## Accepted Manuscript

Adaptation opportunities and maladaptive outcomes in climate vulnerability hotspots of northern Ghana

Philip Antwi-Agyei, Andrew J. Dougill, Lindsay C. Stringer, Samuel Nii Ardey Codjoe

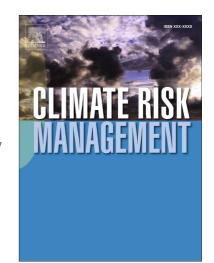
PII: S2212-0963(17)30071-2

DOI: https://doi.org/10.1016/j.crm.2017.11.003

Reference: CRM 137

To appear in: Climate Risk Management

Received Date: 28 April 2017 Revised Date: 27 September 2017 Accepted Date: 23 November 2017



Please cite this article as: P. Antwi-Agyei, A.J. Dougill, L.C. Stringer, S.N.A. Codjoe, Adaptation opportunities and maladaptive outcomes in climate vulnerability hotspots of northern Ghana, *Climate Risk Management* (2017), doi: https://doi.org/10.1016/j.crm.2017.11.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

# Adaptation opportunities and maladaptive outcomes in climate vulnerability hotspots of northern Ghana

Philip Antwi-Agyei <sup>1\*</sup>, Andrew J. Dougill <sup>2</sup>, Lindsay C. Stringer <sup>2</sup> Samuel Nii Ardey Codjoe <sup>3</sup>

<sup>1</sup>Department of Environmental Science, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

<sup>2</sup>Sustainability Research Institute, School of Earth and Environment, University of Leeds, West Yorkshire, LS2 9JT, Leeds, UK.

<sup>3</sup>Regional Institute for Population Studies, University of Ghana, Legon, Ghana.

\*Corresponding author: Philip Antwi-Agyei, Department of Environmental Science, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. PMB, University Post Office, Kumasi, Ghana. Tel: +233 50 525 5247: Email: philiantwi@yahoo.com; pantwi-agyei.sci@knust.edu.gh

#### 1 Abstract

How climate change adaptation practices can constrain development and deliver maladaptive outcomes in vulnerability hotspots is yet to be explored in-depth using case study analyses. This paper explores the effects of climate change coping and adaptation responses in three case study villages across the Central Gonja district of northern Ghana. The study addresses the following research questions: i) What are the key climatic and non-climatic stressors confronting households in northern Ghanaian communities? ii) How are households adapting to climatic and non-climatic stressors? and iii) What are the outcomes of these coping and adaptation responses on development? The study employs a mixed method approach including key informant interviews, focus group discussions and household questionnaire surveys. Data identified socioeconomic stressors including a lack of access to (and high cost of) farm inputs, labour shortages and population growth. Climatic stressors include erratic rainfall, high temperature, droughts and floods. Climatic and non-climatic stressors interact to affect agricultural practices and related livelihoods. The study identified various adaptation measures including extensification and intensification of agriculture, temporary migration, planting of drought

#### Download English Version:

## https://daneshyari.com/en/article/7462088

Download Persian Version:

https://daneshyari.com/article/7462088

Daneshyari.com