

Going, Going, Gone: The Fate of Low-Lying Islands and Estuaries

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Some might prefer us to suffer in silence but today we have decided to speak... we will not die quietly.
President Mohammed Nasheed, Maldives Islands

At the moment every country arrives at the negotiations (climate) seeking to keep their own emissions as high as possible. They never make commitments unless someone else does first.
President Mohammed Nasheed, Maldives Islands

This is the logic of the madhouse, a recipe for collective suicide.
President Mohammed Nasheed, Maldives Islands

We will not sign a global suicide pact, in Copenhagen or anywhere.
President Mohammed Nasheed, Maldives Islands

The lifeboat, and the problem of ethical behavior on a lifeboat, was used by Garrett Hardin (1974) as a metaphor to illustrate the problems of overpopulation and finite resources. Rising sea levels will soon make some lifeboats (low-lying islands) uninhabitable. The cause of rising sea levels is excess atmospheric greenhouse gases that melt glaciers and warm the oceans. Anthropogenic greenhouse gas emissions are still increasing, so humankind is placing both the human culture and individuals at serious risk because of its addiction to fossil fuels. At present, low-lying islands and river deltas may be harbingers of humankind's fate if it continues "business as usual" with anthropogenic greenhouse gas emissions and other unsustainable practices on a finite planet. Why has so little concern been voiced about this event globally?

The Ostrich Factor

Hardin (1998) calls attention to an event in 1st century AD in which Pliny the Elder noted that the stupid ostrich thrusts its head and neck into a bush (later, sand), imagining "that the whole body is concealed." The path of logic, suggests Hardin, is as follows: "My world is what I see. If I do not see (or hear) something, it does not exist. I will cause this fearful object to cease to exist by wiping out its image." Freudian denial, i.e., when a whole culture responds in this denial of existence way, is referred to as a taboo, which closes off the search for causes.

A modern example of the ostrich factor is the Holocaust – every arm of Nazi Germany's bureaucracy was involved in the logistics of the mass murder of six million Jews (US Holocaust Memorial Museum). This mass denial is an extreme example and included religious groups in both Germany and the rest of the world. In 2009, deniers still exist, although their numbers are reduced.

Low-Lying Islands and Estuaries

In 2009, President Mohammed Nasheed of the Maldives Islands is working tirelessly to alert people everywhere in the world to the very real threat of imminent extinction of cultures of low-lying islands and deltas due to rising seas. However, powerful "ostrich factors" are still at work. National and international entities maintain that reducing anthropogenic greenhouse gas emissions **might** be

bad for the economy. How many people should be sacrificed to protect the economy – 1 million (the Maldives)? 25 million (the Bangladesh delta)? At what level do ethics, morality, and simple decency override the economy?

Four of the most common responses to pointed questions such as the one above seem to be:

- (1) "I don't want to hear about that!"
- (2) "I didn't do it."
- (3) "Something (e.g., technology) or someone (a deity or creative grandchildren) will save us."
- (4) "I'm just one person – I can't do anything about it."

These responses to crises probably were just as common during the Holocaust.

Another, more sophisticated, version of the ostrich factor is demonstrated by people who profess a spiritual relationship with nature (online dictionary: *spiritual* – of, relating to, consisting of, or having the nature of spirit, not tangible or material), yet they are unwilling to change their behavior. Most people claiming this spiritual connection seem to believe that the connection itself is sufficient; therefore, no action on behalf of nature is necessary. A similar claim can be made about a person who cares deeply for people, yet that person is unwilling to change behaviors that are contributing to deaths not immediately visible. Compassion, in these cases, may consist of actions that are relatively painless, such as "checkbook compassion," rather than actions that are more difficult, such as changing the use of fossil fuel produced energy. Mohandas Gandhi was both spiritual and an activist. The two qualities must go hand-in-hand and are not exclusive. All must "walk the talk."

Cognitive Dissonance

That uncomfortable feeling individuals are having collectively may be due to cognitive dissonance, i.e., becoming aware of two conflicting priorities. For example, one article on the Afghan War in a recent issue of *The New York Times* ("High Costs Weigh on Troop Debate for Afghan War" by Christopher Drew, November 15, 2009) was typeset not far from an article on climate change ("World Leaders Agree to Delay a Deal on Climate Change" by Helene Cooper). Certainly, a robust "climate deal" would save lives both now and in the future, and continuing a long war with changing objectives and goals will cost lives and money and have adverse effects on the families of those serving. What then are the national goals of the United States? Is war a top priority or is the top priority saving millions of lives while benefiting future generations? Of course, terrorists that are unrestrained can kill and cause property damage, but their activities are miniscule compared to the effects of a 3°C increase in the global average temperature.

What? Me Worry?

"What? Me Worry?" is Alfred E. Neuman's famous quote from *Mad Magazine* (http://www.leconcombre.com/concpost/us/postcard4/alfred_e_neuman.html) and epitomizes the attitude of the intellectually uncurious. The Maldives Islands are remote and not heavily populated by global standards. Most people in the United States, and probably in most other parts of the world, have never heard of these islands. Are the strongly worded statements of its President Nasheed enough to arouse curiosity, and then from curiosity to compassionate action?

No Man is an Island

No man is an island, entire of itself . . . any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls; it tolls for thee.

John Donne

The "global climate change bell" tolls for every nation, every individual, and every species. Different regions of the world will be affected by climate change in different ways at different times, but none can escape climate change. Switzerland is now (November 2009) experiencing unseasonably icy rain, as is Beijing, China (Qin Mei 2009). Such instances may be normal variability, but they could also be the beginning of a trend.

Australia is the first country in the world to undertake a national assessment of the consequences of sea level rise, and its study recommends that the Australian Emergency Management Committee “improve coastal community awareness of and resilience to natural disasters” (James 2009). The study lists what is at stake with a 13-meter sea level rise (James 2009), which would be a major challenge for any society and is probably typical for any developed nation except for scale:

(1) for starters, some 200,000 homes worth perhaps \$20 billion, (2) 1800 bridges and their supporting earthworks, roads, and so on. Some are for railway, requiring relaying of tracks and stations, (3) 360 schools, colleges and universities, with their sports facilities, complex specialist training centres, and libraries, (4) 258 police, fire and ambulance stations, (5) 170 industrial zones, too often built on reclaimed land, (6) 120 ports, (7) 177 hospitals, retirement homes and other health services.

Coping with Multiple Catastrophes

Hurricane Katrina, which hit New Orleans and much of the Gulf Coast of the United States in August 2005, is a “poster child” of future disasters. Although 1,836 people lost their lives in Hurricane Katrina, arguably the greatest reason for concern was the slow, inept response of the federal government agency, Federal Emergency Management Agency (FEMA), whose Director, Michael D. Brown, originally praised by then U. S. President Bush, ultimately resigned. Many problems still remain, including refugees unable or reluctant to return and unsuitable emergency trailers. Perhaps people should not return to New Orleans and some other coastal locations because hurricane risks remain and may increase.

Why was more help not available immediately? In addition to inept bureaucracy, the United States was fighting two wars and was in the midst of other distractions. In 2008 and 2009, the global financial meltdown came, unemployment increased, “bailout funds” were given to large corporations, and both the United States and individuals were deeply in debt. Such nationwide problems could occur in Australia in conjunction with a sea level rise. The funds and skills required to address them could possibly be unavailable. Other nations would be prudent to follow Australia’s example and at least outline the problems that will be caused by sea level rise and other climate change consequences.

Back to the Maldives

President Mohammed Nasheed’s speech at the “Climate Vulnerable Forum” was actually directed at all nations in the front lines of the climate crisis. Substantial, immediate reductions of anthropogenic greenhouse gas emissions will unlikely result from the 2009 Climate Conference in Copenhagen, Denmark. If no substantive reductions occur, greenhouse gases will continue to accumulate in the atmosphere, and low-lying islands and coastal areas will be at increased risk. A 2°C rise seems inevitable unless something is done in 2010. President Nasheed states: “At two degrees we would lose the coral reefs. At two degrees we would melt Greenland. At two degrees my country would not survive.”

What Can We Do?

Earth is overpopulated, but a reduction in population due to rising sea levels is not acceptable when more compassionate alternatives are available that only require some changes in lifestyle. Some illustrative examples follow.

- (1) Rapidly develop non-carbon energy alternatives such as wind and solar power.
- (2) Drastically reduce per capita energy consumption in countries where the consumption is far above the global norm. Improved public transportation, insulated houses and buildings, and reduced recreational travel are three of many options.
- (3) Substitute immediate action for endless inconclusive political conferences.
- (4) Accept that some “sacrifice” will be necessary in wealthy countries.

(5) Accept useful information on climate change from science, but basic decisions should be based on compassion, ethics, and morals.

Conclusions

To paraphrase John Donne, “no nation is an island.” As stated previously, global climate change will affect each nation differently and at different times, but all will be affected. Even if some nations are less affected than others, environmental refugees will head for nations with some viability. The issues of compassion, ethics, and morality cannot be ignored. Neither can the preponderance of scientific evidence showing that anthropogenic greenhouse gas emissions are a significant part of the climate change problem. Economics should not have a higher priority than ethics and morality. The climate bell tolls for all humankind, so what is done to help people on the low-lying islands and coastal areas will also be acts of enlightened self-interest.

No man is an island, entire of itself . . . any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls; it tolls for thee.

John Donne

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