

WHEN EVERYTHING DEPENDS ON THE RAIN

DROUGHT, RAIN-FED AGRICULTURE AND FOOD SECURITY

In sub-Saharan Africa, 95 per cent of agriculture is rain-fed. Climate change represents an increased vulnerability for farmers, who face poverty, hunger and famine when the erratic rain fails. The only thing that matters in the end is whether the rain comes.

Text by Terje Oestigaard

The drought in the Horn of Africa in 2011 affected up to 13 million people. Parts of Somalia and Ethiopia were hardest hit, but regions in Kenya and Tanzania were also affected. In Mwanza region in Tanzania, south of the shores of Lake Victoria, the rainy season almost completely failed during the spring of 2011. Although there was some rain, it was too little and too erratic for agriculture. During the autumn of 2010, the rain was also bad, but it was enough to produce some food. When the rain did not come the following spring, the fields were left uncultivated or covered in failed crops. The farmers faced the “hungry season” with barren fields and hardly any food. When the rain came in late August, it was met with great relief in Usagara village. Everybody had survived the difficult season, but as one old woman remarked, this drought had been one of the three worst in her whole life. Famine is serious food deficit, and in the globalised world where one needs money, farmers face a difficult choice: should one grow food or cash crops?

Coping with the uncertainties of erratic rain-

fall in a time of climate change, when rainfall patterns fluctuate even more markedly, is an immense challenge. Farmers living on the absolute subsistence minimum are dependent on rain and making the right decisions. But how is it possible to be strategic when everything depends on the uncertainty of the rain? Millet is a low water-intensive crop and in times of hardship this staple may secure livelihoods. Rice and cotton, on the other hand, demand much water for cultivation, but if good rain comes in abundance, they are also the choices that bring the most money and prosperity. The farmers cannot afford to make wrong decisions, yet they do, because everything depends on the rain, which is impossible to predict.

THE MAIN SOLUTION is diversifying risks. Specialisation may increase vulnerability, whereas diversification may reduce the uncertainties. Some plots of land are used for maize, cassava, beans and vegetables and others for rice and cotton, but herein also lays a paradox. If all the land is used to grow millet, which is low water-intensive but generating little cash, there might be enough food

when the rain fails or is insufficient. However, if fields are put to millet cultivation and the rain is good, farmers will lose money and opportunities because of their wrong choice of crop. Thus, when the rain fails and the farmers hope that it will start again, a lot of arable land is left uncultivated because they will not put the prepared rice fields under millet in case the rain comes. Hence, food deficits are also culturally made, but this situation highlights the impossible choices farmers have to make when their lives and subsistence are totally dependent on the unpredictable annual rains.

When the rains fail completely, all these strategies are in vain. The result is hunger and famine, which have huge impacts on society. People have to get money to buy food. Today, the global market on which they sell their agricultural products during times of good rain is also the place they have to buy their necessities at fluctuating and increasing prices when there is drought.

MONEY MATTERS and changes lives. Seasonal migration, day labour in the construction business, making mud-bricks and charcoal and perhaps increased prostitution are some of the options to

get money. The arrival of the annual rains is a matter of life and death.

Religiously, rainmaking has been the most important ritual in many African traditions. Controlling the rain and manipulating the weather was the responsibility of the chief and gave him the legitimacy to be the ruler. In today's globalised world, however, this tradition is rapidly disappearing, although the cultural memory still exists and has importance.

The need to control the life-giving water has not disappeared but has become increasingly important, but in other terms. Rain-fed agriculture is highly vulnerable to the uncertainties of rainfall patterns. In conjunction with increased population growth and greater pressure on all resources, irrigation and more efficient farming systems will improve food security and reduce poverty.

RAIN-FED AGRICULTURE poses significant challenges for current and future food security, especially given the uncertainties posed by climate change, which will change rainfall patterns and increase the vulnerability of farmers. In Tanzania, as elsewhere in Africa, the food security question is thus integral to poverty alleviation and development.



Terje Oestigaard is an archaeologist and water researcher. His current fieldwork is focused on Nile Basin issues, past and present. His other major areas of research are political archaeology, death rituals and cremation and the connection between water and religion.

