THE IMPACTS OF CLIMATE CHANGE ON NUTRITION

GÉNÉRATION NUTRITION

ACTION CONTRE LA FAIM
ACF INTERNATIONAL

"Climate change is the biggest global health threat of the 21st century"
The Lancet, 2008

795 million people are already suffering from **undernourishment**[1]

Undernutrition **kills 8,000 children every day worldwide**[2]

Only **10%** of children suffering from **severe acute malnutrition** have access to treatment[13]

2 billion people suffer from a serious **lack of vitamins** and minerals[3]

200 million children are **stunted or wasted**[4]

1.4 billion people are now **overweighed or obese**[3]

Undernutrition costs **8-11%** of **annual gross domestic product** (GDP) across developing countries[5]

CLIMATE CHANGE IMPACTS UNDERNUTRITION THROUGH MULTIPLE PATHWAYS:

food security, water, hygiene and sanitation, health, and maternal and child care practices. Food and nutrition insecurity, forced displacements, water resources contamination will weaken the health of the most vulnerable populations, women and children in particular.

50% OF WORLD POPULATION
at risk of food insecurity by 2050[6]

+ 25-90% UNDERNOURISHED
in Africa by 2050[7]

+ 30-50% STUNDED CHILDREN
by 2050[8]

+ 250,000 deaths per year from malnutrition, **malaria, diarrhea and heat stress** between 2030-2050[9]

2 billion people will be **exposed to dengue** by 2080[10]

More psychological distress

Increased and more unpredictable impacts of seasonality on nutrition

INCREASED UNDER-NUTRITION

-10% total agricultural output by 2050 with +2°C[8]

-50% crop yields in Sub-Saharan Africa by 2020[11]

Decrease of proteins, iron and zinc in food staples[11]

75-250 million people at risk of increased **water stress** in Africa in 2020 and **350-600 million** people in 2050[11]

1-3 billion people experiencing **water scarcity** by 2080[12]

Despite the growing threat and incidence of climate change, too little has been done so far in reducing and adapting to the impacts of climate change on nutrition and increasing the resilience to climate change. The nutrition community remains largely disconnected from key climate change issues and initiatives. **Therefore, the increasing impact and threats of climate change calls for a multiple-track approach:**

- **Addressing the drivers of climate change** through climate change mitigation and adaptation, in order to minimize the extent of future negative and potentially disastrous impacts induced by climate change.
- **Scale-up coverage of and increase access** to interventions to treat and prevent malnutrition adopting a multi-sectoral approach.
- **Mainstream climate** into nutrition initiatives and nutrition objectives into national and local adaptation programs (e.g NAPs).
- **Researchers should build further evidence on the links between climate and undernutrition**, on projected effects and on threats that mitigation actions pose on nutrition (do no harm).
- **The COP21 agreement** should aim at protecting and promoting food security, prioritizing actions for the most vulnerable livelihoods groups, households and individuals.
- **Public funding** for adaptation (additional to Official Development Assistance) must be increased, mainly in the form of grants and should be allocated to the countries and populations most affected by nutrition insecurity.
- The **CFS, FAO and other organizations** should **increase efforts to address the impact of Climate Change on nutrition** in policies and programs.

[1] State of food insecurity in the World 2015, UNFAO 2015 [2] Lancet, 2013. Maternal and children nutrition series [3] Global Alliance of Improved Nutriiton website: http://www.gainhealth.org/about/malnutrition/ [4] UNICEF, 2009. Tracking progress on child and maternal nutrition [5] Horton S and Steckel R, 2011. Malnutrition: Global economic losses attributable to malnutrition 1900 - 2000 and projections to 2050. Copenhagen Consensus on Human Challenges [6] Dawson TP et al. 2014. Modelling impacts of climate change on global food security. [7] Lloyd et al. (2011). Climate change, crop yields and undernutrition : development of a model to quantify the impact of climate scenarios on child undernutrition. Environmental Health Perspectives, 119 (12). pp. 1817-23. [8] Richard Munang, Jessica Andrews, « L'Afrique face au changement climatique », Afrique Renouveau : Édition Spéciale Agriculture 2014, page 6 [9] WHO website : http://www.who.int/mediacentre/factsheets/fs266/en/ [10] Hales S et al. Potential effect of population and climate changes on global distribution of dengue fever: an empirical model. The Lancet, 2002, 360:830–834. [11] IPCC, Africa. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, chapter 9 [12] Contribution of Working Group II to the Fourth Assessment Report of the IPCC, 2007 [13] Global SAM Management Update: Summary of Findings, UNICEF, 2013, p.13