

# World Food Programme

### NEW PUBLICATION

## Climate Change and Risk of Hunger: the Scale of the Challenge and Required Response

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The World Food Programme will soon release a report linking climate change to hunger and malnutrition. The report reviews the latest thinking and suggests action to meet this global challenge. Below is a summary note of key findings highlighting the importance of tackling an issue that will impact millions of people.

#### The climate is changing

- Climate change and more frequent natural disasters will substantially increase the risk of hunger and malnutrition, especially in the poorest parts of the world. The scale is unprecedented. The increased risk due to climate change is projected to affect millions of people.
- Sub-Saharan Africa is expected to be the most affected by a global

Impact on risk of hunger

Studies predict that higher temperatures and water scarcity will lower the yield of the major food grains – wheat, rice and maize - by 9 to 11 percent, and would be felt most strongly in grain-producing developing countries. The decrease in grain production is projected to lead to an increase of 25 to 150 percent,

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increase in hunger caused by climate and weather changes, especially its semi-arid regions north and south of the equator. Not only are these regions projected to become even drier, but they will be affecting poor populations that are already vulnerable. Some of the more disadvantaged areas of South and Southeast Asia would also be significantly affected.

which could result in an increase of hunger anywhere from 10 to 60 percent. These estimates could be reduced with the introduction of adaptation and coping strategies, such as changing planting schedules and new irrigation techniques, but the outlook is still grim.



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#### More food insecurity

• Some of the most critical impacts of climate change is expected to be felt on food security, meaning reduced availability of calories and increased child malnutrition. The biggest rise in the number of malnourished children is predicted to be in sub-Saharan Africa, with a 26 percent projected increase in the number of children (10 million) lacking adequate nutrients by 2050. Globally, climate change is forecast to increase the number of malnourished children by 24 million, or 21 percent, by 2050.

#### **Responding to the challenge**

- If estimates are correct, climate change will lower global agricultural production, increase food prices, and increase the risk of hunger and malnutrition. Action is needed now to begin adapting institutions and activities to reduce vulnerability and increase capacity to respond effectively to these new challenges.
- The challenge of adapting to climate change will rarely be a stand-alone endeavour, as the impacts of a changing climate will overlap with those of other global risks, from economic volatility to natural resource scarcity. Instead, the challenge will be to integrate adaptation and other forms of risk management throughout multiple areas of policy, with the overarching aim of targeting vulnerability and replacing it with resilience.
- In the context of the risk of hunger, two areas of work will be especially important. The first is **food production**, where the challenge is not only to produce more food (as much as 50 percent more by 2030, according to a World Bank estimate), but also to do it in a way that is more resilient, more sustainable and more equitable. This will entail investment in providing farmers with access to: knowledge and innovation, assets, markets and credit, and risk management. A second key area for action is **food security**, given that the challenge is not simply to produce more food, but also to ensure that poor people actually have access to it. This will involve: scaling up humanitarian assistance capacity, moving from crisis response to crisis prevention, and scaling up social protection systems.

#### WFP's experience

• Over the last 40 years, **WFP has spent around US\$8 billion** on programmes to protect and improve the environment to help food-insecure communities better preserve, develop or use natural resources and rebuild food security systems and vital infrastructure damaged by disasters.

**Kenya** — Our targeted employment programme illustrates efficient natural resource management in drought-prone and arid regions, contributing to the rehabilitation of approximately 28,000 hectares of land for irrigation, soil conservation and water management. **Afghanistan** — WFP has helped communities dig 227 water wells and rehabilitate 652 water reservoirs — all in exchange for food.

**Mali** — WFP-supported activities combat desertification by stabilising dunes and planting a greenbelt as a buffer between the Sahara and people's homes.

**Ethiopia** — WFP's MERET (Managing Environmental Resources to Enable Transitions to More Sustainable Livelihoods) programme has helped more than a million food-insecure people through the rehabilitation of 300,000 hectares of degraded land.



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Publication soon to be available at: www.wfp.org/climate-change