



**PERMANENT MISSION OF THE REPUBLIC OF MAURITIUS TO THE UNITED NATIONS
AND OTHER INTERNATIONAL ORGANISATIONS**

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ET DES AUTRES ORGANISATIONS INTERNATIONALES**

No. 265/2008 MMG/HR/28/2

The Permanent Mission of the Republic of Mauritius to the United Nations Office and other International Organisations in Geneva presents its compliments to the Office of the High Commissioner for Human Rights and with reference to the latter's Note Verbale (Ref. IW/MK/UH) dated 20 August 2008, has the honour to submit, as attached, the comments of the Government of the Republic of Mauritius on Human Rights Council resolution 7/23 entitled "*Human rights and climate change*".

The Permanent Mission of the Republic of Mauritius has also the honour to enclose herewith a CD-ROM which contains the following reports:

- Climate Change Action Plan 1998;
- Initial National Communication 1999;
- Vulnerability and Adaptation Assessment of the Sugar Cane Crop to Climate Change in Mauritius 1999;
- Technology Needs Assessment for Climate Change Activities 2004; and
- Stocktaking and Stakeholder Consultation Exercise on Climate Change Activities 2006

The Permanent Mission of the Republic of Mauritius to the United Nations Office and other International Organisations in Geneva avails itself of this opportunity to renew to the Office of the High Commissioner for Human Rights the assurances of its highest consideration.



**Office of the High Commissioner for Human Rights
United Nations Office at Geneva
Palais des Nations
CH-1211 Geneva 10**

Geneva, 30 September 2008

OHCHR REGISTRY

- 1 OCT, 2008

Recipients:H.....
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Human Rights Council Resolution 7/23 – “Human Rights and Climate Change”

(a) **Assessments at national level of the impact of climate change (experienced or anticipated) on human lives and on populations most affected and vulnerable;**

- **Temperature**

Analyses of temperature recorded by the Meteorological Services of Mauritius and its outer islands show a definite warming trend. Average temperature at two places in Mauritius, namely, Vacoas and Plaisance during the last twenty years (1998-2007) was higher than that of the decade 1951-1960 by 0.74 and 1.1° C respectively. Most of the warming started as from the mid seventies.

Similar warming trends were also observed on the outer islands of Rodrigues, St Brandon and Agalega where the temperature rise is in the range of 0.5 to 1.0° C.

- **Precipitation**

Long term of rainfall amount over the past century (1905 to 2007) show a decreasing trend of about 8% in annual rainfall over Mauritius.

- **Dry Soil**

The duration of the intermediate dry months, the transition period between winter and summer is becoming longer. While in the 60s and 70s, summer rains used to start by November, they now only occur in late December. Since the last past four summer seasons, the rains started only in January of the following year. Furthermore and as if to catch up with the delay, when it starts to rain it really pours with recurrent flash floods in February and March. This shift in the onset of summer rain is highly significant as it translates into increasing pressure on the water sector to increase storage capacity to cater for longer periods of dry spells and to meet equally increasing demands of the agricultural, tourism, industrial and domestic sectors.

(b) **Studies carried out at national level, including by independent research institutions, on the relationship between climate change and human rights;**

No study has yet been carried out.

(c) **Projects and measures at national level to mitigate or adapt to climate change, including information on any assessments of the impact of such projects and measures on affected populations and their human rights**

• **Vulnerability and Adaptation**

Vulnerability and adaptation assessments were restricted to some sectors and are mostly qualitative. Some of the identified adaptive measures have been implemented in the agriculture, water resources, coastal zone, fisheries, health, land use change and forestry sectors. Climate change scenarios, with finer resolution, need to be developed in order to refine vulnerability assessment of the main economic sectors. Inadequate human capacity and lack of sufficient financial technical and technological resources remains a major barrier in this respect.

Sufficient capacity both in terms of human, technical and finance to address all issues relating to climate change has indeed been a serious problem. There is a strong need for comprehensive capacity building to address issues of mitigation and adaptation.

Few activities have been implemented so far due to lack of financial, technical and/or technological means.

In terms of adaptation to climate change, the Government of Mauritius has already initiated works to protect our coast from the effects of sea level rise. Coastal protection works at the most affected sites, mangrove propagation programmes, monitoring and protection of coral reefs are some of the works that are on-going. Some examples are outlined hereunder:

- (i) Beach fill and dunal restoration that is proposed to be undertaken at Flic en Flac over 600m of coast;

- (ii) A sloping rock revetment will soon be undertaken at Rivière des Galets over the existing gabions to provide for long term effective protection;
- (iii) A sloping rock revetment and some refurbishment works are presently being implemented at Petit Sable, Bambous Virieux and Grand Sable;
- (iv) The restoration of the dune and beach will be undertaken shortly to remedy the erosion problem at Belle Mare;
- (v) Mangrove propagation has been undertaken on the east coast of Mauritius mostly at Quatre Soeurs, Bambous Virieux and Petit Sable; and
- (vi) Monitoring of coral reefs is being undertaken on a regular basis at 12 sites around the island, for example Trou aux Biches, Pointe aux Sables, Belle Mare, Trou d'Eau Douce, Ile aux Bénitiers, Bel Ombre, Poudre d'Or.

The Government of Mauritius has also launched a project for the development of an Integrated Coastal Zone Management Framework (ICZM) for Mauritius. The ultimate objective of the project is to promote sustainable use and development of our coastal zone through the elaboration of an ICZM strategy and an appropriate policy and regulatory framework for the coastal zone.

Concurrently, the Government of Mauritius, in collaboration with the UNDP, is intending to seek financing under the GEF Special Climate Change Fund to implement the project: "Adapting Coastal Zone Management to Address the Impacts of Climate Change". The objective of this project is to enhance local capacities to incorporate risks associated with climate change and variability into coastal management strategies, policies and plans.

- **Mitigation**

Apart from adaptation, the response of the Government of Mauritius to climate change is through mitigation, that is, lowering our greenhouse gas emissions. Being a Small Island Developing State, our greenhouse gas emissions are negligible.

As such, Mauritius has no binding emission reduction targets under the Kyoto Protocol.

The Kyoto Protocol established the first global mechanisms for the trading of carbon permits, so that reductions in emissions could occur where they are more economically

efficient. Poor nations were exempt from the Protocol's binding limits but, in what was to become a key provision, were able to participate in the global project of emissions reductions by hosting projects under the Protocol's Clean Development Mechanism, or CDM.

The energy sector remains the main emitter of greenhouse gases (GHG), since fossil fuels will be increasingly used to maintain future energy demand. Some previously identified abatement measures/options have been implemented. They could all be classified under no-regret measures except in generation capacity addition, improving the energy conversion efficiency of Combined Heat and Power plants, retrofitting of fuel system, Integrated Electricity Planning and wind power generation in Rodrigues. Electricity generation expansions will have to follow least cost capacity additions that take into account the type of demand growth, the appropriate technology, the best fuel mix and impacts on the environment.

The Government of Mauritius has drafted a National Energy Policy, and the overall policy approach in the energy sector is to make the latter progressively more sustainable and at reasonable cost by:

- Reaching 70% self-sufficiency in energy supply through progressive increase in renewables in 50 years time. This would be equivalent to reducing GHG emissions by 30% over the next 25 years and by 70% over the next 50 years:
- Raising the share of renewables for power generation to 43% by 2025.
 - by limiting growth of electricity consumption to 2.5% per annum through energy efficiency; and
 - using more renewables, in the form of biomass (22%), existing hydro (3%); a planned waste-to-energy plant (5%), wind power (10%) and photovoltaic microgeneration (3%)
- Minimising the use of petrol and diesel for transportation;
- Using energy efficiency policies, sustainable transport policies and introducing biofuels; and
- Applying strict energy efficiency and solar water heating policies in households, businesses and the public sector.

As the second emitter of GHG, the transport sector has a potential for mitigation with the adoption of environmentally sound technologies. Some of the activities undertaken consist of the control of vehicle emissions, introduction of unleaded gasoline and use of bi-fuels vehicles. Future work will focus mainly on the effect of higher traffic volumes on fuel intensity, alternatives to the existing public transport system and use of ethanol.

There has been a considerable increase in the generation of waste due to rapid industrialization, urbanization and higher living standard. Mitigation measures implemented in the waste sector include the commissioning of one sanitary landfill, limited sorting and recycling activity, and composting on a small scale. Three wastewater treatment plants have been commissioned at national level. Future activities will focus on centralized systems of solid and liquid waste disposal. Sorting and recycling as well as composting are being encouraged on a larger scale.

- **Project: Landfill Gas (LFG) from Mare Chicose**

Solid waste landfills are among the largest sources of human-related methane emissions. At the same time, methane emissions from landfills represent a lost opportunity to capture and use a significant energy resource. Instead of allowing LFG to escape into the air, it can be captured, converted, and used as an energy source. Using LFG helps to reduce odours and other hazards associated with LFG emissions, and it helps prevent methane from migrating into the atmosphere and contributing to global warming.

A project of landfill gas capture will soon be implemented by the Mauritian authorities.

(d) **Views on the relationship between obligations arising out of international climate conventions and international human rights treaties, including on international assistance and cooperation**

While the connection between the protection of human rights and the condition of the environment has been widely recognized in the international system, it would appear that the precise nature of that relationship remains a subject of dispute.

It is observed that a specific right to environment has not been clearly articulated in international human rights treaties. Neither the International Covenant on Civil and Political Rights (ICCPR) nor the International Covenant on Economic, Social and Cultural Rights contains a right to environment, notwithstanding the fact that a number of rights in these instruments arguably, rely, for their fulfilment, on an environment of a certain quality.

However, the African Charter on Human and People's Rights provides in its Article 24 that all peoples shall have the right to a general satisfactory environment favourable to their development.

(e) **Examples of support to mitigate and adapt to climate change through international assistance and cooperation, bilaterally and through multilateral institutions, including assessments of their human rights impact.**

The Government of Mauritius, in collaboration with the UNDP, intends to seek financing under the GEF Special Climate Change Fund to implement the project: "Adapting Coastal Zone Management to Address the Impacts of Climate Change". The objective of this project is to enhance local capacities to incorporate risks associated with climate change and variability into coastal management strategies, policies and plans.
