

Life Boat Ethics Revisited: What Should Be the Reaction to the Maldives Crisis?



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Abstract : The climate change crisis and exponential population growth have now reached a point where thinking about the unthinkable cannot be postponed. Over 30 years ago, Garrett Hardin used a lifeboat metaphor to describe the consequences of unlimited growth on a finite planet. He proposed the situation of a lifeboat in the ocean with 50 people aboard and room for only 10 more. The lifeboat is surrounded by 100 swimmers. Hardin discussed the ethics of whether and under what circumstances swimmers in distress should be taken aboard. The Maldives crisis is a current case illustrating Hardin's metaphor. The President of the Maldives has declared his search for a new homeland for Maldivians somewhere else in the world because their homeland is in peril from rising ocean levels and increased ferocity of storm surges. The small island nation of Tuvalu, with a population of less than 12,000 people, is already being evacuated for the same reasons. The Maldives, however, has a population of 396,334 (July 2009 estimate), so relocation is a much greater problem than for Tuvalu. Which nations should accept such ecorefugees and under what circumstances? Ocean levels are rising because the anthropogenic greenhouse gas emissions of the entire world have caused the problem, but the United States and China are responsible for approximately half the anthropogenic greenhouse gas emissions. What is the United States and China's ethical responsibility? What, if any, is the obligation of the host, receiving country? What should be done about people who refuse to leave their homeland?

Key words : Lifeboat ethics, Maldives, Garrett Hardin, Rising oceans, Storm surges, Ecorefugees.

The essential point is this: one default position or the other must be embraced, for the most practical of reasons. No good can come of demanding absolute proof. The default position reveals where men or common sense, in a certain jurisdiction, have agreed to place the burden of proof. It is the denial of the default position that must bear the burden of proof. **Garrett Hardin**

In the real world – beyond pedagogy, beyond hypocrisy – language has two purposes: to facilitate thought, and to prevent it.

Garrett Hardin

The Lifeboat Ethics Metaphor

Garrett Hardin's (1974a,b) lifeboat ethics metaphor for resource distribution was carefully conceived. In the metaphor, no one person is in charge (i.e., no captain) in a lifeboat, as is the case for Earth. Moreover, wealthy nations are represented as the lifeboats and the swimmers are the poor nations. Hardin's lifeboat carries 50 people, with room for only 10 more. Passengers on the lifeboat could be "noble" by taking on 10 additional passengers at comparatively little risk to themselves. However, the compassionate act would not be entirely risk free since their current situation of being below capacity provides a safety factor for unexpected conditions (e.g., a severe storm). In addition, the decision process would have to

be rapid since the swimmers could not swim indefinitely and some would undoubtedly be more capable and durable than others. Some swimmers would also have opinions on who should be granted admission to the lifeboat (e.g., family members).

However, when the lifeboat is filled to capacity, the decisions become much harder. Should a few additional swimmers be taken aboard, risking capsizing during a storm and losing everyone on board? The probability of a catastrophe occurring increases significantly with each additional passenger taken on board. Alternatively, if a lifeboat passenger feels particularly strongly that a certain swimmer should be taken aboard, would (s)he give up a place on board to admit the swimmer? Even if this circumstance were the case, the other passengers might not approve the noble act if the swimmer has a communicable disease.

These circumstances are but a few of the difficult decisions that might need to be made in the lifeboat metaphor. However, the basic issue cannot be avoided – on a lifeboat, size and resources are finite – not everyone could be saved.

The Maldives

"The Maldives is an archipelago of 1,190 islands in the Indian Ocean, with an average elevation of four feet" (Schmidle, 2009). The low-elevation Maldives is

affected by both storm surges and rising sea levels. President Mohamed Nasheed would like to find a new homeland for its residents and has named India, Sri Lanka, and Australia as possible destinations. He hopes to establish a sovereign wealth fund to buy a new country, or at least part of one (Schmidle, 2009). Even if a nation would accept nearly 400,000 ecorefugees, the Maldivians would not likely retain their cultural identity in the long run. Schmidle (2009) notes: "I heard countless Maldivians express concern that in a relocation, they would be treated as second-class citizens." Ideally, the Maldivians should have a single host country in order to preserve their culture to some degree. Arguably of great importance, the prospective host country should not have an ecological deficit (generally, the terms *ecological deficit* or *ecological overshoot* are used interchangeably; both are used here to acquaint readers with the two terms).

An ecological deficit is the level of resource consumption that exceeds natural regeneration of resources. It can also be caused by the production of anthropogenic wastes in excess of natural assimilative capacity. In short, the biocapacity has been exceeded (e.g., greenhouse gas emissions). Biocapacity is not constant, particularly in the current era of global climate change. In 2005, the biocapacity of India was far below its ecological footprint (Global Footprint Network <http://www.footprintnetwork.org/en/index.php/GFN/page/trends/india>). The gap was dramatically larger in 2005 for Sri Lanka (<http://www.footprintnetwork.org/en/index.php/GFN/page/trends/srilanka>), and Australia was the only prospective nation to have a biocapacity significantly greater than its ecological footprint (<http://www.footprintnetwork.org/en/index.php/GFN/page/trends/australia>). However, in recent years (e.g., 2008, 2009), Australia has been suffering from prolonged drought, bush fires, and markedly decreased flow in the Murray and Darling Rivers. Agricultural productivity has also declined, thereby reducing its biocapacity.

Another factor in determining the relocation of Maldivian ecorefugees is anthropogenic greenhouse gas emissions, which are the primary cause of the ocean level rise. In 2009, China and the United States together produced about half of the world's anthropogenic greenhouse gas emissions; therefore, reason dictates that these two countries should take half of the ecorefugees from the Maldives, with the remaining half divided among other nations according to their emissions output. However, both China and the United States have ecological footprints dramatically greater than their

biocapacity. Bolivia, on the other hand, has an ecological footprint well below its biocapacity, although its biocapacity is declining markedly (<http://www.footprintnetwork.org/en/index.php/GFN/page/trends/bolivia/>).

Back to the Lifeboat Metaphor

Most of the world's lifeboats (nations) are slowly sinking (i.e., living unsustainably).

Earth Overshoot Day marks the day [each year] when humanity begins living beyond its ecological means. Beyond that day, humankind moves into the ecological equivalent of deficit spending, utilizing resources at a rate faster than the planet can regenerate them in a calendar year . . . Globally, we now require the equivalent of 1.4 planets to support our lifestyle. But, of course, we only have one Earth. The result is that our supply of natural resources – such as trees and fish – continues to shrink, while waste, primarily carbon dioxide, accumulates

(http://www.footprintnetwork.org/en/index.php/GFN/page/earth_overshoot_day/).

In 2008, Earth Overshoot Day was 23 September. For some nations, the day occurs earlier than others – for example, 12 April 2009 was Overshoot Day for the United Kingdom (Vidal, 2009).

Since ecological deficit is a global phenomenon, millions of ecorefugees will be seeking new locations. Very few places will then have exemplary sustainable living. The critical question is: are any of the lifeboats (nations) in suitable (i.e., sustainable) condition to accept ecorefugees on a long-term basis? If not, then the swimmers (ecorefugees) should not be admitted to the lifeboat (nation) because the primary result will be to endanger the lifeboat and cause it to sink sooner. Refusing to aid the swimmers seems heartless, but the risk would be less for the occupants of the lifeboat. Human nature compels people to do something noble, especially if no personal price must be paid. However, placing a lifeboat beyond capacity has a price – increasing the personal risk to all occupants.

If people entering the lifeboat knew that the lifeboat was already beyond capacity, they might not wish to be admitted. Thus, citizens of the Maldives might wish to remain at home, even if their lifeboat is sinking. Why leave the culture, friends, sense of place, and homeland to reside temporarily in a new location? However, many inhabitants of a particular nation may feel that conditions

at home are so intolerable that they will take any risk to relocate where they perceive conditions to be better. Raspail (1994) has written a fictional but persuasive account of such a situation – refugees arrive uninvited and unannounced and overwhelm the local social system. The “host” country is unprepared for such an event and uncertain of how to respond. Since the local citizens are unprepared for such an event and have different opinions on the appropriate course of action, they delay a firm decision and remedial action, if any.

Ecological Deficits Have Economic Costs

A common statement made by US politicians and corporate executives in the 21st century is that climate change can be addressed if doing so does not hurt the economy. In 2008 and 2009, persuasive evidence has indicated that the greatest amount of damage to the economy has been done by bankers and financial executives (through poor decisions or unethical practices). In addition, adequate recognition has not been given to the biospheric life support system, which simply cannot handle the strain being placed upon it. Significant changes in the biospheric life support system would almost certainly result in conditions less favorable, even hostile, to humans and would almost certainly disrupt human society. Where would the economy be then? Everyone suffers from ecological deficits and climate change since anthropogenic greenhouse gas emissions do not respect political boundaries. In a very sad sense, ecological deficits are both reducing the carrying capacity of lifeboats (nations) and their seaworthiness (by overpopulation/overcrowding/excessive consumption of finite resources).

The Default Position – Leaving Carrying Capacity Problems for Mother Nature to Solve

A *default* is the failure to perform a task or fulfill an obligation. If humankind does nothing about overpopulation, Mother Nature will step in with her usual solutions to exceeding carrying capacity – starvation, disease, and death. Few lifeboats (nations) are seaworthy (i.e., living sustainably), and, if they accept many survivors from unseaworthy lifeboats as they sink, they will also become more unseaworthy.

Scientists are growing more pessimistic about the consequences of climate change (e.g., Krugman, 2009). Reduction in lifeboat carrying capacity seems inevitable. Since the majority of nations on Earth are exceeding their biocapacity (i.e., ecological footprint exceeds biocapacity), attempts must be considered to make them more sustainable by (1) increasing biocapacity by

nurturing natural capital, (2) reducing human population size as compassionately as possible so that it no longer severely stresses biocapacity, (3) using biocapacity more prudently through markedly reducing consumption and markedly increasing recycling, and (4) restoring the integrity of damaged ecosystems to the fullest extent possible. Nations under severe stress (e.g., war, famine, disease) generally have a lower life expectancy than those with better living conditions. For example, “according to the *CIA World Factbook*, an Afghan’s life expectancy is merely 44 years” (Mujahid, 2009). If the low biocapacity relative to a nation’s ecological footprint results in resource wars, it will make the nations less sustainable. Such events would be unfortunate but, regrettably, not unlikely. Decreased longevity would reduce population size and reduce pressure on resources (i.e., less stress on biocapacity).

How did humankind arrive at this potentially fatal situation of exceeding Earth’s biocapacity? The answer is simple – by forgetting that Earth is finite. As a consequence, natural resources are finite at any one point in time. In short, factors limit all types of physical growth (intellectual growth is another matter entirely). Advances in medicine and health care have increased longevity, which is good for the individual but not for the species if humans continue breeding at the same rate. Similarly, increased amounts of quality food may benefit the individual up to a point, but lead to obesity unless physical activity burns up the extra calories. In this 21st century, huge numbers of people are starving or are inadequately nourished and, for many millions, obesity is causing health problems.

If intelligence (e.g., Goleman, 2009), common sense, and ethics do not provide solutions to biocapacity and ecological overshoot, Mother Nature will do so in ways humans find unattractive at best and devastating at worst.

This problem will not be easily resolved. Growth is the metric used by every organization, from chambers of commerce to churches, to measure success. Basically, economic growth is based on natural capital, although processing may add value. However, the value is added to finite resources, so growth is limited if the natural resources are not regenerated.

The Earth as a Dynamic System

Earth is not a steady state system as geological and paleontological records clearly show. In other words, Earth’s carrying capacity for humans, or any other species, is not constant. Species come and go and

ecosystems evolve as climate and other conditions change. Technology may shield humankind from some of the changes as long as human society has adequate, non-polluting sources of energy to run the devices technology produces. However, fossil fuels produce greenhouse gases that cause climate change. Technology cannot shield humankind from natural law. If resource wars occur, technology cannot shield humankind from the climate change that would result from the explosion of 12 Hiroshima-level bombs.

Conclusions

Ecological overshoot and reduced carrying capacity due to adverse effects of global climate change upon agricultural productivity and regeneration of natural resources endanger all nations. If humankind persists in "business as usual," conditions will continue rapid deterioration. Immediate elimination of unsustainable practices (e.g., generation of anthropogenic greenhouse gases) is essential. Ethical guidelines that will enable humankind to save civilization are badly needed. Time is short.

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