IPSI Case Study Summary Sheet

Basic Information

Title of case study *(should be concise and within approximately 25 words)*			
Compound farming system in semi-arid Ghana: a socio-ecological production landscape in decline			
Submitting IPSI member organization(s)			
Integrated Research System for Sustainability Science (IR3S), The University of Tokyo			
Other contributing organization(s) *(IPSI members and/or non-members)*			
University for Development Studies (UDS)			
Author(s) and affiliation(s)			
Yaw Agyeman Boafo (IR3S), Romanus Ziem and Abdallah Alhassan (UDS)			
Format of case study *(manuscript or audiovisual)*	Manuscript	Language	English
Keywords *(3-5 key concepts included in the case study)*			
Compound farms, Households, Semi-arid Ghana, Ecosystem services			
Date of submission *(or update, if this is an update of an existing case study)*	25 August 2016		
Web link *(of the case study or lead organization if available for more information)*	https://collections.unu.edu/eserv/UNU:5769/SEPLS_in_Africa_FINAL_lowres_web.pdf		

Geographical Information

Country *(where site(s) or activities described in the case study are located – can be multiple, or even "global")*									
Ghana									
Location(s) *(within the country or countries – leave blank if specific location(s) cannot be identified)*									
Northern Region									
Longitude/latitude or Google Maps link *(if location is identified)*									
https://www.google.com/maps/@9.4306381,-1.3458389,10z?hl=en									
Ecosystem(s) *(please place an "x" in all appropriate boxes)*									
Forest		Grassland	x	Agricultural	x	In-land water		Coastal	
Dryland	x	Mountain		Urban/peri-urban		Other (Please specify)			
Socioeconomic and environmental characteristics of the area *(within 50 words)*									
The area has a peculiar sub-humid and semi-arid climate marked by a distinct wet and a dry season. The vegetation of the district is Guinea savanna. However, the natural vegetation has been severely depleted as a result of anthropogenic factors such as wild bush fires, illegal logging of trees for charcoal and fuel wood, hunting, farming, and construction.									
Description of human-nature interactions in the area *(land-use, traditional resource management practices etc. – within 50 words)*									
Farming is the foremost socio-economic activity of households in this predominantly rural landscape. Livestock and poultry rearing are common in most households. Small-scale trading and youth outmigration to urban centers in southern Ghana are also important livelihood strategies among the population. Some disturbances can be blamed partly on human factors, including poor environmental management.									

Contents

Status *("ongoing" or "completed")*	Completed	Period *(MM/YY to MM/YY)*	2016

Rationale *(why activities or policies described, or information shared in the case study are needed – within 50 words)*

Against the backdrop of challenges linked to rapidly changing socioeconomic, cultural, political, and environmental conditions in semi-arid Ghana and beyond, this once-resilient agroecosystem is vulnerable and threatened.

Objectives *(goals of activities or policies described, or of producing the case study – within 50 words)*

The present study examines the defining characteristics, functions and values of compound farming systems in semi-arid Ghana. Current threats and challenges as well as recommendations for the sustainability of compound farming systems is discussed.

Activities and/or practices employed *(within 50 words)*

This study documents the current state of compound farming systems in semi-arid Ghana based on a 3-year in-depth field survey of six communities in the Tolon district of the Northern region.

Results *(within 50 words)*

As a subsector of the agriculture production sector in Ghana, compound farming systems, from our investigation has not been received the needed attention from key stakeholders despite the significant socio-economic and ecological benefits associated with this farming system.

Lessons learned *(factors in success or failure, challenges and opportunities – within 40 words)*

The loss of genetic diversity, particularly where poor farmers in rural semi-arid Ghana communities is concerned, is associated with reduced food security, increased economic uncertainty, increased vulnerability to pests and diseases, reduction in the possibilities for adaptation and for future generations and accelerated loss of local knowledge about diversity.

Key messages *(within 40 words)*

In the face of the existing and looming threat of climate variability and change, conserving genetic diversity is critical for building resilience and adaptability in socio-ecological production landscapes in vulnerable semi-arid regions. Programmes need to promote climate smart agriculture practices, agroforestry schemes in addition to prioritizing the integration of resilient traditional knowledge practices and systems of communities.

Relationship to other IPSI activities *(if the case study is related to any other IPSI collaborative activities, case studies, etc.)*

This case study originally appeared in the publication "Socio-ecological Production Landscapes and Seascapes in Africa".

Funding *(any relevant information about funding of activities or projects described in the case study)*

Much of the primary data collection for this study was made possible through fieldwork activities as part of the interdisciplinary research project in semi-arid Ghana known as 'Enhancing Resilience to Climate and Ecosystem Changes in Semi-arid Africa: An Integrated Approach (CECAR Africa)." This project is being funded by the Japan International Cooperation (JICA) and the Japan Science and Technology Agency (JST).

Contributions to Global Agendas

CBD Aichi Biodiversity Targets (https://www.cbd.int/sp/targets/)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the "direct" or "indirect" contributions to the CBD's Aichi Biodiversity Targets respectively to which the work described in this case study contributes to.

Strategic Goal A				Strategic Goal B					
■						■			
									
Strategic Goal C			**Strategic Goal D**			**Strategic Goal E**			
■		■						●	
									

UN Sustainable Development Goals (SDGs) (https://sustainabledevelopment.un.org/sdgs)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the "direct" or "indirect" contributions to the SDGs respectively to which the work described in this case study contributes to.

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						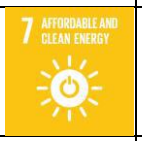		
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