Food & Water and Climate Change

This synopsis will sound much like the previous months, which only affirms how interconnected the issues are. We cannot talk about climate change's effects on food and water supplies without also noting that impact upon the world's poor, upon women, upon migration, and upon economies.

"The main way that most people will experience climate change is through the impact on food: the food they eat, the price they pay for it, and the availability and choice that they have," said Tim Gore, head of food policy and climate change for Oxfam.

Climate change has already cut into the global food supply on land and sea, fuelling wars and natural disasters, according to a report from the UN's climate science panel. Agriculture and fisheries are highly dependent on specific climate conditions. The Intergovernmental Panel on Climate Change (IPCC) reports that "All aspects of food security are potentially affected by climate change."

The rate of increase in crop yields is slowing – especially in wheat – raising doubts as to whether food production will keep up with the demand of a growing population. Changes in temperature and rainfall patterns could lead to food price rises of between 3% and 84% by 2050. It is a similar story for corn as well. Declines in crop yields will register first in drier and warmer parts of the world but as temperatures rise two, three, or four degrees, they will affect everyone. In the more extreme scenarios, heat and water stress could reduce yields by 25% between 2030 and 2049.

Animals we raise for food are also directly affected by heat waves and drought, as well as by threatened pasture and feed supplies. And according to the report, fish catches in some areas of the tropics are projected to fall by between 40% and 60% due to water temperature changes and ocean acidification.

Water scarcity is becoming an ever-increasing problem, making water security more difficult and costly to achieve, even in countries that have enjoyed reliable water supplies and few, if any, water shocks. The Pentagon has long acknowledged that it is water, not oil, that will be the cause of most future wars.

Much of the developing world will have to cope with droughts and/or the growing risk of flooding. Currently, 1.6 billion people live in countries and regions with absolute water scarcity and the number is expected to rise to 2.8 billion people by 2025.

Global changes already evidenced include dramatic changes in seasonal distribution and amounts of precipitation, increased or decreased precipitation intensity, reduction in soil moisture, changes in vegetation cover and consequent changes in management of land resources, accelerated melting glacial ice threatening major sources of drinking

water, increased fire risks, increased coastal inundation and wetland loss from sea level rise, faster rates of soil erosion, mass movements of land, and water degradation. Increased water temperatures can lead to a bloom in microbial populations, negatively impacting human health as well as the ecosystems' inhabitants.

Friends of the Earth's executive director, Andy Atkins: "We can't continue to ignore the stark warnings of the catastrophic consequences of climate change on the lives and livelihoods of people across the planet."