

Droughts and famines: The underlying factors and the causal links among agro-pastoral households in semi-arid Makueni district, Kenya

Chinwe Ifejika Speranza^{a,*}, Boniface Kiteme^b, Urs Wiesmann^a

^aCentre for Development and Environment, Institute of Geography, University of Berne, Steigerhubelstrasse 3, CH-3008, Berne, Switzerland

^bCentre for Training and Integrated Research in Arid and Semi-Arid Lands Development, Nanyuki, Kenya

Received 28 December 2005; received in revised form 6 May 2007; accepted 13 May 2007

Abstract

Famines are often linked to drought in semi-arid areas of Sub-Saharan Africa where not only pastoralists, but also increasingly agro-pastoralists are affected. This study addresses the interplay between drought and famine in the rural semi-arid areas of Makueni district, Kenya, by examining whether, and how crop production conditions and agro-pastoral strategies predispose smallholder households to drought-triggered food insecurity. If this hypothesis holds, then approaches to deal with drought and famine have to target factors causing household food insecurity during non-drought periods. Data from a longitudinal survey of 127 households, interviews, workshops, and daily rainfall records (1961–2003) were analysed using quantitative and qualitative methods. This integrated approach confirms the above hypothesis and reveals that factors other than rainfall, like asset and labour constraints, inadequate policy enforcement, as well as the poverty-driven inability to adopt risk-averse production systems play a key role. When linking these factors to the high rainfall variability, farmer-relevant definitions and forecasts of drought have to be applied.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Vulnerability; Actor strategies; Livelihoods; Drought; Food security/-insecurity; Famine; Drought impacts; Rainfall variability; Risk

1. Introduction

Famine has been shown to result from complex interactions of political, social, economic and biophysical factors (cf. Ball, 1976). It is thus not only a question of production shortfalls but also of inadequate access to enough food (Yaro, 2004).

Despite these interactions, most famines in Kenya have been triggered by droughts (Central Bureau of Statistics: CBS, Ministry of Finance and Planning, Kenya, 2001, App. 1–55) and this relation persists (Ifejika Speranza, 2006b, p. 247; WFP, 2006). Due to drought and lack of alternatives to water plants, vegetation in form of pastures for livestock and crops wilt. This can lead to crop loss, reduced harvest, and feeds for livestock, emaciated livestock, hunger and in severe cases livestock and human deaths. These impacts can destabilise rural livelihoods.

The immediate production shortfalls caused by drought and the food crises most often associated with it suggest that rural livelihoods and conditions do not enable people to produce, store and access enough food in non-drought periods and are therefore unable to build up enough buffer to cushion crop and income loss due to drought. They also suggest that rural households are already food insecure even before a drought occurs and that drought exacerbates an already precarious food insecure situation through its impacts—lack of rain water for plants, animals and domestic uses.

The foregoing shows that analysing livelihoods and livelihood conditions prior to drought can be a way of exposing the underlying factors that foster vulnerability to food insecurity and their interrelations. Such an approach may provide answers to the question of why droughts almost always develop into famines in semi-arid rural Kenya and reveal pathways of how the tenacious link between drought and famines can be broken.

This study is based on field research in 8 agro-pastoral villages of Makueni district, Kenya. Many households in

*Corresponding author. Tel.: +41 31 631 88 22; fax: +41 31 631 85 44.
E-mail address: speranza@giub.unibe.ch (C. Ifejika Speranza).

Makueni district are often food insecure during drought periods and in most cases depend on external support, in form of government relief food and food-for-work (FFW) activities, to bridge the food insecure period until the next harvest. The district (Fig. 1) lies between latitude 1°35'S and 3°S and longitude 37°10' E and 38°30' E and is inhabited mainly by the Akambas.

The semi-arid area of Makueni covers an area of 5052 km². Altitudes range from 600 to 1200 m above sea level. The vegetation consists mainly of grassland and shrubs. The mean annual temperature ranges from 20.2 to 24 °C (Jätzold and Schmidt, 1983, p. 152) and evaporation is high.

The district experiences two rainy seasons: the first rains (Long Rains: LR) between March and May and the second rains (Short Rains: SR) between October and December. The average seasonal rainfall amounts range 120–240 mm (LR) and 220–410 mm (SR). The SR is the major farming season, but rainfall in both seasons is highly variable and unreliable.

Although the major perennial rivers have potentials for irrigation, rain-fed agriculture is practised, and together with livestock keeping, are the major sources of livelihoods. According to Jätzold and Schmidt (1983, pp. 159–165), the agro-ecological potential of the area is suitable for growing millet and rearing livestock (Agro-Ecological Zone: AEZ 5), for growing cotton (AEZ 4), and for lowland ranching (AEZ 6). Despite this marginal agricultural potential, the major crops grown by the households are maize, cowpeas, pigeon peas and beans.

Agro-pastoralists in Makueni district Kenya derive their livelihoods mainly from crop production and marketing, livestock keeping and sale, as well as from low-income off-farm and non-farm activities. At least 72% of the households simultaneously engage in crop production, livestock keeping and off-farm activities but the degree of participation in off-farm activities varies with household need for money, availability and access, as off-farm jobs become scarce during drought periods (Ifejika Speranza, 2006b, p. 301); 84% of the households derive part of their income from crops sales, 83% from livestock sales, while house-

holds earn off-farm incomes from various activities such as unskilled casual jobs (37%), business (28%), paid employment and pensions (26%), and remittances (20%). Thus incomes from sale of crops, sale of livestock and from off-farm activities are all comparably important but to different degrees at different times, vary from place to place, and are influenced by resource constraints, rainfall variability and drought (see also Government of Kenya/CBS, 1996; Nelson, 2000; Mbogoh, 2000). In terms of importance 39% of the households ranked crop sales as their primary source of income, 21% derive their primary income from casual jobs, 17% from salaries and pensions, 10% from business activities, while only 9% have livestock as their first major source of income, and 4% depend mainly on remittances. Casual jobs are mainly dependent on agricultural activities and are therefore affected by many factors that influence crop production. Poverty is widespread and there are limited opportunities for livelihood diversification hence many, especially men, migrate to urban centres to look for employment.

Although livestock is only the primary source of income for 9% of the households, 54% declared it as their second major source of income (Ifejika Speranza, 2006b, p. 301). This means that livestock sale is used as an insurance buffer, a security against income loss as a result of crop failure. It therefore follows that agro-pastoralists experiencing crop loss or reduced harvest due to drought not only lose their main source of food but also a major part of their income. Since household crop production is a major source of staple food to the markets, a reduction in crop production may lead to a reduction in market food supply. This can cause an increase in prices thereby further constraining access to food in addition to the already constrained access attributed to reduced food production and reduced income due to crop loss.

Thus the scenario whereby rural livelihoods are increasingly being de-linked from farming (see Rigg, 2006) does not hold for the study area. Rather most households depend mainly on own food production for consumption and for income generation, whereby it is the first and second major source of income for 65% of the households. Hence crop farming still remains a crucial part of rural livelihoods. (Ifejika Speranza, 2006b, p. 169; Ministry of Finance and Planning, Makueni District, Kenya 2002).

These elaborations highlight the importance of crop production for rural livelihoods and justify the focus given in this paper. The foregoing also suggests that the actions and strategies of agro-pastoral actors, and their socio-economic, political and biophysical environment provide the backdrop within which a drought can occur and evolve. Thus the analysis of the underlying conditions prior to drought is crucial for understanding the hows, whys and whens of drought vulnerability.

While acknowledging that famines can develop from food production-, distribution-, exchange- or consumption crisis, this study focuses on food production crisis triggered by drought as the households depend mainly on own food

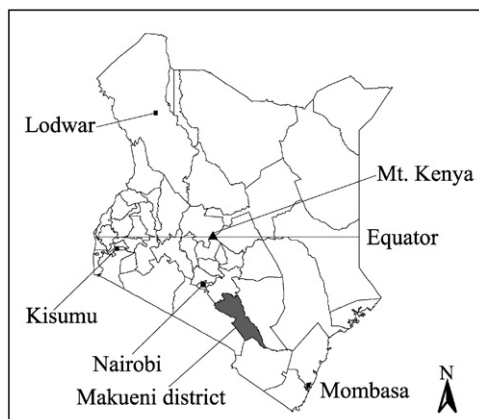


Fig. 1. The Makueni District study area in Kenya.

Download English Version:

<https://daneshyari.com/en/article/1055087>

Download Persian Version:

<https://daneshyari.com/article/1055087>

[Daneshyari.com](https://daneshyari.com)