**Inputs to questionnaire -**

**Enjoyment of a safe, clean, healthy and sustainable environment Climate Change and Human Rights: a safe Climate**

**Qu. 1 Please provide, in detail, examples of laws, regulations, policies and programmes that specifically incorporate the human right to a safe, clean, healthy and sustainable environment (acknowledging that different terms may be used to describe this human right).**

**International Commitments**

Mauritius is a party to thirty six multilateral environmental agreements relating to climate change and associated challenges*inter alia* the United Nations Convention to Combat Desertification, the Convention on the Protection, Management and Development of the marine and coastal environment of the Eastern African Region and related protocols (Nairobi Convention], the United Nations Framework Convention on Climate Change (UNFCCC ) and the Kyoto Protocol under the UNFCCC], the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol under the Vienna Convention], the Stockholm Convention on Persistent Organic Pollutants (POPs)], the Minamata Convention on Mercury, the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal and the Bamako Convention on the ban of the import into Africa and the control of transboundary movement and management of hazardous wastes within Africa.

1. **The relevant legislationenacted is as follows:**
   1. **National Disaster Risk Reduction and Management Act 2016**

* This act provides for the development of an overall national strategic framework (Sect. 13) and for the formulation of a national disaster risk reduction and management plan (Sect. 14).   
  The plan is to set out measures to prevent disasters and reduce their impact, as well as response measures, and to assign roles and responsibilities to the various agencies and stakeholders.
* The National Disaster Risk Reduction and Management Council (NDRRMC) set up in Part II of the Act is mandated to ensure that disaster risk reduction becomes an integral objective of environment-related policies and plans, land use planning, natural resource management, educational plans, social development plans, economic policies, sectoral policies, as well as infrastructure through enforcement of building codes, to oversee the implementation of post-disaster recovery and reconstruction activities, to promote research and development and commission studies on disaster risk reduction and management and to promote regional and international cooperation related to disaster risk reduction and management.
* The National Disaster Risk Reduction and Management Centre set up as a ministry department in Part III of the Act is mandated to develop a National Disaster Risk Reduction and Management Plan, to coordinate and monitor the implementation of the disaster risk reduction and management programmes through community participation and public awareness campaigns, to implement a national multi-hazard emergency alert system to provide accurate and timely advice to the public and key stakeholders, to assist relevant stakeholders to develop an appropriate risk transfer mechanism for post-disaster recovery and rehabilitation purposes, to foster regional and international cooperation in disaster risk reduction management issues. including best practices and sharing of expertise and to promote research and development and commission studies on disaster risk reduction and management matters.
* The National Crisis Committee set up in Part IV of the Act is mandated to take timely actions to safeguard the life of persons in danger, including evacuation of persons at risk, to supervise the organisation of disaster response operations, to provide relief assistance and to take appropriate measures during the initial recovery phase.
* The Disaster Response Unit set up within the Special Mobile Force of the Police in Part V of the Act is mandated to assist emergency services in disaster response operations.
* Mauritius receives an annual rainfall of about 3,700 million metre cube (Mm3), out of which 2200 Mm3 flows as surface run-off into rivers, about 1110 Mm3 is lost through evapotranspiration and 370 Mm3 for groundwater recharge. Despite the fact that Mauritius is blessed with plentiful water resources, seasonal water scarcity and shortage of water do occur due to the effects of climate change which has led to longer spell of dry periods and higher intensity of rainfall over short duration of time.
  1. **National Disaster Scheme 2015**

The National Disasters Scheme 2015 (NDS) has traditionally been used as the primary source of information for agencies and individuals working in preparation and response to identified threats. The NDS 2015 divided information within threat headings (Cyclone, Heavy rainfall, Torrential Rain & flooding, Landslide, Tsunami, High Waves, Water Crisis, Earthquake and Port-Louis Flood Response Plan). It is intended to aid users in quickly identifying, understanding and implementing their respective roles.

* 1. **The Climate Change Bill**

The Climate Change Bill provides for the creation of a climate change department within the ministry which is responsible for the development, coordination, monitoring and evaluation of climate change policies, strategies, programmes and action plans, for mainstreaming adaptation and mitigation measures into national, sectoral and local policies and plans, for formulating and updating guidelines for determining vulnerability to climate change impacts and adaptation assessments, and for keeping and updating a climate change database.

* 1. **Public Health Act**

The Public Health Act deals with the abatement of nuisances, this term referring to water or waste accumulations in conduits and drains which are dangerous for health, among other things. Section 20 empowers the Sanitary Authority (medical or health inspector) to inspect any premises in order to ascertain whether a nuisance exists, and to serve on the author of a nuisance a notice to remove it (Section 29).

* 1. **Wastewater Management Authority Act**

This Act provides for the establishment of the Wastewater Management Authority for the collection, treatment and disposal of domestic, commercial and industrial wastewater.

* 1. **Land Drainage Authority Act**

This Act provides for the establishment of the Land Drainage Authority (LDA).

* 1. **Local Government Act**

The Local Government Act spells out the functions and powers of the local authorities. It has been amended in 2018.

Under Section 50 of the Act, the Municipal City Councils, the Municipal Town Councils and the District Councils are responsible for the construction, maintenance and cleaning of drains of all roads other than motorways and main roads, for the collection and conveyance of waste to waste disposal or management facilities, for the undertaking of afforestation and terracing works along public roads, for the construction, control, care, management, maintenance, improvement and cleaning of the beds and banks of lakes, rivers, rivulets and streams, and for the control of pollution.

* 1. **Energy Efficiency Act**

The Act sets up the Energy Efficiency Management Office as a ministry office to promote national awareness for the efficient use of energy as a means to reduce carbon emissions and protect the environment.

* 1. **The Mauritius Renewable Energy Agency Act**

The Act sets up the Mauritius Renewable Energy Agency which is entrusted with promoting the adoption and use of renewable energy with a view to achieving sustainable development goals.

* 1. **Board of Agriculture and Natural Resources Act**

The Board advises the Minister on policy relating to agriculture, forestry and the utilisation and preservation of natural resources and the environment.

**1.11 The Central Electricity Board Act**

The Central Electricity Board can set up companies for the implementation of projects relating to the production of electricity from renewable energy sources.

**1.12 Finance and Audit [Maurice Ile Durable Fund) [Amendment) Regulations 2010**

The said regulationsextend the scope of the finance projects of the Maurice Ile Durable Fund to the mitigation, adaptation and increase of resilience to climate change.

**Qu2. Please provide specific examples of good practices in the implementation of the human right to a safe, clean, healthy and sustainable environment.**

1. **Examples may include practices related to: guaranteeing procedural rights (e.g., access to information, public participation in environmental decision-making and access to justice and remedies)**
2. **The Right to a Safe, Clean, Healthy and Sustainable Environment**

The Sustainable Development Goals (SDGs) are a universal call to action to protect the planet, end poverty, and ensure that all people enjoy peace and prosperity. These 17 Goals are interconnected - often the key to success on one will involve tackling issues more commonly associated with another.

On the other hand, the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) is the first major agreement of the post-2015 development agenda, with seven targets and four priorities for action. It aims at the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

1. **National Environment Commission**

This Commission acts under the Prime Minister's Office and is chaired by the Prime Minister. According to the Environment Protection Act of 2002, as subsequently amended, it shall:

* set national objectives and goals, and determine policies and priorities for the protection of the environment, having due regard to the recommendations of the Minister;
* review progress made by public departments on any aspect of environmental management projects and programmes;
* ensure coordination and cooperation between public departments, local authorities, and other government organisations engaged in environmental protection programmes;
* Monitor and review the activities of public departments concerned with the protection and management of the environment.

1. **Community Based Disaster Risk Reduction (DRR)**

Through the implementation of Community Disaster Response Programme by the NDRRMC and with the support of other first responders/stakeholders, it has been envisaged to increase the coping capacity in Disaster Response and Disaster Risk Reduction through:

(i) Enhancing DRR structures at Community Level;

(ii) Promoting community preparedness and engagement;

(iii) Understanding population vulnerability and advocate accordingly; and  
(iv) Developing and exploring new partnership and strategies.

In this context the Ministry of Environment and Sustainable Development had in its budget included CDRP including in Rodrigues island and in Agalega so as to help in training of volunteers and grouping them in Community Disaster Response Team (CDRT). The CDRT members can also help with non-emergency projects that help improve the safety of the community.

1. **Simulation exercise participation**

An annual simulation calendar is prepared by the National Disaster Risk Reduction Management Council (NDRRMC) after consultation with the Local Disaster Risk Reduction Management Council (LDRRMC) whereby each Municipal and District Council plans for simulation exercise for the communities within their jurisdiction. All the simulations are monitored by the NDDRMC and assurance made that they are all being conducted as per the time frame.

1. **Community preparedness**

Drills were carried out at primary and secondary schools in vulnerable areas prone to flooding, high waves and Tsunami. Even schools in Agalega Island and Rodrigues were sensitised and they participated in the simulation.

1. **Awareness programme at Women Empowerment Centres (WEC)**

A joint awareness programme on DRR by the NDRRMC with the collaboration of the Ministry of Gender Equality, Child Development and Family Welfare called "Your Safety our Concern", was held in Women Centres. According to the UNDP report on Gender and Disasters (2010)' in the event of a disaster, women, boys and girls are 14 times more likely than men to be victims. Hence participation and empowerment of women to better prepare and make them aware of appropriate action to take in case of a disaster.

1. **Awareness/sensitisation campaign**

To enhance community preparedness, awareness programmes, seminars for public officers and private sectors are regularly organised by the local institutions as well as international bodies such as the *UNISDR, UNDP and DIMO.*

To build community resilience, lectures, simulations, distribution of pamphlets using video clips and billboard and use of the website, media, radio and television to tender their advice on safety measures and DRR are used.

1. **Empowerment workshop was conducted for Public and Private sector**

In order to empower the public and private sector to understand the importance of disaster   
risk reduction as a concept to reduce cost of business continuity plan and increase profitability, a workshop on 'The Business Case for Disaster Risk Reduction *'Make Your Business Disaster and Climate Resilient'* was held from 22 to 23 June 2017 at Voila Hotel, Bagatelle upon request of the NDRRMC to UNISDR.

This training workshop explained why risk sensitive investment could help prevent the creation of new risk and contribute to strengthen the profitability and sustainability of the organization.

1. **protecting the substantive elements of the right (including: clean air; access to clean water and sanitation; healthy and sustainably produced food; a non-toxic environment in which to live, work, study, and play; a safe climate; and healthy biodiversity and ecosystems);**

Although the Mauritian Constitution does not provide for specific economic, social or cultural rights, which would include a right to safe drinking water and sanitation, healthy and sustainably produced food, a clean and sustainable environment, Chapter II of the Constitution does provide*, inter alia,* for the protection from inhuman treatment (including degrading treatment) or the right to personal liberty. In some instances, the right to clean water and sanitation or to food has been encompassed under the right to live in dignity which itself is construed as an emanation of the right to life (which is another Chapter II right).

These rights are afforded protection under various pieces of legislation. A non-exhaustive list of the main enactments and some relevant extracts thereof are as follows:

**Clean air**

1. **Environment Protection Act**

Section 40 of the Act provides that the Minister can prescribe standards to protect the quality of air resources so as to promote the public health and welfare, and the development and the productive capacity of human, animal or plant life.

1. **Environment Protection (Standards for Air) Regulations 1998**

Under the regulation, factories are required to comply with set standards for the emission of pollutants.

1. **Environment Protection (Standards for Air) Regulations 1998**

The regulation sets out the maximum limits for a number of pollutants to be respected by any trade, industry or process.

1. **Road Traffic (Control of Vehicle Emissions) Regulations 2002**

The regulation sets out the standards for exhaust emissions for vehicles.

1. **Environment Protection (Industrial Waste Audit) Regulations 2008**

As per the regulation, any person who carries out an activity shall conduct an industrial waste audit. The person may be requested to submit an environmental management plan where it will have to state how it addresses environmental issues such as air pollution.

**Access to clean water and sanitation**

1. **Environment Protection Act**

Part V of the Act provides for the measures to be taken in cases of spill of pollutants, which includes preventing, eliminating or reducing the adverse effects of the spill and restoring the environment to the state it was in prior to the spill.

Part VII of the Act provides for the protection of coastal and maritime zones. It provides for the setting up of an Integrated and Coastal Zone Management Committee which shall inter alia monitor coastal water quality and coastal resource, including wetlands. Under the Act, it is an offence to release or cause to release into the coastal zone any pollutant, waste or other noxious substance from or through the atmosphere or by dumping.

1. **The Central Water Authority Act**

The Act establishes the Central Water Authority which is responsible for the control, development and conservation of water resources.

1. **The Public Health Act**

The Act provides inter alia for an adequate water supply to every household. It also contains provisions in relation to sanitation rights, works and nuisance issues.

1. **The Waste Water Management Authority Act**

The Act sets up the Waste Water Management Authority mandated to carry out, monitor, supervise, maintain, manage and control wastewater works; promote the treatment and reuse of wastewater; ensure the proper functioning, inspection and maintenance of house sewers and wastewater systems and control and monitor pollution, private sewers and the use of equipment in relation to wastewater systems

1. **The Forest and Reserves Act**

The Act provides for the monitoring and regulation of the use of resources in a national forest, nature reserve, a mountain reserve or a river reserve including the removal of trees and the introduction of rubbish or any dangerous substance.

1. **The Environment Protection Act**

The Act establishes standards for drinking water and managing effluent discharges.

1. **The Ground Water Act**prohibits pollution of ground water.
2. **Environment Protection (Standards for Effluent Discharge into the Ocean) Regulations 2003**

This regulation provides that effluents should be discharged into the ocean in compliance with a number of standards.

**Non-toxic environment in which to live, work, study and play**

1. **Beach Authority [Use of Public Beach) Regulations 2004**

**Regulation 16 prohibits the following at a public beach:**

1. damage, or interfere with any flora, including trees and grasses on a public beach;
2. remove, deface, damage or destroy any sign or post placed on a public beach;
3. light a fire outside a place designated by the Authority;
4. leave a fire unattended at such designated place until the fire is completely extinguished;
5. deposit or leave any object, including any rubbish or litter on the public beach, except in receptacleor within an area provided for that purpose;

(f) deposit or dispose of any waste or rubbish, oily liquid, acid or other chemical or toxic or pollutingsubstance into the marine environment on a public beach;

g)subject to regulation 15, on a public beach engage in any game or activity which is likely to cause danger to any other person or damage to any property;

h)abandon a vessel, motor vehicle or any other property on a public beach;

i)damage, remove or otherwise interfere with any floats or buoys

1. **Criminal Code**

Section 385 [a), [c) and [g) make it an offence liable to a fine not exceeding 3000 rupees and imprisonment for a term not exceeding 10 days for any person who makes a fire in any house, outhouse or hut in which there is no hearth or chimney to receive it and any person who lights a fire without the permission of the Municipal Council in any street or public place or in any suburb or yard in any field at a distance of less than 50 metres from any house, building, orchard or plantation even though no accident ensues.

1. **Environment Protection Act**

Section 9 of the Act provides that the Police de l'Environnement, a unit of the Mauritius Police Force comprising of police officers, designated by the Commissioner of Police, shall provide the Director of Environment, and the Island Chief Executive in relation to the Island of Rodrigues, assistance to enforce an environmental law.

1. **Environment Protection (Collection, Storage, Treatment, Use and Disposal of Waste Oil] Regulations 2006**

The regulation provides for conditions under which waste oil are collected, stored, treated, used and disposed of.

1. **Environment Protection (Banning of Plastic Bags] Regulations 2015**

The regulation provides that no person shall import, sell, supply or manufacture plastic bags.

**Biodiversity and Ecosystem**

1. Mauritius is facing challenges relating to its coral reef ecosystem which is under threat due to climate change hence causing coral bleaching. The rise in sea temperature is causing coral bleaching that is five times more frequent than 40 years ago. Coral reef ecosystems have great economic, social and cultural importance for Mauritius. Locally, with massive coral bleaching events that occurred in 1998, 2014, 2015 and 2016, a lot of the coral reefs in Mauritius have been degraded. Effects of climate change such as coral bleaching, sea level rise and increased sea surface temperature consequently impact local fisheries as well as tourism and the quality of life for the most vulnerable coastal residents. The monitoring and rehabilitation of the coral reef, are among the tasks being implemented by the Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping (MOEMRFS) through long-term ecological survey, coral farming and community-based coral faming to overcome the challenge posed by climate change.
2. Long term monitoring of coral reefs at 12 sites (21 stations), we undertake coral farming and assist in Mangrove propagation projects carried by Non-Governmental Organisations/Local residents.
3. The Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping (MOEMRFS)has also started promoting coral farming by fishermen and SMEs by setting up sea-based coral farms for conservation purposes. A "Community-Based Coral Culture Project for the Republic of Mauritius" was initiated and spear-headed by the Mauritius Oceanography Institute in joint collaboration with the Albion Fisheries Research Centre. To date, 3 pilot coral farms each consisting of 3 nurseries have been established together with the community at Albion, Ouatre-Soeurs and La Gaulette. Training is on-going with the communities of Grand-Gaube and Bel Ombre where coral nurseries have been earmarked to be set up. Currently, 5 coral nurseries which can accommodate 2,500 coral fragments have already been installed at selected stations in the Blue Bay Marine Park. Another new coral nursery that can accommodate 500 fragments fixed on polypropylene ropes was set up at Trou aux Biches.
4. In Mauritius, the mangrove forests' coverage experienced a drastic decline before the 1990s triggering action from the Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping (MOEMRFS) to implement a Mangrove Restoration Project in the 1990s. In this respect, the Ministry started a mangrove propagation programme in 1995 so as to protect and restore the denuded areas.
5. The mangrove rehabilitation programme has yielded positive results: 20 hectares of mangrove forests have been rehabilitated with around 400, 000 propagules planted up to date. Over the years, Non-Governmental Organisations were also roped in and a continued effort towards mangrove forests propagation gained momentum along with the sensitisation campaigns on its importance. Mangrove forests of the Republic of Mauritius are nowprotected through the Fisheries and Marine Resources Act under the section 69 stipulating that:

"No person shall - (a) except with the written approval of the Permanent Secretary, cut, take or remove; (b) damage, a mangrove plant."

1. **regulating business activities in accordance with the UN Guiding Principles on Business and Human Rights to protect the right to a safe, clean, healthy and sustainable environment; and remedies that have been provided for victims of violations of the right to a safe, clean, healthy and sustainable environment. These examples may occur at the international, national, sub-national, or local level.**

* **Occupational Safety and Health Act 2005 (Business)**

Section 5 of the Act provides for the general duties of employers to ensure the safety, health and welfare at work of all of his employees. Section 6(3) provides that employers shall establish appropriate procedures to be followed in the event of a fire, explosion or accidental release of substances hazardous to health.

* In order to encourage more SMEs towards sustainable development which ultimately aim at minimizing climate change., The Business and Enterprise Division (BED) of the Ministry of Business, Enterprise and Cooperatives, has taken the following measures:
* A forum was organized in May 2018 in collaboration with Partnership for Action on Green Economy (PAGE) whereby some 50 participants had the opportunity to exchange their ideas on the adoption of green practices.
* Moreover, current work is underway by BED and PAGE to conduct a study on Green SMEs in Mauritius by local/international Consultants who will be called upon to sensitize our SMEs to adopt green practices in their businesses and guide them towards re-engineering their internal processes for long term.
* Mauritius is very committed to taking necessary actions to reduce its greenhouse gas (GHG) emissions and mobilise substantial funds for implementing the necessary mitigation measures.
* In its Nationally Determined Contributions (NDCs) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in the context of the 2015 Paris Agreement on Climate Change, Mauritius has pledged to reduce its GHG emissions by 30% by 2030.

The key mitigation actions in the energy sector of Mauritius NDCs are:

1. expansion in solar, wind and biomass energy production and other renewable energy sources;
2. gradual shift towards the use of cleaner energy technologies, such as Liquefied Natural Gas (LNG), amongst others;
3. modernisation of the national electricity grid through the use of smart technologies, which is a prerequisite to accelerate the uptake of renewable energy; and
4. efficient use of energy through the deployment of appropriate technologies in all sectors of the economy and awareness raising on energy conservation.

**Qu. 3 Please provide evidence related to the effectiveness of the measures identified in your responses to Questions #2. For example, evidence could involve measured decreases in air and water pollution, a growing proportion of the population with access to clean water and adequate sanitation, increased production of renewable energy, declining greenhouse gas emissions, a growing percentage of land in terrestrial and marine protected areas, declining use of pesticides and/or other toxic substances, lower body burdens of toxic substances such as PCBs and lead, and declining rates of deforestation.**

Currently, Mauritius generates about 20.7 % of its electricity requirements from renewable sources, comprising mainly of bagasse, hydro, wind, solar and landfill gas. It has a well-established renewable energy development programme to reach the target of 35% by 2025 and in the long term, it intends to gradually shift to LNG, which is a cleaner fuel.

**Solar PV**

8 solar PV projects have been commissioned from 2015 to date and these are:

* Mont Choisy PV Farm – 2 MW (Dec 2016)
* L’Esperance PV Farm – 2 MW (Jan 2017)
* Petite Retraite PV Farm – 2 MW (Jan 2017)
* Queen Victoria PV Farm – 16.3 MW (Dec 2018)
* Solitude PV Farm – 15.1 MW (Dec 2018)
* Anahita PV Farm – 10.3 MWac (Dec 2018)
* Akuo Henrietta PV Farm – 15 MWac (April 2019)
* CEB Green Henrietta PV Farm – 12 MW (May 2019)

2 more solar projects will be commissioned as follows:

* Petite Riviere PV Farm – 4.88 MWac (Nov 2019)
* Petite Retraite Expansion PV Farm – 11.5 MW (2020)

**Wind farm**

One wind farm of a total capacity of 9.35 MW is operational since March 2016.

Another wind farm of capacity 29.4 MW will be implemented at Plaine Sophie.

**Solar PV schemes**

Several PV schemes at a lower scale targeting household, commercial customers, SMEs, Cooperatives and Government buildings.

From 2015 to April 2019, about 7 MWac have already been installed under the different schemes.

|  |  |  |  |
| --- | --- | --- | --- |
| S/N | List of Solar PV Schemes | No. of systems commissioned | Equivalent capacity commissioned (kW) |
| 1. | Total SSDG (FIT, NM, PECR) | 1,269 | 4,816 |
| 2. | Cooperative scheme | 6 | 23 |
| 3. | Home Solar Project – Phase 1 | 752 | 752 |
| 4. | SME Phase 1 | 150 | 300 |
| 5. | MSDG Net-Metering 1 | 14 | 1,667 |
| 6. | MSDG (MCB + Super U) | 1 | 1,140 |

**Landfill gas and Waste-to-Energy Project**

The wastes are disposed in the sole landfill of the island at Mare Chicose. As from 2011, landfill gas is used to generate electricity. The effective capacity is 3 MW and in 2018, an amount of 22.6 GWh of electricity was generated.

Mauritius produces about 500,000 tons of solid waste per year and its only landfill site is close to saturation. A new project of waste-to-energy will be operational in 2022. This project will not only produce electricity, but will at the same time alleviate the problem associated with the disposal of waste in the country.

**Qu. 4 Please specify any challenges your Government, business, or organization has experienced in fulfilling its obligations relating to the human right to a safe, clean, healthy and sustainable environment.**

One major challenge is the level of preparedness of the Social Welfare Centres which are used as Emergency Shelters in case of natural calamities. The environmental and sanitary conditions need to be improved to better protect the human rights of the evacuees. A few Emergency Shelters are overcrowded and this impacts on the conditions in which the people stay.

**Qu. 5. How are the rights of those who may be particularly vulnerable to violation of their right to a safe, clean, healthy and sustainable environment (e.g. women, children, persons living in poverty, members of Indigenous peoples and traditional communities, older persons, persons with disabilities, displaced persons, and national or ethnic, religious and linguistic minorities), through either environmental degradation (e.g. air and water pollution, exposure to toxic substances, climate change impacts) or lack of access to environmental amenities (e.g. safe drinking water, adequate sanitation, waste management services, access to natural spaces), provided with heightened protection?**

Their rights are protected by sensitizing them on climatic changes and the ways and means to minimize effects on their life.

The Mauritian Disaster Risk Reduction (DRR) system has much strength and compares favourably with many other national DRR arrangements:

* The legislation is robust and clear. Administrative and operational arrangements and roles and responsibilities are understood and agreed.
* The NDRRMC clearly understands DRR policy and practice as it is expressed in the Sendai Framework.
* Emergency Plan for Vulnerable regions, Hospitals and Residential care homes. Several Contingency plans have been developed by the NDRRM and a contingency plan for Dr Jeetoo hospital and residential homes which are in prone areas will be completed by mid of 2019.
* Several families which were vulnerable and living in landslide prone areas at Quatre Soeurs and Chitrakoot have been relocated to a safe location with the prompt intervention by the NDRRMC. They were provided with plots of land and compensations from the Government.
* An emergency plan for the safety of students in a particular vulnerable school proneto flooding, has been drafted and approved by the Cabinet. The plan will be used as template by other schools to draft other emergency plans.

**Development of a Protocol for Heavy Rainfall for the Public Sector/Private sector**

* A Protocol for public sector/private sector was prepared to prevent disputes and confusion, maintain good labour management relations, and ensure safety of employees, whilst maintaining continuity of business.
* Assistance to victims of natural calamities/events are provided by the government in   
  terms of vouchers.

**Emergency Alert Mobile App–**

The Mobile App acts as a channel of communication between the NEOC and/or the NDRRMC and members of the general public and provides alert notifications as and when required by the NEOC/NDRRMC.

* **MyT Weather –**

This App is a common platform for alerts/ emergency news, viral information from different government institutions and other authorized entities in Mauritius and which people can access through the mobile application.

* Human Rights treaties require states to not only respect (not violate) those rights but to take positive measures to ensure protection of those rights. The right is enshrined **in Article 6 of t e International Covenant on Civil and Political Rights**: *“Every human being has the inherent right* to *life. This right shall be protected by law. No one shall be arbitrarily deprived of his life “*

General comment No. 36 (2018) on article 6 of the International Covenant on Civil and Political Rights ICCPR (2018), on the right to life provides that:

* The duty to protect life also implies that States parties should take appropriate measures to address the general conditions in society that may give rise to direct threats to life or prevent individuals from enjoying their right to life with dignity.
* States parties should also develop, when necessary, contingency plans and disaster management plans designed to increase preparedness and address natural and man- made disasters, which may adversely affect enjoyment of the right to life, such as hurricanes, tsunamis, earthquakes, radio-active accidents and massive cyber- attacks resulting in disruption of essential services.
* Electricity and sanitation, and other measures designed to promote and facilitate adequate general conditions such as the bolstering of effective emergency health services, emergency response operations (including fire-fighters, ambulances and police forces) and social housing programs.

Similar reasoning for other rights as: right to health, right to a healthy environment, right to property, right to food, etc.4.2 The National Disaster Risk Reduction and Management Centre also plays important roles by providing guidance for public education, alert and warning systems, response andevacuation plans but DRR occurs in a competitive environment where various sectors and agencies compete for limited government resources and there are often less than optimum funds to achieve all desired objectives.

* High income states and Government will have to position public awareness and education as   
  the primary tool for achieving an informed population that accepts responsibility for personal   
  safety and is committed to disaster prevention and mitigation. Public awareness activities aim to foster changes in behaviour leading to a national culture of prevention and mitigation.

In 2016, the Mauritius Renewable Energy Agency (MARENA) was created to oversee the development of renewable energy in Mauritius.

With a view to implementing the energy strategy, a Renewable Energy Roadmap 2030 for the electricity sector is being developed, whereby projects are planned to allow the achievement of 35% renewable sources in the electricity mix by 2025, and maintained at this level by 2030.

**Exemption from undertaker licence**

The Finance (Miscellaneous Provisions) Act 2016 brought amendments to the CEB Act to simplify licensing processes for installations of less than 2 MW.

**Reinforcement of CEB’s infrastructure**

A high penetration of intermittent renewable such as solar or wind power, make the power system more exposed to frequency instability due to the intermittency of the power output. CEB appointed Consultants Mercados of Spain to examine technical solutions for minimizing the impact of highly intermittent RE on the stability of the grid frequency. On the basis of the recommendations of the Consultant, CEB has started the implementation of a number of technology-oriented grid absorption capacity solutions to maintain grid stability, which allow for more injection of renewable electricity into the grid.

These solutions include the Battery Energy Storage System (BESS), Automatic Generation Control (AGC), the Advanced Distribution Management System (ADMS) and Advanced Metering Infrastructure (AMI), for operating medium speed engines in droop mode rather than in load control. In addition, a new CCGT plant, planned for 2023-2024, will allow fast response to stabilise frequency created by highly intermittent Renewable Energy (RE).

**Investments**

With a view to achieving the target of 35% of Renewable Energy (RE) in the energy mix of Mauritius by 2030, it is estimated that an additional investment of US$ 290 million in renewable technologies would be required. It may be noted that a further amount of about US$ 900 million would be required for the shift to cleaner technologies such as LNG, away from oil and coal, for further decarbonisation of the energy sector in Mauritius, as per our NDC pledges.

Since 2015, we have made significant efforts to mobilize both public and private investment to be able to progressively work towards achieving our pledges and meeting our RE targets in our energy mix.

With the support of the IRENA and Abu Dhabi Fund for an amount of USD 10 Million, Mauritius is currently implementing an innovative solar PV programme for the poor and vulnerable families of our society through the CEB Green Co Ltd. Over the next 4-5 years some 10,000 poor households will be provided each with a free 1 kW PV kit. 50 kWh of electricity is provided free to the household, and the excess injected into the grid for sale to consumers, with the revenue therefrom used to amortize the investment of the kit. This project does not only empower the poor to become energy producers, but also allows to foster greater social inclusion with attendant benefits to society at large.

**Qu. 6 How do you ensure that the rights of environmental human rights defenders are protected? What efforts has your Government, business or organization made to create a safe and enabling environment for them to freely exercise their rights without fear of intimidation, violence or reprisal?**

Human rights defenders enjoy the same rights as any other citizen in Mauritius including rights entrenched in chapter II of the Constitution of Mauritius. The Constitution makes provision under section 17 for redress to be afforded to any individual whose rights under chapter II have been, are being or are likely to be contravened. There is also the possibility of challenging acts of public bodies in Court by way of applications for judicial review on grounds of illegality, "Wednesbury unreasonableness", abuse of powers and procedural impropriety. There are also a number of human rights institutions which an aggrieved individual can resort to: The National Human Rights Commission, the Equal Opportunities Commission, the Ombudsperson for Children, the Independent Police Complaints Commission, the National Preventive Mechanism, Division of the National Human Rights Commission. There is also the possibility of addressing minor petitions to the Attorney General.

**Qu. 7. What are ways in which high-income States should assist low-income States in respecting, protecting, and fulfilling the human right to a safe, clean, healthy and sustainable environment?**

* Arrangements for international aid and assistance need to be developed with relevant consulates and embassies.
* Financial aid to implement other projects need to be provided.
* Legislation should be reviewed to ensure that agencies have the mandate and responsibility to carry out DRR activities.
* Build more appropriate shelters and develop a protocol for the removal of evacuees from emergency shelters after the disaster has ended This ensures that facilities that have been repurposed during the disaster response (such as youth facilities) can revert to their usual use (for example, for youth activities) in a timely manner.
* There is a need to strengthen awareness, education and preparedness campaign so as to reduce the disruptive impacts of natural hazards on vulnerable communities.
* Development of media DRR programmes and campaigns, including sensitisaiton of media itself. Integrate media into public awareness programme and define their role.
* Integration and disaster risk development into school textbooks of primary schools. Ensure schools' public education programme including drills.

The Mauritius Meteorological Services (MMS) provides services complying with customer, statutory and regulatory requirements, including WMO and ICAO, and to continually improve the effectiveness ofthe QMS so as to ensure its continuing suitability for meeting the need and aspiration of our customers. The MMS is also committed to fostering a conducive work environment through the use of modern technology that will enable the MMS to achieve its mission, objectives and goals.

The vision of the MMS is to be a weather resilient and climate-smart nation and its mission is to provide accurate and timely weather and climate services and early warnings for natural hazards for enhanced socio-economic development of the Republic of Mauritius.

To be able to achieve the above, the MMS has the following strategic goals:

1. Building a weather resilient nation.
2. Strengthening network of observing station and modernise operations.
3. Providing climate services for the socio-economic development.
4. Strengthening human and institutional capacity.
5. **Projects implemented to achieve the goals:**

Awareness Campaigns were conducted as follows:

1. In 2016, talks were delivered in the fifteen Women Empowerment Centres to about 300 women from different regions. Same exercise was carried out in 2017.
2. In 2018, awareness has been conducted in Social Welfare Centres around the island, schools and any other organisations that solicits our knowledge sharing capacity.
3. Some 8000 visitors have visited the MMS in 2018; about 50% of the visitors are primary school students. The rest consists of Secondary and tertiary students, women associations and senior citizen groups.

The following equipment were installed to strengthen the observation network:

* Doppler Radar
* Lightning detector
* Storm surge modelling: we are actually in the second phase of the project whereby we have to acquire the wave and swells component.
* Automatic Weather Stations have been installed in additional locations.
* Automatic rain recorder has been installed in two locations.

Moreover, the MMS has put in place since 2015, a new concept of warning called 'Now casting' whereby the public is informed of localised heavy rainfall so as to enable them to react accordingly and move to safer places.

In addition, an officer of the Meteorologist or Divisional Meteorologist cadre is posted at the NDRRMC since its creation in 2013, so as to be proactive in case of extreme weather. He also acts as a liaison officer to NDRRMC and helps in decision making and preparedness as well as planning purposes.

**Qu. 8. For businesses, what policies or practices are in place to ensure that your activities, products, and services (extraction, sourcing, manufacturing, distribution, sale, and end-of life management) respect and protect the human right to a safe, clean, healthy and sustainable environment?**

1. **Switch Africa Green Project**

The SWITCH Africa Green Project is an initiative of the European Union to support countries in Africa to achieve sustainable development by promoting a shift to Sustainable Consumption and Production (SCP) patterns. Mauritius identified Agriculture, Manufacturing and Tourism as the priority sectors for promoting green business development and eco- entrepreneurship in the country. The project is led by UNEP, UNDP and UNOPS and the national focal point for Mauritius is the Ministry of Social Security, National Solidarity, and Environment and Sustainable Development.

The SWITCH Africa Green project aims at supporting both Climate Change Adaptation and Mitigation as it seeks to encourage the adoption of resource efficient techniques. It promotes eco-friendly and green business ideas based on techniques such as use of renewable energy sources, alternatives to plastic as raw materials, recycling and upcycling as well as sustainable agricultural practices which minimise use of chemicals.

**Objective of the project**

The overall objective of the project is to improve resource efficiency by providing support to private sector led inclusive growth. Specific objective of the project is to support the development of green businesses and eco-entrepreneurship and use of SCP practices and thus:

* **Budget: EUR 19 Millions for the 6 selected pilot countries**
* **Sectors of Intervention: Manufacturing, Tourism and Agriculture**
* ***Cross-cutting issues include Energy Efficiency, Labelling and Standards, Water Efficiency, Eco-Innovation and Integrated Waste Management***

**The project has 3 main components:**

* Component A: Policy Support - Conduct a Policy Review of the 3 identified sectors
* Component B: Green Business Development - Call for Proposal for a Grant Scheme to enable SMEs to start and develop resource efficient and green businesses.
* Component C: Networking facility for dissemination and sharing of knowledge among stakeholders

**Implementation of the project: Phase I**

Implementation of the first phase of the project has led to the development of a Country Implementation Plan which comprises recommendations for economic and market instruments, aimed at promoting and facilitating the shift to green economy. The Plan also includes recommendations for country projects which will establish new and innovative business ideas to lay the basis for green business development.

The SWITCH Africa Green project also supports implementation of country projects through a Grant Scheme under Component B. 6 Country projects and 2 multi-country projects were supported under Phase

1. Financial and technical support was provided to Small and Medium Enterprises to empower them with thenecessary skills and technical know-how to adopt sustainable business practices. The projects were completed in June 2018.

Under Component C - Networking Facility, awareness raising forums were organised to disseminate information on green business development. The forums served as a platform to disseminate knowledge on how best to integrate sustainable practices in existing businesses and also promoted the sharing of knowledge on opportunities that can be explored to encourage the emergence of new and innovative business ideas.

**Implementation of the project: Phase 11**

**Duration: Jan 2018 - Dec 2021**

* Under Phase II, the Policy Support Component will seek at implementing the policy recommendations made in the Country Implementation Plan.
* 4 policy areas have been identified and TORS have been prepared to support implementation of policy action, namely:

1. Development of Standard for manure from animal wastes
2. Setting up of a pilot biogas production plant using livestock wastes
3. Development of a Greenhouse gas (GHG) emission model for livestock waste
4. Marketing of local products for Rodrigues Island.
5. **Development of Standard for manure from animal wastes**

Implementation of the project "Development of Standard for manure from animal wastes" has already started and a brief on the status is attached.

* As regards Component B(Green Business Development), 1 project from Mauritius was awarded a grant of EUR 1,108,189 for the project: *'Improving Sustainable Tourism in Mauritius through greening the value chain of tour operators'.* The grantee for the project is the Mauritius Tourism Authority.

**Objective of the project:**

To support Tour Operators adopt sustainable, innovative and smart actions to improve   
the sustainability of their businesses.

* Under the Networking Facility Component, 2 capacity building/ sensitisation sessions held on 19 and 26 February 2019 with the Cooperatives sector and Women Associations to share information and experience on best practices. 136 persons trained and sensitised on green skills development in Agricultural, Manufacturing and Tourism sectors.

1. Women and Cooperative societies sensitised on the concept of Green Economy and Sustainable Consumption and Production practices.
2. Networking amongst women and Cooperative societies established to promote and upscale green entrepreneurship through the adoption of sustainable practices.
3. Promotion of new green ideas and business development opportunities for the Cooperatives sector and for empowerment of women entrepreneurs.

The Sugar Industry Labour Welfare Fund is engaged in sensitization campaigns in all Community Centres to protect vulnerable populations from climate change. This is done in collaboration with different stakeholders in the locality.