



EARTHJUSTICE

Because the earth needs a good lawyer

21 July 2008

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

**Re: Universal Periodic Review of Tuvalu, December 2008
Submission of Earthjustice**

I. SUMMARY

1. In accordance with the Information and Guidelines for Relevant Stakeholders regarding the Universal Periodic Review mechanism (1 July 2008), Earthjustice respectfully submits to the Human Rights Council information regarding human rights violations in Tuvalu as a result of anthropogenic climate change. Via this submission, Earthjustice seeks to inform the Council of the acute impacts that climate change is having and will have on the human rights of all Tuvaluans. We recommend that the OHCHR include this information in its summary of stakeholders' information, and urge the Human Rights Council to adopt an outcome recognizing the responsibility of major greenhouse gas emitting states for human rights violations suffered by Tuvaluans due to climate change.

2. 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.¹ In Tuvalu, climate change will:

- Threaten Tuvaluans' access to freshwater by increasing extremes of temperature and precipitation, increasing instances of drought, and causing salinization of groundwater;
- Jeopardize food security by damaging ocean ecosystems such as coral reef fisheries on which Tuvaluans rely for food, and impeding the agricultural capacity of the islands;
- Threaten Tuvaluans' physical security by subjecting Tuvaluan communities to more severe storms and cyclones, and physically destroying the very territory of Tuvalu through coastal flooding, shoreline erosion and sea-level rise; and
- Endanger Tuvaluan culture by forcing Tuvaluans to flee their island communities to seek refuge in more environmentally secure nations, where they will no longer be able to continue traditional customs and practices.

3. 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.² This will result in the direct violation of many of the human rights guaranteed by Tuvalu under international law, including: the right to **life**, the right to **health**, the right to be **free from hunger**, the right to **water**, the right to a **healthy environment**, the right to an **adequate standard of living**, the right to **means of subsistence**, the right to **property**, the right to **culture** and **traditional knowledge**,

¹ IPCC Working Group II Report: *Impacts, Adaptation, and Vulnerability* (2007), available at: <http://www.ipcc.ch/ipccreports/ar4-wg2.htm>.

² IPCC Working Group I Report: *The Physical Science Basis: Summary for Policymakers* (2007), available at: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>.

the rights of **indigenous peoples**, the right to be **free from discrimination**, the right to **self-determination**, and the right to **resettlement** under humanitarian law.

II. BACKGROUND

4. Tuvalu's nine isolated islands (5 atolls, 4 reef islands) in the southwest Pacific Ocean cover only 26 square kilometers and average less than three meters above mean sea-level. The islands have dry and infertile soils and rely almost entirely on rain for freshwater. A thin "lens" of fresh groundwater floats above the saltwater within the porous coral base of each atoll. This provides a stable freshwater supply for island vegetation and for drinking, cooking, and cleaning. The densely-packed population of about 12,000 (over 400 people per square kilometer) relies on subsistence fishing and agriculture. Reef fisheries provide the main source of protein for islanders, while the freshwater lens supports subsistence crops of taro, coconut, bananas, breadfruit and pandanus. The country's only exports are coconut and fish. Tuvalu's communications and transportation infrastructure is extremely limited.

5. Tuvalu acquired Least Developed Country status in 1986. Because Tuvaluans' subsistence livelihoods depend on the delicate balance of a fragile island ecosystem, they are particularly vulnerable to environmental disruptions. The impacts of climate change on the population of Tuvalu are therefore potentially catastrophic. Most threatening is the IPCC's prediction that sea levels are predicted to rise an additional 0.23 to 0.47 meters before the end of the century if global fossil fuel use is not significantly reduced.³ Sea level rise at Tuvalu has been documented to be close to the global mean, once El Niño events are accounted for in sea level variations.⁴

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

Climate change threatens Tuvaluan's access to freshwater for consumption, sanitation, and subsistence agriculture.

6. According to the IPCC, climate change will cause stronger and more frequent tide surges in the southwest Pacific. During tide and storm surges, seawater percolates up through the porous coral gravel base of the islands, flooding low-lying areas and infiltrating the freshwater lens. With the saltwater contamination of Tuvalu's fresh groundwater supply, Tuvaluans are even more dependent on storage of rainwater for their daily needs. While rainfall in Tuvalu's southern islands is high and reliable throughout the year, abnormally low rainfalls are more common in the northern islands. The IPCC predicts that precipitation will increase in the south Pacific, while more frequent El Niño cycles will cause more severe droughts.⁵ Surface air temperatures in the south Pacific are predicted to increase by 2.5°C by 2100, which will exacerbate drought.⁶ Droughts in the northern islands last up to eight months and cause soil moisture deficits,⁷ leading to the loss of vegetation, increased risk of dangerous bush fires, and lack of sufficient water for daily needs.⁸ Severe droughts will require emergency assistance to hard-hit islands, which the government of Tuvalu does not have funds or infrastructure to provide.

³ IPCC 2007, *supra* note 2, *Chapter 11: Regional Climate Projections*, p. 909-916.

⁴ John R Hunter, *A Note on Relative Sea Level Change at Funafuti, Tuvalu*. Antarctic Cooperative Research Center (2002). Available at: <http://staff.acecrc.org.au/~johunter/tuvalu.pdf>.

⁵ IPCC 2007, *supra* note 3.

⁶ IPCC 2007, *supra* note 1, *Chapter 16: Small Islands*, p. 694.

⁷ Tuvalu Meteorological Service, *Climate of Tuvalu* (2006), available at: <http://informet.net/tuvmet/climate.html>.

⁸ Tuvalu Climate Change Response Office, *National Report to the United Nations Convention to Combat Desertification*, (2002), available at: <http://www.unccd.int/cop/reports/asia/national/2002/tuvalu-eng.pdf>.

7. Salinization of soils and groundwater threatens all vegetation on Tuvalu, particularly the traditional staple of taro (*pulaka*). Indeed, many areas are already unusable for *pulaka* cultivation. Tuvaluans can not afford to replace subsistence crops with imported food, yet without subsistence crops, the nutrition, health, and standard of living of most Tuvaluans will worsen dramatically. Moreover, without traditional crops, Tuvaluans cannot practice or benefit from their traditional knowledge and culture.

8. *The impacts of climate change on Tuvalu's freshwater resources violates Tuvaluans' human rights to life, health, food, water, culture, traditional knowledge, the rights of indigenous peoples, means of subsistence, an adequate standard of living, and a healthy environment.*

Climate change jeopardizes Tuvalu's reef-dependent food security and traditional livelihoods.

9. Fisheries provide the majority of the protein in Tuvaluans' diet, and 74% of households participate in reef fishing.⁹ Climate change threatens the integrity of the coral reef ecosystem on which Tuvaluans depend. The IPCC predicts that climate change will have severe impacts on coral reefs and fisheries due to increasing carbon dioxide in the atmosphere, acidification of sea waters, rising sea temperatures and increasing intensity of storms.¹⁰ Decline of coral communities will reduce the richness of fish species and will result in local extinctions and loss of species within key functional groups of fish.¹¹

10. Over generations, Tuvaluans have evolved complex and effective cultural strategies for conserving limited marine resources, including controlling access to certain fishing grounds reserved for particular clans, protecting certain species, and creating customs such as food taboos that help prevent over-fishing.¹² Though cultural practices have changed since colonialism, traditional knowledge and practices continue to play an important role in natural resource management.

11. *The destruction of coral reef ecosystems essential to Tuvaluan livelihoods violates Tuvaluans' human rights to life, health, food, culture, traditional knowledge, property, the rights of indigenous peoples, means of subsistence, an adequate standard of living, and a healthy environment.*

Climate change-related storms, tidal surges and changes in sea-level threaten Tuvaluans' physical security as well as their property and perhaps their very existence as an island nation.

12. According to the IPCC, "Small Islands...have characteristics which make them especially vulnerable to the effects of climate change, sea-level rise and extreme events. Sea-level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure and facilities that support the livelihood of island communities."¹³ Sea-level rise is caused by thermal expansion of sea waters as well as melting glaciers, ice caps, and ice sheets. It is potentially the most cataclysmic long-term impact of climate change facing Tuvaluans and many other small island nations. Even if greenhouse gas concentrations were to be stabilized, anthropogenic warming and sea-level rise are predicted to continue for centuries due to the timescales associated with climate processes

⁹ Food and Agriculture Organization, *Fishery Country Profile, Tuvalu* (April 2002), available at: <http://www.fao.org/fi/oldsite/FCP/en/TUV/profile.htm>.

¹⁰ IPCC Working Group II Report: *Impacts, Adaptation and Vulnerability; Cross-chapter case study: Impacts of Climate Change on Coral Reefs* (2007), p. 850-54, available at: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-xccc.pdf>.

¹¹ *Id.*

¹² Leon Zann, *Traditional management and conservation of fisheries in Kiribati and Tuvalu atolls*, South Pacific University, Fiji (1983), available at: <http://www.fao.org/agris/search/display.do?f=1986/v1204/FJ8600011.xml;FJ8600011>.

¹³ IPCC 2007, *supra* note 1.

and feedbacks.¹⁴ Thus Tuvaluans are facing complete loss of all their lands over the next several centuries, if not sooner. Without any land at all, Tuvaluans will have little to no property, food, water, health, means of subsistence, ability to practice their culture, or meaningful self-determination.

13. Strong winds and cyclones are not common in Tuvalu, though the islands are near the cyclone belt and El Niño events are known to push cyclones toward Tuvalu. Wind speeds over the surrounding ocean average about 10 knots, with strong winds experienced only 3% of the time.¹⁵ According to the IPCC, the largest increase in storms and cyclones since 1970 occurred in the southwest Pacific Ocean.¹⁶ In 1997, three cyclones devastated Tuvalu, damaging homes and property and endangering lives.

14. Tuvalu's 24 km of coastline are susceptible to shoreline erosion from storms and high tides. Because the islands are long and narrow without a continental shelf to dissipate waves, the effects of distant storms are exacerbated. Beaches, sand bars, and entire small islands in Tuvalu have already eroded away. Some areas have lost up to three meters of beachfront in the past decade. Shoreline erosion has negative impacts on tourism and increases susceptibility to floods during storms and tide surges. As shorelines recede, the overall land area of Tuvalu is reduced, squeezing the population, agriculture, and infrastructure into smaller areas. The dramatic shrinking and reshaping of land is likely to lead to increased conflicts between neighboring property owners. Ultimately, fewer Tuvaluans will be able to live in Tuvalu and practice their culture.

15. As their lands become submerged or eroded, Tuvalu's population will be forced to flee.¹⁷ New Zealand is currently the only country with a program to accept climate change refugees from the Pacific, but it currently accepts only 75 Tuvaluans per year. Candidates must be aged 18-45, in good health, with an offer of permanent, full-time employment in New Zealand. The requirements of the program are not easily met, particularly for those that traditionally practice subsistence livelihoods and do not have the training or experience to easily secure an offer of employment. This violates the obligation of New Zealand not to discriminate in guaranteeing the exercise of the rights of Tuvaluans forced to flee their homeland – especially children, the elderly, those in poor health, and those with few workplace skills.¹⁸

16. While Tuvaluans may require assistance as environmental refugees in the face of climate change, it is essential that the international community also take seriously the responsibility to prevent such human rights violations from occurring. In 2002, Tuvaluan Governor-General Sir Tomasi Puapua stated that "Taking us as environmental refugees, is not what Tuvalu is after in the long run. We want the islands of Tuvalu and our nation to remain permanently and not be submerged as a result of greed and uncontrolled consumption of industrialized countries. We want our children to grow up the way we grew up in our own islands and in our own culture."¹⁹

17. The physical destruction of land and property in Tuvalu by sea-level rise, climate-related storm events, and increased shoreline erosion violates Tuvaluans' human rights to life, food, health, property,

¹⁴ IPCC 2007, *supra* note 1, at p. 16.

¹⁵ Tuvalu Meteorological Service, *supra* note 2.

¹⁶ IPCC Working Group I Report: *Observations: Surface and Atmospheric Climate Change*, p. 239 (2007).

¹⁷ IPCC Working Group II (2007) (see *supra* note 1) predicts that 150 to 200 million people worldwide will be displaced by climate change by the year 2050.

¹⁸ See *International Covenant on Economic, Social and Cultural Rights*, Art. 2.1.

¹⁹ *Tuvalu Statement at the 57th Session of the UN General Assembly* (2002), available at: <http://informet.net/tuvmet/global.html>.

culture, traditional knowledge, the rights of indigenous peoples, means of subsistence, an adequate standard of living, a healthy environment, self-determination, the right to be free from discrimination, and assistance as climate change refugees.

IV. CONCLUSION AND RECOMMENDATIONS

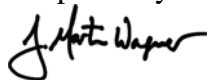
18. The most serious threat to the human rights of the people of Tuvalu is the vulnerability of the environment, on which they have depended for millennia, to the impacts of climate change. The plight of the people of Tuvalu illustrates how fundamental the right to an ecologically sustainable environment is to guaranteeing other rights such as the right to life, food, health, water, and culture.²⁰

19. Complexities surrounding responsibility for the human rights violations caused by climate change require consideration not only of the actions of the State of Tuvalu, but also of other states that are major emitters of greenhouse gasses. The international community – and particularly those nations historically and currently responsible for the greatest portion of greenhouse gas emissions – has a responsibility to prevent violation of the human rights of Tuvaluans, and, when violations occur, to mitigate the harms and assist the victims. The potential physical disappearance of the State of Tuvalu also raises the issue of collective responsibility for the future of the people of Tuvalu.

20. Earthjustice respectfully recommends that the Human Rights Council encourage the government of Tuvalu to increase efforts to provide citizens with information and education on the impacts of climate change, and to provide opportunities for public participation in decision-making concerning measures to mitigate and adapt to the harms that will result. Recognizing the role of other states in causing climate change, the government of Tuvalu must do all within its power to increase its mitigation and adaptation efforts to protect the right of the people of Tuvalu to a clean and ecologically sustainable environment.

21. 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 therefore respectfully recommends that the Human Rights Council 1) recognize the responsibility of major greenhouse gas emitting states for the human rights violations suffered by the people of Tuvalu, and 2) encourage the international community to take immediate action to decrease global greenhouse gas emissions, to assist the State of Tuvalu in its efforts to mitigate and adapt to the effects of climate change, and to collectively provide for or offset the costs of resettlement of Tuvaluan refugees in the event that resettlement becomes unavoidable, on a basis proportional to their greenhouse gas emissions.

Respectfully Submitted,



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²⁰ See, e.g., *Human Rights and the Environment: Final Report by Mrs. Fatma Zohra Ksentini, Special Rapporteur, U.N. ESCOR, Hum. Rts. Comm., U.N. Doc. E/CN.4/Sub.2/1994/9* (1994).