CLIMATE CHANGE: AN ADDITIONAL BURDEN FOR THE MOST VULNERABLE

The impact of climate change is a humanitarian reality that Action Against Hunger teams must face every day. Thus, in addition to the risks of climatic disasters, there are further serious health consequences themselves often linked to an increased pressure on natural resources, including access to clean water. Moreover, climate change is already heavily impacting the food security and livelihoods of a very large number of small producers. It acts as an aggravating factor in areas which are already highly vulnerable and can exacerbate tensions between communities when access to natural resources is a survival matter. Because it represents an additional burden on the most vulnerable populations, addressing climate change is at the very heart of Action Against Hunger's humanitarian mandate.

The Intergovernmental Panel on Climate Change (IPCC) is very clear: if an ambitious action plan is not implemented now, it will be difficult if not impossible to maintain the overall surface temperature below the threshold of 2°C of warming (relative to pre-industrial era). Above this threshold, the world will have to face irreversible consequences for all, especially for the most vulnerable populations, women and children in the first place.

The impacts of climate change are already being felt in the North as well as the South. The projections are alarming: if nothing is done to combat climate change, an additional 600 million people will suffer from undernutrition in 2080 .

UNDP, Human Development Report 2007/2008. Fighting Climate Change: Human solidarity in a divided world, 2007, p. 90

With extreme natural events getting increasingly frequent and intense, the populations' levels of poverty and vulnerability will increase significantly. The most optimistic projections of global warming predict that the undernutrition rate in Africa will increase from 25 to 90% by 2050. If nothing is done to meet the climate challenge, the changes under way will threaten to reverse much of the progress achieved over the past years in the fight against hunger and undernutrition.

The biggest refugees camp in the world (Dadaad) has a population of 400,000 people. ACF is mobilizing against droughts and the risk of starvation. Kenya, Meri village: Nado, 24 years old, 3 children. His entire herd died because of the drought. Only one buffalo is left.

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THE POOREST AND MOST VULNERABLE ARE AT GREATEST RISK

These figures are even more alarming as they reflect an extremely paradoxical situation: **the people who are the least responsible for climate change are the ones who suffer the most from its consequences.** Even though their capacity to respond to exogenous shocks is limited if not exhausted, Southern countries, and especially the poorest households, will therefore suffer from the largest share of human, economic and environmental damages generated by climate change. The populations involved are mainly small producers and women producers who live from subsistence farming, fishing or livestock: sources of livelihood that are very sensitive to climatic hazards. Following a disaster, the poorest often have no choice but **to resort to negative coping strategies** (reducing food intake, selling productive assets, etc.) which impede their resilience capacities and aggravate their food and nutrition insecurity. Spontaneous and recurrent shocks and stress are at the heart of this vicious circle in which women and children are the main victims. Indeed, **it is estimated that women and children are 14 times more likely than men to die during a natural event.** Women accounted for 80% of victims in the 2004 tsunami while the last IPCC report (2014) confirms that 25 million additional children will suffer from malnutrition in 2050 compared to a scenario without climate change.

MORE FREQUENT AND MORE INTENSE EXTREME NATURAL EVENTS

The latest data of the UN Office for Disaster Risk Reduction show that in 2014, **87% of climate disasters were related to global warming.** These disasters first affect areas of the world where rates of poverty and malnutrition are the highest. Between October 2010 and September 2011, severe droughts in East Africa caused the death of 50,000 people and affected 13.3 million individuals. Southeast Asia and Small Island States are also extremely vulnerable to the consequences of climate change. In these countries, where the local economy is shattered, rehabilitation of livelihoods finance schemes are essential in order to enable the survivors not to aggravate their vulnerability and to rebuild their future.

A THREAT THAT PUT SEVERE CONSTRAINTS ON AGRICULTURE

The multiplication and the alternation of natural disasters related to climate change (droughts, scarcity and irregular rainfall, floods, pest pressure on crops and livestock, etc.) reduce if not destroy farmers' production resources and pose a major threat on the functioning of agricultural production systems: destruction of crops and fodder, loss of livestock, soil depletion, etc. Consequently, global agricultural production will be severely affected due to the expected decline in some crop yields such as cereals (wheat, rice, corn, soybeans). Thus, if current climate trends prevail, global wheat production yields will decrease between 1.3 and 9% by 2030 and the fall in yields could rise to 29% in 2080. **Overall, in sub-Saharan Africa, one of the most affected regions by the adverse effects of climate change, a warming of about 2°C would result in a 10% reduction of total agricultural output by 2050, while a higher warming, hence more likely, could increase this reduction to 15 to 20%.**
These yield falls will have a disastrous effect on the income of small producers who are currently practicing small-scale agriculture and family farming. This loss of income, due to the increased frequency of natural hazards, will have major economic consequences on the ability of people to meet their family basic food needs. In addition, the instability of crops will increase the volatility in the prices of basic food commodities in international markets, resulting in detrimental price fluctuations for producers as well as consumers. Thus, climate change amplifies the already existing threats to livelihoods and food security.

WATER RESOURCES UNDER PRESSURE

At the current rate, global warming will have devastating consequences on the availability and quality of water resources, which are already under pressure. By 2020, the World Bank estimates that the total availability of **"blue and green" water (from rainfall and rivers) will most likely suffer a 10% drop across Africa, while 95% of the African agriculture depends on regular rainfall.** Moreover, the scarcity of these resources will represent an additional workload for girls and women who are most often responsible for household water supply. Beyond simple access to water, climate change is also responsible for increased flooding and droughts in areas that are mostly lacking of basic sanitation or hygiene facilities. Climate change, whose effects are already being felt, will therefore worsen all negative aspects associated with the quantity and quality of water resources.

CLIMATE CHANGE, AN AGGRAVATING FACTOR OF TENSIONS

Climate change act as **an aggravating factor to pre-existing vulnerabilities and exacerbate cross-communities tensions** until it creates clashes and conflicts. The depletion of natural resources (water, pastures, forests) and the increased pressure to access these resources represent additional factors of tension. Directly linked to climate change, these phenomena multiply tenfold the risk of food and nutrition insecurity in a context of demographic pressure. The Sahel zone is one of the areas where these vulnerabilities concentrate the most. Social tensions and even conflicts can erupt when these factors are combined. The South Kordofan region, in Sudan, represents a prime example of this case. In addition, tensions between pastoralists and farmers have been aggravated in particular by droughts becoming more frequent due to climate change, which threaten everyone's livelihoods while encouraging population migrations. These populations thus have a strong tendency to cluster in cities so that these areas (already subject to special vulnerabilities related to their population density or to their coastline location) find themselves facing a massive and sometimes archaic urbanization making it difficult to offer an appropriate response to the populations needs.

In 2010, **the number of disaster-related internal displacement has exceeded by almost 20 million the number of conflict-related displacements.** Population movements lead to serious health issues and severely threaten food and nutrition security for migrant populations. Without regular access to water, without functional sanitation facilities, lacking access to healthy food, displaced populations often suffer from serious deficiencies, which promote the rapid development of illnesses. Tensions resulting from these unstable environments enhance conflicts within migrant populations or with the host populations, especially as other tensions, including inter-communities, may pre-exist in the affected territories.

According to the IOM forecasts, **we could count one billion climate refugees in 2050,** while the general issue stemming from the ever more numerous and sustained displacements of populations already represent a significant humanitarian challenge.

HEALTH HAZARDS INCREASE TENFOLD

The effects of climate on human health will not be evenly distributed across the planet. Once again, the most vulnerable populations in developing countries, small island states, arid and high mountain and coastal areas which are often more densely populated, will be affected first by the multiplication of health hazards. Climate change will lead to an unprecedented increase in plant diseases and zoonosis. **Food and nutrition insecurity, forced displacements, water resources contamination will weaken the health of the most vulnerable populations.** This weakening will promote the prevalence of vector-borne diseases, resulting in a weakening of the population's nutritional status. 88% of these vector-borne diseases attributable to climate change will impact children under five.

At last, the WHO estimates that nearly 2 billion people will be exposed to dengue by 2080, and expects that climate change will lead to **nearly 250 000 additional deaths per year** due to the combined effects of malnutrition, malaria, diarrhea and heat-related stress between 2030 and 2050.

Beyond these serious impacts on physical health, heat-related stress as well as shock and trauma caused by significant climate events will cause more psychological distress, once again related to the victims' age and gender.

Chad Food Crisis, 2010

Copyright : S. Hauenstein Swan, ACF UK - Tchad 2010

CONCLUSION

Climate change already exacerbates all undernutrition determinants. The expected increase in natural hazards related to climate change will further amplifies the vulnerabilities of millions of people, especially the most vulnerable groups. Their low adaptive capacity will not allow them to deal with these repeated shocks. It is therefore urgent that the humanitarian community integrates climate change as a determining factor in the fight against poverty and undernutrition. Governments and donors must secure dedicated funds over the long term in order to address these humanitarian emergencies and the needs of affected people.

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