

Case study:

Implementation of nutrition-sensitive interventions to improve food and nutrition security in Kenya and Honduras



INTRODUCTION

Nutrition-sensitive interventions are those whose primary objective is not nutrition, but that have the potential to improve the food and nutrition security of beneficiaries.¹ Such programmes take place in sectors complementary to nutrition, such as agriculture and education, and are designed to address the underlying causes of malnutrition. The initiatives outlined in this case study aim to achieve this by increasing the availability of, access to, and consumption of food in the targeted populations.

Home gardens promote the production of nutrient-rich fruits and vegetables that grow well in local conditions. Household members, particularly women, are trained in cultivating crops and raising livestock. Such interventions have shown promising increases in food production and dietary diversity.² Although the evidence of nutritional impact is limited, kitchen gardens have the potential to impact nutrition indirectly: by raising household income and purchasing power; through the empowerment of women in society; and through increased availability of food in markets when surplus from the kitchen garden is sold.³ In this case study, we explore one such initiative in Kenya.

We also explore a nutrition-sensitive initiative in the Dry Corridor area of Honduras, where a multi-donor alliance has been established to reduce poverty and malnutrition through strategic investments in vulnerable communities. The initiative aims to (a) mitigate the impacts of climate change on food security and nutrition by increasing the resilience of smallholder farmers; and (b) maximise integrated approaches for increasing smallholders' productivity and income generation through more sustainable food systems.

1 As defined by the SUN framework.

2 Olney DK, Talukder A, Iannotti LL, Ruel MT, Quinn V. Assessing impact and impact pathways of a homestead food production program on household and child nutrition in Cambodia. *Food Nutr Bull.* 2009;30(4):355–69.

3 <https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-018-0238-7>

Kenya: One Million Kitchen Gardens Initiative

BACKGROUND AND CONTEXT

Kenya: Joined the Scaling Up Nutrition (SUN) Movement in 2012.

The Kenyan government is committed to improving food and nutrition security, which is a basic right enshrined in the country's constitution. Kenya is on track to meet many of the World Health Assembly (WHA) nutrition targets. However, 26% of children under five years are stunted, 11% are underweight and 4% suffer from wasting. These figures are exacerbated by sub-optimal maternal nutrition and child-feeding practices,⁴ and drought related emergencies that repeatedly affect parts of the country's arid and semi-arid lands. Additionally, the COVID-19 pandemic has caused adverse effects on food and nutrition security at the household level, through reduced income, increased job insecurity and loss of purchasing power.⁵

To address concerns about sustainable food production, food supply chains, and food and nutrition security, the Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MoA) launched the One Million Kitchen Gardens initiative in April 2020. The goal of this multisectoral, multi-stakeholder initiative (undertaken in collaboration with the Ministry of Health (MoH) and other stakeholders)⁶ is to empower one million kitchen garden farmers in urban and peri-urban areas in Kenya to mitigate malnutrition and hunger through improved access to nutritious food. By encouraging vulnerable households to adopt the kitchen garden farming system, the initiative aims to contribute to achieving food and nutrition security, one of the four pillars under the government's Big Four agenda.



The project's specific objectives include:

- Profile and identify support for vulnerable households affected by the COVID-19 pandemic.
- Support the targeted one million vulnerable households with subsidised inputs within the target period.
- Support value addition, processing and marketing of surpluses.
- Support youth-led agribusinesses to support the value chain and create employment.
- Build capacity of communities on diverse kitchen garden technologies, crop and animal production, utilisation of agriculture produce, and preservation and marketing.
- Train communities on good nutritional practices which will include food hygiene and handling, cookery, and balanced diets.
- Develop robust monitoring and data collection, and a reporting system, to ensure transparency, accountability and results evaluation.

4 SUN country profile, 2021.

5 <https://www.gainhealth.org/sites/default/files/publications/documents/kenya-situation-report-edition-3-covid-impact.pdf>

6 Including the National Business Compact on COVID-19, which will complement the project by providing strategic communication on aspects of food availability, accessibility and proper nutrition, following the COVID-19 Nutrition and Healthy Diets Guidelines.

Funding and partnerships

The MoA set aside 500 million Kenyan Shillings (US\$4.6 million) to support the one million kitchen garden initiative by providing kitchen garden kits (solar dryers, shade nets and assorted vegetable seeds) for 223,000 households in 21 counties. This budget runs until July 2022, with funding provided by the World Bank, the Global Agriculture and Food Security Programme (GAFSP) and the Government of Kenya.

The project is implemented in partnership with the National Agriculture Rural Inclusive Growth Project (NARIGP), the Smallholder Irrigation and Value Addition Project (SIVAP) and the Kenya Climate Smart Agriculture Project (KCSAP), who work closely with the counties to identify beneficiaries. Under Phase I of the project, over 200,000 households were supported through several grants:

- 19,750 beneficiaries across 21 counties through grants by NARIGP.
- 15,000 beneficiaries across 11 counties through SIVAP.
- 171,992 beneficiaries across 24 counties through KCSA.

Phase II will begin in October 2021, with a target of a further 230,000 households to be supported through SIVAP in 21 counties.

It is intended the initiative will cover all 47 counties in Kenya as it is scaled up. Funding for the remaining counties is provided by the World Bank, via grants that counties can apply for through a private service provider.

Process

To showcase the various technologies available for use in different agro-ecological zones, a demonstration and learning site was set up at Kilimo House, the MoA headquarters. The site currently displays 12 technologies, and is open to the public so they can experience kitchen gardens first-hand. Advocacy groups such as The Right to Food Group are also invited to the demonstration site, where they receive training.

In total, 1,056 people have received training at the demonstration site since its inauguration in April 2020.⁷

The proposed simple, organic, water-efficient kitchen garden farming technologies include: multi-storey, micro garden, moist bed garden, tyre garden, simple drip irrigation garden, cone garden, staircase garden, hanging garden and aquaponics. The rearing of small livestock (rabbits, chickens, goats and sheep) and fish is also encouraged, to promote dietary diversity. Small livestock give the added benefit of providing fertiliser as well as eating kitchen and garden waste.

In addition to the demonstration site, step-by-step 'How To' [videos](#) were produced as learning aids and made available [online](#). As food preparation is also key to food safety and the optimal conservation of nutrients, simple recipes using locally-available foods have also been produced. These resources have been promoted through the media. In June 2021, 15 extension officers (one per county) were trained on kitchen garden technologies. These officers will train 45 community trainers each, who will in turn train farmers groups in the communities.

Household eligibility is assessed at local level by each county's Department of Agriculture, with priority given to poor households with large families, households with single parents, widowers and widows. Eligible families receive a start-up kit comprising a shade net, a 50 litre tank, seeds of various leafy vegetables, and small livestock such as rabbits and poultry.

Benefits of a Kitchen Garden

- Ensures an inexpensive, regular, easily-accessed supply of fresh vegetables, fruits, herbs, spices, legumes and protein.
- Provides access to a wide variety of foods that contain vital micro- and macro-nutrients.
- Provides an important source of both food and income for poor households in peri-urban and urban areas.
- Avoids use of chemicals.
- Can be set up in small spaces.

⁷ Data for September 2020 – 31 July 2021.

Raising awareness

The One Million Kitchen Garden initiative has benefited from the outset from the support of a Champion from the political realm. Ms Anne Nyaga, Chief Administrative Secretary (CAS) Ministry of Agriculture, has lead advocacy on the project, helping to raise awareness and mobilise resources. Using national TV channels, she led a media campaign to promote the initiative, especially when people were at home during lockdown.

Awareness was also created across other sectors through monthly technical committees. Multi-actor collaboration has resulted in the development of a training manual on Nutrition Sensitive Agriculture with the FAO and other partners.

“Kitchen gardens have been proven as one of the easiest and fastest ways households can ensure inexpensive, regular and handy supplies of fresh vegetables, fruits, herbs, spices, eggs and meat. Well-planned kitchen gardens also guarantee households’ access to a healthy diet that contain adequate macro- and micronutrients, as many different kinds of foods can be produced.” Ms Anne Nyaga, Chief Administrative Secretary, Ministry of Agriculture.

Youth involvement

The programme is being mainstreamed into the youth agenda through their involvement in setting up of kitchen garden technologies and as a way of ensuring access to income generation activities. Youth groups have been mobilised through the SUN Civil Society network. Twenty-five youth leaders have received training-of-trainers from the government, as well as the opportunity to set up a demonstration garden showcasing one of the kitchen garden technologies. The youth programme aims to facilitate the scale-up of the project as committed, energetic youth take the initiative back to their communities.

Schools across Kenya are also being engaged and several school gardens have already been established, e.g. the Olympic High School garden, which allows students to learn about agriculture as well as acting as a demonstration garden for the surrounding communities. This garden remained functional despite school closures, allowing students to continue to work in the garden to produce vegetables and earn some money through their sale. A handbook for schools, including both kitchen garden and nutrition information, has been developed in collaboration with the MoH and Ministry of Education, and will be rolled out by the end of September 2021. Additionally, through the support of the President and the CAS existing 4K school clubs⁸ are to be revitalised and will include nutrition and kitchen garden technologies in their syllabuses.

Lessons learned and best practices

- Having a champion of the initiative at the political level was key to driving the agenda, raising awareness and mobilising resources.
- Awareness creation is a continuous process if all areas are to be reached, and should be included in the budget.
- Key stages of the project include identification of the technologies that are applicable to different agro-ecological zones, a model kitchen garden site, and resource mobilisation.
- A comprehensive monitoring and evaluation strategy with disaggregated data should be incorporated from the design stage.
- Nutrition-sensitive approaches require multisector, multi-stakeholder (including media and civil society) involvement. Awareness raising across sectors is vital.

⁸ The four Ks stands for “Kuungana, Kufanya, Kusaidia Kenya” in Kiswahili, loosely translating as: coming together, to act, to help Kenya.

Honduras: The Integration of Nutritional Objectives in the Territorial Management of Food Security in the Dry Corridor

BACKGROUND AND CONTEXT

Honduras: Joined the SUN Movement in 2019.

Honduras is one of the countries most vulnerable to the effects of climate change in Central America, and is part of the geographical area called the 'Central American Dry Corridor'. Although this area is susceptible to drought, many poor households rely on agriculture for their livelihood.⁹ In 2014, the Alliance for the Dry Corridor (Alianza para el Corredor Seco, or ACS) was established to provide an operational platform for national strategies aimed at promoting food and nutritional resilience. This case study seeks to describe three approaches to this: a) the integration of nutritional objectives into municipal planning according to a territorial approach; b) the development of nutrition-sensitive agricultural models; and c) the multi-donor partnership.

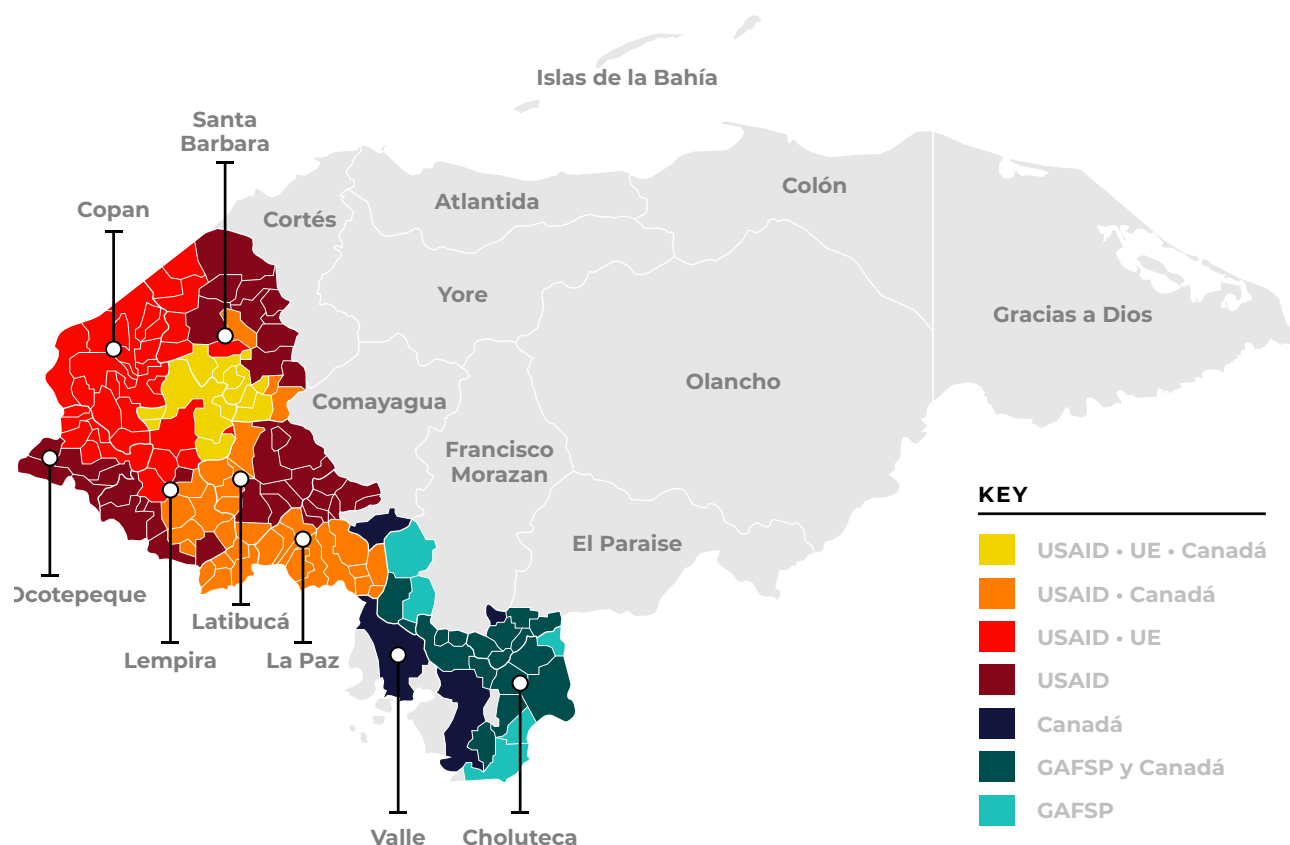


Figure 1: Dry Corridor Alliance, geographical coverage by funding sources, Honduras 2021.

The initiative took place in the Departments of Copán, Ocotepeque, Santa Bárbara, Lempira, La Paz, Intibucá, Choluteca and Valle, between 2014 and 2021.

In the map the program's geographical coverage supported by different donors.

⁹ <http://www.fao.org/americas/prioridades/corredor-seco/es/>

The three approaches

The Honduras ACS is a multi-donor alliance to reduce poverty and malnutrition through strategic investments in vulnerable communities in specific areas of the country. Its central strategy is to mitigate the impacts of climate change on food security and nutrition, and to maximise integrated approaches for increasing smallholders' productivity and income generation through more sustainable food systems.^{10, 11}

The aim of the **Nutrition-Sensitive Agriculture Approach** was to increase the resilience of smallholder farmers by improving their access to information, appropriate technology, agricultural inputs, tools, and credits for crop diversification toward crops with high nutritional value, such as bio-fortified corn, beans and sweet potatoes. Food assistance was also provided in the most critical months of seasonal hunger. Small-scale producers were also given support for integration into value chains and the strengthening of local markets.

Crop diversification was complemented by programming on access to safe water, nutrition education, and access to primary health, especially sexual and reproductive health.^{12,13}

Incorporating gender, social protection and a nutrition lens to the programming brought the added value of the participation of women and ethnic minorities.

The aim of the **Territorial Approach** was to achieve synergies in the management of natural resources, and in the mitigation of climatic, social, economic, and demographic risks common to several municipalities. These municipalities started a joint programming based on an associative modality called 'mancomunidades.' The mancomunidades, or association of municipalities, are local territorial entities, auxiliary and subordinate to the member municipalities. They are subject to public laws and regulations for managing programmes, projects and priority services, which allow its members to jointly address problems that affect a shared territory.

The Municipal Agreements that approve the creation of these associations are norms with force of law in their corresponding territory. They therefore have the nature of municipal legal instruments that define a commonwealth.¹⁴

Nutrition-sensitive agriculture impact pathways

- Access to nutritious food produced in agricultural diversification schemes.
- Increase in income resulting from the integration of producers into the market.
- Prioritisation of communities based on the prevalence of chronic malnutrition
- Improvement of the nutritional content of foods produced in soils under conservation.
- Redefinition of school feeding programmes as local nutritious food distribution spaces.

Impact pathways of the integration of nutrition objectives in this territorial programming included:

- Formulation of public policies relevant to nutrition outcomes at the sub-national level.
- Integration of food and nutrition security indicators into municipal information systems.
- Adoption of an investment strategy (rather than a subsidy management) with a high nutritional impact in economically lagging areas.
- Interventions based on the nexus between development and emergency responses to climate risks, including the protection of natural resources and the creation of strategic grain reserves.

10 <https://sgpr.gob.hn/ODS/Home/IniciativasVista/27>

11 https://www.ennonline.net/attachments/3405/NEX-13_p26-27_Honduras.pdf

12 <http://www.eurosan.hn/wp-content/uploads/2021/05/Informe-ano-4-PP-Eurosan-Occidente.pdf>

13 https://ec.europa.eu/international-partnerships/system/files/nutrition-case-study-honduras_es.pdf

14 <https://www.amhon.hn/mancomunidades>

The **Multi-donor Partnerships** aimed to go beyond coordination between sectors to reach complementarity of donors and cooperation agencies. The impact of this approach was seen in: increased aid efficiency, by reducing indirect operating costs and the expenses associated with multiple bureaucratic processes; the strengthening of dialogue between local and international cooperation; and in the allocation of budgets to two strategic areas: supporting nutrition governance, and promoting joint programming in the territory.

Actors and financing

Programming in the territories occurs under the leadership of the municipalities as the minimum state management unit at the sub-national level. These in turn were coordinated in platforms for joint programming. Municipal Units for Food and Nutrition Security and Emergency Committees were set up to support the programme's operations. These committees made up the nucleus of roundtables for consultation and operational coordination, in which civil society and the private sector were integrated.

Financing has been channelled from international cooperation funds plus counterpart funding from the Government of Honduras. Funding came from the European Union (EUROSAN), the Government of Canada, and the USA Government through USAID and GAFSP. The total grant is estimated to have been close to US\$300 million.

Progress and achievements

Diversity of both crops and diet increased. Food consumption increased for three food groups, including high value proteins. The project's progress reports recorded a decrease in chronic malnutrition in the targeted areas.

The recovery of market areas and local food fairs enabled access to nearby food supplies during periods of restricted mobility due to the COVID-19 pandemic. The strategic reserve of staple foods mitigated price fluctuations and market depletion in this period, and allowed supplies to be stabilised during periods of political instability.

Analysis of food and nutritional vulnerability at territory level supported informed decisions on sector programming, and the definition of nutrition goals and indicators that were relevant to service delivery at sub-national level.

Lessons learned and best practices

- The municipalities provided a key platform for intersectoral coordination for nutrition.
- Formulation of public policies on food and nutrition at the national level may be informed by experiences at the sub-national level.
- The integrated management approach allows mancomunidades access to a scale of resources they would not have each reached through individual management.
- Improving food security does not mean improving nutrition. Nutrition-sensitive agriculture allowed for improved diet diversity along with the increment of crop productivity. This inclusion seems more effective when linked to nutrition education, the promotion of care, and access to safe water. The integration of effective markets and value chains reinforced access to food.
- The impact of nutrition-sensitive agriculture is more evident and easier to demonstrate using results around food consumption and dietary diversity, than by using nutritional status (nutritional surveys).
- Promoting women's participation in facilitating access to food brings benefits for them and for diet improvements within their households. However, it can result in overloading them with small-scale activities limited to the domestic sphere.

Enabling factors

- Budgetary autonomy by sub-national bodies.
- Information systems which enable evidence-based programming.
- Nutrition visibility via communications.
- Systematised successful platforms.

Challenges for replicability

- Sustainability of nutrition-sensitive agriculture in areas under high climate pressure demands large infrastructure investments and funding at scale.
- Broad systemic programmes, such as those following a territorial approach towards food and nutrition resilience, should be able to demonstrate impacts on a larger population scale and over multiple years.
- Social protection needs more focus on nutrition-sensitive programming.
- Women's participation is key but hazardous: it can result in overloading them with small-scale activities in the domestic sphere.
- Evaluating the impact of nutrition-sensitive programming is easier when registering outputs and process than impacts on nutritional status. Alternatives to nutritional surveys, such as nutritional surveillance, should be prompted and validated.
- The food industry and business sectors should take an active role in nutrition-sensitive initiatives that challenge climate and healthy diets agendas.

Conclusion

Nutrition-specific interventions alone, even if implemented at scale, will not be able to meet global targets for improving nutrition. It is therefore imperative that other sectors also contribute. Nutrition-sensitive programs such as those highlighted in this case study, that bring together sectors such as agriculture; education; water, sanitation and hygiene; health; and gender; are key to tackling malnutrition at scale. Despite their challenges, initiatives such as kitchen gardens and the development of nutrition-sensitive agricultural models have the potential to improve food availability and access to diverse, nutrient-rich foods; as well as to enhance household food security, dietary equality, income and women's empowerment.

FOR MORE INFORMATION ON KENYA, CONTACT:

Scaling Up Nutrition Secretariat:

sms@scalingupnutrition.org

Jane Wambugu, Head; Agri-Nutrition. State Department for Crops Development and Agricultural Research:

wambugujane@kilimo.go.ke

FOR MORE INFORMATION ON HONDURAS, CONTACT:

Jose Lino Pacheco, Director; the Food Security and Nutrition Technical Unit, Honduras National Coordination Secretary:

joselinopacheco@yahoo.es

Susan López, Nutrition Officer; the Food Security and Nutrition Technical Unit, Honduras National Coordination Secretary:

slopez@scgg.gob.hn

Héctor Ortega Director; UE Project on Food Security, Nutrition and Resilience in the Dry Corridor (EUROSAN OCCIDENTE), Honduras:

h.ortega@eurosan.hn

CASE STUDY SUPPORTED BY TECHNICAL ASSISTANCE TO STRENGTHEN CAPABILITIES (TASC)



This document was produced through support provided by UK aid and the UK Government; however, the views expressed do not necessarily reflect the UK Government's official policies