bizcommunity

The relationship between drought and famine: lessons from the Horn of Africa

Countries in the Horn of Africa - particularly Somalia, Ethiopia and Kenya - are suffering from severe drought due to historically low rainfall and high temperatures.

By Philippe Roudier 22 Sep 2017

© Gilles Paire – 123RF.com

The Famine Early Warning System network reports that the rainfall recorded during the short rainy season from August to October 2016, and the main season, from March to May 2017, has been especially low in large areas. Some areas in Somalia are suffering the worst drought in the past 35 years.

According to data released by USAID the drought has led to a major food crisis in the region. Somalia and southern Ethiopia are the most affected regions. Certain areas of Somalia could reach a state of famine by the end of the year, particularly if there is an interruption in humanitarian aid. While there's cause for concern in Kenya, it remains less critical.

At first sight, there would clearly appear to be a link between drought and famine. This is particularly true in a region in which agriculture is mainly non-irrigated. A lack of rain results in poor harvests and livestock are left with no grazing land and water.

But the link is not so direct and the processes which lead to famine are much more complex.

What the philosophers have to say

According to specialists working on the path initiated by Indian philosopher and economist Amartya Sen, famines have multiple institutional causes and don't necessarily correspond to production crises. According to the Malthusian theory, which predicts that populations grow geometrically and outgrow resources, famine can be attributed to demography. More recently, environmental causes, especially due to the climate, have been blamed. This aspect has aroused great interest in academic literature since the severe droughts of the 1970s.

Yet certain authors, such as the historian Philip Slavin, argue that we tend to overestimate climate's role in creating famines or wars: this is what Climatologist Mike Hulme calls climate reductionism.

It's obvious that climate parameters (rain, temperature) influence production levels. But climate shocks lea to shortages, such as major production deficits – not to famines. The transition from shortages to famine i related to anthropological and demographic factors. These include factors that prevent the implementatior of conventional mitigation mechanisms (stocks, imports or external aid).

In the food crisis affecting the Horn of Africa we must bear in mind the fact that Somalia is highly prone to armed conflicts stretching back over the past 20 years. These have had multiple repercussions, such as tl difficulty of distributing imported food goods to make up for the production deficit.

Similarly, the conflicts involve groups such as the al-Shabaab militants, which prohibit humanitarian aid beir brought into certain areas. Finally, Somalia's state structures are extremely weak and are therefore unable manage this type of production shock effectively.

Predict droughts

It's essential to take a holistic approach to attempt preventing such crises. Action needs to be taken on socioeconomic aspects, such as strengthening states, securing conflict zones, inclusive development policies, as well as on environmental aspects.

The recent lack of rainfall had been quite accurately predicted during the Greater Horn of Africa Climate Outlook Forum in 2016 and again in 2017. These expert meetings, which are held periodically for each African region, allow forecasts to be produced for the rainfall expected for the coming season.

The last forum report, released in February 2017, predicted: "The seasonal forecast indicates that most countries in the regions will receive depressed rainfall during the March-April-May 2017 rainfall season."

It also specified that the below average rains "will likely have a negative impact on food security and water availability in the region."

Similar forecasts were made for the famine in Somalia in 2011, and proved to be right.

Unfortunately, while they are generally backed up with advice to farmers, the forecasts aren't common knowledge in rural areas. Yet users could certainly benefit from them, as they would allow them to adapt th practices by, for example, choosing resistant plant varieties and adjusting fertiliser purchases.

What this means is that disseminating the information and ensuring it's taken on board by farmers is essential.

It's also unfortunate that these forecasts, combined with an assessment of the situation, do not allow swift emergency action. This is a well-known problem and has been seen during a number of natural disasters, especially during floods: aid often arrives too late. This is exactly what happened in recent weeks during th floods in Sierra Leone.

But solutions exist.

The answers

One example is an innovative mechanism, forecast based financing, which has been developed, for example, by the Red Cross Centre on Climate Change. It has been set up in various parts of the world and its usefulness was demonstrated in the 2015 Ugandan floods. When a given forecast exceeds a defined alert threshold, funds – from a donor to an actor established in the zone (in this case, the Uganda Red Cross) – are automatically released to provide the affected populations with necessary aid such as water sanitation kits.

Although only in the development phase, the approach gives us cause to hope that aid could arrive more quickly in crisis zones in the near future. But it does require donors and authorities involved in distributing a to accept that the forecast may sometimes lead to action being taken in vain. Nevertheless, it's a political a economic cost that needs to be accepted.

A step has perhaps recently been made in this direction in Ethiopia with the creation, in August this year, o special drought committee, which aims to mitigate crises when they are forecast and imminent.

ABOUT THE AUTHOR

Philippe Roudier, chargé de recherche agriculture, climat et sécurité alimentaire, AFD (Agence française de développement).