

**EARTHJUSTICE
350.ORG
HUMAN RIGHTS ADVOCATES
GREENPEACE INTERNATIONAL**

1 November 2010

Office of the High Commissioner for Human Rights
Palais Wilson, 52 rue des Pâquis, CH-1201 Geneva, Switzerland

**Re: Universal Periodic Review of the Republic of Seychelles, 2011
Submission of Earthjustice, Human Rights Advocates, 350.org and Greenpeace
International**

I. SUMMARY

1. Recalling the UN General Assembly Resolution 60/251, adopted on 15 March 2006, the UN Human Rights Council Resolution 5/1, adopted on 18 June 2007, and the Decision 6/102, adopted on 27 September 2007, and in accordance with the Information Note for NGOs regarding the Universal Periodic Review mechanism (8 October 2007), Earthjustice et al. respectfully submits to the Human Rights Council the following information regarding threats to human rights in the Republic of Seychelles (hereafter Seychelles) as a result of anthropogenic climate change for its universal review.

2. Via this submission, Earthjustice et al. seek to contribute to the protection of human rights in Seychelles, where acute environmental problems related to the extreme vulnerability of this island nation to climate change threaten the realization of a standard of living adequate for the health and well-being of all persons. The changes in the physical environment causing these threats have been increasing in frequency and severity over the past several decades and are predicted to increase significantly by the end of the century. This will undermine many human rights recognized under international law.

3. In January 2009, the UN Office of the High Commissioner for Human Rights published a report on climate change and human rights concluding that 1) climate change threatens the enjoyment of a broad array of human rights; 2) human rights obligations provide important protections to individuals who are affected by climate change; and 3) states have legal obligations to those whose rights are affected by climate change, and that those obligations extend extraterritorially. We seek to inform the Human Rights Council of the acute impacts that climate change is having and will have on the human rights of all citizens of Seychelles. We urge the Human Rights Council to adopt an outcome recognizing that Seychelles cannot be considered as bearing the main responsibility for human rights threats suffered by citizens of Seychelles due to climate change. Significantly increased international cooperation will be fundamental to help protect the human rights of the citizens of Seychelles. The responsibility for adaptation to and mitigation of climate change in Seychelles should be shared by major greenhouse gas emitting states, relative to their share of historic and current emissions.

4. In its Fourth Assessment Report, the Intergovernmental Panel on Climate Change predicts that anthropogenic climate change will have significant adverse effects not only on the natural environment, but also on the human populations that inhabit that environment and rely on its processes and services. In Seychelles, climate change will:

- Threaten rights to **food, health, means of subsistence**, and the **ability to maintain an adequate standard of living** by causing salinification of limited freshwater sources, worsened cyclones, sea level rise resulting in flooding and overwash during tide surges, and erosion of coastlines and low-lying areas;
- Jeopardize rights to **food, health, and subsistence livelihoods** by damaging fisheries through sea level rise, increased sea temperature, and exacerbated cyclones; and
- Endanger rights to **life, property, housing, self-determination, security of person, access to water, sanitation, and a healthy environment** due to increased cyclones, droughts, flooding, and spread of disease vectors with warmer air and water temperatures.

5. Increasing changes in the physical environment causing these threats will result in the direct threat to many of the human rights guaranteed by Seychelles under international law, including: the right to **life**, the right to **security of person**, the right to **water**; the right to **food**, the right to **means of subsistence**, the right to **sanitation**; the right to **health**, the right to **property**, the right to **housing**, the right to **self-determination**, the right to an **adequate standard of living**, and the right to a **healthy environment**.

II. BACKGROUND

6. Seychelles is an archipelago of 115 granitic and coralline islands in the western Indian Ocean, northeast of Madagascar. It consists of 455 km² of land area with three main inhabited islands of Mahe, Praslin and La Digue. Tropical rainforests, coral reefs, mangrove lagoons, sandy coasts, dunes, and open ocean provide habitat for high levels of biodiversity. The economy relies on agriculture, fisheries, forestry, and tourism, all of which depend on a stable climate and healthy environment. Seychelles is experiencing disruptive changes due to climate change, including floods, drought, infrastructure damage, coral bleaching, increased mean air and sea surface temperatures, and outbreaks of mosquito-borne diseases.

7. Seychelles is party to the International Covenant on Economic, Social and Cultural Rights and the Convention on the Rights of the Child. Human rights referred to in this document that are not based on those conventions find their source in the 1948 Universal Declaration of Human Rights.

III. THE IMPACTS OF CLIMATE CHANGE ON HUMAN RIGHTS IN SEYCHELLES

8. **Agriculture** in Seychelles consists primarily of food crops, which provide for 60 percent of local food consumption, along with export crops of copra (dried coconut), vanilla, patchouli and cinnamon. A large number of Seychelles households are involved in some form of agricultural production, though mountainous terrain and low soil fertility severely constrain

agriculture. A rise in sea level would contaminate coastal soils and coral islands, making them unsuitable for cultivation. Increased temperature, floods, droughts and cyclones will exacerbate threats from crop diseases, pests, weeds and soil erosion. In 1997, one storm caused the loss of hundreds of tons of agricultural products, with damages estimated at US\$1.5million. **Climate change threatens Seychellois' rights to food, to a means of subsistence, and to adequate standard of living.**

9. **Fisheries** are Seychelles' leading provider of employment, and consist of subsistence and artisanal fisheries. Seychelles is one of the world's leaders in processing tuna. Per capita fish consumption is about 80 kg per year. With over one thousand fish species recorded, fisheries in Seychelles rely on a diversity of coral, mangrove, pelagic and saltwater marsh habitats. Some corals are already living at or near their thermal limits, so increased sea surface temperatures threaten reef ecosystems. As reefs are spawning habitat for pelagic species, reef degradation threatens deep water fisheries as well. Bleaching of coral was particularly severe during the 1997-98 El Niño Southern Oscillation, with 95 percent coral mortality in some areas. More recent bleaching events have compounded earlier damage, making the Seychelles reefs some of the most damaged on earth. Since May 2010, a new bleaching event that spans the Indian Ocean from the Seychelles to eastern Indonesia may be the worst bleaching event known to science. Eighty percent of *Acropora* and 50 percent of other species have died. Coral cover is predicted to drop from 50 percent to 10 percent across the region, with gradual but devastating impacts to fisheries and tourism. Increasing ocean acidification due to rising concentrations of atmospheric carbon dioxide also threaten the coral reefs of Seychelles, as a doubling of CO₂ by 2065 would reduce calcification by reef-building organisms by 17 percent, and 35 percent by the end of the century. Increased sea temperatures could cause pelagic species of economic importance, including tuna, to migrate out of Seychelles' Exclusive Economic Zone. Higher precipitation and flood conditions will increase sediment that washes into lagoons, mangrove areas, and fringing reefs, causing further habitat degradation. Prawn farming is also threatened by algal blooms, infrastructure damage and oxygen depletion associated with sea level rise. **Climate change threatens reef and pelagic fish, as well as mangroves and corals—both of which are key habitat for fish populations—threatening Seychellois' rights to food, right to a means of subsistence, right to an adequate standard of living, and right to a healthy environment.**

10. Seychelles' economy is strongly dependent on environment-based **tourism**, which employs one third of the work force and provides 70 percent of foreign exchange. With the smallest population of any African nation at 87,000, tourism has played a major role in raising the per capita GDP from US\$800 in 1976 to US\$21,000 by 2009. Tourism in Seychelles is threatened by climate changes that worsen droughts and cyclones, erode beaches, damage coastal infrastructure, and bleach corals. **As climate change threatens Seychelles tourism, it undermines Seychellois' rights to an adequate standard of living.**

11. Seychelles suffers from **severe water shortages** during Southern winter and La Niña events. Roughly 98 percent of rainfall is unavailable for human use, as it is lost to run-off and evaporation. During drought events, water rationing is required, as the two main dams are inadequate to meet demand. Forest fires also are common during drought, putting many areas at risk. The 1998-99 La Niña event caused water shortages with dire economic consequences. **Climate change threatens Seychellois' rights to water, health, and sanitation.**

12. Increased heat events around the world are linked to increased cardiovascular mortality, respiratory illnesses, malnutrition from crop failures, and altered transmission of infectious diseases. Mean air temperatures have increased in the Seychelles over the past four decades, and Seychellois are already suffering from an increase in mosquito-borne chikungunya fever since 2005. **Climate change threatens Seychellois' rights to health and to a healthy environment.**

13. High surface water temperatures intensify the destructive force of **tropical cyclones**. These storms threaten the lives of Seychellois during the rainy season from October to May each year. While most islands are not in the direct track of tropical cyclones, all islands of the archipelago are affected by feeder-bands of tropical cyclones that can cause gale-force winds, flash floods, and severe thunderstorms. During El Niño years, torrential rains have caused widespread damage, including deaths due to landslides. Already the southern islands of Seychelles, which are closer to the cyclone track, have suffered declines in economic activity, except for tourism, due to extreme winds. **Climate change threatens rights of Seychellois to life, housing, property, and security of person.**

14. **Rising sea levels** pose a serious threat to the majority of Seychellois. The coral islands average two to six meters above sea level, while the granitic islands have low-elevation coastal plateaus where most infrastructure for housing, transport, and tourism occurs. More than 90 percent of the population lives in coastal settlements vulnerable to the storm surges and flooding that will be exacerbated by sea level rise. Rising sea levels will result in coastal erosion, flooding, infrastructure damage, salinification of soils and freshwater, and forced internal migration. **Climate change threatens Seychellois' rights to security of person, property, housing, and self-determination.**

IV. CONCLUSION AND RECOMMENDATIONS

15. One of the most serious threats to the human rights of the people of Seychelles is the vulnerability of their environment to the impacts of climate change. The threats confronting Seychelles illustrate how the right to an ecologically healthy environment is fundamental to guaranteeing other rights, such as the rights to life, food, water, health, security, and a means of subsistence.

16. The primary responsibility for the protection of human rights for the citizens of Seychelles lies in the hands of the state. However, the causes and impacts of climate change on the human rights of Seychellois also lie with states that are major emitters of greenhouse gases. Seychelles is not a significant consumer of the fossil fuels that are the primary source of greenhouse gas emissions, and it is among those nations that emit the smallest amounts of greenhouse gases in the world. The international community – and particularly those nations historically and currently responsible for the greatest portion of greenhouse gas emissions – has a responsibility to prevent climate change from undermining the human rights of citizens of Seychelles and, where particular circumstances makes that not possible, to mitigate the harms and assist the victims.

17. Article 22 of the Universal Declaration of Human Rights underscores that protection of human rights requires “national effort and international co-operation.” Every state has the obligation to do no harm either to its own citizens or to the citizens of another state. Earthjustice

et al. therefore respectfully recommends that the Human Rights Council 1) recognize the responsibility of major greenhouse gas-emitting states for the human rights threats suffered by the people of Seychelles, and 2) encourage the international community to take immediate action to decrease global greenhouse gas emissions and to assist the government of Seychelles in its efforts to mitigate and adapt to the effects of climate change.

Respectfully Submitted,

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**NOTE: A fully referenced, footnoted version of this submission is available at
<http://www.earthjustice.org/humanrights>**