

## **Sustainability and Waste of Biospheric Resources are Incompatible**

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*Reducing food waste should become one of the highest priorities on the environmental agenda.*

Tristram Stuart (2009)

The quest for sustainable use of the planet is noble, but the pursuit is devoid of effective action until flagrant waste of biospheric resources ceases. Although no single remedial measure (e.g., energy efficient light bulbs) will achieve sustainability, ending the waste of biospheric resources would constitute a giant leap toward sustainability — for example, the entire planet could stop wasting food. Stuart (2009) remarks: “Reducing food waste should become one of the highest priorities on the environmental agenda.” By wasting food, humankind is guilty of both misuse and co-opting space that was formerly used by other species that collectively constitute the biosphere. Even countries with significant numbers of starving or malnourished people waste food because of the lack of an infrastructure to deliver it to consumers before it rots or because no means is available to preserve it for future use (e.g., refrigeration or canning).

Arguably, the ultimate, mindless waste of food is the “food fight” — once a common event among students. The fight itself is not over the lack or abundance of food, but it is a fight with food. Students throw food at each other, usually from a dining table, which could have been eaten. Food fights appear to have diminished at present, possibly because of the recession. Basically, a food fight displays a lack of compassion for individuals who are starving or malnourished, or, perhaps, the food fighters are unaware that not everyone is well fed.

In the United States, some television programs center around eating contests based on how much food an individual can eat in a specified time. Usually, one type of food (e.g., hamburgers, pizza) is used, so the consumption is far from a balanced diet. People in dire economic straits could not possibly view such programs as entertainment. These programs may be a relic of the cornucopian era when people relied on MORE being available and food was CHEAP (i.e., requiring a small percentage of the family income). However, at present, individuals in some areas might use as much as 75% of the total income on food.

Another abomination is turning food (e.g., corn) into fuel (e.g., ethanol) or cutting down parts of the Amazon forest for growing soybeans. Corn is a staple for Mexicans and other cultures. When the price of corn increases because of US production of ethanol, these cultures suffer a financial hardship. Deforestation of the Amazon rainforest deprives many species of their habitat. In addition, accumulation of topsoil for agriculture in the US Midwest is not what it once was.

On the other hand, if humankind merely feeds the starving, this access to food may result in continued exponential human population growth, thus increasing the present level of misery. Humankind must become aware that population stabilization is essential on a finite planet. Stabilization should be at a level that permits a quality life for most, ideally all, of Earth’s inhabitants. “If the only ultimate check on the growth of population is misery, then the population will grow until it is miserable enough to stop its growth” (Boulding 1971).

Another example of flagrant waste in the United States and other parts of the planet is energy. Energy efficiency (e.g., home insulation) could make dramatic reductions in power consumption. Europeans use, on average, half as much electricity as US citizens, but even they could benefit markedly from increased electrical appliance efficiency (Brown 2010). However, some potentially drastic increases in consumption of electricity may occur in the future. "Weather scientists say that as global warming intensifies, Russians unaccustomed to such sweltering heat should brace for more summers like this. The mercury hit 100 in Moscow on Thursday, setting a new record, and July was the hottest month ever recorded in Russia" (Nowak 2010). Air conditioners have not been common in Russia, but, as seems probable, this heat will increase the number of air conditioners for the wealthier members of Russian society, thus increasing power demand.

Some people respond to the threats to security from global climate change as having nothing to do with them. Must a catastrophe occur in their "backyard" before they are willing to do anything to reduce the risks of global climate change? Perhaps humankind is not the intelligent, rational species it thinks it is. Humankind could markedly reduce the risks of global climate change by merely reducing or eliminating the waste of food and energy. Reducing waste would also have both long- and short-term financial benefits.

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#### LITERATURE CITED

- Boulding, K. E. 1971. Page 37 in *Collected Papers*, Vol. 2. Colorado Associated University Press, Boulder, CO.
- Brown, L. 2010. Raising appliance efficiency: a big win for consumers and the climate. 29 July [http://www.earthpolicy.org/index.php?/book\\_bytes/2010/pb4ch04\\_ss3](http://www.earthpolicy.org/index.php?/book_bytes/2010/pb4ch04_ss3).
- Nowak, D. 2010. Russia mobilizes army to fight fires: 214,000 acres ravaged; 25 die. Associated Press 31 July Boston Globe [http://www.boston.com/news/world/asia/articles/2010/07/31/russia\\_mobilizes\\_army\\_to\\_fight\\_fires/](http://www.boston.com/news/world/asia/articles/2010/07/31/russia_mobilizes_army_to_fight_fires/).
- Stuart, T. 2009. Afterword. Page 294 in *Waste: Uncovering the Global Food Scandal*, Norton, W. W. & Company, Inc., UK.