Guatemala case study proposal

Background and rational

Guatemala is a country with a neoliberal government located in Central America. It is characterized by having among the highest levels of child malnutrition in the world and doubles the regional average of Latin-America and the Caribbean (Calderón et al., 2018; Cleaves & Tuy, 2015). Guatemala has also become one of the most vulnerable countries to environmental hazards caused by climate change (Kreft, Eckstein, Junghans, Kerestan, & Hagen, 2014; Sain et al., 2017). The natural cycles of floods and droughts are becoming more intense and severe. From this context, a battery of international actors ranging from non-governmental organizations, to universities, and to the USAID, the UNDP, WMO and the FAO, among others, have pushed forward programs of adaptation, resilience, and risk management to improve small-scale farmers and peasants' food security and wellbeing. Among these efforts, the development of early warning systems for droughts is now being promoted by the Disaster Risk Reduction community and the National Institute of Seismology, Volcanology, Meteorology and Hydrology (INSIVUMEH). In recent years, this institute has created the Climate Services (CS) and Research Department to develop monthly bulletins on climate forecast and food production. CS are a modern tool of climate knowledge developed to provide tailored information on subseasonal and seasonal (up to six months) climate scenarios for decision-makers and users such as farmers.

However, implementing CS in agriculture has not been a straightforward process and demands further analysis. In this context, the CS community has focused on improving communication between the potential users and the scientific community and producing locally relevant climate information. My research takes a step back and focuses on how an ecosystem of institutions operate around the implementation of CS. It explores how scientist, technicians, and other bureaucrats negotiate the implementation of CS within an already existing set of food security policies and programs.

In this sense, the case study proposed in Guatemala would be a part of a wider Ph.D. research that explores the implications of merging CS with food security by examining the wider policy regimes of the climate infrastructure and the food system. Aligned to my first research objective, I propose a case study in Guatemala to enrich the results and provide further insight.

It is within the following research objective that the case study is situated:

i) Dissect the components that make up the two global policy regimes (the food system regime).

Situating ADAPTO

Food insecurity has increased in the urban and semi-urban areas in late years. This issue is mostly related with the access to food and not food availability (Calderón et al., 2018; Sen

& Dreze, 1999). To tackle this issue, ADAPTO focuses on exploring alternative food systems existing in Latin-America that allow communities to improve their livelihoods. A case study in Guatemala will allow further discussions and reflection for ADAPTO and my Ph.D. research, mainly in two aspects. On the one hand, it will inform on the way the conventional food system works at a local scale and how it is challenged by the community. On the other hand, it will provide insight on the current discussions held on food security and development that are championed by international organizations and local government (Holt-Giménez, 2011). Overall, the empirical data will further the discussions regarding the ways in which the conventional food system, with its actors and institutions, allows or not the emergence of alternative food systems.

Expected results:

ADAPTO's objective of identifying and supporting alternative food systems developed in and by local communities (urban or semi-urban) provides a different, yet complementary focus to my research objective of dissecting the food system. It allows us to understand: i) how the food system is understood by government, institutions, and **civil society**, ii) how the food system operates at different scales, and iii) inform about the role CS have in different contexts.

These questions can generate different results:

1. Theoretically, it can challenge the food security discourses championed by reformist and provide new opportunities for implementing different programs of development. In this fashion, it could give new perspectives to the CS community regarding the role that CS have in food security and improving livelihoods.
2. Empirically, the case study could allow us to contrast global and national approaches on food security with placed-based experience and practices. It will detect possible contradictions and/or opportunities between the different scales, either in theory (with political economy) or in practice (moral economy, culture, and other factors).

As observed, the Ph.D. research objective is aligned with ADAPTO's objectives of identifying alternative food systems and building capacities to transfer results through Latin-America by building up a wider theoretical framework that is capable of examining the nuances of locality.

A side result is that it could allow the development of new and different relationship networks between actors from Central America.

Methods:

This research will implement qualitative methods inspired by ADAPTO I research projects. Through interviews and semi-structured interviews, it will provide a descriptive and exploratory investigation of the selected urban or semi-urban community. I would begin the research with Guatemala's SiiSAN (Sistema de Información Nacional de Seguridad

Alimentaria y Nutricional) as it is a source of robust statistical and networking information regarding food security and the actors involved, see figure 1.

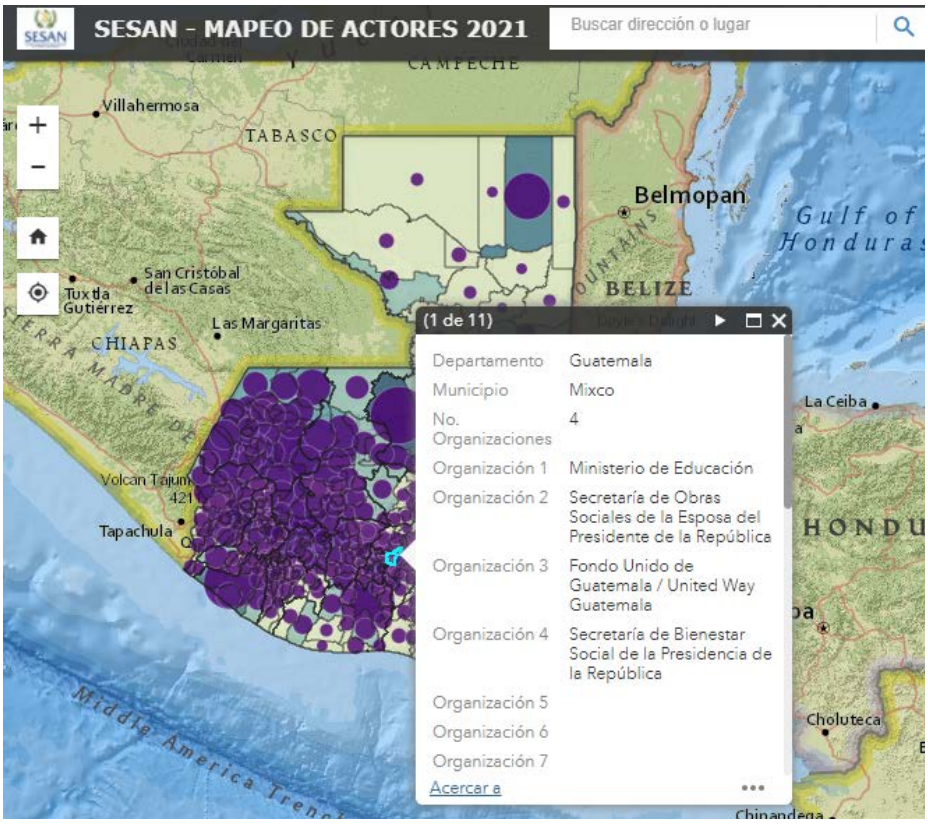

Figure 1 SiiSAN, map of actors involved on food security in Mixco, Guatemala, Guatemala, 2021. Source: http://www.siinsan.gob.gt/siinsan/mapeoactores/

Before identifying any potential community, it is important to locate the institutional actors. At this moment, some of the institutions of interest are:

- University and research institution

Universidad de San Carlos de Guatemala

Prof. Juan José Prado at Universidad de San Carlos de Guatemala. Prof. Prado is currently working on food security and the food systems in rural Guatemala. Recent publications include case studies that compare conventional food production with agroecology (Calderón et al., 2018), or theoretical discussions on decolonizing green-Marxist by looking into the metabolic rift and the human-nature relations as discussed by Bellamy Foster and Moore (Córdova, Bailey, & Class, 2021).

Universidad Rafael Landívar

Ing. Raúl Maas works for IARNA (Instituto de Investigaciones y Proyección sobre el Ambiente Natural y Sociedad). He has been involved with several international organizations like IICA (Inter-American Cooperation for Agriculture)

CATIE:

Ing. Julio Lopez has been representing CATIE in Guatemala since 2009. He is in charge of technical and administrative work and works alongside other Guatemalan institutions.

- Public:

SESAN

The Secretary for Nutrition and Food Security is in charge, among other things, of organizing programs and projects that other organizations have regarding food security. They also provide a robust source of information in coordination with SiiSAN.

- NGO:

Acción contra el Hambre

Catholic Relief Services

Budget:

The fieldwork is divided into two sets of 10 days to maximize travelling expenses. This leaves the budge around CAD$ 1750 to allow a second trip later in the year. Mobilization within the city is an expense that still needs calculation. This budget considers a round ticket, food and an average Airbnb located within the Guatemala City. With this budget, there is the possibility of assuring two trips during the year and 40 days of fieldwork. I would be able to work on this project while doing my Ph.D. research. If two trips were to be made, the total budget would be CAD$ 3500. Mobility within the city will be assessed after the first trip.

	20 day budget				
Budget	March	April 10 days	May	July 10 days	Total
Round-trip		600	0	0	
Mobility					
Food		350		350	
Airbnb		300		150	
Total		1250	0	500	1750

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