

Tropentag, September 9-11, 2020, virtual conference

"Food and nutrition security and its resilience to global crises"

The Role of the Food System Approach in Assessing Food and Nutrition Security from an Agroecological Perspective: Insights from Case Studies in Ghana and Ecuador

Maria Bustamante¹, Patricia Natividad², Pablo Vidueira³

Abstract

Food insecurity and malnutrition are complex challenges for humanity. This complexity is best understood and addressed through the application of food system approaches that take food and nutrition security as the normative purpose and expected outcom. of any food system. This research aims to assess the application of the food system approach in two different situations, exploring the influence of contextual factors – structured under the four agroecology dimensions – in the definition of the systems' purpose and the scale of the analysis.

To better explain the situation of interest, we first map the broader system that includes the activities and agents in the value chain, and the dimensions and elements that influence and are influenced by them. Then we explore the interests and concerns that shape the different perspectives in the system to finally decide the system's purpose and scope, acknowledging the impacts of placing boundaries that privilege some perspectives over others.

As result, we have that even when all food systems should be focus on reaching food security and nutrition in a sustainable, the dimensions of availability, access and utilisation are addressed differently depending on the context and the scope of the analysis. In the small-scale livestock and poultry systems in Ghana, the stakeholders share as main concern the difficulties to be competitive in the local market in way that reduces the country's dependence on animal protein from; the focus of the system is on food access and availability, because small holder needs to produce in a way that makes the product affordable to the local market. On the other hand, the dynamics of local markets in Ecuador are not determined by the characteristics of the products being sold, which requires an analysis of the local food systems sustainability (food use and availability) to identify their characteristics and roles of the different agents involved in the food system, in order to lead to actions involving policy makers and small farmers.

Those differences in focus and scope in the food systems of Ghana and Ecuador result in pathways for improvement that are mainly focused on political and socio-economic dimensions.

Contact Address: Maria Bustamante, Polytechnic University of Madrid, School of Agricultural, Food and Biosystems Engineering, Project Planning for Rural Development and Sustainable Management, Puerta de Hierro Avenue Nº 2, 28040 Madrid, Spain, e-mail: m.bliria@gmail.com

¹ Polytechnic University of Madrid, School of Agricultural, Food and Biosystems Engineering, Project Planning for Rural Development and Sustainable Management, Spain

²Polytechnic University of Madrid, School of Agricultural, Food and Biosystems Engineering, Project Planning for Rural Development and Sustainable Management,

³ Polytechnic University of Madrid, School of Agricultural, Food and Biosystems Engineering, Project Planning for Rural Development and Sustainable Management,

 $\textbf{Keywords:} \ \textbf{Agri-food systems, agroecology, food and nutrition security, local markets}$