



Article

"We Will Always Ask Ourselves the Question of How to Feed the Family": Subsistence Farmers' Perceptions on Adaptation to Climate Change in Burkina Faso

Raissa Sorgho ^{1,*}, Isabel Mank ¹, Moubassira Kagoné ², Aurélia Souares ¹, Ina Danquah ¹ and Rainer Sauerborn ^{1,*}

- Heidelberg Institute of Global Health (HIGH), Heidelberg University Hospital, Heidelberg University, Im Neuenheimer Feld 324, 69120 Heidelberg, Germany; isabel.mank@uni-heidelberg.de (I.M.); aurelia.souares@uni-heidelberg.de (A.S.); ina.danquah@uni-heidelberg.de (I.D.)
- Centre de Recherche en Santé de Nouna (CRSN), Ministry of Health, Nouna P.O. Box 02, Burkina Faso; kmoubache@yahoo.fr
- * Correspondence: raissa.sorgho@uni-heidelberg.de (R.S.); rainer.sauerborn@uni-heidelberg.de (R.S.); Tel.: +49-176-6857-7016 (R.S.); +49-6221-805430 (R.S.)

Received: 17 July 2020; Accepted: 24 September 2020; Published: 1 October 2020



Abstract: In West Africa, climate change aggravates subsistence farmers' vulnerability to weather variability to sustain their agricultural and nutritional requirements. For successful adaptation policies, in-depth understanding of farmers' perceptions about climate change, agriculture, and adaptation strategies is essential. This qualitative study in rural Burkina Faso characterized farmers' perceptions and knowledge through in-depth interviews. The study enumerated the barriers, possibilities, strategies/practices, and support sources of farmers. There was awareness but limited understanding of climate change amongst farmers. Those unable to adapt, faced increased health difficulties, specifically regarding nutrition and mental health. Farmers could implement some dietary and agricultural adaptation strategies (reduce meal size, frequency and variety, preemptive purchase of cereals, multi-cropping, crop rotation, modified seeds) but were unable to implement others (soil rehabilitation, water management). Barriers to implementation comprised financial and time constraints, material and labor shortages, and inaccessible information. Farmers did not understand, trust or utilize meteorological services, but appreciated and relied on agricultural extension services. They reported that social and governmental support was sporadic and inconsistent. This study uncovers the following targets for climate change adaptation policies in rural Burkina Faso: promoting meteorological services, expanding agricultural extension services, increasing access to financial resources, and framing sustainable adaptation within national development goals.

Keywords: climate change; adaptation; agriculture; farmers; extension service; social support; food security; health; perception; West Africa