

# AGRICULTURE EQUITABLE AND AMBITIOUS SOLUTIONS

Doha, November 2012

The objective and principles of the Convention must guide action on agriculture across the UNFCCC regime.

## Ensure the objective of the Convention

Food production is currently threatened by climate change. Scientists estimate that maize and wheat yields globally have already been reduced by 3.8% and 5.5% respectively, due to climate change, between 1980 and 2005. Crop yields are predicted globally to fall 10 to 20 percent or more between now and 2050 due to climate change; yield decreases are likely to be much higher in the tropics and sub-tropics.

**A global goal of below 1.5°C is the only goal compatible with a science-based understanding of impacts on food production from climate change.** Urgent reductions and an early peaking year are essential to prevent extremely dangerous impacts on food production in the next three decades.

## Adaptation in agriculture is central to sustainable development

Scientists warn that "entire regions face a shift to a different climate type and the geographic range for many crops will shift accordingly." Studies show significant decline in coming decades in the growing areas for cocoa in Ghana and Côte d'Ivoire, bananas in Uganda, maize and beans in Central America, and potatoes around the world. "Steadily rising temperatures are likely to reduce potato yields in places where people already struggle to meet basic nutritional needs."

**A massive mobilization of resources is needed immediately for adaptation in agriculture. Adaptation in agriculture must be made a priority in negotiations under SBSTA and the Durban Platform.**

## Compensation for loss and damage beyond adaptation

But, at the Doha conference, rich industrialized countries are systematically working toward the deregulation of the international system of climate controls.

Assumptions that adaptation in agriculture will sufficiently address the impacts of increasing temperatures and increased variability in precipitation are unfounded and lead to a dangerous complacency.

**A mechanism for reparations for loss and damage which includes impacts on agriculture and food security must be a central component of a post-2012 regime.**

## Developed countries must lead

*"The developed country Parties should take the lead in combating climate change and the adverse effects thereof." (Article 3.1, UNFCCC)*

**Table 1: Projected impacts on different crops with and without adaptation, with warming from 2.2-3.2°C**

	Without adaptation	With adaptation
Spring wheat	-14 to -25%	-4 to -10%
Maize	-19 to -34%	-6 to -18%
Soybean	-15 to -30%	-12 to -26%

**Table 2: Illustrative comparison of developed and developing country agriculture emissions**

Country	Non-CO <sub>2</sub> GHG emissions from agriculture in 2010 (Mt CO <sub>2</sub> eq)	Per capita non-CO <sub>2</sub> emissions from agriculture (tons CO <sub>2</sub> eq)	Per capita N <sub>2</sub> O emissions from agricultural soils (tons CO <sub>2</sub> eq)	Per capita emissions from livestock (tons CO <sub>2</sub> eq)	Per capita meat consumption (kg)
France	102.7	1.63	0.86	0.77	88.6
Ghana	8.7	0.36	0.07	0.08	9.9
India	732.3	0.60	0.18	0.18	5.2
Malawi	12.8	0.86	0.66	0.09	5.1
New Zealand	37.1	8.49	2.91	5.59	142.1
United States	454.9	1.46	0.78	0.64	124.8

Annex I Parties must take the lead in reducing emissions from agriculture, in particular by reducing the production and use of synthetic fertilizers and reducing meat consumption.

**"... the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system ... within a time frame sufficient ... to ensure that food production is not threatened ..."** (Article 2, UNFCCC)

## Mitigation actions

Mitigation in the agriculture sector must be based on real emission reductions or prevention.

**Soil carbon "sequestration" is not a solution** to preventing dangerous anthropogenic interference with the climate system.

**Carbon "sequestration" in soils is not emission reduction and it is not permanent** -- in fact, it is technically not sequestration at all, as soils will likely become a net source of

carbon as precipitation patterns change and temperatures increase.

**Relying on false "sequestration" as a mitigation strategy is extremely dangerous.** Accounting fixes in carbon markets to address the stigma of "non-permanence" will only serve to magnify the danger.

Instead, **permanent reductions in agricultural emissions must be achieved through real reductions** -- such as by reducing the production and use of synthetic

fertilizers, or by reducing meat consumption in developed countries.

Recent research shows that in order to stabilize atmospheric N<sub>2</sub>O by 2050, **a 50% reduction in mean per capita meat consumption in developed countries would be required.**

Annex 1 countries must reduce their agricultural emissions, but they should not mistake soil carbon sequestration in the South as equivalent. **Agriculture should not be used by historical polluters to evade their responsibilities.**