



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

PRESENTATION SNAPSHOT

Implementing place-based food systems when access to place is precarious



Maria J. Van Der Maaten, Iowa State University *

Presentation Abstract

Agroecologists and development practitioners claim that the use of agroecological practices can reduce poverty and increase food security. However, this assumption is made without understanding how peasant households can access land on which they can implement agroecological practices. This research explores two research questions: How does differential access to land influence a household's decision to implement agroecological practices? What types of land-tenure statuses are conducive to adapting agroecosystems? I find that household implementation of agroecological practices by peasant households in rural Guatemala is shaped by access to land, specifically land ownership and parcel size, because of the household's ability to create systematic changes to crop and livestock production. The household's ability to implement agroecosystems that cycle nutrients throughout the farm to increase productivity and reduce risk affects its decision to invest in new agroecological practices. I analyze the implementation of agroecological practices among households in San Martín Jilotepeque, Chimaltenango, Guatemala, through qualitative interviews conducted in early 2016.

Keywords: Land; Access; Agroecosystems; Political Ecology; Peasant Farmers; Smallholders; Guatemala

Key Findings

- Land tenure shapes the implementation of agroecological practices. Households did not want to make significant investments to rented land, because they feared that owners would see the land as better (i.e., improved) and be less likely to rent the land the following year or more likely to increase the rent. Most agroecological practices thus were implemented on land owned by participants. Participants implemented agroecological practices that could be implemented independently, as standalone practices, or systematically. Whether households were able to implement practices systematically was influenced by participants' land tenure and parcel size.
- Parcel size shapes the implementation of agroecosystems. Most households argued that their main barrier to the systematic implementation of agroecological practices was their lack of access to land and subsequent inability to raise large animals. The centrality of animal excrement for fertilizer demonstrates the importance of access to land for rural households to effectively implement agroecosystems. Larger animals produce more manure, but also require more food, which requires more land.

* Maria J. Van Der Maaten earned her PhD in sustainable agriculture and sociology at Iowa State University. Her research examines how access to resources affects the use of or ability of rural Guatemalan smallholder households to implement agroecological practices. She can be contacted at mariavdm@iastate.edu.

Submitted December 13, 2018 / Published online July 22, 2019

Citation: Van Der Maaten, M. J. (2019). Implementing place-based food systems when access to place is precarious [Presentation snapshot]. *Journal of Agriculture, Food Systems, and Community Development*, 9(Suppl. 1), 245–246.
<https://doi.org/10.5304/jafscd.2019.091.027>

Copyright © 2019 by the Author. Published by the Lyson Center for Civic Agriculture and Food Systems. Open access under CC-BY license.

Conclusions

Variation in land assets shapes the ability of households to use agroecological practices in rural Guatemala in several ways. First, households are unlikely to use agroecological practices on rented land. Renters acknowledge the ecological benefits of using the practices, but weigh those benefits against the risk of losing access to land that they use to produce subsistence crops. Second, households can incorporate agroecological practices regardless of their plot size, but households with smaller landholdings are more likely to need to purchase certain inputs to create complex, input-dependent agroecosystems. Agroecological practices can be implemented at any scale; agroecosystems, however, as a livelihood strategy—and the ideal of most participants—require a larger scale and greater landholdings. Finally, households with larger parcels of land are most likely to be able to implement broader agroecological practices and create simple, on-farm agroecosystems. They have the land to grow fodder for their livestock and enough livestock to use the manure to fertilize crops, which can serve as food for the household, feed for livestock, or be sold in the market to purchase other goods. The simple, independent agroecosystem is an assumed result of using agroecological practices; however, as evidenced by the households in San Martín Jilotepeque, this is a challenging outcome for marginalized households to achieve. Agroecological practices can be a development strategy, but only with changes to how households can access land. Without land to systematically implement agroecological practices, they will have limited impact as a livelihood strategy. 