

The Phenomenon of Seasonal Hunger among Coffee Farmers: a Case-study on Smallholders in Caranavi, Bolivia

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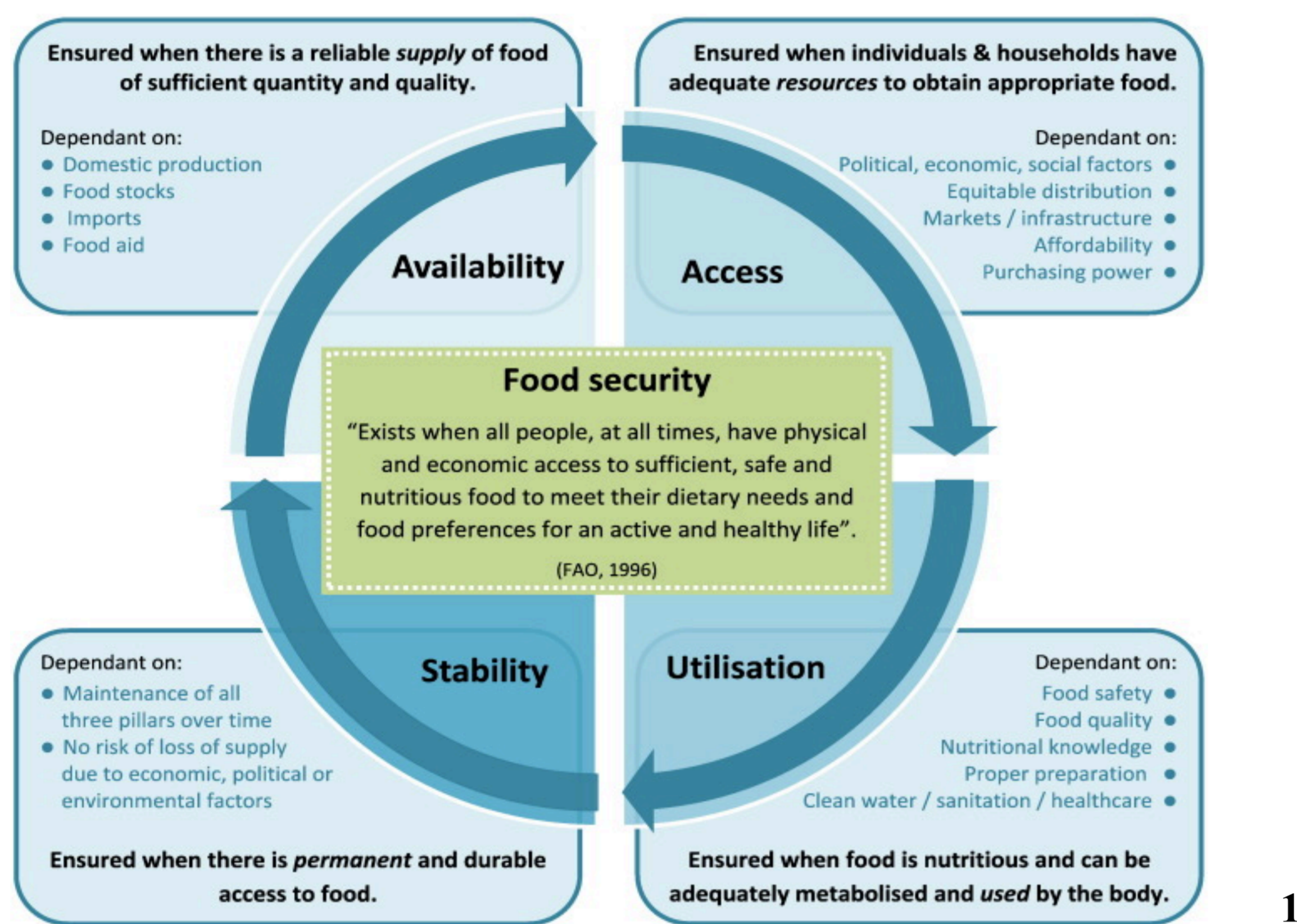


Instituto Agrario Bolivia



INTRODUCTION

- **Seasonal hunger** is a livelihood challenge recognized as the most common type of food insecurity in rural communities (Devereux et al., 2008)
- It is associated with a **cyclical** pattern of inadequate availability and access to food, particularly in the months prior to the harvest season, when:
 - stored food supplies from previous harvest are depleted
 - household incomes and discretionary income are low
 - food access is limited by unfavorable prices, climate variability, work opportunities, and crop failure induced by plagues and/or diseases
 - livelihood activities compete for scarce resources
- Coffee producing regions struggle with many consequences of seasonal hunger. However, its basis among coffee households and communities is diverse and not fully understood (Caswell et al., 2012)
- The coffee-producing region of Caranavi, Bolivia is characterized by high rural poverty rates and comparable hunger related challenges, offering a compelling case to study this phenomenon



OBJECTIVES

- To raise awareness to this problem by examining the magnitude of seasonal hunger and key contributing livelihood factors among smallholder coffee producers in Caranavi, Bolivia
- Principally, it seeks to identify the opportunities that enhance living standards and support livelihood sustainability by:
- **(1)** examining the phenomenon of seasonal hunger, its causal factors, and determining who are the most vulnerable, focusing particularly on intra-household, gender, and age related aspects of the phenomenon
- **(2)** identifying and prioritizing coping strategies to help households reduce their vulnerability to seasonal hunger and maximize their resilience

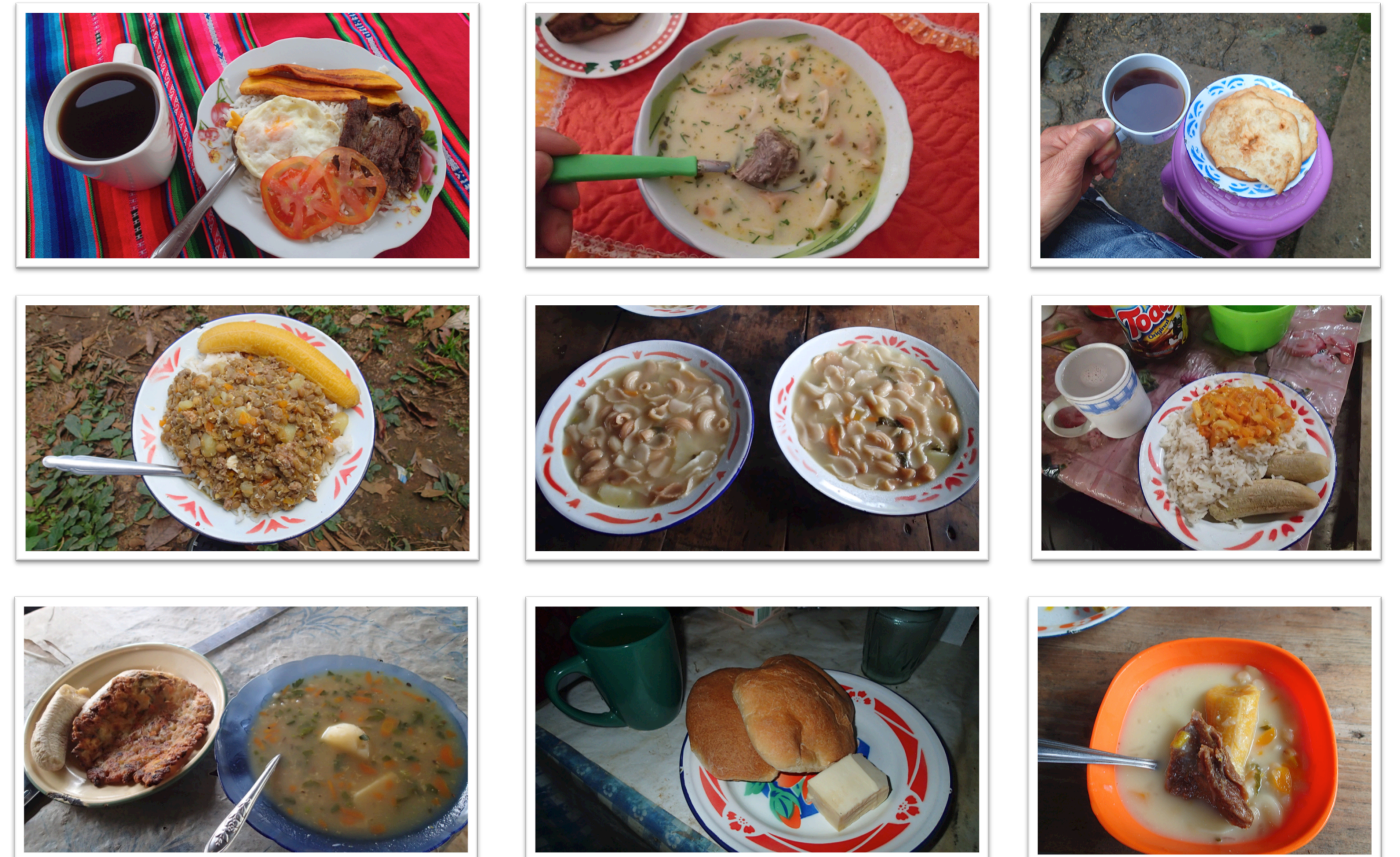
METHODS

- A case study approach is employed for this project, in combination with a mixed methods strategy to examine causes and responses to seasonal hunger of 22 coffee producing households, members of the Cooperativa Agropecuaria Bio-Arabica R.L. Data is supported through:

1. Participant observation
2. Household questionnaire
3. Photovoice household session
4. PRA Seasonal Calendar
5. Focus groups
6. Key informant interviews



TYPICAL DIET



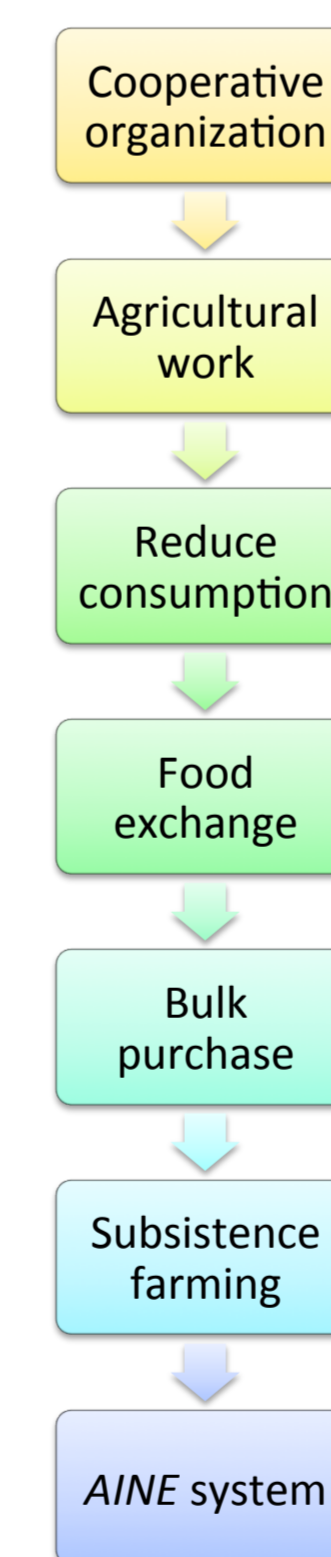
SEASONAL CALENDAR

	January	February	March	April	May	June	July	August	September	October	November	December
CAFÉ												
Tomato												
Potato (Papaliza)												
Cassava												
Carrot												
Peas												
Corn												
Fava Beans												
Pumpkin												
Mandarin												
Orange												
Coca												
Dried foods (available always, with minimal price variability EXCEPT rice)												
Rice												
Meats/Proteins												
Beef-Fresh												
Dried Ch'arki (Charque/Chalon)												
Chicken												
Eggs												
Pork												
Fish												
Economic Activities/Expenses												
Income (Sale of coffee)												
Expenses												
Food												
School												
Clothing												
Medical/Clinic												
Harvest expenses												
Transportation/fuel												

Legend: Prices / Income / Expenses	
Negligible change	\$
Minimum	\$
Medium	\$
High	\$

RESULTS

COPING STRATEGIES



- Seasonal hunger influenced by multiple factors
- Long term inability of coffee harvest and prices to provide sufficient income
- Recurrent climatic variability
 - reduced coffee yields (ex. 2016 40% loss)
 - extreme rains/droughts damage subsistence crops
 - remote areas have limited physical access to food markets
- Labor shortage drive costs/farming efforts to unsustainable levels
 - families do most of coffee work autonomously
 - less time and resource for subsistence farming (avg. 25% of food self-produced)
- Traditional gender dynamic task women with higher workload who often eat less to manage responsibilities

RECOMMENDATIONS

- Improve terms of exchange via long-term contracts in coffee specialty market
- Cooperative fund for natural disasters/ health emergency alleviation
- Cooperative food bank/reserves of dried and canned goods
- Increase of subsistence farming among members (apply AINE system)
- Innovative protection of food crops against wild life
- Infrastructure rehabilitation initiatives
- Selection of adaptable, high-yielding and disease resistant coffee varieties
- Further research and in-depth nutritional analysis of current diet

SELECTED REFERENCES

1. Adhikari, S. (2018, July 19). *Food security, its determinants and urbanization*. Retrieved from <http://www.publichealthnotes.com/food-security-determinants-and-urbanization>
2. Bacon, C. M., Sundstrom, W. A., Gómez, M. E. F., Méndez, V. E., Santos, R., Goldoftas, B., Dougherty, I. (2014). Explaining the 'hungry farmer paradox': smallholders and fair trade cooperatives navigate seasonality and change in Nicaragua's corn and coffee markets. *Global Environmental Change*, 25, 133-149.
3. Caswell, M., Méndez, V.E., Bacon, C.M. (2012) *Food security and smallholder coffee production: current issues and future directions*. Burlington: University of Vermont. ARLG Policy Brief 1.