategy and Action Plan will lay the foundation for the country's transition towards sustainable development. However, the country presently lacks the necessary capacity in terms of financial, human, technical and technological resources for implementation of all the recommendations emanating from the MID. Furthermore, there is insufficient funding and capacity to implement the other strategies and activities recently adopted or nearing finalisation in other programmes related to sustainable development.

2.2. Economic Shocks and Financial Constraints

The global financial crisis of 2008, the food crisis of 2009, the actual Euro zone crisis are all serious emerging challenges to economic growth in Mauritius. A significant decline in foreign capital inflows and private international capital flows to emerging and developing countries is to be expected. Furthermore, since Mauritius relies on the traditional markets of EU and USA for its imports and exports, as well as its tourist arrivals, the emergence of these new crises may impact negatively on the economic performance of the country unless appropriate domestic measures are adopted, and international support sought. The financial crunch being faced by the developed countries runs the risk of drying up the inflow of the funds essential to the initiation/ completion of actions for Mauritius' transition to a green economy.

2.3 Human Resources and Skills Mismatch

Today, the economy rests on sugar, tourism, textiles and apparel, and financial services. It is expanding into new emerging sectors including the seafood hub, healthcare, life sciences and knowledge hub, renewable energies, ICT, duty-free shopping as well as creative industries. The services sector represents more than two-third of GDP (Statistics Mauritius, 2011). This restructuring of the Mauritian economy has led to a decline in employment in the traditional sectors. There is insufficient labour to service development needs in certain sectors, and a mismatch among the local population between the skills needed, and skills available. For instance, there is a paucity of quality ICT manpower that is needed to keep pace in this highly evolving sector and to meet the challenges from international competitors. Other higher knowledge intensity sectors are facing the same constraint.

2.4 Technology Gap, Intellectual Property Rights & International Standards

Financial, technical and technological constraints are major challenges that are marginalizing small economies like Mauritius. Given that most of the new sophisticated technologies being developed are highly resource-intensive, meeting the need for adequate financial and human resources is a major challenge for small countries. For instance, lack of technology remains a major constraint for food processing industries and thereby their food products do not meet international standards. Furthermore, Intellectual Property (IP) is now increasingly recognised as an economic asset as more and more sectors of the economy are becoming knowledge-based. In the light of the Mauritian ambition to be a cyber island and a major duty-free trading centre, the capacity to capitalise on IP assets is a determining factor in the development of the economy. However, Intellectual Property Rights (IPR) remains a problem for firms in the manufacturing sector and other sectors of the economy. The process

of patenting their products is long, onerous and expensive, and this coupled with the large influx of relatively inexpensive imported goods, makes it difficult for local manufacturers to maintain their IPR and remain profitable.

2.5 Cleaner Production

Boosting the country's resource efficiency and adopting cleaner production are key priorities for the Government in light of the growing needs of the population, greater global resource constraints as well as unpredictable climate change. Besides market trends indicate that buyers increasingly require suppliers to respond to sustainable production, and comply with acceptable standards related to quality, environmental management and social accountability. The services orientation of the economy is seen as less polluting and less dependent on fossil-fuels, which is thus more in line with sustainable development strategy of the country. For instance in the manufacturing sector, energy derived from non-renewable sources is still very significant.

Two projects identified under the National Environment Strategies (NES), namely the setting up of a cleaner production centre and industrial management could not be implemented due to lack of finance and lack of technical expertise. With the technical assistance of UNIDO-UNEP, it was recommended to implement a Resource Efficient and Cleaner Production Programme for a period of three years instead of a cleaner production centre and industrial management. The Resource Efficient and Cleaner Production Programme is expected to facilitate and assist in improving resource productivity and environmental performance of businesses as well as enhance human development. Core activities proposed involve capacity building, information dissemination, awareness raising and implementation of cleaner production assessment tools at enterprise level.

2.6 Green Tourism and Integrated Resort Schemes

With the increasing importance of new investment sectors of activity and with the sugar sector reforms, business activities and Integrated Resort Schemes for tourism development are bringing profound modifications to land use. These are raising concern for environmental sustainability.

2.7 Incentives and Taxation Mechanism

Under Maurice Ile Durable, Mauritius introduced a Green taxation system for motor cars which is based on their CO_2 emission instead of engine capacity. In July 2011, an Amendment was brought to the Excise Act to allow for the imposition of a CO_2 levy or for the granting of a CO_2 rebate from the excise duty payable, depending on the CO_2 emission of cars. Such a tax is considered as an effective policy instrument to encourage and promote the use of eco-friendly vehicles in Mauritius. In the same endeavour a framework is being developed for the production of Ethanol from bagasse (a by-product of sugarcane) and the use of Ethanol (5% or 10%) in motor cars blended with mogas (95 or 90%). Legislation has been amended to allow for the blending under the Consumer Protection (Price and Supplies Control) Act as from 3 January 2012. The main objective of this framework is to reduce our dependency on fossil fuels and at the same time increase our sources of renewable energy.

2.8 Food Security

The threat of food insecurity in the future is one of the major challenges for the Republic of Mauritius, which imports 77% of its food. While this did not raise more than a mild concern previously, recent events have shown that a food security status so highly dependent on imported foods and raw materials is highly precarious, and can have serious implications in the future. The food import bill (equivalent to 18% of the country's total import bill).continues to rise, placing a heavy burden on Government spending, while local production is highly dependent on high external, fossil-fuel based inputs.

As a SIDS, and a Net-Food Importing Developing Country, Mauritius is particularly vulnerable to the rapidly changing global food system resulting from rising and volatile prices of basic food commodities, climate change and diversion of food crops to biofuels. As was demonstrated in the recent past, production drops in exporting countries resulted in reduced availability of food on the global market, and escalating food prices locally. There is therefore a need to shore up the country's ability to produce its own food. Competing demands on the limited land resources, coupled with the problems of a changing climate, decreasing soil fertility, irrigation water scarcity, increasing pest and disease problems, as well as insufficient interest of the young generation in primary agricultural activities, makes this a particularly challenging issue.

With the increase in global production figures for genetically modified seeds and planting material, the availability of non-GM seeds and planting material may represent an additional challenge for food security in the future.

2.9 Water

Presently, the different aspects of water use and water management are under the responsibility of different authorities: the Water Resources Unit of the Ministry of Energy and Public Utilities is responsible for the assessment, development, management and conservation of all water resources in the country. The Ministry of Environment and Sustainable Development is responsible for the preparation and issue of guidelines, standards and regulations on water quality and effluent limitations, while the Central Water Authority is mandated to provide a sustainable water supply service to the people and to support economic development. The Wastewater Management Authority is responsible for the collection, treatment and disposal of wastewater from domestic, commercial and industrial sources (MEO, 2011). This fragmentation in responsibilities is a challenge for the efficient and effective management of this vital but scarce resource. With the current trend in reduction of precipitation, coupled with insufficient water harvesting and storage structures, the water issue is expected to become one of the major challenges facing the country in the coming years.

2.10 Energy

According to The World Bank Report (2011) on 'Vulnerability to Higher Oil Prices' (Kojima, 2011), the vulnerability¹ of the Mauritian economy to oil price increased from 3.9 in 2003 to 8.9 in 2008, which is above the mean vulnerability parameter of 3.8 for African economies. Energy in the Republic of Mauritius is still met by imported fossil fuels. For instance, in 2009 82.5% of the total primary energy requirement was imported. Figure 3.1 shows the average import price of energy sources during the period 2001-2010. The challenge is to increase the share of renewable energy and explore other sources of energy in the energy mix.

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¹ Vulnerability is defined as the share of GDP spent on net oil imports

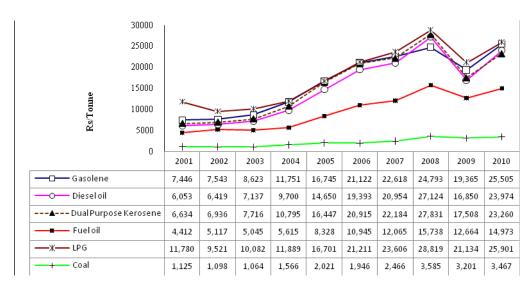


Fig 3.1 - Average import price of energy sources, 2001-2010 Source: Energy and Water Statistics 2010, Statistics Mauritius

2.11 Transport and Land Use Planning

The transport sector uses about 50% of the imported fossil fuels and emits 25% of CO_2 in the country. The number of cars has been increasing over the years, causing an increase in the amount of fossil fuels being used in the transport sector, and also in the carbon emissions.

One of the main challenges for the Government is to decrease daily distances travelled by the people, on one hand, and to encourage people to use public transport on the other, in order to reduce energy consumption. A major challenge for land use planning is the increasing pressure from development on limited land resources.

2.12 Green economy, green growth and green iobs

There is presently no national level definition, understanding or application of the concepts of green economy, green growth and green jobs. There are no existing jobs defined as green jobs, and no new employment created under the label of green jobs which can help develop and promote this concept, and at the same time help to raise the social status of the concerned job.

The concept of green economy has the potential to be a double-edged sword: on one hand, providing new and better opportunities for a more sustainable development of the country, while on the other hand, it can increase the trade-related difficulties for Mauritian exports.

2.13 Marine Resources

Mauritius has very limited land resources, most of which are already exploited and there is little scope for further development and expansion on land in a sustainable manner. However, Mauritius has a huge territory of over 2 million km², of which 99% is the unexplored ocean. As a result, the exploitation of ocean and marine resources present an immense opportunity to promote and improve economic diversification and resilience of the country. In addition, with the recent expansion of the continental shelf by 396,000 km² (jointly with Seychelles), this potential has further increased.

However, while the development of an Ocean Economy presents an added opportunity for the country to expand its spatial boundaries, develop scientific knowledge and new business opportunities,

Mauritius will require significant resources and expertise to exploit its ocean and marine resources in a comprehensive and sustainable manner. Indeed, Mauritius presently lacks the necessary financial capacity, skills, and technology to explore, study and utilise the immense potential offered by the marine environment for food security (seafood hub, fisheries, other marine living resources), economic development (e.g. exploitation for manganese, nickel and other mineral nodules), energy (e.g. marine algae, oil and gas), carbon sequestration, and climate change studies.

Whilst the marine environment offers a key prospect for achieving sustainable development for SIDS like Mauritius, an integrated assessment of the state of the marine environment is required. The formulation of a national policy on the sustainable management and use of ocean and marine resources is also important. Furthermore, while the sea food sector and the tourism industry are important pillars of the economy, Mauritius requires further assistance to replenish fish stocks, to combat illegal and unregulated fishing and piracy and to prevent marine pollution and oil spills, among others. In this regard, the support of the International Community is crucial to enable Mauritius achieve its sustainability goals.

2.14 SIDS

The case for the sustainable development of SIDS is a specific one requiring special attention. The UN has stated clearly that SIDS is a special case for sustainable development, and the Barbados Programme of Action provided the necessary blueprint for same. So far, international support to enable SIDS to secure a more sustainable future has not been operationalised adequately. The vulnerability of SIDS has also worsened over the last two decades and SIDS are facing increasingly severe challenges to sustain their sustainable development agenda, because of high negative impacts of the food, fuel, financial and economic crisis, climate change and other natural disasters.

2.15 Natural Disasters

As a SIDS, Mauritius is highly vulnerable to natural disasters, such as cyclones, droughts, tsunamis, flash floods and tidal waves. The toll taken by these natural disasters on agricultural production, food security, losses in the industrial and manufacturing sectors, the effect on the tourist industry, infrastructural damages, insurance losses, can run into billions of rupees and can impact heavily on the economy. Such natural disasters are predicted to increase in the context of climate change and can pose severe challenges to the country.

2.16 Climate Change

Climate change is another major challenge gaining more and more prominence in the Republic of Mauritius. However, there are as yet insufficient national-level studies on climate change impacts, on vulnerability and risk assessment in vulnerable areas and on ecosystems services. There is no comprehensive and dedicated legislation related to climate change. While a Climate Change Action Plan was developed in 1998, follow-up of the proposed action plan was uncoordinated. Some measures have been integrated while others have not been implemented due to a lack of technical, human and institutional capacity. Capacities to tackle climate change issues are also insufficient in the country, particularly with respect to trained personnel, technical and technological options as well as funding to enable climate change adaptation and mitigation.

2.17 Land, Ecosystems and Biodiversity

Unsustainable agricultural practices and inappropriate constructions resulting in soil and beach erosion are major challenges in several parts of the country, leading to land degradation and increased sedimentation downstream, and in the case of Rodrigues, in siltation of the lagoon. The principle of

ecosystem services and the concept of paying for the use of the ecosystem services are still to be implemented in the country. Insufficient human, technical and technological resources make it difficult to ensure enforcement of legislation.

2.18 Sustainable Consumption and Production

A National Programme on Sustainable Consumption and Production (2008 - 2013) for Mauritius is currently being implemented at national level. To make sustainable consumption and production a reality, coordinated and integrated programmes are essential, considering in particular the cross-sectoral nature of consumption and production patterns. Many countries like Mauritius have instituted some policies to promote sustainable consumption and cleaner production. However, these actions are often not sufficiently coherent or are driven by an isolated strategy or programme. These individual policies and activities, no matter how innovative, stand little chance of bringing about wholesale changes in consumption and production patterns. A strategic programmatic approach can help balance the necessary interventions for the consumption and production of, and market for, goods and services. Success is not according to expectations due to limited resources.

2.19 Education

The country has made commendable progress in a relatively short space of time by adapting its education system to the needs of its own society, while at the same time being fully aware of the need to be aligned with both regional and international practices and directions. However, a number of gaps still need to be addressed: improvement in the pass level in the *'Zone d'Education Prioritaire'* schools is still short of target and the failure rate at the end of the primary cycle has remained high over the years (31.44% in 2011). There is also an increasing mismatch between skills available, and new and emerging job markets. All of these issues have to be addressed urgently.

2.20 Social and Gender Equality

The major challenges of the Mauritian society remain the eradication of domestic violence, the achievement of social equality and the empowerment of women. With regards to the participation of women in politics, for instance, Mauritius has not yet met the recommendations of the 2005 SADC Declaration with regard to the 30 % quota of women in the different structures of power (government, Parliament and political parties).

2.21 Poverty Alleviation

Poverty alleviation still remains a challenge. Income inequality is growing; the Gini Concentration Index has deteriorated during the past five years, increasing from 0.371 to 0.388 (APRM, 2010). Through the establishment of the appropriate legal and institutional framework, the country has made major strides in supporting vulnerable groups in participating in the national development process. The setting up of the National Empowerment Foundation and the Ministry of Social Integration & Economic Empowerment have been major milestones in this process.

The provision made under the Finance Act of 2009 for a mandatory 2% CSR levy has boosted the involvement of the business sector in social and environmental issues. However, in spite of the conducive legal and institutional framework, persistent signs of poverty are still present in a number of localities across the country. The National Empowerment Foundation has identified some 6,983 families still living in 225 pockets of poverty in the island of Mauritius (National Empowerment Foundation, 2010). Moreover, there is insufficient capacity, especially at the level of the NGOs, to play an active role as essential partners in the poverty alleviation programmes set up by the Government.

2.22 Health

An average of 574 new cases of HIV/AIDS has been reported annually for the 2004-2011 period, with 74.2% of all cases of HIV/AIDS registered since 1987 being Injecting Drug Users (Ministry of Health and Quality of Life, 2011). A cumulative total of 5,157 HIV cases have been detected as at November 2011 (Health Statistics, 2011). Apart from HIV/AIDS, another major health challenge is posed by the increasing level of non-communicable diseases such as obesity, diabetes, cardiac problems and cancer. These are associated with the increasing affluence, dietary practice, and sedentary lifestyles of the people. In spite of Government's efforts at awareness-raising, free medical check-ups brought to neighbourhood levels, free advisory services, and free recreational facilities, the level of these diseases is still on the rise.

2.23 Science and Technology

There is insufficient local data, knowledge and information to enable the necessary technology development in the country to move towards a green economy. For instance, there is a lack of biological data on ecotypes of crop varieties and under-utilised species, on farm animal genetic resources, on effects of increasing CO_2 and other climate change and climate variability impacts on crops and pests, on soil health and fertility, on the risks and vulnerability of the different sectors to climate change, on freshwater floral and faunal diversity, etc. There are no island level models scaled down from the Global Climate Models, nor are there data on the biodiversity (trees and other flora, and fauna) of privately owned forests.

2.24 Regional and International Cooperation

Presently, regional and international organizations do not have a harmonious and synergistic approach with regard to reporting. This causes a lot of burden to SIDS like Mauritius where technical and human resources are inadequate.

2.25 Institutional Framework

• Legislation and Policies

Legislation, strategies and action plans have been developed in all sectors, but their implementation is met by challenges such as insufficient finances, inadequate human, technical and technological capacities. Legislation in certain areas is still to be finalised, for instance, the Plant Breeders Bill, Intellectual Property Rights Bill and the Genetically Modified Organisms Bill.

Institutional organisation

The institutional framework for sustainable development is still young in Mauritius and needs more time and resources to be fully operational and to reach targeted objectives.

2.26 MDG Implementation

Mauritius is doing well in respect of Millennium Development Goals (MDGs) such as universal primary education, gender equality in education, adult literacy rate, provision of safe drinking water , access to improved sanitary facility, eradication of vector borne diseases, has lower poverty rates and infant / child mortality rates . However, there are many challenges such as prevalence of HIV/AIDS and noncommunicable diseases, gender disparity in employment and women's representation in parliament, environmental sustainability and further development of Rodrigues. Sustainability of MDGs is also a challenge for SIDS with limited resources.

3. RECOMMENDATIONS

During the past 20 years strong political will and commitment coupled with judicious institutional and legal reforms have advanced progress towards sustainable development. Actions have been taken in a number of sectors to make the economy resilient, improve social justice and protect the environmental assets of the country. To renew commitment, further consolidate progress and move forward with the sustainability agenda, Government has put forward MID as the overarching vision to guide sustainable development in the future. The MID policy, ten-year strategy and three-year action plan is presently being developed. The aim is to deliver development in a timely, realistic and pragmatic manner without jeopardizing economic, social and environmental equilibriums.

To translate the MID into reality, all stakeholders have to exercise their full responsibilities and play an active role to make sustainable development happen. In this context, targeted actions are required in the following critical areas:

3.1 Institutional framework for sustainable development

- i. To translate the MID action plan into reality, the institutional framework for sustainable development will have to be further strengthened by *inter alia*:
 - a. mainstreaming sustainable development across all sectors,
 - b. developing a comprehensive indicator framework to monitor progress; and
 - c. decentralising sustainable development governance.
- ii. To achieve this ambitious societal project, Mauritius will require appropriate support from the international community in terms of adequate funding, technology transfer, capacity building and expertise.

3.2 Improving economic resilience and greening the economy

- i. At national level, opportunities should be identified to move towards a green economy. In this context, a green economy strategy should be developed to assist government reshape and refocus policies, investment and spending in a range of sectors such as: resource use efficiency, clean technologies, food security and sustainable agriculture, green tourism, sustainable transportation, waste management, green buildings, sustainable consumption and production and green jobs among others.
- ii. To green the economy, a comprehensive set of economic policy instruments should be adopted. These should include: sustainable public procurement practices, ecological tax reforms, public investment in sustainable infrastructure, targeted support for research and development, incentive programmes and partnerships as well as social policies.
- iii. To achieve sustainable development, green jobs should be promoted through skills mapping and continuous training programmes.
- iv. There is need to develop a universally accepted definition of the green economy concept as well as consistent and comparable standards for measuring progress towards its achievement. Mauritius may also develop its own definition of green economy based on its specificities.

v. As a highly vulnerable SIDS, there is still need for external financial, technical and technological support to address new and emerging challenges.

3.3 Social integration, empowerment and poverty alleviation

- i. Efforts should be reinforced and accelerated to promote employment, alleviate poverty and reduce disparity in incomes. Empowerment programmes aimed at vulnerable groups and poverty reduction efforts should be sustained.
- ii. Mainstreaming of gender perspectives should be enhanced in all policies and strategies, eliminating all forms of violence and discrimination.
- iii. Institutions responsible for women and children welfare need to be provided with additional human, financial and technical resources for effective and efficient implementation.
- iv. NGOs must be empowered to enable them play their role effectively as essential partners in the quadripartite relationship with Government, corporate sector and development partners.
- v. Programmes must be strengthened to address communicable, non-communicable and emerging diseases. Early public warning systems against emerging diseases should be improved.

3.4 Environmental sustainability

3.4.1 Sustainable management of natural resources

Implement time-bound strategies and associated action plans to protect the integrity of ecosystems, to manage natural resources in a sustainable manner and to ensure *inter alia* food and water security.

3.4.2 Oceans and seas

- i. Our oceans and seas are of high economic, social and environmental importance for the sustainable development of Mauritius. The promotion of integrated, multidisciplinary and multi-sectoral ocean and coastal management is of paramount importance. The potential of the Exclusive Economic Zone should also be fully explored and national policy developed for its sustainable use and management.
- ii. Partnerships should be enhanced among countries of the Indian Ocean sub-region as well as with international organizations to combat Illegal, Unreported and Unregulated (IUU) fishing in our waters.

3.4.3 Climate change & sea level rise and disaster risk preparedness & reduction

i. Developed countries to raise their level of ambition to reduce greenhouse gas emissions so that temperature rise could be limited to less than 1.5°C and dangerous impacts on vulnerable countries could be avoided.

- ii. Technical and financial assistance to Small Island Developing States to be fast-tracked to expedite climate change adaptation, mitigation, technology transfer and capacity building.
- iii. A National Climate Change Adaptation and Mitigation Plan for Mauritius to be urgently developed and implemented.
- iv. Local communities such as farmers, fishermen and other vulnerable groups to be empowered and best practices be shared amongst SIDS and African countries

3.4.5 Integrated water resources management

- i. An integrated water mobilization strategy and water efficiency plan must be urgently developed and implemented.
- ii. Programmes for mitigating the effects of extreme water-related events should be developed.
- iii. To develop an Integrated Watershed Management Plan to conserve water catchment areas to ensure long term water availability.

3.4.6 Biodiversity

- i. Review and implement the strategies and plans on biodiversity protection and conservation.
- ii. Increase the extent of and strengthen management of terrestrial and marine protected areas and Islet National Parks.
- iii. Develop and implement wealth accounting and valuation for ecosystem services.

3.4.7 Land use planning

The integrated spatial planning system should be reinforced to prevent urban sprawl and encroachment on Environmentally Sensitive Areas.

3.4.8 Sustainable consumption and production

The effective implementation of the National Programme on Sustainable Consumption and Production will enable the transition towards a green economy. Financial, technical and technological support and capacity building will enhance sustainable consumption and production implementation in Mauritius.

3.4.9 Waste management

- i. Implement integrated waste management programmes at all levels to promote waste minimization, reuse, recycling and use of environmentally friendly alternatives.
- ii. Financial and technical support to address chemical and hazardous waste management.

3.4.10 Energy for sustainable development

i. 35% of renewable energy in the national energy mix to be attained using new sources to be attained by 2025.

- ii. The use of innovative renewable energy technology such as sea wave energy and geothermal energy to be explored and promoted.
- iii. Enhance energy efficiency and energy conservation programmes.

3.5 Regional and international cooperation

- i. As a SIDS, well-targeted external support is a crucial element for implementation of sustainable development goals and to achieve a green economy. In this regard, capacity building, access to finance, technology transfer, research and development, regional integration, south-south and international cooperation are required on all SIDS issues identified in the Barbados Programme of Action and the Mauritius Strategy for Implementation, in particular climate change, disaster risk preparedness and reduction, ocean exploration, coastal zone management, renewable energy, hazardous waste management and water mobilization, among others.
- ii. A continuous regional surveillance system, with the support of the International Community to combat piracy to be explored.
- iii. There is a need to adapt the international MDG system of indicators to the more specific requirements for small island states.

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ANNEX I: PROJECTS SUPPORTED BY DEVELOPMENT PARTNERS

GEF-UNDP:

- Funding, demonstration, NGO, and community projects in the fields of Biodiversity, Climate Change, International Waters, Land Degradation. Persistent Organic Pollutants
- Removal of Barriers to Energy Efficiency and Energy Conservation in Buildings in Mauritius.
- Energy Policy Reform.

IFAD:

- Rural Diversification Programme.
- Marine and Agricultural Resources Support Programme.

ILO:

- Support to the finalisation of the 2010-2013 Decent Work Country Programme for Mauritius.
- Development of a Green Jobs Programme for Mauritius (4 studies currently underway: a Baseline Assessment of Green Jobs in the country, a study on Skills for Green Jobs in Mauritius, a Study on the Greening of Enterprises by the Mauritius Employers' Federation and a Training Needs Assessment for Trade Unions on Green Jobs in Mauritius).

IOM:

- Facilitating Circular Labour Migration programmes.
- Health & Migration (Rodrigues and mobile populations in the port) Knowledge, Attitudes and Practices studies.
- Migration and Environmental Change (assessment and implementation of pilot green businesses for vulnerable groups affected by environmental change).
- Border Management.
- Assisted Voluntary Return and Reintegration Programme.

UN-Habitat:

- Support to the implementation in Mauritius of the regional Participatory Slum Upgrading Programme for ACP countries, funded by the EU.
- Setting up of a Mauritian window of the Urban Youth Fund to fund local youth projects for sustainable development.

UN WOMEN, UNDP, UNFPA:

 Support to the development of the Indian Ocean Commission's gender policy and strategy in the field of women participation in politics, gender-based violence, economic empowerment of women and sustainable development & food security.

UNAIDS, in collaboration with UNDP, WHO, UNODC and UNHCHR:

- Support to the development and implementation of a Peer-strategy for Populations vulnerable to HIV infection in Mauritius.
- Technical and financial support for the scaling up of the Harm Reduction Strategies.
- Technical and financial support for resource mobilization through the submission of a dual track national proposal to the Global Fund for AIDS 2010-2014.
- Technical and financial support for getting first baseline data for Injected Drugs Users, opening the way for further surveys on other key populations.
- Technical & financial support for the mid-term review of the National Strategic Plan (NSP) and for the joint NSP Annual Review in view of the elaboration of the new 2012-2016 NSP.

UNDP:

- Partnerships for Marine Protected Areas in Mauritius and Rodrigues.
- Support to "Maurice Ile Durable".
- Establishing a Network of Private Protected Areas.
- Capacity Building for Sustainable Land Management in Mauritius (including Rodrigues).
- Support to the development of a Sustainable Integrated Development Plan for the island of Rodrigues.

UNEP:

- National Biodiversity Conservation Strategy, Action Plan and First National Report to CBD.
- Enabling Activities for the Preparation of Initial National Communications Related to the UNFCCC.
- Strengthening the Clearing House Mechanism (CHM) Focal Point for the Participation in the Pilot Phase of the CHM of the CBD.
- Expedited Financing of Climate Change Enabling Activities Part II: Expedited Financing for (Interim) Measures for Capacity Building in Priority Areas.
- National Capacity Self-Assessment for Global Environmental Management.
- National Sustainable Consumption and Production Programme

UNESCO:

- Situation Analysis on Education for Sustainable Development (including Climate Change and Environment, HIV-AIDS and health/life skills, gender and inter-cultural dialogue). This will lead to a capacity-building programme for education stakeholders.
- Support to the development of the UNESCO National Education Support Strategy for Mauritius.
- Implementation of education expected results for Mauritius biennium 2010-2011.

UNESCO-UNDP:

 Support for the application of renewable energies as part of a strategy for the conservation of Marine Protected Areas in Rodrigues.

UNIDO-UNEP:

• Finalisation of the joint programme "Resource Efficient and Cleaner Production" for Mauritius, in line with the Government's MID vision.

UNODC:

- Capacity-building support to Mauritius under the UNODC's regional Counter-Piracy Programme.
- Identification of additional synergies between Democratic Governance initiatives led by UNDP and Criminal Justice technical assistance proposed by the UNODC Regional Office, notably in the field of Prison Reform.

UNODC-UNDP:

 Support to the police reform and the transition from a police force to a police service through strategic planning and organisational change management.

WHO:

- Building national capacity to undertake better detection, assessment and response to major epidemic and pandemic-prone diseases.
- Strengthening the control and prevention of new HIV infection and to provide a continuum of comprehensive care to all people living with HIV in order to mitigate the impact of the HIV epidemic on the population at large.
- Improving health during key stages of life including pregnancy, childbirth and the neonatal period.
- Promoting healthy lifestyles and cost-effective primary and secondary care interventions for prevention and control of major NCDs and injuries, and for mental health promotion.

COMMONWEALTH SECRETARIAT:

The Commonwealth Secretariat has provided assistance to Mauritius on a number of occasions, mainly in the form of technical support, e.g. Advisor on Sustainable Development Policy (2007/08), Capacity Building in Debt Management (2007/08), Advisor on Telecommunications (2005/06), Maritime Boundaries Delimitation (2002), Promoting Export, etc.

AGENCE FRANÇAISE DE DEVELOPPEMENT:

- The Agence Française de Développement has approved a €62.5 M loan in 2011 to Mauritius for the construction of a dam to supply 14.25 million m³ water to the south of the island.
- The landslide damage to the La Butte area in the west of the capital of Port Louis triggered by the rainy season in 1986-87 led to collaboration with the Japanese Government for financial, technical and technological support for ground reinforcement works using Japanese disaster prevention technologies. Given that there have been no more significant landslides since the completion of the project in 1998, it is anticipated that plans for the redevelopment of the area will be formulated and implemented.
- In addition to the implementation of the Africa Adaptation Programme supported by the Government of Japan, Mauritius would receive funding from Adaptation Fund Board for "Climate Change Adaptation Programme in the Coastal Zone of Mauritius" to the tune of USD 9.12 M.

EUROPEAN UNION (EU)

• The EU has provided technical assistance to the elaboration of an ambient air quality monitoring framework as well as a framework on sustainable buildings and constructions.