

Adaptation and mitigation of climate-change effects on food and nutrition security in Honduras



José Lino Pacheco is Director of the Food and Nutrition Security Technical Unit, Secretary of General Coordination of the Government of Honduras and the SUN country Focal Point.

Susan Lopez is a Food and Nutrition Security Specialist in the Food and Nutrition Security Technical Unit and Secretary of General Coordination in the Government of Honduras.

Adriana Hernandez is an Associate Professor of Human Nutrition and Food Security in the Department of Food Sciences at Zamorano University, Honduras.

Lucía Escobar is an Associate of the Nutrition Programme for the UN World Food Programme, Honduras.

Introduction

Honduras is a Central American country with a population of over nine million, comprising nine different ethnic groups. Hunger is on the rise and is estimated to affect 1.4 million people (2017)¹. Almost one in four (23%) children under five years old (CU5) are stunted; in the more vulnerable areas, this increases to one in every two². At the same time, rapid urbanisation is leading to increased consumption of processed foods and lower levels of physical activity, which are contributing to rising levels of overweight and obesity and risk of nutrition-related non-communicable diseases (NCDs). Approximately 51% of women in Honduras are overweight or obese (2012)².

A high percentage of the population live in poverty (64%) and extreme poverty (40%), with most of the extremely poor living in rural areas (69%)³. Honduras also has a high vulnerability to climate change⁴ and lies in what is called the 'Dry Corridor', an area that is particularly susceptible to irregular and long-lasting droughts. The increase in climate effects has given rise to new challenges; as a result, the resilience of the population needs to be built up to address undernutrition, overweight/obesity and NCDs.



A small producer with new technology that is helping to improve the quality and productivity of crops

Scarleth Duron, Euroson Occidente

Policy and plans in Honduras to address climate change

The main policy in Honduras that seeks to help the population adapt to the effects of climate change is the Climate Change Policy Framework. This includes objectives for agriculture, soil and food security, as well as improving the resilience of crops and pastures to thermal and water stress and preventing or reducing the incidence of pests and diseases. Other objectives include combatting soil erosion, loss of productivity and desertification in order to preserve and improve the nutritional quality of foods.

Linked to this policy is the *National Climate Change Adaptation Plan (2018-2030)*, which prioritises agri-food production and food sovereignty, and strengthening early-warning and risk-management systems for extreme natural events. The plan also focuses on expanding partnerships with government departments, private sector, academia, UN agencies and international and national non-governmental organisations (NGOs) to maximise integrated approaches for increased smallholder productivity and income generation through more sustainable food systems.

Linking humanitarian and development responses

In a context of increasing complexity due to poverty, undernutrition, increasing overweight and obesity, climate-change effects and a history of drought emergencies, government and its partners are investing in more sustainable solutions to restore the natural resource base, protect communities against climate shocks and predict extreme weather events. Strengthening the resilience and adaptive capacity of smallholder farmers, whose yields are often lower than all other food producers, is seen as pivotal to preventing hunger and malnutrition in Honduras. The country's worst drought, in 2014-16, triggered the declaration of an emergency, with a focus on helping 280,000 families most affected by the drought via the National Risk Management

¹ The State of Food Security and Nutrition in the World (2017). FAO

² <https://globalnutritionreport.org/resources/nutrition-profiles/latin-america-and-caribbean/central-america/honduras/#profile>

³ Encuesta Permanente de Hogares de Propósitos Múltiples en Honduras (2017) Instituto Nacional de Estadísticas (INE)

⁴ Índice de Riesgo Climático Global según (GermanWatch)



Water reservoirs and a distribution network for drip irrigation are government strategies to tackle drought

Scarleth Duron, Euroson Occidente

System (SINAGER, from its initials in Spanish) formed by government agencies and the humanitarian aid network.

The Alliance for the Dry Corridor

In 2014, the Alliance for the Dry Corridor (Alianza para el Corredor Seco in Spanish, or ACS) was created as part of implementing the *National Food and Nutrition Security Strategy* (2014-2022) and other strategies related to climate change.

The programme focuses its efforts on poverty reduction and malnutrition through strategic investments in the Dry Corridor's vulnerable communities. This country-led initiative, supported by international donors, is coordinated by the Food and Nutrition Security Technical Unit, Secretary of General Coordination in the Government of Honduras in conjunction with area municipalities through their local emergency committees, in which different sectors, NGOs and local organised groups participate.

ACS activities include providing equipment, information and knowledge to smallholders, together with appropriate technologies and the capacity development of farmers' organisations in the communities and municipalities of the 10 Dry Corridor departments. As a result of the country's 2014-16 drought, the Ministry of Agriculture and Livestock also undertook the Presidential Water Harvest Programme, which constructs reservoirs, water pipes and a distribution network for drip irrigation.

Layering activities

The main goal of the ACS has been to lift 50,000 families out of poverty by 2020 and to reduce stunting by 20% in CU5 in the target communities (analysis on data towards achieving this goal is currently underway). Activities were expanded to include nutrition education and hygiene in the home, food production and income generation, construction of water reservoirs and drip irrigation, technical assistance and training of producers, access to agricultural credit to small and medium producers, and the prevention of pregnancy in adolescents through strengthening the capacities of the 10 focus departments.

The approach also relies on the understanding that no single activity is enough to facilitate the transformation of smallholders from subsistence farmers, who are highly vulnerable to shocks and climate stresses, to being surplus producers who are integrated into local and regional market systems and resilient to shocks.

The activities implemented are based on the following principles:

- Focus on the most food-insecure and vulnerable populations.
- Build effective partnerships.
- Understand, define and address the links between climate risks, non-climate risks, nutrition and food security.
- Integrate environmental restoration and natural-resources management into strategies and efforts to adapt to climate change.
- Include a gender, social protection and nutrition lens.

Nutrition activities include health, hygiene and nutrition education to deliver key messages promoting a healthy lifestyle. The diversification of crops with high nutritional value is also promoted in order to increase the production of and access to foods with a high micronutrient content (biofortified corn, beans and sweet potatoes) to prevent micronutrient malnutrition. Many of these activities, including training and actions to mitigate the effects of climate change, are implemented at the community level using existing platforms. These include local associations (such as groups of rural women, rural housing, child nutrition monitors, health volunteers) and community leaders (such as representatives of water boards, members of local emergency committees, school parent associations, etc.), which provide the opportunity to demonstrate results to other families to encourage changing crops and eating habits.

Challenges and next steps

Funds for river-basin management for the Dry Corridor are insufficient, so advocacy is needed to secure greater financing. Other issues include the need to raise awareness and disseminate issues relating to climate change and integrated management of water resources at national and local level, as well as strengthening dialogue mechanisms between climate-change actors in both the public and private sectors. An added challenge is that there is a lack of data by which to measure the impact of these various climate change-related activities and, indeed, their effectiveness in reducing malnutrition.

A second phase of the ACS programme is being planned, subject to funding from national and external partners. There are also plans to incorporate climate change adaptation and mitigation actions into regional and municipal development plans.