

IMPACT OF CLIMATE CHANGE

*on the enjoyment of the right to adequate food
in the South East Asia region*

Abstract

Climate change, sustainable resource management and food security are now widely considered to be among the most complex, interdependent and urgent global policy challenges. Climate change has negative impacts on agriculture while current agricultural practices and food systems are responsible for harming the environment. Climate change in Southeast Asia has an impact on all the necessary elements required for the enjoyment of the right to food, including availability, accessibility, adequacy and sustainability. Southeast Asia is prone to many nutrition related risks due to a heavy dependence of the coastal communities on fisheries for food, and due to the frequent extreme weather events impacting agriculture, food crops and fresh water resources.

Background

Climate change directly and indirectly impacts the full and effective enjoyment of a range of human rights, including the right to adequate food. No place is completely immune to the effects of climate change. However, the ways in which it influences regions, communities and individuals will vary, and will affect vulnerable groups, such as women, children and the elderly, disproportionately. Climate change can be seen as the biggest threat to human health, but also as the biggest opportunity. There are multiple benefits to taking action for a sustainable economy, contributing both to climate change mitigation and to better health, community resilience and poverty reduction.

Impacts on Food Systems

The most recent figures of the Food and Agriculture Organization of the United Nations (FAO) suggest that 795 million people are hungry. Without the implementation of serious measures to combat climate change, this figure could rise up to 20 percent by 2050. Climate change has negative impacts on agriculture while current agricultural practices and food systems are responsible for harming the environment. Moreover, climate change is undermining the right to food, with disproportionate impacts on those who have contributed least to global warming and are most vulnerable to its harmful effects. In this brief, we look at the impact of climate change on the necessary elements required for the right to food, including availability, accessibility, adequacy and sustainability.



CLIMATE CHANGE AND FOOD

in the Southeast Asian Context



Food Availability

Southeast Asia is a major producer and supplier of grains and the largest producer of palm oil and natural rubber globally. With rising temperatures and increased frequency of extreme weather events, the negative impact of climate change on crop, livestock, fisheries and aquaculture productivity on food availability will have significant regional reach. For example, due to the frequent flooding in the Red River Delta, Central Region and Mekong Delta, a large amount of land devoted to rice production have been damaged. Increases in sea temperatures and the acidification of oceans will impact fisheries. This is particularly dangerous because more than 120 million people living in coastal communities depend directly on local marine and coastal resources for their income, livelihoods, and food security.



Food Accessibility

Changes in food production and quality affect market prices and, in turn, price increases affect economic accessibility to food, especially for the poor. In the region, we can expect a sharp price increases for all major crops, particularly food grains. Physical accessibility will also be affected by climate change, and it will particularly impact the already vulnerable groups such as women, elderly, people with disabilities. With growing number of emergencies caused by extreme weather events, it may become difficult to deploy adequate food supplies to affected populations. Rising temperatures and sea levels will affect communities living in coastal areas, specifically in the Coral Triangle, whose food security and livelihoods rely on fisheries. Diets of vulnerable populations will have to be altered.



Food Adequacy

Accessibility refers to both physical and economic access. Adequacy requires that food satisfy dietary needs and be safe for human consumption, free of adverse substances, culturally acceptable and nutritious. Climate change has a substantial negative impact on food production and food quality in the region. Rising carbon dioxide emissions are causing harm to staple food crops, reducing their nutritional content including of zinc. Heavy rainfall may also be linked to lower quality of crops owing to fungal infections. Childhood malnutrition will increase within the sub-region due to decline in calorie availability.



Sustainability

Sustainability is linked to hunger-reduction strategies and policies as it places emphasis on the principles of participation, non-discrimination, transparency and empowerment. The Intergovernmental Panel on Climate Change predicts with medium confidence that droughts will intensify in the twenty-first century, owing to reduced precipitation and/or increased evapotranspiration. Water is crucial to food security, as it is necessary for food production, preparation and processing, as well as the absorption of nutrients within the human body.