Latin America and the Caribbean:
Supporting national priorities on nutrition through multiple platforms
Foreword

WFP’s is continuously focusing its efforts on addressing existing nutrition gaps worldwide. In particular, in the region of Latin American and the Caribbean (LAC), WFP is acting as a catalyst to accelerate knowledge transfer to government counterparts.

Some of the key success partnerships between WFP and national governments are integrating a nutrition-specific and sensitive component into the governmental social protection programmes which successfully resulted in addressing nutrient needs of children and pregnant and breastfeeding women during the first 1000 days. The main purpose is to use these tools to empower local communities and families in long term and sustainable solutions.

WFP supports the governments’ national programmes, primarily targeting poor populations with high risk and high prevalence of malnutrition, ensuring scalability, building capacity of the national government, promoting nutrition education, empower women, and providing direct assistance as necessary.

WFP also has the ability to leverage and develop strategic partnerships for multi-sectorial engagement and has expertise working with governments across diverse ministries.

Through this report Supporting National Nutrition Priorities Through Multiple Platforms in Latin America and the Caribbean, we will be able to appreciate some of the most key innovative models that we have developed in countries like Guatemala, Dominican Republic, Ecuador, Colombia and Panama, that shows how WFP has worked together with governments to accelerate their progress to achieve national nutrition-related priorities and reach the 2030 Sustainable Development Goals Agenda.

Regional Director
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Supporting national nutrition priorities through multiple platforms in Latin America and the Caribbean

Every country in the world faces serious public health risks from malnutrition. Two to three billion people worldwide are malnourished, suffering from undernutrition and micronutrient deficiencies and being overweight or obese. Poor child growth and development is indicated by 24 percent global stunting prevalence for children under five. The prevalence of anaemia in women of reproductive age is greater than 15 percent in every sub-region of the world except Northern America1.

United Nations Secretary-General Ban Ki-moon launched the Zero Hunger Challenge in 2012 and called on all sectors to fight hunger and malnutrition. Latin America and the Caribbean (LAC) as a region has made some of the greatest progress in the world reducing hunger over the past two decades. The region met Millennium Development Goal 1C by halving the proportion of undernourished people before 2015. The Hunger-Free Latin America and the Caribbean Initiative commits to permanently eradicate hunger in the region by 2025, five years before the Sustainable Development Goal 2 deadline for universal access to safe, nutritious and sufficient food. Economic growth and political stability have undeniably contributed to the region’s success but the biggest factor distinguishing LAC from other regions is the high level of sustained political commitment to food security and nutrition.

Through a variety of multi-sectoral strategies focused on the most vulnerable populations countries have developed policy instruments to address short term social problems and structural changes to deliver long term solutions. This report highlights how WFP has supported governments in five LAC countries to accelerate their progress to achieve national nutrition-related priorities.

In recent years WFP’s focus on developing sustainable solutions has redefined the organization’s role in several LAC countries — mostly middle-income countries (MIC) or those in transition to MIC. WFP addresses food and nutrition security with innovative approaches for changing economic, social and political environments. WFP is a catalyst accelerating knowledge transfer to government counterparts. By generating robust evidence WFP is increasingly influencing countries to invest in nutrition and make social protection programmes more nutrition-sensitive. The steady accumulation and commitment to sharing good practices and lessons learned from successful and unsuccessful programmes drives the adoption of alternative strategies and the use of new entry points to support national nutrition priorities.

1 Global Nutrition Report, 2015
Five different experiences in Latin America

**Colombia** represents a successful example of engagement at multiple levels, from central down to local level, to support national efforts addressing micronutrient deficiencies through home fortification. This multi-level partnership ensures alignment with the government’s national nutrition strategy, and enables the provision of a comprehensive nutrition response in the country. The package of interventions delivered in the Department of Bolivar, with the support of WFP, contributed to reducing iron deficiency prevalence in children aged 24-59 months by 50 percent in seven months.

In the **Dominican Republic**, WFP has collaborated with the government to integrate a strong and multi-faceted nutrition-specific component into the national social protection programme, *Progresando con Solidaridad*, ensuring access to nutrients for children and pregnant and lactating women (PLW). The Dominican Republic experience shows how WFP can leverage and utilize data for decision making and for securing funding for nutrition.

In **Ecuador**, under the *Plan Nacional Buen Vivir* (2013-2017), WFP has complemented government efforts to establish a comprehensive national social protection platform within a framework of social equity and the promotion of a balanced diet. Through a combination of different nutrition-sensitive programmes WFP is working to increase the dietary diversity of Colombian refugees and vulnerable Ecuadorians who are not benefiting from the government’s cash transfer programme and increase the income of smallholder farmers through value chain transactions. WFP supports the provision of conditional vouchers to be redeemed in exchange for pre-determined locally produced fruit, vegetables, dairy products and other nutritious foods. This programme is implemented in conjunction with the development of a robust electronic monitoring and evaluation platform and strong sensitization and capacity building for beneficiaries, vendors, smallholder farmers and government and programme staff.

WFP in **Guatemala** has supported the government-led *Pacto Hambre Cero* through a combination of nutrition-specific actions to improve complementary feeding in children aged 6-23 months and specifically address nutrient needs of children and PLW during the first 1000 days\(^2\). Special emphasis was placed on community education and behaviour change to improve infant and young child feeding (IYCF) practices; distribution of a locally produced specialized nutritious food, called *Mi Comidita*; strengthening health staff capacity at national and district levels to address stunting; and carrying out rigorous monitoring and evaluation activities.

In **Panama**, WFP served as an active member of the government’s Technical Sub-Committee for Rice Fortification, and advocated in favour of making rice fortification mandatory. WFP provided ongoing technical assistance to senior government officials, legislators and the rice sector. Today Panama stands out as one of only six countries in the world with national legislation to fortify rice.

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\(^2\) Good nutrition during the critical 1,000-day window from pregnancy to a child’s second birthday is crucial to developing a child’s cognitive capacity and physical growth.
At the national level, WFP supported the Colombian government in the design and implementation of a National Strategy for the Prevention and Control of Micronutrient Deficiencies and the National Programme for the Prevention and Reduction of Anaemia in children aged 6-23 months.

At the local level, WFP collaborated with the Department of Bolivar in the design and implementation of the “Chispitas de Vida” programme. Launched by the local government and WFP in the summer of 2014, the “Chispitas de Vida” programme aims to reduce anaemia among 24-59 months olds by delivering an integrated nutrition package. This package includes provision of locally produced micronutrient powder (MNP) as well as deworming tablets and health and nutrition education training for families. By focusing on children aged 24-59 months, the programme complements the national government’s efforts to deliver MNP to those 6-23 months old through the health system. The intervention has contributed to a 50 percent reduction of iron deficiency prevalence in children aged 24-59 months after just seven months of implementation.

ACKNOWLEDGMENTS

Government of Bolivar, Colombia

Mayoralities of 45 municipalities of Bolivar Department, Colombia

National Agency for Overcoming Extreme Poverty (Agencia Nacional para la Superación de la Pobreza Extrema, ANSPE- Red Unidos)

Colombian Family Welfare Institute (Instituto Colombiano de Bienestar Familiar, ICBF- Bolivar region)

Educational institutions and day care centers from Bolivar Department

To all the parents and children who participated in the project
**Country context**

Colombia is the third most populated country in Latin America, with 48 million inhabitants. Of the total population, 25 percent live in rural areas and 14 percent is indigenous and Afro-Colombian. The conflict between the government and guerrilla groups over the past 50 years has displaced millions of individuals and families, leaving Colombia with one of the highest rates of internally displaced people (IDP) globally.

Colombia is divided into 32 departments and a Capital District. The Capital District is the country’s capital, Bogotá. Bogotá is partially dependent on the Cundinamarca Department that surrounds it. Departments are country subdivisions; they are granted a certain degree of autonomy from national government; and have their own budget, ability to set priorities and responsibility to implement social programmes. Each department has a Governor and a Departmental Assembly, which are re-elected every four years. Departments are further divided into municipalities, including a capital city.

**Food and nutrition situation:** food insecurity represents a challenge, especially for the poorest and most vulnerable, the rural and peri-urban population. In this context, approximately 15 percent of households are food insecure. In addition, Colombia is facing a “double burden” of malnutrition, with persistently high levels of undernutrition, along with rapid increases in overweight and obesity rates. According to the Encuesta Nacional sobre Situación Nutricional (ENSIN-2010) 13.2 percent of children under five are stunted, and the prevalence of anaemia is still a critical problem—affecting 27.5 percent of children under five and 17.9 percent of PLW.

**Socioeconomic inequalities:** from 2004-2012, Colombia’s economy grew at an annual average rate of 4.4 percent, earning Colombia the status of a steadily growing MIC. However, this national economic progress masks severe inequalities, especially between urban and rural populations, highlighted by its GINI index of 53.5. In rural areas, few sustainable economic opportunities exist, basic human development indicators are low and service delivery is poor.

**Gender inequality:** while Colombia has enacted national policies to close the gender gap, gender disparities persist, especially with regards to women’s participation in politics and the labour market. The 2013 Human Development Report’s Gender Inequality Index ranks Colombia 88 out of 148 countries, and below the Latin American and Caribbean Regional average.

**WFP support at national level**

The government of Colombia recognizes WFP as a partner with the comparative advantage, technical expertise and necessary experience to support the development of programmes that address micronutrient deficiencies. More specifically, it recognizes WFP’s ability to contribute through a full package of technical support ranging from procurement and logistics to large-scale operational capacity and specialized expertise. For this reason, the Ministry of Health called upon WFP to support its efforts to address micronutrient deficiencies and anaemia, including in the development of national strategies and guidelines, as well as filling gaps in programming when necessary. In addition, WFP is a permanent member of the Comité Nacional para la Prevención y Control de las Deficiencias de Micronutrientes - CODEMI (National Committee for Prevention and Control of Micronutrients deficiencies)\(^1\).
National efforts to address malnutrition

Addressing malnutrition is recognized as one of the national priorities that needs to be achieved in partnership and collaboration with different actors. In 2011, acknowledging the importance of early childhood, President Juan Manuel Santos launched the strategy De Cero a Siempre (“Zero to Always”), to create a comprehensive system of care for children under five, with the aim of ensuring the protection, health, nutrition, and early education of young children.

This is aligned with the Plan Decenal del Ministerio de Salud Pública del Ministerio de Salud (Ministry of Health’s Ten-year Public Health Plan 2012-2021) formulated within the Plan Nacional de Desarrollo 2010-2014 (National Development Malnutrition Plan) in which micronutrient deficiencies and anaemia are recognized and listed amongst the key factors that need to be addressed in order to reduce health inequalities.

To accelerate progress in reducing micronutrient deficiencies, the new Plan Nacional de Desarrollo 2014-2018, the Plan Nacional de Seguridad Alimentaria y Nutricional 2012-2019 (National Nutrition and Food Security Plan) as well as the Estrategia Nacional para la Prevención y Control de las Deficiencias de Micronutrientes (National Strategy for the Prevention and Control of Micronutrient Deficiencies) highlight the importance of reducing and preventing micronutrient deficiencies, including anaemia, during the period covering pregnancy and the first five years of life.

In 2014, in line with these plans and strategies, the Ministry of Health launched the Programa Nacional para la Prevención y Reducción de la Anemia en niños y niñas menores de 6 a 23 meses (National Programme for the Prevention and Reduction of Anaemia in children aged 6-23 months). The programme is currently being piloted in two departments (La Guajira and Bolivar) with the ultimate goal of national scale up. It seeks to strengthen early childhood care, and promote behavioural changes in the general population to improve nutrition in the country. The programme is implemented through the health system, therefore MNP and education sessions are provided at health facility level.

Nutrition response in the Department of Bolivar

The Department of Bolivar, located in the northwest of the country, is made up of 45 municipalities. These municipalities are diverse—they include growing metropolitan areas such as the capital Cartagena, and cities like Magangué and Turbaco, as well rural areas that can be difficult to access. The southern part of Bolivar is affected by conflict. With 10.8 percent of chronic malnutrition and 22.8 percent of anaemia in children under five, malnutrition is a public health concern, especially among indigenous, Afro-Colombians, and IDPs.

In alignment with the Plan de Desarrollo Departamental 2012-2015 (Development Plan) and the Plan de Seguridad alimentaria y Nutricional SAMBAPALO 2013-2019 (Nutrition and Food Security Plan), the Department of Bolivar aims to reduce the prevalence of anaemia in children under five (from 22.8 percent to 18 percent in 2015, and to 11 percent in 2019) through the scale up of different interventions, including home fortification.

In July 2014, the home fortification project “Chispitas de Vida” was launched by the local government, with the participation of the Secretaría de Salud (Health Department) and the Dirección de Desarrollo Social (Department of Social Development). It seeks to prevent and reduce anaemia in children aged 24-59 months through actions that will emphasize the importance of nutrition and diet in child development. Other national entities such as Instituto Colombiano de Bienestar Familiar (Colombian Institute of Family Welfare) and the Departamento para la Prosperidad Social (Department of Social Prosperity) are also involved in the implementation of the project.
Learn all about Chispitas de Vida

Chispitas includes 15 vitamins and minerals: vitamin A, B vitamins (B1, B2, B3, B6 and B12), folic acid, vitamin C, vitamin D3, vitamin E, copper, iodine, iron, zinc and selenium.

Chispitas are packaged in small sachets containing the daily portion of MNP (1g). There are 30 sachets in each box of Chispitas.

Bi-yearly distribution of MNP, 60 packages at each distribution, with intervals of four to five months between each delivery.

Chispitas are mixed with solid or semi-solid foods (e.g. rice or pasta) prepared at home.

When taken daily, improvements in micronutrient status can be achieved in approximately 60 days.

WHY

The main reason for implementing the programme in the Department of Bolivar is to respond to Plan de Desarrollo Departamental 2012-2015 and Plan de Seguridad alimentaria y Nutricional SAMBAPALO 2013-2019, which clearly identify the improvement of nutrition and the reduction of anaemia in children under five as main strategic objectives.

The goal is to reach all children aged 24-59 months in the Department of Bolivar’s 45 municipalities with an integrated nutrition package.

WHAT

The package includes:

Locally produced MNP, known as “Chispitas de Vida” (Box 2); Provision of deworming treatment

Trainings for parents and caregivers on topics such as the proper use of Chispitas, IYCF, healthy eating practices, and sanitation and hygiene (e.g. hand washing).

WHERE

The identification of children and the provision of the package is achieved through a community based approach. In particular, through the involvement of the municipal authorities, health department, hospitals, child care centres and social centresand the community.

HOW

To implement the project, the WFP Project Manager (based in Bogota) coordinates with a local team made up of one WFP field coordinator (based in Cartagena), two medical doctors, seven professionals in health and social arenas, and 45 facilitators with experience in community work (one in each of the municipalities). The team is contracted by WFP and is responsible for managing and implementing the project in collaboration with other local government entities, such as Instituto Colombiano de Bienestar Familiar and the Departamento para la Prosperidad Social. This team is trained in fortification, and receives technical assistance and ongoing support from the WFP Project Manager.

The assistance package has been brought to even the most difficult to reach communities in all 45 municipalities, through different means of transportation. An innovative public communication campaign, involving radio programmes, TV broadcasts and “voz a voz” (word of mouth) among families and neighbours helps spread nutrition and healthy living messages to the deepest corners of Bolivar. Personnel at child care centres are also encouraged to inform parents and caregivers about the programme.

Specific objectives

Implement a combination of different activities for children aged 24-59 months as part of the overall strategy of home fortification with MNP.

Promote optimal breastfeeding practices and safe, timely, adequate and appropriate complementary feeding from six months onwards

Promote appropriate behaviour change activities at household and community level in order to raise awareness about nutrition services, and stimulate shifts in social norms in order to sustainably improve the enabling environment

Strengthen the capacity of local institutions to manage the proposed activities and ensure sustainability of the project

Build strong monitoring and evaluation frameworks to measure programme performance
Duration and phases: The local government and WFP are planning to evaluate the programme “Chispitas de Vida” over a period of 13 months. The project consists of six phases (Figure 1).

Roles and responsibilities

In November 2013, WFP and the government of Bolivar signed a formal agreement to define roles and responsibilities, and established the Technical Committee, which includes the Department of Health and WFP. The Technical Committee was formed to coordinate and guide project implementation and track progress.2

Key achievement: fifty percent reduction of iron deficiency prevalence in children over a period of seven months

Seven months after the start of the programme, approximately 62,000 children in Bolivar were identified and received a total of 120 sachets of Chispitas in two distributions. Around 58,000 children participated in deworming. This number represents those children who had not been dewormed in the previous six months. Blood samples of 385 participants showed that in seven months the prevalence of iron deficiency had been reduced by 50 percent (from 25.5 percent to 11.2 percent) and the percent of ferritin increased after provision of MNP.

As well as bringing knowledge and experience to the programme, WFP helps provide MNP at a reduced costs, allowing the programme to cover all children aged 24-59 months in the department. By buying locally, WFP saves time as well as money on transport costs. In addition WFP obtains a better price from the suppliers, due to its high volume purchase.

Both the Departments of Bolivar and the WFP have invested substantial resources in “Chispitas de Vida”.

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2. The Technical Committee has the following functions: 1) define the technical guidelines for the orientation and implementation of the programme; ii) approve the methodology and its development; iii) approve the activities and any possible modifications to be made to these; and, iv) define a workplan.
Best practices from the Colombia model

The government of Bolivar serves as an excellent example of the significant role that local government can play in addressing malnutrition. Local leaders commit to complement national efforts to improve early childhood nutrition, including through the allocation of funding and human resources.

Already recognized as a valuable partner at the central level, WFP has also positioned itself at local level. WFP’s collaboration with the government of Bolivar represents a new type of engagement: local government provides funds to WFP in order to create the conditions for successful knowledge transfer in the design and management of programmes addressing micronutrient deficiencies. This collaboration at both national and local levels ensures that there is alignment but not duplication between the National Programme for the Prevention and Reduction of Anaemia in children aged 6-23 months currently piloted in Bolivar, and the local programme (Chispitas de Vida for children 24-59 months). This ensures that the two programmes complement each other, and jointly reach all children from 6-59 months.

Lessons learned from the Colombia model

Establishing a formal partnership and coordination mechanism between government and WFP is crucial for ensuring successful programme implementation.

Through the generation of robust evidence, WFP is able to advise the government on the most cost-effective programmes addressing national nutrition problems.

The collaboration, in each of the municipalities, between the facilitators contracted by WFP and all other local actors is key for building relationships with community actors, including in indigenous areas.

This multi-level partnership between WFP and government structures ensures alignment to the national nutrition strategy, and enables the provision of a comprehensive nutrition response in the country.
Dominican Republic
Leveraging social protection platforms to improve nutrition in young children

In the Dominican Republic, the strong collaboration between the government and WFP ensured a successful integration of a multi-faceted nutrition component into existing national social protection programme, Progresando con Solidaridad. National government’s efforts to deliver MNP to those 6-23 months old through the health system. The intervention has contributed to a 50 percent reduction of anaemia in children aged 24-59 months after just seven months of implementation.

This programme, formerly known as Solidaridad, is a cash-based transfer social protection programme which aims to help Dominicans living in poverty. It has been implemented since 2004, expanding in 2012 (under the Vice Presidency’s Cabinet for Social Policy) to become Progresando con Solidaridad. The programme is composed of three main cash transfer components: i) Comer es Primero distributes cash to poor families to address hunger. It also seeks to improve the overall health status of children (through access to vaccines, growth monitoring and health education) as well as of PLW and the elderly; ii) Incentivo a la Asistencia Escolar provides monthly financial assistance for each child between the ages of 6 and 16 who attends school; iii) Dominicanos con Nombre y Apellido facilitates and promotes birth registration, and improves the process of obtaining documentation.

Since 2009, WFP has supported the government to enhance the impact of Progresando con Solidaridad on the nutritional status of the population, with a specific focus on undernutrition and micronutrient deficiencies. In particular a nutrition intervention was incorporated as part of the conditional cash-based transfer and health component. An evaluation in 2013 found a reduction in anaemia in beneficiary children as a result.

ACKNOWLEDGMENTS
To all staff of the Social Policy Cabinet of the Vice-Presidency of the Dominican Republic and staff from the governmental social protection programme, called Progresando con Solidaridad.

Technical programme staff, field monitors, drivers and administrative staff from the WFP country office.
**Country context**
The Dominican Republic is a Caribbean nation rich in natural resources, with a population of approximately 9.8 million people. As of the end of 2010, 74.3 percent of the total population lived in urban areas and 25.7 percent in rural areas. The Dominican Republic is divided into 31 provinces, 154 municipalities, 231 districts, 1,182 departments and 9,965 parajes (which represent the rural areas).

International migration affects the Dominican Republic greatly, as it receives and sends large flows of migrants. Mass illegal Haitian immigration and the integration of Dominicans of Haitian descent are major issues.

**Socioeconomic inequalities**: though it is classified as an MIC, income inequalities are marked by its GINI index of 45.7. The inflation rate is 1.58 percent and the poverty rate is 40.0 percent. Income inequalities, combined with sustained inflation, result in declining purchasing power of poor households, affecting their access to food. 63 percent of poor households’ expenses are food purchases.

**Gender inequality**: women in the Dominican Republic face several gender-related challenges. Women are much more severely affected by unemployment than men, and their activities are more limited. Domestic violence is frequent and represents a serious concern. In rural areas, women have poor access to healthcare, education and bank loans. There is evidence that early marriage is a persistent issue. Recent data reveals that 41 percent of women between the ages of 20-24 were married or in union before they were 18 years old, ranking the Dominican Republic 17th in the world for early marriage.

**Food and nutrition situation**: poverty affects the food and nutrition security of most Dominicans, and leads to insufficient food consumption, poor dietary diversity and micronutrient deficiencies among vulnerable populations. The national prevalence of chronic undernutrition is seven percent; yet some provinces present rates two or three times higher. The populations most vulnerable to malnutrition, including micronutrient deficiencies, are young children, PLW, people with chronic illness, the elderly and Haitian immigrants. According to the Ministry of Health’s National Micronutrient Survey (2009), the prevalence of anaemia reached 34 percent in non-pregnant women, 37 percent in women who had given birth in the preceding 12 months, 28 percent in children aged 6-59 months, and 61 percent in children aged 6-11 months. The baseline survey of the nutrition component (2011) found anaemia prevalence of 60.9 percent in children aged 6-59 months who were beneficiaries of the Progresando con Solidaridad programme.

**Progresando con Solidaridad**
*Progresando con Solidaridad* is part of the Red de Proteccion Social (Social Protection network) to contribute to eradicate poverty and improve the nutrition and food security of the most vulnerable populations. This social protection programme is managed by the Social Policy Cabinet and represents a significant investment in the health and wellbeing of the citizens of the Dominican Republic.

Targeting of beneficiaries is accomplished through the surveillance systems of the Unique System of Beneficiaries (SUIBEN) and the Social Services Administration (ADESS).

WFP is currently working closely with national counterparts to improve the targeting criteria, and ensure that this social protection programme consistently reaches poor families with malnourished individuals, in particular children.

Main conditional cash-based transfer components of the programme:

1) *Comer es Primero* proves economic assistance of roughly the equivalent of $16/month to each beneficiary household with the aim of contributing to basic food needs. Additionally, the programme seeks to improve the overall health status of children through access to vaccines, growth monitoring, and health education.

2) *Incentivo a la Asistencia Escolar* addresses education by providing monthly financial assistance of between US$7-13 (depending on the number of children) for each child between the ages of 6-16 years who attends school, in order to increase school attendance rates.

3) *Domenicanos con Nombres y Apellidos* facilitates and promotes birth registration, and improves the process of obtaining documentation.

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1. UNICEF. State of World’s Children 2015: Executive Summary
Nutrition component of “Progressando con Solidaridad”

Background information

Studies such as the Cost of Hunger and the Atlas of Hunger as well as documenting the economic burden that poverty and malnutrition place on many countries in the region, also mapped the prevalence of childhood undernutrition in several countries, including the Dominican Republic.

In 2009, the government of the Dominican Republic reformed its social sector. WFP leveraged this social reform process to support the government in addressing malnutrition, specifically anaemia, through the social protection programming of Solidaridad. Particularly, the nutrition intervention was incorporated as a sub-component of the conditional cash-based transfer health component. It included training, capacity development, promotion of growth monitoring and preventative care for children through primary healthcare, as well as the provision of MNP (locally called Chispitas Solidarias) to all beneficiary children aged 6-59 months.

In 2010, the Social Policy Cabinet and WFP conducted a four month pilot programme to test the feasibility of the proposed nutrition component in one region of the country. The positive results on anaemia led to the national implementation of the nutrition component of Solidaridad in 2011. An evaluation of the nutrition component of the Progressando con Solidaridad programme, conducted in 2013, reported a 50 percent reduction in anaemia prevalence in enrolled beneficiary children after two years of implementation (Figure 1). WFP leveraged these data to secure governmental funding for a four year extension of a more comprehensive nutrition component.

Elements of the programme

Driven by the positive results of the nutrition programme, in 2013 the Vice President of Dominican Republic and WFP signed a Memorandum of Understanding for the implementation of a more comprehensive nutrition component focused on children under 5, PLW and the elderly benefiting from the Progressando con Solidaridad programme.

The nutrition component is composed of the following actions:

1) Distribution of MNP to children 6-59 months in order to contribute to the prevention and control of micronutrient deficiencies.

2) Provision of nutrition education to the families benefiting from the Progressando con Solidaridad programme to improve their capacity to properly select food and therefore impact on their food consumption and nutrition.

3) Strengthen and extend the community volunteer network (called Red de consejeria nutricional) to reach beneficiaries at household level, in particular mothers. This helps to ensure an adequate consumption of MNP, fortified and complementary food. Additionally, it contributes to improved health service attendance of mothers and their children.

4) Distribution of a specialised nutritious food (SNF) called Progresina forticada (Super Cereal plus) to children aged 6-59 months to prevent and control acute malnutrition.

FIGURE 1

PERCENTAGE OF CHILDREN WITH ANAEMIA BY AGE GROUP: 2010 AND 2013
5) Distribution of SNF called Progresina (Super Cereal) to PLW and the elderly.
6) Strengthen national local capacities to carry out monitoring and evaluation activities.

In order for beneficiaries of Progresando con Solidaridad to receive the nutrition component of the programme, they are required to complete the health conditionality under the cash transfer Comer es Primero. The health conditionality is regular participation to preventive medical care such as vaccinations, attendance at primary health care child growth and development check-ups established by the Ministry of Health for children aged 0-5 years, and attendance at pregnancy consultations for PLW.

Integration and collaboration among different actors

WFP and the national counterparts responsible for the Progresando con Solidaridad programme, as well as the government staff from the Ministry of Public Health work together at all levels to execute this complex programme (Figure 2). For example, at regional and provincial level, staff from WFP, the Ministry of Health and Progresando con Solidaridad meet regularly to assess the programme and resolve problems from the field. At community level, family health focal points employed by Progresando con Solidaridad in each community, health staff at the primary health care centres, as well as WFP field monitoring staff, support programme implementation and increase engagement of community members and households.

As a sign of engagement and commitment, the government of the Dominican Republic continues to support WFP financially to ensure adequate nutrition programme implementation.

**Box 2**

**Progresando con Solidaridad in Numbers**

Currently, Progresando con Solidaridad’s conditional cash-based transfer component for food consumption (Comer es Primero) targets over 700,000 poor households. From January 2014 to August 2016, the nutrition component will target 121,706 beneficiaries of these households: 88,348 children aged 6-59 months, 23,665 PLW and 9,693 elderly adults. In addition, the component supports 20,000 Progresando con Solidaridad community employees and public health practitioners as beneficiaries of capacity development activities.
Best practices from the Dominican Republic model

1. The Dominican Republic represents an excellent example of how to optimize an existing social protection scheme and make it nutrition-sensitive. Flexibility and creativity were crucial to capitalize on opportunities to reach nutrition objectives.

2. WFP focused its efforts on evidence generation activities for advocacy. In particular, WFP used and leveraged these data for decision-making and for securing national funding for the nutrient component.

3. The political, financial and administrative commitment of the government, and the strong collaboration between WFP and key national counterparts at different levels is pivotal for success in programmes of such large scale.

Lessons learned from the Dominican Republic experience

Without the political, financial and administrative commitment of government, this programme would not have been so successful.

WFP works alongside government at each level, from national to local. This requires knowledge of the programme from everyone involved in order to ensure that the same message is delivered to beneficiaries. Trainings are conducted, and consistent follow up is provided. However, the high turnover of staff requires additional efforts to maintain the right capacity and knowledge at all levels.

Participation in the Progresando con Solidaridad programme is often perceived as an additional burden by medical staff who are not motivated to participate. Continuous time and energy are required to inspire and motivate their participation in the nutrition component of the programme.

As a new product, the introduction of MNP raised a number of misconceptions, including claims about its unpleasant taste. Proactive strategies to improve beneficiaries’ adherence and participation are consistently required.

FIGURE 2

KEY IMPLEMENTERS FOR THE IMPLEMENTATION
Despite the lack of traditional WFP operations in the country, and therefore in a context of limited human and financial resources, WFP played a pivotal role as technical advisor to the government for rice fortification.

As an active member of Panama’s Technical Sub-Committee for Rice Fortification, WFP effectively advocated to make rice fortification mandatory, and played a crucial role in the successful approval of the law by providing ongoing technical assistance to senior government officials, legislators, and the rice sector. Today, Panama is one of only six countries with national legislation to fortify rice.

ACKNOWLEDGMENTS

Mery Alfaro de Villageliu, former Secretary of the Food and Nutritional Security (SENAPAN)

Teresita Yaniz de Arias, former congress women of the National Government

Mabel de Mas, Nutritionist, Coordinator of National Commission of Micronutrients at the Ministry of Health

Aracelis Vergara, investigator, agronomist engineer of the Food Protection Department at the Ministry of Health

José Alberto Yau, investigator, agronomist engineer of the Agricultural Research Institute of Panama (IDIAP)

Marco Pino, General Manager of the Panamanian Food Safety Authority (AUPSA)

National Rice and Millers Association (ANALMO)

Tayra Pinzon and Eyra Mojica, Programme staff of the World Food Programme’s Panama Country Office
Country context

The Republic of Panama is a country in Central America situated between North and South America. It has a land area of about 75,000 km², and is divided into nine provinces, 76 municipal districts, 620 corregimientos (administrative districts) and five comarcas (indigenous territories). The capital and largest city is Panama City with a population of 3.6 million.

Socioeconomic situation: Panama has made significant progress in reducing poverty in recent years. Between 2007 and 2012, a period which saw the global financial crisis and recession, Panama managed to reduce poverty from 39.9 percent to 26.2 percent, and extreme poverty from 15.6 percent to 11.3 percent. Despite these gains, challenges remain and differing rates of poverty reduction have led to the poor becoming more concentrated in specific geographic areas. Poverty in Panama is a rural and indigenous territories phenomenon. Lack of services, particularly access to water and sanitation, continues to be a constraint in the comarcas.

Gender situation: while women’s wages still fall behind men’s in Panama, the overall wage gap has narrowed for younger generations. Panama is making steady progress on gender equality as measured by education, health, and labour force participation indicators.

Food and nutrition situation: despite Panama’s status as an upper MIC, and increased life expectancy recorded across the years, food insecurity and malnutrition remain major challenges. This is the case particularly in indigenous areas, where 62 percent of children under five are chronically malnourished, in contrast to 11 percent in urban areas. Anaemia is considered a severe public health problem, with a prevalence of 52.5 percent in children under two, 36 percent in children under five, and 40 percent in women of childbearing age. Given that the prevalence of malaria is low, poor nutrition (such as deficiencies in folic acid, zinc, riboflavin, or vitamin B12) is likely to be a major contributor to the high levels of anaemia. Over 15 percent of the population is at risk of inadequate zinc intake. According to 2012 data, 25.1 in 10,000 births have birth defects, most of which could be prevented by increased maternal intake of folic acid around the time of conception.

Gender situation: while women’s wages still fall behind men’s in Panama, the overall wage gap has narrowed for younger generations. Panama is making steady progress on gender equality as measured by education, health, and labour force participation indicators.

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The Role of SENEPAN and its Technical Committee

The National Secretary for the Plan of Food and Nutrition Security (SENEPAN) is situated within the Office of President of the Republic, giving it a high level of visibility and influence within the government. Additionally, because it is not embedded in any of the ministries, SENEPAN is ideally positioned to lead and engage with ministries across multiple sectors.

SENPAN is the body responsible for advising, coordinating, monitoring and evaluating the actions aimed at ensuring food and nutrition security in the Panamanian population.

It was officially established in 2004 and it is supported by a Technical Committee composed of institutions and public agencies. Based on need, representatives from NGOs and UN agencies working in the area of food and nutrition can also be part of the Technical Committee. Amongst its different functions, the Technical Committee is responsible for providing technical support to SENAPAN in the elaboration, design and development of strategies in order to achieve national nutrition and food security targets.

National efforts to address malnutrition

To improve the health and nutritional status of the population, the government implements an integration of different strategies, such as vitamin A, iron and folic acid supplementation to pregnant women; a complementary food programme to deliver fortified food to young children and PLW; and a school feeding programme. Additionally, Panama has developed a conditional cash-based transfer programme, "Red de Oportunidades", which targets the poorest households with children to improve their livelihood and access to basic social services. This programme benefits people mainly living in indigenous and poor rural areas. All of these actions are aligned with three main national nutrition plans.

The main purpose of the National Food and Nutrition Security Plan 2009-2015 (Plan Nacional de Seguridad Alimentaria) is to inform and guide the implementation of strategic activities to address food and nutrition insecurity. In particular, the objective is to guarantee that the most vulnerable people consume and have access to food in the right quantity, quality and variety.

Rice fortification and Panama’s specifications

What is rice fortification?

Rice fortification is the process of adding essential vitamins and minerals to rice in order to make it more nutritious. While rice is naturally rich in micronutrients, many of these nutrients, such as iron, zinc, calcium, thiamine, riboflavin and niacin, are found in the outer layer of the grain. During processing this outer layer is removed, and therefore the nutrients are lost. The type and level of fortificants mandated for rice in Panama are summarized in Table 1.

How is rice fortified?

Fortified rice kernels prepared with a mix of vitamins and minerals are added to the rice. Fortified kernels can be made in a number of ways. In Panama, extrusion or coating are the two suggested fortification processes that ensure that added nutrients will not wash off when rice is rinsed or cooked in excess water.

Extrusion: a dough made from rice flour, broken rice kernels and a mixture of vitamins and minerals is passed through an extruder to make fortified rice-shaped kernels.

Coating: Rice is sprayed with a mix of vitamins and minerals plus ingredients such as waxes and gums that help the nutrients adhere to the rice.

Table 1: Type and Level of Fortificants for rice fortification in Panama

<table>
<thead>
<tr>
<th>Micronutrients</th>
<th>Quantity (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin B1</td>
<td>5</td>
</tr>
<tr>
<td>Niacin</td>
<td>40</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>4</td>
</tr>
<tr>
<td>Folic acid</td>
<td>1</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>0.010</td>
</tr>
<tr>
<td>Iron (as ferric pyrophosphate)</td>
<td>24</td>
</tr>
<tr>
<td>Zinc (as Zinc oxide)</td>
<td>25</td>
</tr>
</tbody>
</table>

The Prevention and Control of Micronutrient Deficiencies Plan 2008-2015 (Prevención y Control de las Deficiencias de Micronutrientes 2008-2015) aims to respond to vitamin and mineral deficiencies in the country. It is the product of a coordinated and participative process led by the Ministry of Health, the National Secretary for the Plan of Food and Nutrition Security (SENAPAN) and the National Commission of Micronutrients, supported technically by WFP, INCAP and Organización Panamericana de la Salud (OPS).

National Plan to Fight Child Undernutrition 2008-2015 (Plan Nacional De Combate a la Desnutrición Infantil) was developed jointly by SENEPAN and the Ministry of Health, with the technical support of WFP. Its general objective is to reduce any form of malnutrition in children aged 0-36 months. The plan targets PLW and children aged 0-36 months in 98 corregimientos with the highest malnutrition and poverty rates. All these strategies also recognize the bio-fortification of staple food crops and the fortification of mass-consumed food as key strategies to address micronutrient deficiencies within the population.
Rice fortification programme in Panama

Panama has a history of supporting national food fortification programmes (for example, legislation on salt iodization was enacted in 2002) and has worked towards rice fortification for nearly a decade. In 2001, before its official establishment, the body that later became SENAPAN began pushing for rice fortification in Panama. However, it wasn’t until June 2009 that the government successfully passed this into law (Law 33) making Panama one of only six countries in the world with rice fortification legislation. The Rice Fortification Programme has a clear role in preventing and controlling micronutrient deficiencies. The selection of rice was driven by the fact that rice represents the main staple food consumed by the general population.

Key elements defined in the law are:

All white rice packaged by rice mills in Panama are fortified. This applies not only to rice produced in country, but also to all imported rice which is later packaged in Panama.

Specified types and levels of vitamins and minerals need to be used (see Table 1)

The government, through the Ministry of Agriculture Development and the Institute of Agricultural Marketing, is responsible for the provision of the premix of fortified rice kernels to milling companies. The milling companies are in charge of adding the premix to the white rice and labelling the packaging accordingly.

SENEPAN is responsible for developing a communication strategy to raise awareness of the importance of fortified rice.

The Department of Food Protection under the Ministry of Health is responsible for monitoring the quality of rice fortification (in packing companies and distributors, as well as in stores or any other places where the product is available).

Main activities undertaken

Law 33 was approved in June 2009 and in September 2011 the fortification programme was launched. The development of the programme was a long process that involved different actors and entailed a sequence of essential and interlinked activities, including:

High level advocacy: from the beginning SENAPAN, through its Technical Committee, was the main institution that took leadership and raised the awareness of national decision makers and government leaders. Advocacy activities were relevant throughout the process, and included three debates on fortification with the members of Parliament in the Comisión de Salud de la Asamblea Nacional de Diputados (Health Commission of National Assembly).

Capacity building: technical consultations, meetings, training sessions, seminars, conferences, South-to-South mission (Box 3) and other knowledge transfer and technical assistance activities were provided to representatives of public institutions, the private sector and NGOs in order to strengthen local capacity in rice fortification.

Establishment of Technical Sub-committee: SENAPAN established the Technical Sub-committee by convening key entities that could help in the development and implementation of the rice fortification programme. These included the Ministry of Health, Ministry of Agriculture, Agricultural Marketing Institute, National Micronutrient Panamanian Food Safety Authority, Ministry of Commerce and Industry, Gorgas Laboratory, National Association of Rice and Millers. It also invited UN agencies such as WFP, Pan American Health Organization (PAHO) and the United Nations Food and Agriculture Organization (FAO) to advise throughout the process.

Elaboration of the rice fortification programme, including a detailed budget: based on the size of the population, the level of rice consumption and the prevalence of micronutrient deficiencies, the Technical Sub-committee with the technical support of an expert on fortification from the A2Z group (Engineering, Procurement and Construction Company) defined the formula of the premix. The Technical Sub-committee also drafted the bill and defined the implementation cost for the fortification project. Implementation costs included purchasing the premix and its distribution to milling companies, as well as conducting trainings to all personnel involved. All implementation costs were covered by SENAPAN’s budget.

2. Other five countries are: Costa Rica, Nicaragua, Papua New Guinea, Philippines and United States
Mission to Costa Rica

A technical mission composed of 15 officials of involved Panamanian governmental institutions, as well as some entrepreneurs in the rice sector, was conducted in Costa Rica. The objective of this mission was to learn about the different steps required for rice fortification from another country’s experience. It was an opportunity to become familiar with the policies and strategies required for rice fortification, as well as techniques, regulations and standards. The mission also gave participants a chance to better understand their role in the implementation of rice fortification.
WFP’s main role in the programme

Due to the change of government, WFP worked closely with SENAPAN over four years, in particular with three different Secretaries. This was fundamental, because government officials valued WFP’s technical capacity and its consistency in supporting government despite changing administrations. Therefore, they officially invited WFP to join the Technical Sub-Committee for rice fortification.

WFP supported the government in the development of the National Food and Nutrition Security Plan 2009–2015, Prevention and Control of Micronutrient Deficiencies Plan 2008–2015 and National Plan to Fight against Child Undernutrition 2008–2015. As an active member of the Technical Sub-Committee for Rice Fortification, WFP staff regularly provided technical assistance to the government throughout the process leading up to the approval of the rice fortification law. In addition to drawing on their expertise, WFP sourced an international expert on fortification who acted as an advisor to the programme.

In particular:

WFP, with technical support from A2Z, provided support in drafting the law and defining the technical aspects of the programme.

WFP supported SENEPAN in all key advisory activities, including at three debates with the deputies of the National Assembly, at which WFP presented the benefits of the fortification strategy.

WFP, in collaboration with the expert from A2Z, assisted the government in engaging with the rice sector over concerns about additional costs that the rice sector would need to address.

Through the use of different learning tools, WFP strengthened the capacity of key actors in the rice fortification programme, including representatives from government counterparts, the private sector and NGOs. For example, the Secretary of SENAPAN was invited to attend food and nutrition conferences and seminars in Mexico, Spain and Chile. These learning opportunities proved to be valuable not only for expanding her understanding of the strategies for combatting malnutrition, but also for deepening her commitment to improving food security and nutrition in Panama.

Lessons learned from the Panama experience

It is crucial to identify and work closely and consistently with the national champions for rice fortification, as they influence national decision-makers.

Given the reality of changing administrations, it is important to build relationships with new government officials, and provide them with information and training in order to maintain momentum for fortification.

It is necessary to strengthen the capacity of SENEPAN and other highest authorities on fortification, in order to increase their interest, and therefore have fortification on the national agenda.

It is fundamental to increase awareness of the private sector and involve it as key actor, in order to obtain the buy-in from rice producers and ensure the success of the project.

It may be opportune to have financial contributions from, not only the government but other actors involved, such as rice millers responsible for purchasing the premix. This would represent an additional sign of commitment from all key actors, and could ensure sustainability of the programme.
In Ecuador, under the Plan Nacional del Buen Vivir (2013-2017) and in alignment with national priorities, local governments partner with WFP to adopt a combination of diverse but inter-linked nutrition-sensitive programming along the value chain, in order to address different context needs.

In particular, WFP’s efforts aim at strengthening local capacity to increase the dietary diversity of Colombian refugees and vulnerable Ecuadorians, who are both excluded from the government cash transfer programme, and therefore reduce tensions between these two target groups. Additionally, within the framework of a value chain approach, the programmes stimulate the local economy and enhances the livelihoods of smallholder farmers.

Amongst different activities, WFP supports the provision of conditional vouchers, redeemable with pre-specified locally produced fruit, vegetables, dairy products and other nutritious foods. This is complemented with a strong behaviour change communication (BCC) strategy, and a capacity building component for project participants, vendors, smallholder farmers as well as government and programme staff. In addition, WFP has contributed to the development of a robust electronic monitoring and evaluation platform, which shows the impact of the programme on dietary diversity.

**ACKNOWLEDGMENTS**

Pablo Jurado, Governmental authority of the Provincial Government of Imbabura

Tania Endara, General Manager of the Patronato de Acción Social de la Prefectura de Imbabura

Celina Morales, Rector of the Educative Unit, Imbaya

Alexandra Bejarano, President of the Tierra del Sol Association

Delia Toapanta, President of the Plaza Sarance Association

Makipurashpa Kawsay, Producers Association
Country context

Ecuador is the fourth-smallest country in Latin America with approximately 14 million inhabitants, 67 percent of whom live in urban areas. It is a country of great social, cultural and geographical diversity. This is reflected in the country's demographics, which include Spanish descendants, several indigenous groups and Afro-Ecuadorians. It is a country prone to natural disasters such as volcanic eruptions, floods and earthquakes, and its fragile and diverse eco-systems are highly susceptible to climate change and climate variability.

Ecuador is divided into regions, provinces, cantons and rural parishes, which are ruled by decentralized institutions with defined political, administrative and financial autonomy (Decentralized Autonomous Governments-GADs).

Refugee situation: Ecuador receives more refugees than any other country in South America. Each month, approximately 950 Colombian refugees cross the border into Ecuador, mostly fleeing ongoing conflict and violence. The border region receiving these refugees is topographically diverse, however tension between incoming Colombians and Ecuadorians is common in all regions due to competition for jobs in resource-limited areas; the perception that Colombian refugees receive more aid and assistance than vulnerable Ecuadorians; and the belief that Colombians are source of violence and delinquency. Despite their legal recognition, it is widely believed that 30 percent of the Colombian population fleeing to Ecuador is invisible and unregistered.

Economic and social inequalities: Ecuador is categorized as a MIC by the International Monetary Fund. The Gini Coefficient was 0.45 in 2015. However, inequality and exclusion continue to dominate social problems despite progress over the last few years. Over 38 percent of Ecuadorian households live in poverty and have difficulties meeting their basic needs. Disparities between indigenous and other Ecuadorians remain entrenched. Indigenous children and adolescents are widely engaged in some form of labour: 29 percent compared to 8.6 percent nationally. Marginalized populations face poor access to basic health and social services. Skilled health personnel attend only 75 percent of births.

Women’s situation: According to the National Institute of Statistics and Censuses, six out of ten women have experienced gender-based violence including physiological, physical, cultural or sexual. Similar to other countries in Latin America, women shoulder a double-burden of work, with rural women working an average 60 hours a week, versus the 23 hours that rural men work.

Food and nutrition situation: Ecuador is self-sufficient in food commodities, producing an array of grains, fruit and vegetables. However, inherent social inequalities affect nutritional security and reinforce unequal access to and distribution of food, as well as quality and stability of consumption. Malnutrition is still a major public health issue: chronic malnutrition in children under 5 is 25.3 percent, reaching 35 percent along border provinces. Despite its relatively high per capita income, levels of anaemia in Ecuador are the highest in the Latin America region (63.9 percent of children under 1 year of age). Anaemia is related to poor dietary diversity, with children and adults consuming large quantities of carbohydrate-rich foods and low quantities of animal-source foods protein. In addition, parasites are a recurring problem due to poor sanitary conditions and lack of access to clean water. Ecuador has also seen a recent increase in obesity. This “double burden” of malnutrition is the result of various factors. Rapid urbanization and the adoption of diets high in refined carbohydrates, saturated fats and sugars, combined with a more sedentary lifestyle are commonly cited as major contributors to the increase in overweight and chronic diseases. Cultural factors, perceptions and beliefs about different food types also play a significant role.

National efforts to address malnutrition

In 2008, Ecuador’s current government ratified the new Constitution, which recognized human rights, the rights of nature, a philosophy of good living and equitable wealth distribution. The Constitution places great emphasis on food, nutrition, energy, environment and territorial security, as well as regional and global integration. Food sovereignty is considered an integral part of national security. For this reason, even social programmes focus on the empowerment of local producers and supply chain enhancement. In addition, the Constitution recognizes and supports the rights of refugees.
Ecuador’s Plan Nacional del Buen Vivir 2013-2017 (National Plan for Good Living) promotes territorial and diversified approaches by incorporating provincial plans in the country’s overall development strategy. With the Plan Nacional del Buen Vivir, the government of Ecuador aims to eradicate chronic malnutrition among children under two years old, and to reverse the trend of obesity and overweight in school-age children. It recognizes the importance of adopting, from a young age, sound dietary practices and healthy habits to ensure appropriate physical and cognitive development. It also stresses the importance of small producers and diversification in local production to ensure food sovereignty, food and nutrition security and sustainable development.

As part of a comprehensive Social Protection Programme developed by the Ministry of Social and Economic Inclusion, the government provides conditional voucher transfers to female heads of households, and non-conditional cash transfers to senior citizens and people with disabilities (Programa Bono de Desarrollo Humano). In particular, the provision of vouchers to women is conditional to school attendance for children and medical check-ups for children and pregnant women. Refugees do not have access to this important social protection programme.

Three transfer mechanisms (food, cash, and vouchers) were compared in order to assess how each improved access to food and dietary diversity. The most cost-effective strategy for the local context were vouchers with an additional strong BCC component.

Since 2011, WFP has supported the government in addressing the increasingly complex dynamics of the refugee situation, as requested by the Ministry of Foreign Affairs and Human Mobility.

During 2011-2014, WFP changed its operating strategy in Ecuador from a food- to voucher-based assistance programme. This allows participants to access to fresh products from eight different nutritious food groups, including fruit, vegetables, meat and dairy products.

WFP is now responsible for the implementation of nutrition-sensitive programming to increase access to, and promote consumption of, diversified diets among vulnerable populations.
**Collaboration between WFP and the Government**

WFP seeks to support national frameworks and policies while working at local levels through specific agreements with municipal and provincial governments. This strategy ensures an implementation approach that is both sustainable and targeted to the particularities of each locality.

Through the combination of different nutrition-sensitive activities, WFP supports local capacities to improve dietary diversity and promote livelihood solutions for Colombian refugees, as well as the host populations in six provinces with the highest concentration of Colombian refugees (Carchi, Sucumbios, Esmeralda, Imbabura, Pichincha and Santo Domingo). WFP support contributes to the local efforts to reduce tensions between Colombian refugees and Ecuadorian communities, while promoting women’s empowerment. This programme is implemented in close collaboration with UNHCR, and with the assistance of HIAS, an international non-governmental organization.

**Integrated nutrition-sensitive interventions**

Interventions are planned jointly with communities, in line with GADs, partner and WFP capacities, and include:

**Distribution of conditional electronic vouchers:** to newly arrived Colombians, in order to mitigate initial vulnerabilities. This acts as an incentive for asylum seekers to officially register in Ecuador. The value of the transfer is US$20 per individual per month, and is provided for a maximum period of one year. Other partners offer all registered refugees a broader package of care, including legal, psycho-social and employment support;

To equally vulnerable Colombians and Ecuadorians, to avoid exacerbating tensions and to promote integration. The transfer value is US$10 per individual per month and is provided for up to one year.

The vouchers are distributed directly by WFP or cooperating partners at community level in the northern border area. They can be used only to purchase fruit, vegetables, dairy products and other nutritious foods, most of which are locally produced. Monthly voucher recharge is conditional on participation in at least one training per month covering different topics, mainly nutrition and gender issues.

**School-based activities:** Schools are one entry point for community-based activities, including the provision of locally grown foods. Activities also include the implementation of school gardens, school bullying prevention programmes, deworming interventions, and nutrition trainings complemented with topics such as gender equality, integration and tolerance.

**Empowerment of women**

Considering the context of women in Ecuador, one of the main objectives of the programme is to empower women and increase their decision making power. Women refugees account for more than 50 percent of programme beneficiaries, and approximately 56 percent of smallholder farmers involved.

Monitoring activities show that women in smallholder farmers’ associations who receive extra income through WFP programmes have greater independence and are able to invest more in their children.

Results of the above mentioned IFPRI study show that the use of vouchers enhances women’s decision making ability, and participation in the programme decreased gender-based violence by between 38 and 43 percent.
**BCC strategy**: an IFPRI cost effectiveness study revealed that food and nutrition trainings and education sessions as part of a comprehensive BCC strategy were important for changing dietary habits and increasing dietary diversity. WFP partners with GADs and HIAS staff to implement the communication activities needed to affect the behavior of beneficiaries and other key players.

Family-focused training (a series of training modules) is provided by WFP and partners in order to promote local consumption of nutritious foods, healthier and more balanced diets, sound child care practices, gender violence sensitization, environmental awareness and a variety of other topics. Trainings are dynamic and participative and often include theatre, games, cooking demonstrations and taste tests. Differences in language are taken into account and used as an integration tool. Key nutrition messages are also provided to beneficiaries at shops, schools and voucher distribution sites.

Training on eco-friendly production techniques, accounting, money management and business skills is provided to smallholder farmers’ associations. Sessions on how to participate in formal markets are also included in the training packages.

Training on the importance of dietary diversity and how to increase it through the selection of diversified food items is provided to involved staff (e.g. school staff and vendors) to build their capacity to be more supportive and engaged in the programme.

**Linking local food production and supply to vulnerable populations**: this approach not only helps diversify diets and empower families to make better choices regarding their eating habits, but also stimulates local economies and improve the livelihoods of smallholder farmers, many of whom are women (Box 2). For example, in Carchi and Imbabura Provinces smallholder farmers’ associations are engaged to provide fruit and vegetables to schools.

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**FIGURE 1**

**ROLES & RESPONSIBILITIES**

- **GADs**
  - Coordination for implementation
  - Identification of key actors, including local producers
  - Payments to small farmers
  - Coordination with national government

- **World Food Programme**
  - Support the implementation
  - TA and oversight in the supply chain and use of vouchers
  - Build capacity of and transfer knowledge at different levels
  - Facilitate linkages between food production and supply to vulnerable groups

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Local shops sell fruit and vegetables grown by smallholder farmers’ association members to programme beneficiaries and the general public. In Sucumbíos, the main supermarket chain in the capital city supplies fresh fruit and vegetables provided by vendors at the town market.

Partnership between WFP and GADs

GADs represent an important partner of WFP. GADs and WFP work together in the design of an appropriate package of programmes, by combining local priorities with the comparative advantages of WFP in food and nutrition security solutions. Activities are implemented jointly and costs are shared. This is facilitated by WFP’s local presence in the provinces, which allows key interactions with local authorities, and strengthens WFP’s existing partnership with other players.

A Comprehensive monitoring strategy to improve programme efficiency

Working with contractors, WFP developed an electronic computer platform to support monitoring and evaluation activities: the System Monitoring and Reviewing Transfers (SMART). SMART allows staff to carry out targeting processes, register beneficiaries, record food purchases, and analyse participants’ food preference and consumption patterns over time. Each project participant receives a card with a unique barcode that is registered in the database of beneficiaries via SMART. WFP and trained partner staff use barcode readers connected to computers to track beneficiary participation in training sessions, as well as purchases. WFP staff can charge the beneficiary cards with the assigned value according to the project in which the family participates, and the number of family members. In this way, the card is converted into voucher, the value of which can be exchanged for purchases at the point-of-sale. Food items are also identified with barcodes and at the time of purchase, the exact food items purchased by each project participant are included in the SMART database.

The interconnectivity of SMART allows WFP and partners to evaluate programme coverage and participation, and measure the impact of training and sensitization activities on the selection of diversified food items. In fact, by giving participants the opportunity to select foods at predefined stores, WFP is able to monitor gradual changes in families’ purchasing patterns. SMART also has the capacity to generate reports, which in turn inform programming decisions and facilitate fund transfers. WFP staff, local and provincial government, point-of-sale vendors and HIAS are all trained on, and regularly use, the portion of the system that correspond to their activities.

WFP is also monitoring the proportion of children aged 6-23 months who consumed a Minimum Acceptable Diet (MAD) (besides breast milk). Baseline information gathered in early 2015 in families entering the programme found that 41 percent of children 6-23 months did not have an acceptable diet. At the end of 2016, the impact of the programme on MAD will be assessed. This allows WFP to better understand intra-house food distribution, and define the gaps in child feeding practices. This will inform programme and training design.

This monitoring strategy is supported by a structured feedback mechanism that includes home visits, personal interviews and suggestion boxes to ensure that feedback from participants is collected and used for improving the programmes.

8. Government contribution is 23 percent higher than WFP’s (Annual Operational Plan 2014)
9. Evaluation of assistance project for refugees, December 2014
Best practices from the Ecuador model

The experience in Ecuador represents creative and innovative thinking on how the combination and integration of different, and typically separate, nutrition-sensitive interventions can impact the dietary diversity of vulnerable populations. WFP and local GADs jointly partner in the design and implementation of tailored nutrition-sensitive packages of interventions.

Listening to project participants’ suggestions increases their sense of dignity as well as their wish to continue participating. This also leads to improvements in programme design. For example, based on participants’ suggestions, small shops progressively replaced large supermarkets as points-of-sale for voucher users. These shops offer competitive prices as well as fresh and high-quality products.

The comprehensive and varied communication strategy adopted for the project was key to ensure that consistent messages were provided at all levels and across all actors involved. Results from the study showed that these communication efforts had a positive impact on the dietary diversity of vulnerable populations.

Technology can be used in multiple ways to improve programme efficiency: the SMART system allows WFP and partners to evaluate the impact of the programme on households’ dietary diversity and then inform implementation strategy as needed.

By partnering with smallholder farmer associations, WFP assists producers in increasing and diversifying their harvest with the products the programme requires. This also minimizes transportation, storage and distribution costs, and also means that farmers can achieve greater bargaining power by working together. With WFP’s local purchase model, small-scale farmers have gained access to new markets and, therefore, a more stable income.

Finding innovative ways of attracting participants’ interest during trainings has been a key factor in changing dietary habits. Different approaches, such as theatre, games and food tastings have been introduced to gain and maintain participants’ attention. Quizzes and cooking activities that imitate popular TV shows are particularly successful methods.

Lessons learned from the Ecuador experience

Establishing a strong local presence promotes a relationship of trust between WFP and local authorities, increases credibility to advocate the goals of the programmes and supports institutional receptiveness to proposed activities. However, having WFP present in the provinces also increases programmatic expenses.

The unique geographic characteristics of each province require programmatic adaptations for feasibility, while continuing to reach the same objectives.

The SMART system has strengthened ties between WFP and partners, such as local government and NGOs, by giving everyone access to the same information. This results in a more cohesive team, and contributes to improving the quality of services provided to project participants.

Results of the programme

Figure 2 shows how the combination of different interventions provided to project participants, including the training and sensitization activities, have improved their capacity to prioritize nutritious and healthy food. In particular, the graph compares the weekly consumption of different food groups at the start of the programme and one year afterwards.

An evaluation on the impact of the project in the refugee’s context conducted by WFP in 2012 and 2013 revealed that:

In 2012, families who received WFP assistance for at least six months consumed foods from seven out of ten food groups compared to only four food groups before programme implementation.

In 2013, families who received WFP assistance for at least six months consumed food from eight out of ten food groups.

In 2014, 98 percent of families who received 12 months of food assistance and nutrition training improved their diets as they consumed more food groups weekly, including meats, dairy products, fruit and vegetables.
The Guatemala experience represents a clear example of how WFP can engage with and advise government actors in the design and implementation of stunting prevention interventions, and how it can leverage the achievements in one department to other vulnerable areas.

In line with the national plan Pacto Hambre Cero (Zero Hunger Pact), WFP in Guatemala supports the government with a combination of different nutrition-specific actions. These are aimed at improving complementary feeding in children aged 6-23 months, and at effectively addressing the nutrient needs of children and PLW during the 1000 day window of opportunity.

Since March 2014, WFP has supported the government in the implementation of a comprehensive model in the Department of Totonicapán. This includes: (i) an educational and behaviour change component to improve IYCF practices and maternal nutrition through counselling at health facility and community levels; (ii) distribution of a locally produced specialized nutritious food (SNF), called Mi Comidita; (iii) a strong capacity development component aimed at supporting health staff at national and district levels to address stunting (including the use of analysis tools to better understand the nutritional context) and; (iv) a robust monitoring and evaluation component aimed at generating evidence for future replication of the model and for programmatic adjustments.

The model also includes operational research. This compares the health and nutritional impact of two SNFs—Mi Comidita (Super Cereal Plus) and Vitacereal (Super Cereal) on children aged 6-23 months—and determines the impact of the education component on both their diet and their mothers’. Although awaiting final results from the operational research, WFP is already collaborating with the Ministerio de Salud Publica y Asistencia Social (MSPAS, Ministry of Public Health and Social Assistance) and the Secretaria de Seguridad Alimentaria y Nutricional (SESAN, Secretariat for Food Security and Nutrition) to scale up the model to other departments.

**ACKNOWLEDGMENTS**

Esau Guerra, Delegate for Totonicapán of the Secretary for Food and Nutritional Security (SESAN)

Monica Ramos, Nutritionist at the Secretary for Food and Nutritional Security (SESAN)

Health staff at the Ministry of Health Communitarian staff at the Ministry of Health and other institutions of Totonicapán
Country context

The Republic of Guatemala is a Central American country. With an estimated population of 15.8 million, it is the most populous state in Central America. It is divided into 22 departments, which are in turn made up of 334 municipalities.

Political situation: In addition to military impunity for human rights violations and other crimes, drug trafficking, corruption, and grossly inequitable distribution of resources make political and social development difficult. The recent resignation of the President of Guatemala and the new election contributed further to the political instability.

Socioeconomic situation: Guatemala is an MIC, however, it has one of the highest levels of inequity in the world. It ranks 125th of 187 countries in the humanitarian development index\(^1\). The overall poverty rate increased from 51 percent in 2006 to 59.3 percent in 2014\(^2\). The highest rates of poverty are concentrated in Alta Verapaz, Sololá and Totonicapán, with 83.1 percent, 80.9 percent and 77.5 percent respectively.

Food and nutrition situation: Food and nutrition insecurity results from a combination of factors, including poverty, inequality, poor living conditions, inadequate education and inappropriate nutrition and feeding practices\(^3\). While the prevalence of acute malnutrition is generally low at 0.7 percent, the chronic malnutrition rate amongst children aged 6-59 months is 46.5 percent nationally and exceeds 70 percent in some departments, particularly amongst rural and indigenous populations\(^4\). In the Totonicapán department, the chronic malnutrition rate in children under five is 70 percent\(^5\). This is the highest in the region and among the highest in the world. Overweight and obesity rates among women of reproductive age are high, in particular in urban areas (37.5 overweight and 20.3 percent obesity). In rural areas rates stand at 33.4 percent and 12.1 percent respectively.

Gender: Guatemala ranks 89\(^{th}\) of 142 counties in the 2014 Global Gender Gap Index, the lowest in Latin America. Although maternal mortality decreased from 153 deaths per 100,000 live births in 2000 to 140 in 2011, it remains among the highest in the region due to inequities in access to health services. In the early 2000s, one in five pregnant women had no pre-natal care at all, and half had their first pre-natal care visit during the first trimester of pregnancy.

National efforts to address malnutrition

The Strategic Plan for Food Security and Nutrition (PESAN) 2012-2016 focuses on the four dimensions of food security and nutrition: availability, accessibility, consumption and safety—with an overall emphasis on the importance of effective coordination. Operationalized as Plan del Pacto Hambre Cero, PESAN is a comprehensive governmental strategy for chronic malnutrition, acute malnutrition, micronutrient deficiency and food insecurity for children under five in the country, with an emphasis on children under two.

Plan del Pacto Hambre Cero is the political and operative realization of PESAN 2012-2016. It was launched with the objectives of: (i) reducing chronic malnutrition in children under five by 10 percent by 2015; (ii) preventing and reducing the number of deaths related to acute malnutrition among children under five and; (iii) fighting poverty and promoting development. It is a pact between all sectors of the Guatemalan State, and aims to tackle the immediate causes of hunger, as well as its structural roots. In relation to the first objective, the plan has prioritized 166 municipalities with the highest prevalence of chronic malnutrition. A series of specific actions to address chronic malnutrition during the first 1000 day window has also been identified (Box 1).

SESAN is coordinating all relevant ministries to ensure fine-tuning of respective programmes into a more coordinated approach.

Guatemala was one of the first 22 countries to join the Scaling Up Nutrition movement (SUN) in 2011. It has become an active and committed member since then. Many of the recommendations made by SUN were incorporated into the Plan del Pacto Hambre Cero.

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4. ENSMI (Mother and Child National Health Survey, 2015)
The 10 main actions to prevent chronic malnutrition during the first 1000 day window

Plan del Pacto Hambre Cero focuses on five direct components6 to address chronic malnutrition: (i) provision of basic services in health and nutrition; (ii) promotion of exclusive breastfeeding and complementary feeding; (iii) food and nutrition education; (iv) provision of fortified food (including supplementary fortified foods) and; (v) social protection measures for the most vulnerable (food-for-work, food assistance, public canteens etc.).

The Guatemala model for the prevention of chronic malnutrition in Totonicapán

WFP collaborated with SESAN and MSPAS to design a model to prevent chronic malnutrition in Guatemala, "Proyecto de fortalecimiento de Capacidades en Nutrición para Disminuir la Desnutrición crónica en Guatemala" (Project to strengthen national capacity to reduce chronic malnutrition in Guatemala). The model was successfully launched in eight municipalities in Totonicapán in March 2014.7

The project mainly aims to address components 2 and 4 of the Plan del Pacto Hambre Cero through a combination of four actions:

1. Improving maternal and child feeding and care practices.
2. Distribution of a locally produced SNF, Mi Comidita to children aged 6-23 months.
3. Strengthening national capacity to address chronic malnutrition.
4. Strengthening M&E.

SESAN and MSPAS are the main national counterparts in the implementation of the model: SESAN is the coordinating body of the Plan del Pacto Hambre Cero, while MSPAS partners with WFP in the distribution of Mi Comidita and in monitoring and evaluation activities.

Improving maternal and child feeding practices through community-based education

Female volunteers, called Madres Consejeras (counselling mothers,) are trained on counselling, nutrition and care practices.

They are responsible for providing information and support to mothers in the community. In particular the Madres Consejeras:

1. Facilitate mother-to-mother support groups to allow mothers of children under two and lactating women to share their experience and to learn from each other.
2. Provide individual counselling to mothers in sites mostly frequented by mothers (e.g. markets, churches, river banks etc.).
3. Conduct home visits to mothers and children during key moments, such as the beginning of pregnancy, following delivery to ensure exclusive breastfeeding, at six months when complementary foods are introduced, and when children are malnourished or ill.

Several materials have been developed to support Madres Consejeras in their work. These include flyers for mothers of children aged 6-23 months benefiting from Mi Comidita; posters to show appropriate ways of preparing Mi Comidita; as well as a collection of recipes Additionally, mothers are provided with a basket containing kitchen utensils such as a cooking pot, pallet, measuring cup, small dish and teaspoon in order to prepare Mi Comidita in a hygienic and appropriate manner.

6. Direct components are correlated to and have an immediate effect on the identified country situation.
7. Totonicapán is one of the departments prioritized in the Plan del Pacto Hambre Cero because of its high stunting rate.
Distribution of a locally produced SNF food: WFP has developed local capacity to produce SNF in line with quality and safety standards. WFP supported the government in the development of Vitacereal, a locally produced Super Cereal. However, because Vitacereal does not include dried skimmed milk powder, it is only considered appropriate for pregnant and lactating women but not for children. In order to contribute to healthy growth and child development, WFP advocated for the development of a locally produced SNF (Super Cereal Plus) that specifically addresses children’s needs.

To increase the acceptability of the product with both government officials and beneficiaries, the name Super Cereal Plus was changed to “Mi Comidita” in Guatemala. All local product labels and educational pamphlets have been adjusted accordingly. Focus groups were conducted with 100 mothers in eight communities of every municipality in Totonicapán to gain a consensus on the name of the SNF and the illustration on the packaging.

The role of distributing SNF is shared between WFP and MSPAS. In particular, WFP is responsible for delivering Mi Comidita to health centres and posts in Totonicapán, according to the number of beneficiaries served in each site. In turn, personnel at health centres and posts dispense Mi Comidita to beneficiaries. Each family with a child of aged 6-23 months is entitled to two packages per child, per month (2 kilos).

WFP has three main goals for the local production of SNF: 1) to enable Latin American countries to develop their own capacity to produce SNF, thereby increasing SNF availability for national nutrition programmes; 2) to reduce costs through a simplified supply chain and; 3) to support smallholder farmers through procurement of raw materials through the Purchase for Progress (P4P) programme.

Strengthening national capacity to address chronic malnutrition: WFP has worked closely with the Guatemalan government from the planning phase all the way through to the distribution of SNFs to beneficiaries. This allows WFP to transfer knowledge to national counterparts (including MSPAS) in the area of complementary feeding, logistics, and local production of SNFs.

Additionally, WFP supports national government to gain an improved understanding of the nutrient gap in the country through collection of consumption data at national level and nutrition situation analyses. Results are used to identify strategies to fill the nutrient gap.

Strengthening monitoring and evaluation: WFP has worked with INCAP (Institute of Nutrition of Central America and Panama) and the Universidad Autónoma de Mexico to ensure that qualitative data are collected and analysed for the identification of challenges and bottlenecks. Monitoring and evaluation activities consist of a baseline, quarterly, mid-term and final surveys. Results from each survey are shared with local authorities at department and district level to adjust programmes accordingly.

As part of monitoring and evaluation activities, operational research was designed to compare the impact on the health and nutrition status of children of two different programme packages: Mi Comidita + BCC vs Vitacereal + BCC (Box 3).

Limitations in the implementation of the activities

One of the main challenges faced in the implementation of the programme is the reduction of funding allocated by MSPAS to the “Extensión de cobertura” programme. This has led to the closure of several health posts, and left almost 50 percent of the population without basic health services—with consequent impacts on the distribution of Mi Comidita to beneficiaries. The political instability also impacted beneficiary access to health services.

In 2015, MSPAS started a process to substitute “Extensión de cobertura” and has reorganized the districts, dividing them in territories and sectors which will be covered by community-based services, including door-to-door. This new structure will allow the creation of new distribution points for Mi Comidita in order to reach rural and remote communities. However, the new structure is not yet completely functional in Totonicapán.

Overview of the national programme

Since 2012, in line with the Plan del Pacto Hambre Cero, and as part of the national strategy to improve complementary feeding practices, MSPAS and SESAN have been responsible for providing an SNF, called Vitacereal, to PLW and children aged 6-23 months in 166 targeted municipalities. WFP has complemented and supported the national efforts in eight municipalities in Totonicapán.

8. The inclusion of milk powder as an ingredient improves the amino acid profile (has a high Protein Digestibility Corrected Amino Acid Score) and it is a good contributor of bioavailable calcium and potassium. In addition, it has a specific stimulating effect on linear growth and insulin growth factor 1 (IGF-1) levels in the child and does not contain anti-nutrients.

9. In 1997, with support from the highest levels of government, MSPAS established the Expansion of Coverage Programme (Programa de Extensión de Cobertura, PEC). Aside from increasing coverage of health and nutrition services to poor rural areas, PEC has been credited with strengthening the primary health care system in various ways, including (a) the introduction of planning and monitoring tools; (b) improvements in administrative efficiency, particularly in the case of NGOs that were hired as service administrators of mobile health teams; and (c) the use of alternative personnel to address staffing constraints, that is, having auxiliary nurses instead of being dependent on doctors.
WFP’s main role in the programme

Due to enduring and close collaboration, WFP has become a well-respected partner of the government of Guatemala in its fight against chronic malnutrition. WFP’s technical support was requested by the government during the development of national strategies, including Plan del Pacto Hambre Cero, and the organisation later played a key role in designing “Proyecto de fortalecimiento de Capacidades en Nutrición para Disminuir la Desnutrición crónica en Guatemala”.

WFP and MSPAS share costs and responsibilities in the procurement and distribution of SNF, as well as in data collection.

Lesson learned from the Guatemala experience

Partnership between WFP, government and the private sector is crucial to ensure that the local production of SNF is adequate and satisfies quality standards. For example, government plays a crucial role in expanding demand for locally produced SNF with an improved nutrient profile. At the same time, WFP plays a key role in generating the evidence and making the case for the importance of providing access to a nutrient dense complementary food for young children, especially in areas with a high burden of stunting and micronutrient deficiencies.

A strong monitoring and evaluation system is pivotal to guarantee that bottlenecks are timely identified and therefore implementation activities are adjusted accordingly.

The adoption of adequate feeding practices, including appropriate preparation and consumption of new products, involves influencing behaviour, and the acceptance of change. There is a natural resistance to change for several reasons, including cultural and social. The involvement of the community in the delivery of a comprehensive and intensive education and BCC package facilitates reach and follow up of beneficiaries, and therefore increases knowledge of mothers regarding nutrition and health related topics (Box 4).

It is crucial to strengthen the knowledge and capacity of all actors involved in the programme to ensure consistency and harmonization in the delivery of the messages to beneficiaries. 11

Involvement of local authorities, is essential to achieve comprehensive programmes. In particular, this includes local representatives and actors at SESAN and MSPAS, as well as the Dirección de Área de salud Totonicapán ((DAST) - the Health Area of Totonicapán- as associates in the distribution of SNF, and the work with educators and Madres Consejeras.

WFP is also responsible for:

Providing regular support to MSPAS and SESAN in identifying problems and strengthening the model accordingly.

Organizing and conducting training to MSPAS, NGO staff as well as Madres Consejeras, to ensure that consistent nutrition and health messages are delivered to beneficiaries. 10.

Helping to engage with the private sector, and providing technical support in local production of SNFs.

Mi Comidita

A locally produced Super Cereal Plus, Mi Comidita contains corn, shelled soybeans, powdered skimmed milk, sugar, vegetable oil and a mixture of vitamins and minerals. Milk powder improves the amino acids profile and provides calcium and potassium.

MSPAS Programme

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10. A local NGO (WFP cooperating partner) works inside the MoH at district and community level and train volunteers and community workers as Madres Consejeras.
**Strong monitoring and evaluation for programme improvement and better nutrition outcomes**

A quasi-experimental study was designed with the technical support of INCAp in order to determine the impact of the project after 18 months. Two study groups were compared: (i) the intervention group composed of 252 children aged 6-23 months from the eight municipalities of Totonicapán receiving Mi Comidita together with an education component through the Madres Consejeras and; (ii) a comparison group composed of 249 children aged 6-23 months from four municipalities of Sololá receiving Vitacereal and a similar education component. MSPAS is the implementing partner responsible for the distribution of SNF in both study groups.

From February to March 2014, INCAP conducted a baseline study in order to collect information before the start of the intervention. INCAP also conducted monitoring activities every three months in order to determine strengths and challenges of the project, and therefore modify its implementation accordingly. A final evaluation was conducted in October, 18 months after the start of the intervention.

An increase of knowledge and awareness of mothers benefiting from the education component in relation to the identification of malnutrition in children, exclusive breastfeeding, hygiene and use and preparation of Mi Comidita was shown in both study groups.11

The impact analysis from the Institute of Public Heath from Mexico (INSP) revealed a protective effect of Mi Comidita. This established that the deterioration of length was not reversed over time, but instead helped to slightly reduce deterioration compared with the control group.

Also, the Totonicapan Case Study established that stunting reduction in Guatemala has been slow, achieving, on average, no more than 0.5 percent per year in the last 15 years. However, Totonicapan reduced its stunting prevalence by 12 percent.

**Fostering a freater understanding of nutrient gaps during the first 1000 days for improved strategies to address malnutrition**

A Nutrient Gap study and cost of the diet analysis of pregnant and lactating women and children 6-23 months of age was implemented and based on a 24 hr. recall survey. The survey included food weight and specifies the types and amounts of food consumed by children under two and PLW, it also included collecting the price of commonly used foods at local markets. The study was implemented in 5 regions of the country as a joint effort among SESAN, WFP, CRS, UNICEF and INCAP. Therefore, it is statistically representative at both national and regional level.

This nutrient gap study, provides, for the first time in Guatemala, valuable information on dietary patterns and consumption of the target population of the thousand days' interventions. It indicates there are significant gaps in dietary adequacy of essential nutrients such as calcium, folic acid, zinc, iron, and also in energy and protein, both in PLW and children.

Additional analysis were requested to determine the quality of protein in the reported diets.

The study provides valuable information to refine BCC messages, to orient family agriculture and to design programmes to improve quality of complementary foods through the use of micronutrient powders or specialized nutritious foods. The cost of the diet section of the report establishes the cost of the actual diet and the cost of the gap, this is valuable information for decision makers. Different intervention scenarios can be generated to deliver a differentiated solution to each region taking into account the dietary patterns and economic access of constituents.

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