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THE HUMAN RIGHT TO A CLEAN OR HEALTHY ENVIRONMENT AS AN INTERVENTION TO CLIMATE CHANGE IN MAURITIUS

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Abstract

This chapter argues for the potential of incorporating the right to a clean or healthy environment in Mauritian law as a basis of combating climate change. It starts by giving an overview on the effects of climate change in Mauritius and proceeds to highlight salient existing features in the normative and legal framework on climate change. This exercise serves as a critical basis from which the argument of having a human right to a clean or healthy environment is then articulated. The study finds that there are several considerable advantages in adopting a human rights-based approach with a focus on the right to a clean or healthy environment for addressing climate change in Mauritius.

Key words: *Mauritius; climate change; right to a clean or healthy environment; laws; policies; regulations*

1 Introduction

Over the last ten years the impact of climate change has been felt in Mauritius in a significant manner.¹ The island state located in the Indian ocean is expected to face increased food insecurity, deterioration in coastal conditions through erosion of beaches and coral bleaching and a rise in sea levels exacerbating inundation, storm surge and other coastal hazards.² This will threaten vital infrastructure, settlements and facilities that support the livelihood of island communities. Unexpected flash floods in 2008 and 2013 resulting in the loss of lives, unseasonal rainy periods, an unpredictable rise of the sea level (3,8 millimetres per year the last five years), extremely hot summers and bitter winters are the impact of climate change which were never before experienced in Mauritius.³

- 1 United Nations Environment Programme 'Reducing climate change and disaster risk in Mauritius', <https://www.unep.org/news-and-stories/story/reducing-climate-change-and-disaster-risk-mauritius> (accessed 2 August 2021).
- 2 Relief Web 'Mauritians unprepared for effects of climate change', <https://reliefweb.int/report/mauritius/mauritians-unprepared-effects-climate-change> (accessed 10 January 2021).
- 3 R Davies 'Flash floods in south east after 400mm of rain in 24 hours' FloodList,

In response, the state of Mauritius has taken various legislative and administrative measures. The Environment Protection Act contains provisions that are indirectly geared towards combating climate change, and the forthcoming Climate Change Bill (presented to the National Assembly in 2019 for first reading) addresses the matter in a more direct way.⁴ A Climate Change Division was set up in 2010 within the Ministry of Environment and Sustainable Development with the main aim of developing a climate change mitigation and adaptation framework.⁵ A Disaster Risk Reduction and Management Strategic Framework and Action Plan have also been developed under the Africa Adaptation Programme in order to reduce the impacts and effects of climate change. Additionally, the Technology Action Plans have been designed to implement feasible technologies to reduce greenhouse gas emissions.⁶

From the above, Mauritius has made a considerable effort to combat climate change. However, in the critical absence of a human right to a clean or healthy environment enshrined in the Constitution or directly provided for in legislative acts, the efforts may fall short and be insufficient. In fact, the lack of enforceability and justiciability of the action plans and administrative measures taken by the state of Mauritius is proving to be inefficient in combating climate change. This chapter uses Mauritius as a case study to examine the efficacy and potential of the human right to a clean or healthy environment as an intervention to climate change. The suitability of Mauritius as the case study is explained by the fact that it is a country that is in dire need of concrete measures to overcome or at least minimise the effects of climate change. Despite a myriad of measures taken by the state, the absence of the human right to a clean or healthy environment is proving to be a major impediment.

The chapter provides for a comprehensive overview of the impact of climate change in Mauritius. It subsequently focuses on the theoretical

<http://floodlist.com/africa/mauritius-flash-floods-april-2021> (accessed 20 April 2021); *BBCNews* 'Deadly floods hit Mauritius capital Port Louis', <https://www.bbc.com/news/world-africa-21989070> (accessed 22 April 2021).

- 4 Mauritius National Assembly 'The Climate Change Bill No XIV of 2020', <https://mauritiusassembly.govmu.org/Documents/Bills/intro/2020/bill142020.pdf> (accessed 20 March 2021).
- 5 Ministry of Environment Solid Waste Management and Climate Change 'Climate change division', <https://environment.govmu.org/Pages/Climate-Change-Division.aspx> (accessed 20 March 2021).
- 6 Republic of Mauritius 'National disaster risk reduction and management policy, strategic framework and action plan to be developed soon' 13 October 2013, <http://www.govmu.org/English/News/Pages/National-Disaster-Risk-Reduction-and-Management-policy-strategic-framework-and-action-plan-to-be-developed-soon.aspx> (accessed 20 March 2021).

framework of the right to a clean or healthy environment as a human right. The normative and legislative framework on climate change in Mauritius is then discussed, preceding the part that argues for the human right to a clean or healthy environment as a basis for combating climate change in Mauritius. The chapter concludes with key recommendations.

2 An overview of the impact of climate change in Mauritius

As in most island states, climate change poses serious risks for Mauritius. In one of its assessment reports, the Intergovernmental Panel on Climate Change (IPCC) noted that ‘small islands, whether located in the tropics or higher latitudes, have characteristics which make them especially vulnerable to the effects of climate change, sea-level rise, and extreme events’.⁷ The report underlined that both commercial agriculture and tourism will be adversely affected.⁸ The situation has become significantly more alarming since these are two key sectors of the Mauritian economy. Mauritius is a small island developing state (SIDS) vulnerable to drastic meteorological events and natural disasters such as cyclones, torrential rains, storms and tidal surges, floods and flash floods, tsunamis, landslides and other man-induced disasters.⁹ According to the World Risk Report 2020, Mauritius is today ranked fifty-third with the highest disaster risk, and tenth of the nations most exposed to natural hazards.¹⁰ The monitoring body of the United Nations (UN) Framework Convention on Climate Change (UNFCCC) has explicitly highlighted the dangers and the daunting challenges that the country is set to face in the near future regarding its climate.¹¹ Some of the impacts of climate change are briefly discussed below.

Mauritius is exposed to highly-intense tropical cyclones that can generate gusts of wind that go beyond 260 kilometres per hour, often accompanied by days of torrential rains likely to exceed 400 millimetres of rain. Such tropical cyclones have often resulted in the loss of human lives, severe damage to infrastructure, agriculture and farming, and beach

7 N Mimura et al ‘Small islands’ in Climate Change 2007: Impacts, adaptation and vulnerability Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (2007) 12.

8 As above.

9 Ministry of Local Government and Disaster Risk Management ‘National Disaster Risk Reduction and Management Centre’ 21 February 2021, <https://ndrrmc.govmu.org/SitePages/Index.aspx> (accessed 20 April 2021).

10 BE Hilft *World risk report 2020* (2020) 59.

11 UNFCCC ‘Vulnerability and adaptation: Mauritius’, <https://unfccc.int/resource/docs/natc/maunc1/chap3/chapter3.htm> (accessed 20 April 2021).

erosion through wave surges.¹² Additionally, past records indicated that the occurrence of more intense cyclones lasting much longer has been recorded in the south-west Indian Ocean area.¹³ Tropical cyclones of a very high intensity, with average surface winds reaching up to 212 kilometres per hour with a more enlarged diameter have been located over the past 20 years, such as cyclones Bansi and Eunice in 2015.¹⁴ In terms of future projections, long-term annual average rainfall, previously measured at 2 010 millimetres, will decline, accentuating the challenge that the country is already facing regarding sparse and uneven distribution of rainfall.¹⁵ Indeed, the central plateau region receives an average of 4 000 millimetres annually whereas the western region is limited to 900 millimetres. Technical reports of the Mauritius Meteorological Services reveal that there have been and will continue to be frequent episodes of drought with significant deficiency in rainfall as noted from 1983 to 1984, 1998 to 1999 and 2011 to 2012.¹⁶ It has been forecast by the IPCC that the mean annual rainfall will decrease by 8 per cent whereas, on the other hand, flash floods will be more frequent.¹⁷ On 30 March 2013, 11 people were killed in the capital city of Port Louis by flash floods that resulted in 152 millimetres of rainfall in a very short span of time.¹⁸ Regions such as Chitrakoot, La Butte, Quatre Soeurs and Montagen Ory have experienced unusually heavy rainfalls resulting in landslides.¹⁹

The IPCC has forecast that sea level will rise between 18 and 59 centimetres by the year 2100.²⁰ It has been noted and reported that the sea level in Mauritius has risen by 7,8 centimetres whereas that of Rodrigues (an island belonging to Mauritius) has experienced a rise of 6,7 centimetres based on a long-term average of tidal gauge records spanning over 50 years from 1950 to 2001.²¹ Such tendency is likely to result in the erosion

12 S Sobhee & J Blocher 'Using migration to develop resilience against climate change in Mauritius' (2015) 11 *Migration, Environment and Climate Change: Policy Brief Series 2*.

13 Mauritius Meteorological Services 'Climate change', metsservice.intnet.mu/climate-services/climate-change.php (accessed 20 April 2021).

14 See Mauritius Meteorological Services 'Technical report CS 28 cyclone season of the South West Indian Ocean 2006-2007' (2008) 7.

15 Mimura et al (n 7) 698-706.

16 See Sobhee & Blocher (n 12) 2.

17 Mimura et al (n 7).

18 Government Information System Newsletter 'Eleven die in flash floods', https://publications.iom.int/system/files/pdf/policy_brief_series_issue11.pdf (accessed 20 April 2021).

19 National Disaster Risk Reduction and Management Centre 'Landslides in Mauritius', <https://ndrrmc.govmu.org/pages/landslides.aspx> (accessed 20 April 2021).

20 Mimura et al (n 7).

21 See Ministry of Environment and Sustainable Development 'Maurice Ile Durable:

of the beaches, the loss of bays and severe damage to built-up areas along the coastline. The rise of the sea level has accentuated the effects of storm surges, thereby representing a threat to the beautiful coastal landscape in only a few years.²² In recent times it is common for summer rains to start in January, whereas in the 1960s and 1970s the rains usually started in November.²³

According to surveys conducted by the International Organisation for Migration (IOM) and the government of Mauritius at a village in Mauritius called Rivière des Gallets, which is in the south-west and is highly sensitive to sea level rise and storm surges, elderly persons have been opposed to the idea of being relocated because of the strong ancestral ties that they have with their area, while young citizens for their part have expressed their willingness to be relocated.²⁴ Another relocation plan affects the south-east of the island, in the village of Quatre Soeurs, where there are significant risks of landslides resulting from heavy rainfall. The government has relocated 11 households to Camp Ithier as their houses were threatened of crackdown. All these households agreed to be relocated to the proposed location because of the degree of severity of this natural calamity.²⁵

3 A healthy environment as a human right

The nexus between human life and the environment is an inseparable one. Clean air, potable water, nutritious food to eat and a place to live in and sleep are the basics that are required by human beings to survive. If these crucial elements are contaminated, destroyed, polluted or eliminated, life may cease to exist. Therefore, it is essential that the natural environmental life support system is protected and maintained to protect human life. One way to achieve this is to create a substantive right to a clean or healthy environment. In the past 20 years or so, researchers and academics have debated and discussed the existence of a human right to a clean or healthy environment. According to Thorme, 'these debates have varied from generalised notions of what to include within the term environment

Policy, strategy and action plan', www.govmu.org/portal/sites/mid/file/full%20report%20midpolicy.pdf (accessed 20 April 2021).

22 See Government of Mauritius 'Third international conference on Small Island Developing State – National report of the Republic of Mauritius' (2014), www.sids2014.org/content/documents/215Mauritius%20National%20Report.pdf (accessed 20 April 2021).

23 International Organisation for Migration 'Environmental changes and migration in Mauritius' (2011) 39.

24 As above.

25 Sobhee & Blocher (n 12) 3.

to actual proposals for amendments to multinational human rights conventions'.²⁶ However, the importance attached to this debate over the years has not ended in any substantial conclusion towards the legal recognition of the right to a clean or healthy environment.

The principle question with which the scholastic community has been grappling is to understand the concept of environment as a human right. It therefore is apposite to first understand what a human right is and then to argue whether the environment can fit in the definition of a human right. Cranston has defined a human right as follows:²⁷

A human right by definition is a universal moral right, something which all people everywhere at all times ought to have, something of which no one may be deprived without a grave affront to justice, something which is owing to every human being simply because he is human.

Alston has added more precision and content to the definition of a human right in the following terms:²⁸

Human rights are also legal rights which possess one or more of the following characteristics: appurtenance to the human person or group; essential for international order; essential to human life, security, survival, dignity, liberty, and equality; essential as a place within the conscience of mankind; essential for the protection of vulnerable groups; and universality.

Based on the above definitions, Thorne argues that the human right to a clean or healthy environment possesses all the characteristics as illustrated above to be recognised as a human right.²⁹ In addition, in accordance with Marks's features of 'a right to the new generation', namely, the elaboration of a specialised body of international environmental law; an easily-identifiable international legislative process; incorporation of the right as a human right within municipal legal systems; and the need for concerted efforts of all social actors, the human right to a clean or healthy environment should gain legal recognition.³⁰

26 M Thorne 'Establishing environment as a human rights' (2020) 19 *Denver Journal of International Law and Policy* 301.

27 M Cranston 'What are human rights' (1973) 36.

28 P Alston 'Conjuring up new human rights: A proposal for quality control' (1986) 78 *American Journal of International Law* 615.

29 See Thorne (n 26) 302.

30 S Marks 'Emerging human rights: A new generation for the 1980's?' (1981) 33 *Rutgers Law Review* 442-443.

The right to a clean environment was first recognised by the UN in June 1972 through the UN Conference on the Human Environment which stated that 'man has a fundamental right to freedom, equality, and adequate conditions of life in an environment of quality that permits a life of dignity and well-being'.³¹ In addition, the 1972 Consultative Assembly of the Council of Europe adopted a decision for the setting up of a Committee of Experts with the mandate to 'consider, in the light of the conclusions reached at the United Nations Conference in Stockholm and the Council of Europe Conference on the Human Environment, whether the right to an adequate environment should be raised to the level of a human right, and [to] devise an appropriate legal instrument to protect this new right'.³²

At the UN level, bodies such as the Sub-Commission on Prevention of Discrimination and Protection of Minorities as well as the Human Rights Commission have recognised a clear link between human rights and the environment and have even mandated members to explore the possibility of the establishment of a human right to a clean or healthy environment despite the fact that the work is far from completed.³³ As Weiss rightly said, 'if there is to be a human right to a decent environment, there is disagreement over how to treat it'.³⁴

Various scholars placed the right to clean or a healthy environment in differing human rights categories. Some include it as a fundamental human right, whereas others claim that it falls within the doctrine of basic human needs. Others classify it as a 'third generation' human right.³⁵ There is the possibility of deriving the right to a clean or healthy environment from other human rights as a corollary right. Sohn argued that the human right to a clean or healthy environment may already exist as part of customary international law or under the law of the UN given that this right can easily and readily be derived and intercepted from the Universal Declaration of Human Rights (Universal Declaration), the UN Charter and international covenants on human rights.³⁶ Despite all the

31 Un Report of the UN Conference on the Human Environment Stockholm, UN Doc A/CONF.48/14/Rev. 1 (1974) 4.

32 W Gormley 'The right of individuals to be guaranteed a pure, clean and decent environment: Future programmes of the Council of Europe' (1975) 23 *Legal Issues in European Integration* 52.

33 Thorne (n 26) 308.

34 E Weiss *In fairness to future generations: International law, common patrimony and intergenerational equity* (1989) 116.

35 Thorne (n 26) 317.

36 L Sohn 'The new international law: Protection of the rights of individuals rather than states' (1982) 32 *American University Law Review* 62.

positive developments at the UN level regarding the development of a human right to a clean or healthy environment, the right also is not legally recognised and provided for by treaty laws.

The above situation is in sharp contrast to what exists at the African level and, more specifically, under the African Charter on Human and Peoples' Rights (African Charter). Indeed, article 24 of the African Charter provides that 'all peoples shall have the right to a general satisfactory environment favourable to their development'. This right was interpreted in the *SERAC* case.³⁷ In this matter the Ogoni communities in Nigeria alleged that environmental degradation and health issues were the result of an oil consortium's contamination of the environment. They alleged that the oil consortium's exploitation of oil reserves in Ogoniland resulted in the contamination of water, soil and air and had serious short and long-term health impacts, including skin infections, gastrointestinal and respiratory ailments, an increased risk of cancer, and neurological and reproductive problems.³⁸ Interpreting article 24 of the African Charter, the African Commission on Human and Peoples' Rights (African Commission) stated that articles 16 and 24 of the African Charter

recognise the importance of a clean and safe environment that is closely linked to economic and social rights in so far as the environment affects the quality of life and safety of the individual. As has been rightly observed by Alexander Kiss, an environment degraded by pollution and defaced by the destruction of all beauty and variety is as contrary to satisfactory living conditions and the development as the breakdown of the fundamental ecologic equilibria is harmful to physical and moral health.³⁹

A comprehensive review of the African Commission's decision clearly indicates that the human right to a clean or healthy environment is not only recognised but also justiciable and enforceable under the African Charter.⁴⁰ This statement is directly applicable to the state of Mauritius given that the country has ratified the Charter albeit without domestication. Its relevance and importance will be discussed later in the chapter.

At the domestic level, the human right to a clean or healthy environment has perhaps been more clearly and directly articulated in constitutions.

37 *Social and Economic Rights Action Centre (SERAC) & Another v Nigeria* (2001) AHRLR 60 (ACHPR 2001) (*SERAC*).

38 *SERAC* (n 37) para 2.

39 *SERAC* (n 37) para 51.

40 K Ebeku 'The right to a satisfactory environment and the African Commission' (2003) 3 *African Human Rights Law Journal* 149.

Indeed, proponents of the right to a clean or healthy environment have indicated the acceptance and incorporation of this right into more than 60 national constitutions.⁴¹ In some states, constitutional provisions on the right to clean or a healthy environment are declaratory of the state's duty to pursue development that is environmentally sound, the utilisation of natural resources in a sustainable manner and maintaining a safe and healthy environment for citizens. In other states the constitutions provide for the right to a clean and healthy environment of citizens and the duty of individuals to protect and conserve the environment and natural resources. Interestingly, in some states these two approaches are employed in a combined fashion.⁴² Despite the loose interpretation and provision of the human right to a clean or healthy environment at the UN level, it is generally accepted that such a right does exist in the African human rights architecture and in several other jurisdictions. Therefore, this can be used as guidance for Mauritius in an attempt to incorporate and implement the human right to a clean or healthy environment as a tool for combating the effects of climate change, as will be discussed after an overview of the normative and legal framework on climate change in Mauritius discussed in the following part.

4 The legal framework on climate change in Mauritius: An overview

This part provides an overview of the normative and legislative framework on climate change. Laws, regulations, policies and norms created by the various governments since independence will be presented which in the subsequent part will allow for a critical assessment as to whether or not the regulatory framework is compatible with a human right to a clean or healthy environment. It is apposite to begin with the Ministry of Environment, Solid Waste Management and Climate Change (Ministry of Environment) and its 'mission and vision' statement. The vision of the Ministry of Environment is

to achieve a cleaner, greener and safer Mauritius in a sustainable manner, through protection and management of our environmental assets, mainstreaming sustainable development principles in different sectors of the

41 United Nations (UN) Sub-Commission on Prevention of Discrimination and Protection of Minorities 'Human rights and the environment' E/CN.4/Sub.2/1994/9/Corr.1 para 117.

42 Weiss (n 34) 306.

economy, solid and hazardous waste management, enhanced resilience to disasters, and conservation and rehabilitation of beaches.⁴³

Although the term 'climate change' is not clearly mentioned in the vision statement of the Ministry of Environment, the vision of a greener Mauritius and the emphasis on sustainable development give an indication that climate change no doubt is firmly on the agenda. That said, in the mission statement the concept of climate change is explicitly referred to in the following terms:⁴⁴

Devise appropriate legal and policy framework regarding environment related issues such as climate change, solid and hazardous waste management, disaster risk reduction and beach management to effectively respond to emerging challenges; incorporate climate change adaptation and mitigation measures to ensure sustainable development initiatives.

In view of materialising the vision and mission, the Ministry of Environment in March 2010 established the Climate Change Division (CCD). The main objective of the CCD is to 'lead efforts in response to the challenges of climate change faced by the country and to enhance the country's resilience to climate change'.⁴⁵ More precisely, the responsibility of the CCD is to coordinate and implement climate change adaptation and mitigation policies, programmes and initiatives. Additionally, the CCD has a duty to keep abreast with regional and international climate negotiations and to ensure compliance with international obligations taken by state of Mauritius under the UNFCCC and the Kyoto Protocol. Some notable works have been undertaken by the CCD, including the Development of a National Climate Change Adaptation Policy Framework for the Republic of Mauritius; and the formulation of a technology needs assessment identifying and prioritising relevant technologies for adaptation to and mitigation of climate change impacts. Other works include reporting on greenhouse gas emission; the preparation and submission of the intended nationally-determined contributions to the UNFCCC; the preparation and submission of the third national communication on climate change to the UNFCCC; the development of a Mauritius 2050 Pathways Calculator; the development of user-friendly sector-wise excel-based mitigation toolkits and accompanying manuals for sectors such as energy, transport,

43 See Ministry of Environment, Solid Waste Management and Climate Change 'Vision and mission', <https://environment.govmu.org/Pages/Mission-and-Vision-Statement.aspx> (accessed 26 April 2021).

44 As above.

45 Ministry of Environment Solid Waste Management and Climate Change 'Climate Change Division', <https://environment.govmu.org/Pages/Climate-Change-Division.aspx> (accessed 26 April 2021).

solid and liquid wastes, agriculture including livestock and crop, and forestry, the operationalisation of a Climate Change Information Centre and the promotion of research, capacity building and awareness raising.⁴⁶ In terms of works in the pipeline, the CCD is formulating a Low Carbon Development Strategy and Nationally Appropriate Mitigation Actions (NAMAs) for Mauritius and is also preparing an Initial Biennial Update Report (BUR) for the Republic of Mauritius.⁴⁷

A Climate Change Information Centre (CCIC) has also been established at the level of the Ministry of Environment with the support of the UNDP, the Inter-Regional Technical Support Component of AAP and Japan International Cooperation Agency under the Africa Adaptation Programme funded by the government of Japan.⁴⁸ As part of its key functions, the CCIC acts as a data repository for climate change information with the mandate of disseminating information and reports on climate change for informed decision making. It acts as a knowledge-based platform directing to links such as NASA, the World Meteorological Organisation and National Centre for Atmospheric Research. The CCIC also provides for digital toolkits with the goal of strengthening adaptation skills in key sectors.

In terms of legislation, Mauritius enacted the Energy Efficiency Act 2011 which establishes an Energy Efficiency Management Office with the objectives of promoting the efficient use of energy and national awareness for the efficient use of energy as a means to reduce carbon emissions and protect the environment.⁴⁹ The three major functions of the Energy Efficiency Management Office are to (i) develop and implement strategies, programmes and action plans, including pilot projects, for the efficient use of energy; (ii) establish procedures to monitor energy efficiency and consumption; and (iii) issue guidelines for energy efficiency and conservation in all sectors of the economy.⁵⁰ Another important function is to 'encourage and assist project developers in applying for carbon credits for energy efficiency projects using the Clean Development Mechanism'.⁵¹ In line with the principle of mitigation of the effects of climate change, section 19 of the Energy Efficiency Act 2011 provides for an energy

46 As above.

47 As above.

48 Ministry of Environment, Solid Waste Management and Climate Change 'Climate Change Information Centre', <https://environment.govmu.org/Pages/CCIC.aspx> (accessed 26 April 2021).

49 Sec 5 Energy Efficiency Act 2011.

50 Sec 6 Energy Efficiency Act 2011.

51 Sec 6(j) Energy Efficiency Act 2011.

audit which is defined as the verification, monitoring and analysis of use of energy, including the submission of a technical report containing recommendations for improving energy efficiency with economic and cost analysis and an action plan to reduce energy consumption.⁵²

The Energy Efficiency Act provides for regulations to be adopted by the minister in charge in terms of (i) the minimum energy performance standards for any equipment, machine or appliance that is imported, manufactured or sold in Mauritius; (ii) the labelling requirements and specifications for any equipment, machine or appliance that is imported, manufactured or sold in Mauritius; (iii) the criteria to classify energy consumers; (iv) the minimum qualification standards for certification of energy auditors and related procedures for energy audits; (v) any other matter related to energy efficiency; and (vi) any person who contravenes these commits an offence and, on conviction, shall be liable to a fine not exceeding 100 000 rupees.⁵³

Another notable piece of legislation that is directly linked with climate change in Mauritius is the Renewable Energy Agency Act 2015 which establishes the Mauritius Renewable Energy Agency.⁵⁴ The Agency's missions are to (i) promote the adoption and use of renewable energy with a view to achieving sustainable development goals; (ii) advise on possible uses of liquid natural gas; (iii) create an enabling environment for the development of renewable energy; (iv) increase the share of renewable energy in the national energy mix; (v) share information and experience on renewable energy research and technology; and (vi) foster collaboration and networking, at regional and international levels, with institutions promoting renewable energy.⁵⁵ In terms of regulations, a notable and indirectly applicable regulation to climate change is the Environment Protection (Banning of Plastic Bags) Regulations 2020. According to this regulation, no person can possess, use, distribute, sell, export, import, manufacture or supply a plastic bag.⁵⁶

52 Sec 2 Energy Efficiency Act 2011.

53 Grantham Research Institute on Climate Change and the Environment 'Mauritius – Energy Efficiency Act 2011', <https://www.climate-laws.org/geographies/mauritius/laws/energy-efficiency-act> (accessed 26 April 2021).

54 Sec 3 Mauritius Renewable Energy Agency Act 2015.

55 Grantham Research Institute on Climate Change and the Environment 'Mauritius – Renewable Energy Agency Act 2015', <https://www.climate-laws.org/geographies/mauritius/laws/renewable-energy-agency-act-2015-no-11-of-2015> (accessed 26 April 2021).

56 Sec 4 Environment Protection (Banning of Plastic Bags) Regulations 2020.

In August 2019 the Ministry of Energy and Public Utilities presented the Renewable Energy Roadmap 2030 for the Electricity Sector (Roadmap). This Roadmap was developed after the national pledge taken by the Mauritian government at the Conference of Parties 2015 was a reduction of 30 per cent of its emissions by the year 2030.⁵⁷ One of the essential mitigation factors proposed was the ‘expansion in solar, wind and biomass energy production and other renewable energy’.⁵⁸ The Roadmap highlighted that a target of 35 per cent renewable energy in the electricity mix would be achieved by 2025.⁵⁹ The regulation provides for very strict fines imposed on individuals breaching the law, such as fines and terms of imprisonment not exceeding up to 250 000 Mauritian rupees and two years respectively.⁶⁰

Passed in 2009, the Long-Term Energy Strategy of the government of Mauritius delineates the country’s vision over the medium and long term with a particular emphasis on environmental sustainability. It calls for energy security; encourages energy efficiency through legal, communicational, administrative and sectoral actions; enhances demand side management; incentivises the uptake of sustainable buildings; and fostering the production and use of renewable resources, including wind, solar, bagasse and hydro. An energy strategy for the transport sector is presented to promote the use of buses and promote low emission vehicles and fuels. Financial incentives, including carbon financing, are discussed.⁶¹

Another policy that aligns with actions against climate change is the National Environment Policy 2007. The aim of this policy is to consolidate several sectoral and cross-sectoral policy goals under one common approach to environmental management. The impacts of climate change are among the several challenges considered by the policy to achieve resilience. Among the national targets concerning the built environment is the establishment of new constructions and building standards in the context of climate change. The policy further aims at enhancing the preparedness of Mauritius in addressing the effects of extreme weather events, climate change, including sea level rise, and other environmental disasters. The policy additionally aims at fostering the

57 Ministry of Energy and Public Utilities ‘Renewable Energy Roadmap 2030 for the Electricity Sector’ (2019) 2.

58 As above.

59 Renewable Energy Roadmap 2030 (n 57).

60 Sec 14 Environment Protection (Banning of Plastic Bags) Regulations 2020.

61 Grantham Research Institute on Climate Change and the Environment ‘Mauritius – Long-term energy strategy’, <https://www.climate-laws.org/geographies/mauritius/policies/long-term-energy-strategy> (accessed 26 April 2021).

production of renewable energy and the efficiency of energy. Targets to be achieved in the combat against climate change can be categorised as both economy and energy-oriented. While one target is economy-oriented, four are energy-oriented. In terms of energy targets, the targets are to achieve 35 per cent of renewable energy by 2035; 10 per cent of energy efficiency gains in the electric sector by 2025; a reduction in energy consumption of the public sector to half the current level by 2025; and to have 50 per cent of households and businesses to use solar-powered water heating systems by 2012 (a target not yet achieved). There is also the economy-oriented target of a 30 per cent reduction in greenhouse gas (GHG) emissions by 2030.⁶²

5 The right to healthy environment as a climate change intervention

5.1 The deficit of the right to environment

Before embarking on the argument of having the human right to a clean or healthy environment as a basis for combating climate change, it is important to highlight a critical legislative development in the field of climate change that is in the pipeline in Mauritius. This concerns the Climate Change Bill XIV of 2020 (Bill). In accordance with the explanatory memorandum of the Bill, its main object is

to implement, with a view to addressing the adverse effects of climate change and developing Mauritius into a greener economy, the obligations of Mauritius under the United Nations Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement and any other related instrument on climate change.⁶³

To achieve the above, the Bill sets out to establish a legal framework with the aim of making Mauritius a climate-resilient and low-emission country by providing the following:

- (a) the setting up of an Inter-Ministerial Council on Climate Change which, on the recommendation of the Minister to whom responsibility for the subject of climate change is assigned, shall make climate change policies and set priorities for climate change adaptation and mitigation, and

⁶² Renewable Energy Roadmap 2030 (n 57).

⁶³ Climate Change Bill (n 4).

- monitor and review the progress made by government departments on climate change projects and programmes;
- (b) a Department of Climate Change which, among others, shall develop policies, programmes and action plans relating to climate change and coordinate research relating to climate change;
 - (c) the establishment of a climate change committee which shall coordinate the preparation of reports relating to climate change and the implementation of activities related to greenhouse gas inventories, greenhouse gas emission reduction, climate change vulnerability assessments and adaptation to climate change;
 - (d) the conduct of an annual inventory of greenhouse emission by sources and removal by sinks;
 - (e) the monitoring and reporting with respect to greenhouse gas emissions, including the implementation of sectoral climate change adaptation and mitigation measures;
 - (f) the ministry responsible for the subject of climate change to be compliant to the fiduciary standards set by the Adaptation Fund Board, the Green Climate Fund and such other international climate-related funds and to act as a national implementing entity with a view to seeking direct access to climate funding.⁶⁴

Despite the aim of the Bill to make Mauritius climate change-resilient and a low emission country, little has been provided for in the Bill to meet these objectives. There are no clear time-bound targets and a directive to set a baseline from which to move towards the target. The Bill fails to consider policies, strategies and actions on climate change since 2007, a development that negates continuity and undermines the maturing process of a normative framework. For instance, no reference whatsoever is made to the emission reduction pledge taken at the COP in 2015 which provided for a reduction of 30 per cent by 2030. This may be considered a missed opportunity to provide for a legal and enforceable basis to implement this reduction target.

In general, the Bill fails to provide for any comprehensive legal framework based on which its overarching aim can be achieved. What it primarily focuses on is yet more creation of councils, departments and committees without any meaningful substance. In addition, no link has been made with climate change and economic growth in terms of taking economic measures to halt a single-minded economic growth that affects the environment. Regarding international standards on climate change, such as the Agenda 2030, the SDGs and the Sendai Framework on Disaster Risk 2015-2030, the Bill seems to make no connection or

64 As above.

link even in the most indirect manner. This results in a serious lack of norms, standards and policies that underpin the legislation and a basis for inter-ministerial, public-private sector collaboration and an intersectional approach to combat climate change. The Bill is devoid of a human rights-based approach to climate change, let alone the recognition of the right to healthy environment. There is no clear recognition of the impact of climate change on human rights and how the reverse philosophy of respecting and protecting human rights passes through the protection of the human environment first and to which effect, it is crucial to combat climate change.

The above argument of a lack of a human rights-based approach to climate change in Mauritius is not only peculiar to the Bill. The legal framework described in the previous part is almost completely devoid of such an approach. There is no policy or legislation in Mauritius that adopts such an approach to climate change. As a consequence, the lack of regard for climate change targets by businesses, government or any other person cannot be challenged as constituting a human rights abuse or infringement. Another associated hurdle posed by this reality is that judicial and quasi-judicial bodies cannot be anticipated as a means to access remedies relating to actions and inactions of government relating to climate change. To illustrate this point, the Supreme Court of Mauritius, which is tasked with the interpretation of the Bill of Rights of the Constitution of Mauritius, as well as other quasi-judicial bodies such as the National Human Rights Commission and the Equal Opportunities Commission are devoid of any direct mandate to interpret climate change-related legislation from a human rights perspective. Also, the annual reports of the National Human Rights Commission do not cover the subject matter of climate change from the perspective of human rights since there is no mandate to do so. Concerning the judiciary, the conservative nature of the Supreme Court and its lack of judicial activism, as discussed elsewhere, do not allow for the possibility of applying the implied rights theory, allowing for the interpretation of human rights, such as the right to life, through the lens of the environment and climate change.⁶⁵

5.2 Incorporating the human right to clean or a healthy environment in Mauritius

Against the above backdrop, there is a critical need for a human right to a clean or healthy environment to be incorporated in the approaches to

65 R Mahadew 'The right to health in Mauritius: Is the state doing enough or is the constitutional protection of the right to health still required?' in E Durojaye et al (eds) *Litigating the right to health in Africa* (2021) 170-171.

address climate change in Mauritius. Part 3 of this chapter has shown that there is still a lack of clarity and content regarding the human right to a clean or healthy environment at the global (UN) level. However, it has been underlined that various domestic jurisdictions have already incorporated such a right in their constitutions and other legislation. It is contended that there is a critical need for Mauritius to adopt a similar approach and to enshrine the human right to a clean or healthy environment in the Constitution of Mauritius. The potential benefits of a constitutional human right to a clean or healthy environment has been argued as being stronger environmental laws and policies; improved implementation and enforcement; greater citizen participation in environmental decision making; increased accountability; a reduction in environmental injustices; and a level playing field with social and economic rights and better environmental performance.⁶⁶ Incorporating the human right to a clean or healthy environment in the Mauritian Constitution will provide a legal basis for interested parties to bring cases before the Supreme Court against the acts of government, businesses and other entities that are contributing to climate change. In addition, it will serve as a yardstick for assessing compatibility with human rights of legislation and other soft laws on climate change. This will allow for the creation of a corpus of jurisprudence on the subject matter, the opportunity for the judiciary to use international standards on climate change to interpret climate change-related laws and the need for policy makers and the government to eventually align all domestic legislations on climate change with the international legal framework on the matter.

In the context of Mauritius, another legal advantage flowing from the constitutional recognition of the human right to a clean or healthy environment is that it may halt the weakening of laws and policies relating to climate change. Courts have adjudicated that, based on the human right to a clean or healthy environment, current and existing environmental legislation represents a baseline that can be improved but not weakened.⁶⁷ This concept, often referred to as the standstill principle in Belgium, has been recognised in South Africa, Hungary and several other Latin American states. In the French jurisdiction, the principle is called the 'ratchet effect' or 'non-regression'.⁶⁸ Authorities in Belgium are prohibited from weakening levels of environmental protection except in

66 D Boyd 'The effectiveness of constitutional environmental rights' (2013) Yale UNITAR Workshop 5.

67 L Lavrysen 'Presentation of Aarhus-related cases of the Belgian Constitutional Court' (2007) 2 *Environmental Law Network International Review* 5-8.

68 M Prieur 'De L'urgente Necessité de Reconnaître le Principe de Non-Régression en Droit de l'environnement' (2011) 1 *IUCN Academy of Environmental Law E-Journal* 26-45.

isolated cases with a significant and compelling public interest.⁶⁹ As a matter of illustration, on the basis of the principle, a proposal for motor racing by reducing standards for air and noise pollution was rejected by the Council of State.⁷⁰ Similarly, the Constitutional Court of Hungary rejected an endeavour to privatise publicly-owned forests as a result of weaker environmental standards governing private land.⁷¹

Constitutional provisions on the human right to a clean or healthy environment can substantially increase and emphasise the role of the public in environmental governance. The human right to a clean or healthy environment has consistently been interpreted as including procedural environmental rights such as access to justice and information, and participation in decision making. Citizens are utilising these rights in an increasingly significant and consequential manner. In many states the recognition of the right to a clean or healthy environment, administrative processes and courthouse avenues are now open and accessible to citizens even though they lack a traditional economic or personal interest and are only seeking to protect society's collective interest abating climate change.

The possibility of a level playing field with competing economic and social rights is another advantage of the constitutional right to a clean or healthy environment. Environmental laws sometimes limit the exercise of the right to property, for instance, recognising that there are instances in which the public interest takes precedence over private interests. In several states with the human right to a clean or healthy environment articulated in constitutions, challenges of allegations by plaintiffs that their property rights have been infringed by environmental laws have been rejected by courts. For instance, the Constitutional Court of Slovenia upheld a water pollution tax based on the constitutional interest in protecting the environment.⁷² In Belgium, as Lavrysen observes, 'courts are no longer inclined when facing conflicting interests, to automatically sacrifice environmental interests in favour of economic interests'.⁷³

Therefore, it is clear that there are many benefits in incorporating a human right to a clean or healthy environment in the Constitution of Mauritius for the effective combating of climate change. Looking at

69 Lavrysen (n 67) 5-8.

70 *Jacobs v Flemish Region* (1999) Council of State 80.018, 29 April 1999; *Venter* (1999) Council of State 82.130, 20 August 1999.

71 Constitutional Court of Hungary 1994. Judgment 28, V. 20 AB, p.1919.

72 *Pavel Ocepek, Breg pri Komendi* (1999) Up-344/96, 04/01/1999 (Constitutional Court).

73 L Lavrysen 'Belgium' in L Kotze & A Paterson (eds) *The role of the judiciary in environmental governance: Comparative perspectives* (2009) 114.

the relatively weak legal framework on environment in general, which is reactive rather than proactive, a constitutional guarantee seems to be the most appropriate legal way to counter the adverse effects of climate change and strengthen its existing legislative framework.

6 Conclusion

There is enough scientific certainty that Mauritius has begun to face and will continue to be exposed to the immense and life-threatening consequences of climate change. While there have been legislative and normative responses to climate change in Mauritius, it would certainly not be an exaggeration to say that these responses have so far not been sufficiently effective. Therefore, there is a crucial need for a new approach to be adopted to deal with the danger of climate change that is hovering over the country. While there are scores of approaches and dimensions that can be given to the combating of climate change in Mauritius, this chapter advocates a human rights-based approach, with particularly emphasis on the incorporation of the right to a clean or healthy environment in the Constitution of Mauritius. For a more holistic approach to climate change from a human rights perspective, in addition to the recommendation, there is the critical need to operationalise standards on climate change in instruments such as the UNFCCC and the Paris Agreement in Mauritius so that they could be invoked before national courts. There is also the need for civil society organisations to be more proactive regarding strategic litigation related to climate change issues. The idea of combating climate change using the human right to a clean or healthy environment has benefits, as has been shown. Importantly, it imposes the obligation regarding climate change quite clearly and decisively on the government and it will shape the protection of rights holders in Mauritius against the adverse effects of climate change.