# Climate Justice, Agriculture, Mitigation, and Adaptation
# Oxfam

**THE IMPACTS OF CLIMATE CHANGE**

The total number of natural disasters has quadrupled in the last two decades, and the number of people affected by them has increased from 174 million to about 250 million a year. The year 2007 was specifically a year of climatic crises, especially floods (Africa, Mexico, S. Asia), heat waves and forest fires (Europe, Australia and California).

Growing water shortages in developing countries, coupled with extreme weather and rising temperatures, lead to increased food shortages and spikes in diseases like dysentery and malaria. The WHO estimates that climate change may already contribute to more than 150,000 deaths a year.

Whether a dramatic weather event becomes a disaster depends on the level of human vulnerability (i.e. capacity to resist impacts). In poverty-stricken nations, people are more vulnerable to these events being disasters. The disasters then undermine the development that can provide resilience. One shock after another pushes poor people and communities further into destitution and vulnerability. Vulnerability and adaptation to adverse impacts of climate change is one of the most crucial environmental concerns of many developing countries.

**CLIMATE CHANGE AND GENDER INEQUALITY**

Gender-related inequalities are pervasive in the developing world. Although women account for almost 80% of the agricultural sector in Africa, they remain vulnerable and poor. 70% of the 1.3 billion people in the developing world living below the threshold of poverty are women.

Shocks like weather extremes, economic downturns, conflict, and the spread of diseases (e.g. HIV/AIDS) hit women the hardest because they are the main collectors of water, they depend the most on natural resources to feed their families, they have fewer assets than men to fall back on, and they have less power to demand rights to protection and assistance.

Women are the main producers of the world's staple crops, providing up to 90% of the rural poor's food intake and producing 60–80% of the food in most developing countries. However, maize, sorghum, millet and groundnut yields have a strong association with the year-to-year variability of ENSO (El Niño/Southern Oscillation) in Africa. For southern Africa, productivity is expected to drop by 20–50% in extreme El Niño years.

In 2007, about 35 million people were directly engaged in fishing and aquaculture. In the Pacific region alone, women were estimated to catch about a quarter of the total seafood harvested. For example, in Cambodia, Laos, Thailand, Viet Nam and the Philippines – there are communities where women play a greater part in aquaculture production and harvesting of near shore organisms than men. Changes in fish communities can have a severe impact on fisherwomen. If the greenhouse gas emissions scenario remains as present, climate warming could result in biannual thermal stress spells causing coral bleaching (Donner *et al.*, 2007).

This phenomenon could result in the loss of a key marine ecosystem that supports many marine resources essential to women's livelihoods (e.g. their fishing and tourism activities).

Since climate change is predicted to exacerbate existing shortfalls in water resources, this will mean even more difficulties for women regarding health and sanitation. Additional health concerns are especially for women because they already have a lower quality of health compared to men (despite having a longer average life expectancy).

Gender inequalities continue with access to land and resources. In addition, limited education for many women means they care unable to take advantage of credit facilities and employment prospects.

The table below outlines the many linkages in relation to some of the United Nations Millennium Development Goals (MDG)[1], Climate Change and Gender Implications:

| **Millennium Development Goals** | **Threats due to climate change** | **Gender implications** |
|---|---|---|
| MDG 1: Eradicate extreme poverty and hunger | • Reduction of agricultural production for survival and commercial ends<br>• Food security at risk<br>• Less access to safe water | • Loss of domestic species of plants and animals used by women to ensure food security of their families.<br>• Reduction, mobilization, or extinction of marine species used by women for household consumption or for productive activities.<br>• Increase in women's workload due to decline in availability of water and other resources. |
| MDG 2: Achieve universal primary education | • Increases the workload needed for agricultural production and subsistence activities | • Generally, girls and women are responsible for the collection of water and fuelwood. If the time they invest in these tasks increases, their capacity to attend school is at risk. |

Climate change and gender inequality are inextricably linked. They are both obstacles to achieving poverty reduction and sustainable development goals. In addition, climate change exacerbates existing inequalities and slows progress toward gender equality. Similarly, gender inequality worsens the impacts of climate change

## WOMEN'S ROLE IN ENVIRONMENTAL MANAGEMENT

Women's active involvement in agriculture, fishing and aquaculture in developing countries, and their dependence on biomass energy, makes them key stakeholders in effective environmental management. Yet the threats imposed by global warming have NOT resulted in policy makers placing women at the heart of their vision of sustainable development;

[1] To find out more about the UN Millennium Development Goals, check out www.endpoverty2015.org

women's wealth of indigenous knowledge hasn't been tapped into by policymakers; and women do not have equal opportunity to participate in the decision making related to adaptation and mitigation policies and initiatives at the international and national level related to climate change. For climate change policy to ensure a sustainable future by combining development and environment issues, it has to take into account the interests of ALL the stakeholders.

**WHAT CAN WE DO?**

Preventive measures conducted well in advance prove much more beneficial than simply reacting to unexpected catastrophes.

Oxfam recommends promoting equitable ways to reduce emissions, and therefore greenhouse gas pollution. A mitigation strategy that reduces greenhouse gas emissions drastically to keep global temperature rise as far below 2 degrees Celsius as possible is suggested, and wealthy countries must act first.

Oxfam also recommends advocating for equitable, fair, accountable and transparent adaptation funding that ensures community participation, especially among women and ethnic minorities. The adaptation costs of developing countries is estimated to be $86 billion/yr. The adaptation needs will vary, from improved drinking water systems, infrastructure reinforcement, new infrastructure like food storage facilities, improved disaster preparedness and response, etc.

A broad range of community adaptation efforts must be integrated into promoting development and poverty reduction. The key is to build resilience at the community level in a few key areas: water scarcity, excessive water, disaster risk reduction, agricultural practice improvement and diversification, health systems improvement, and a reduction in social impacts (including migration and natural resource conflicts). Oxfam suggests improving global humanitarian systems through an increase in emergency aid by US$50 billion a year by 2010.

The vulnerability and risk of disaster in developing countries can be reduced by building long-term social protection (essential services like water, sanitation, health, and education); investing in Disaster Risk Reduction strategies (that are linked to climate change adaptation measures and national poverty reduction strategies) and building local capacity by empowering populations with a strong role in preparedness, response, recovery and rehabilitation work.

What this means for all of us working in climate change: **The empowerment of women should be one of the priorities in adaptation and risk reduction strategies.**

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