



# Fill the Nutrient Gap El Salvador

## Summary Report



World Food Programme

August 2016





## Fill the Nutrient Gap Key Steps

- 1) Define Focus:** identify target groups and geographical and/or seasonal elements from stakeholder consultation and national nutrition data.
- 2) Policy Analysis:** determine if there is an enabling environment for access to and availability of nutritious foods, and identify relevant entry points and platforms for increased availability and access to nutrients.
- 3) Analysis of Nutrient Availability and Access:** analyse factors including local preferences and practices, and estimate nutrient gaps for key target groups and context-appropriate interventions to fill nutrient gaps.
- 4) Recommendations** for interventions to fill nutrient gaps, identifying roles for different sectors and stakeholders and public platforms for policy and programmes.

## Fill the Nutrient Gap in El Salvador

'Fill the Nutrient Gap' (FNG) is a situation analysis and decision-making tool developed by WFP with inputs from UC Davis, IFPRI, EPICENTRE, UNICEF, Harvard and Mahidol to identify context-specific strategies for improving nutritional intake of vulnerable populations, especially during the first 1000 days. FNG uses secondary data review and linear programming analysis to understand a country or region's nutrition situation, compare the potential impact of interventions and identify programme and policy entry points to ensure consumption of an adequately nutritious diet.

The FNG process in El Salvador began in October 2015, coinciding with the analysis phase of Cost of the Diet in the country. Key national stakeholders including government partners, UN agencies and NGOs (outlined below) were engaged to define the scope of analysis and reviewed national policy and secondary data. The results and recommendations are being used to support the redesign of the national social protection policy, identifying avenues to make it

more nutrition-sensitive.

### 1) Define Focus

The key target groups for analysis were identified in collaboration with stakeholders based on consideration of current malnutrition

### Key Target Groups



#### Children 6-23 months

- ⇒ Stunting in children under 5: 15%, decreased in past 20 years, but prevalence nearly double (Figure 1) among children in poorer and rural households
- ⇒ Anaemia: 30% among children, increase in prevalence in recent years (Figure 2)



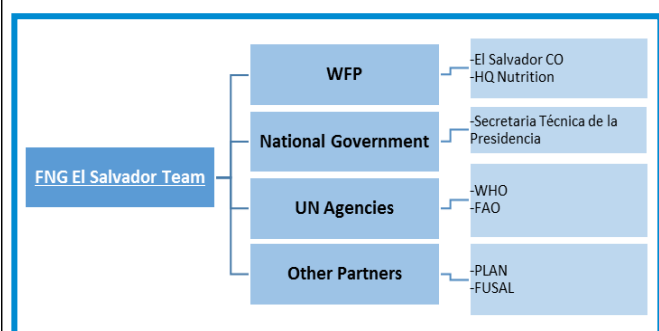
#### Pregnant and lactating women (PLW)

- ⇒ Anaemia: 28% of pregnant women and 23% of non-pregnant women (Figure 2)
- ⇒ Overweight/obesity: 66% overweight and 33% obesity among adult women
- ⇒ Other common micronutrient deficiencies include calcium and zinc



#### Adolescent girls (10-19 years)

- ⇒ Overweight/obesity: 29% among adolescents (13-15 years old)



## Stakeholder Engagement Process

### 1) DEFINE FOCUS

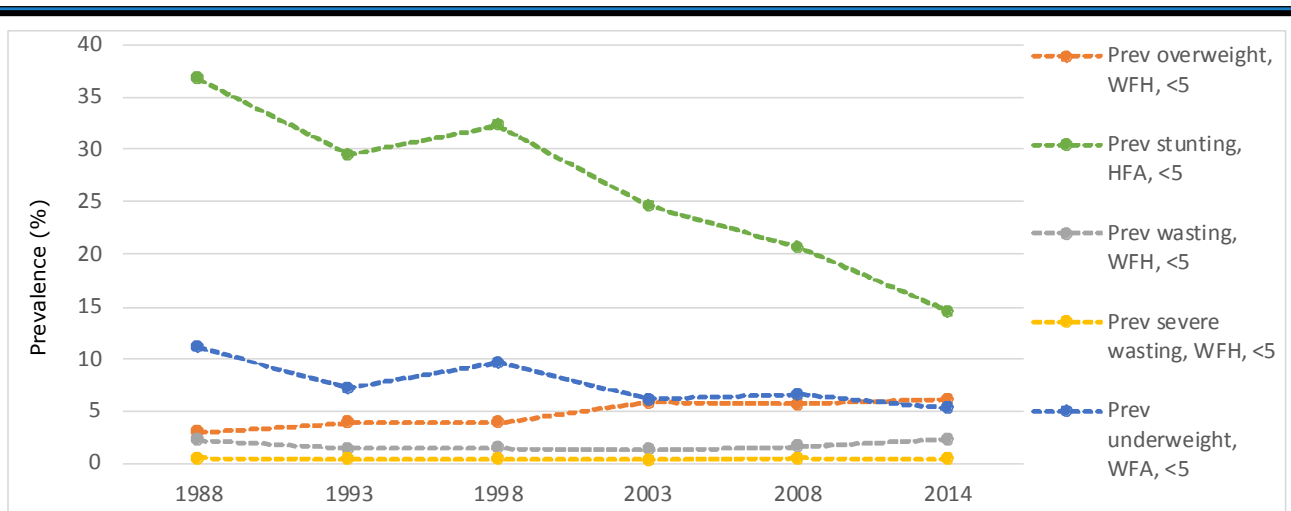
- Multi-stakeholder inception meeting
- Consensus on key target groups and level of analysis

### 2-3) ANALYSIS

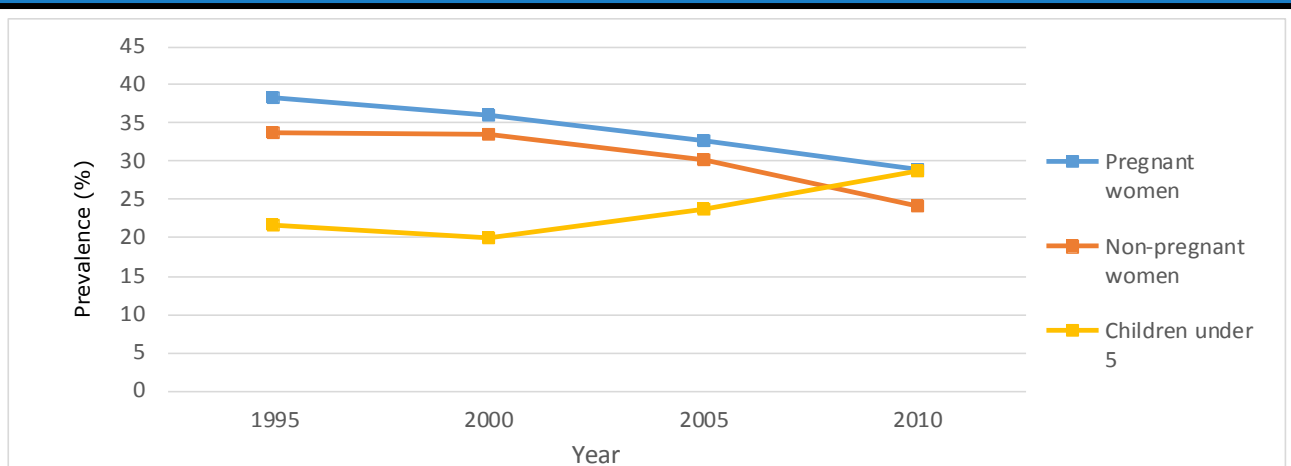
- Small follow-up stakeholder meetings
- Data compilation and analytical input
- Cost of the Diet analysis and intervention modelling

### 4) RECOMMENDATIONS

- Stakeholder dissemination
- Joint identification of potential strategies



**Figure 1: Trends in the key national nutrition indicators (1988-2015) for children under 5 years (Source: World Bank)**



**Figure 2: Anaemia prevalence trends in El Salvador (Source: World Bank)**

## 2) Policy Analysis

An enabling policy environment provides entry points for nutrition interventions and promotes eventual implementation. The current legal and policy framework on nutrition in El Salvador is fairly comprehensive and is complemented by a range of national programmes on agriculture, income generation and social protection.

Key policies and programmes by entry point are:

### National Policy and Legal Framework

- National Food Security and Nutrition Policy: approved 2011
- Bill on Food Sovereignty and Food and Nutritional Security: awaiting approval by Parliament
- Policy on the Promotion, Protection and Support of Breastfeeding (2011), Breastfeeding Promotion, Protection and Support Act (2013)
- National Health Policy 2009-2014 has food security and nutrition as a strategic pillar
- National Strategy for Infant and Young Child Nutrition (2011) is operational
- Mandatory fortification under National Strategy for the Control of Micronutrient Deficiencies:

- Salt (iodine); sugar (vitamin A); wheat flour, maize flour, pasta (iron, folic acid, B vitamins)
- Wide variation in compliance; especially low for iodized salt and French bread (iron)
- SUN movement: joined in 2012

### Fortified Complementary Foods and Specialised Nutritious Foods

- Imported specialised nutritious foods (Incaparina, Chapuditos, Cereal Fortificado) available through government programs
- Incaparina also available on the market; Super Cereal Plus sold in Super Selectos supermarkets
- High heterogeneity in nutrient content and geographic availability of different foods, linked to programmes supported by different development partners

### Social Protection

- Law of Development and Social Protection (2014) includes nutrition-sensitive programmes
- “Comunidades Solidarias”: no specific nutrition targeting, but cash transfer conditionalities include use of health services



### 3) Analysis of Nutrient Availability and Access

El Salvador is a country in the midst of a nutrition transition, and the main drivers of the nutrient gap are likely affordability and dietary habits. There is generally good availability of nutritious foods year round, with no real lean season, but because of high income inequality, a nutritious diet is unaffordable for a large proportion of the population. Dietary habits may also contribute as even non-poor households consume few fruits and vegetables, despite wide availability. More formative research and qualitative studies on bottle necks and cultural beliefs would, however, be required to reach a deeper understanding of dietary-related behaviours and inform effective behavior change communication and demand creation strategies.

#### Availability

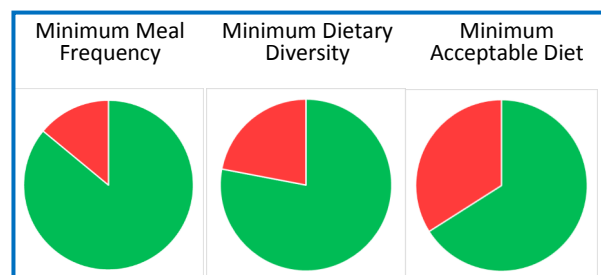
- Seasonality: El Salvador relies largely on imports for staple foods, and therefore does not experience important problems of seasonality.
- Staples: maize (tortillas), rice and red beans
- There is no local production of specialised nutritious foods, but regional production exists in Guatemala.

#### Access

- Most households have “acceptable” Food Consumption Scores, but high income inequality creates an important economic barrier to access for poorer households.
- Lack of dietary diversity and shift in dietary habits toward greater consumption of processed foods may be driven by factors including unaffordability of nutritious foods and unavailability of adequate fresh food storage.
- Access of vulnerable households has recently further decreased due to crisis such as coffee rust and El Niño-induced drought, which have reduced incomes and subsistence crop production.

#### Nutrient Intake

- Breastfeeding:
  - Exclusive breastfeeding: 47% of children under 6 months
  - Duration: 75% of children until 1 year, and 55% until 2 years of age
- Minimum Meal Frequency (86%) among young children is better than Minimum Dietary Diversity (78%); Minimum Acceptable Diet is 66%.



- Increasingly, diets are energy dense but not adequately nutrient dense; even wealthier households are not meeting recommended nutrient intakes.
- Poorer households, in particular, are less likely to purchase foods rich in iron, calcium, vitamin A, vitamin C, and riboflavin.
- For extremely poor households, cereals and sugars contribute approximately 70% of total energy intake.

#### Local Preferences and Practices

- Taboos: in some areas PLW and children under 12 months are discouraged from eating fish.
- High consumption of cheese and chocolate may be encouraged during lactation, as this is believed to increase milk production.
- Generally low knowledge of good IYCF practices
- Infants are often given maize coffee and rice water, rather than being exclusively breastfed.
- Violence may contribute to rising overweight and obesity, due to lifestyle effects such as reduction of physical activity.



### Modelling Dietary Improvement

The secondary data on availability and access, as well as actual nutrient intake and influencing cultural factors, informed affordability modelling and intervention recommendations. Results from linear programming analysis were used to examine whether optimised diets with locally available foods could meet nutrient needs for target groups.

A **Cost of the Diet (CoD)** market survey was conducted by WFP El Salvador in September 2015 in 49 municipalities within 9 departments. Analysis was conducted in zones representing: 1) emergency areas affected by coffee rust or drought, 2) areas with high rates of malnutrition, and 3) principal livelihood zones. Household composition and expenditure data was extracted from EHPM 2013.<sup>1</sup>

The CoD software calculates the lowest cost locally available diet, including typical staple foods (rice, maize and beans), that meets nutrient needs (the SNUT diet). Modelled households included a 6-8 month-old child, a 6-7 year-old child, a 14-15 year-old girl, a lactating woman, and an adult man. On average, 30% of the five-person households modelled could not afford SNUT, ranging from 44% unaffordability in Morazán (US\$225/month) to 9% in San Salvador/Santa Ana (US\$178/month). Unaffordability was generally higher in the Eastern part of the country, where households are more vulnerable to coffee rust and drought.

Four types of potential interventions to improve affordability were modelled based on the secondary data analysis, current or planned national interventions, and stakeholder suggestions:

#### Interventions Modelled



Locally available nutritious foods (voucher)



Multi-micronutrient tablets (MMT) and micronutrient powders (MNP) (in-kind)



Specialised nutritious foods (SNFs) (market, subsidy, in-kind)



Cash transfer

Food-based interventions modelled as part of the CoD analysis showed the same pattern of effectiveness across all livelihood zones and no significant regional differences with respect to limiting nutrients were found. Specialised nutritious foods were selected based on commodities that were

already locally available (on the market or through national or other programmes), or commodities that would be feasible to import.

The most effective interventions for each target group were as follows:

- **Children 6-8 months:** Of the 4 SNFs modelled, **a voucher for a daily portion of Chapuditos (fortified blended food)** was most effective, reducing the daily cost of the child's diet by 90%, from US\$0.50 to US\$0.05.
- **PLW: In-kind provision of SC+** was most effective, reducing the daily cost of the PLW's diet by 31%, from US\$1.72 to US\$1.18.
- **Adolescent girls:** Due to the high recommended intake of iron, calcium, and zinc, girls contributed the largest portion of the household cost of SNUT. **Vouchers for locally available nutritious foods (fresh fruit and eggs)** reduced the daily cost of the girl's diet by 12% (from US\$1.92 to US\$1.69), and in-kind provision of MMTs reduced the cost by 18%, to US\$1.58.

These interventions were combined to form packages, as shown on page 7. The modelled diets are theoretical and would need to be accompanied by complementary behaviour change interventions. Costs have been modelled from a household perspective. A next step would be to estimate programming costs for the non-market based options.

### 4) Recommendations

Recommendations were formulated during stakeholder discussions and informed by the secondary data analysis and Cost of the Diet modelling. They include programme and policy measures to address: 1) access, 2) availability and 3) demand for nutrients and nutritious foods. The recommended actions have the potential to increase consumption of nutrient dense foods, especially by vulnerable target groups.

#### Key Recommendations



Create demand for healthy lifestyles and dietary diversity through public and private sector initiatives

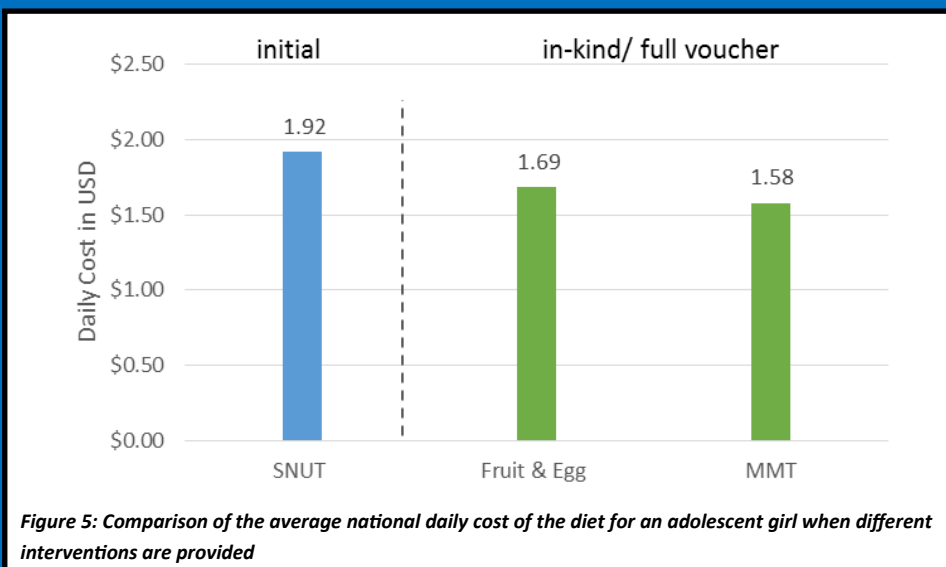
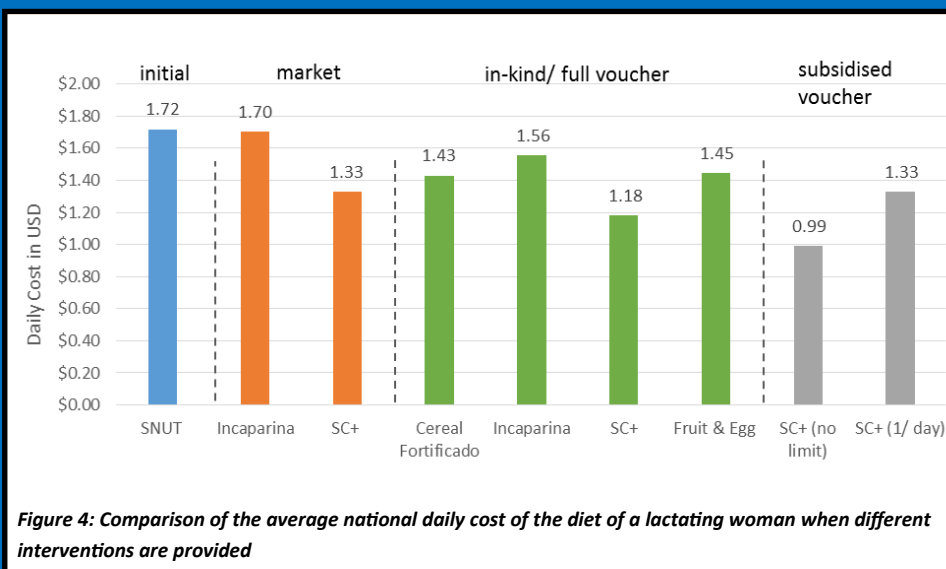
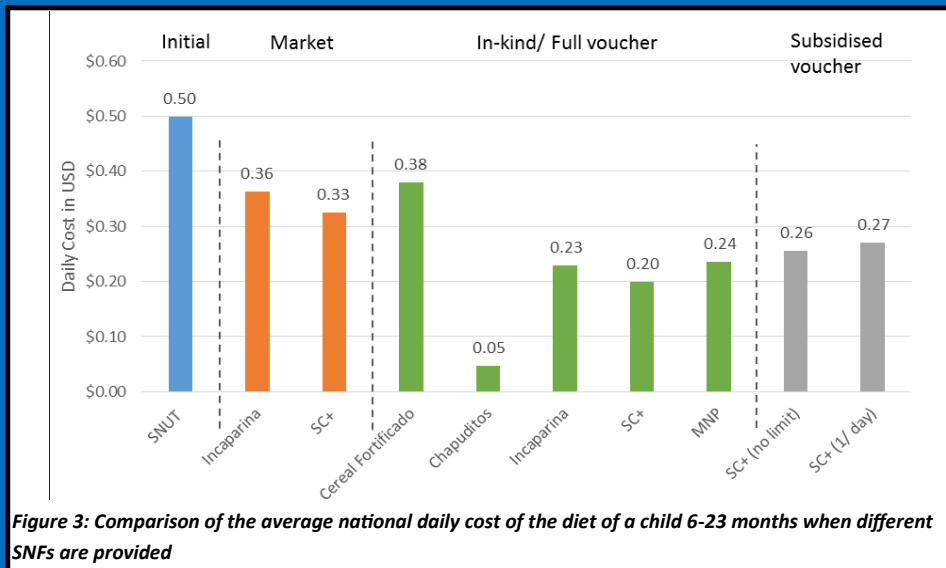


Provide a specialised nutritious food of an adequate nutrient profile through social protection programming to children under 2

Recommended interventions are presented on pages 8-9.

## Cost of the Diet Modelling

Average cost of the diet at the national level for key target groups with different interventions provided at market price, in-kind, or subsidised at 50% of market price. SNFs are provided in-kind in quantities equal to one portion per day. SC+ was modelled both at a limit of one portion per day at a subsidised cost (SC+ 1/day), or with an unlimited number of portions that could potentially meet nutrient needs at the same subsidised cost. (SC+ no limit).



# Cost of the Diet Modelling

Packages of interventions and potential effect on economic access to nutrients for key vulnerable groups

## Optimal Intervention Packages

Two packages targeting the PLW, the adolescent girl and the 6-23 month old child, were created by combining the most efficient interventions. Package 1 consisted of a daily in-kind provision of SC+ for both the PLW and the 6-23 month old child and a daily portion of an MMT for the adolescent girl, which reduced cost by 18% to \$5.31 per household per day. Package 2 consisted of a daily serving of fruit and egg to the PLW and the adolescent girl and a daily ration of Chapuditos to the child under two. This package reduced the daily cost to \$5.53, which is equivalent to a 15% decrease.

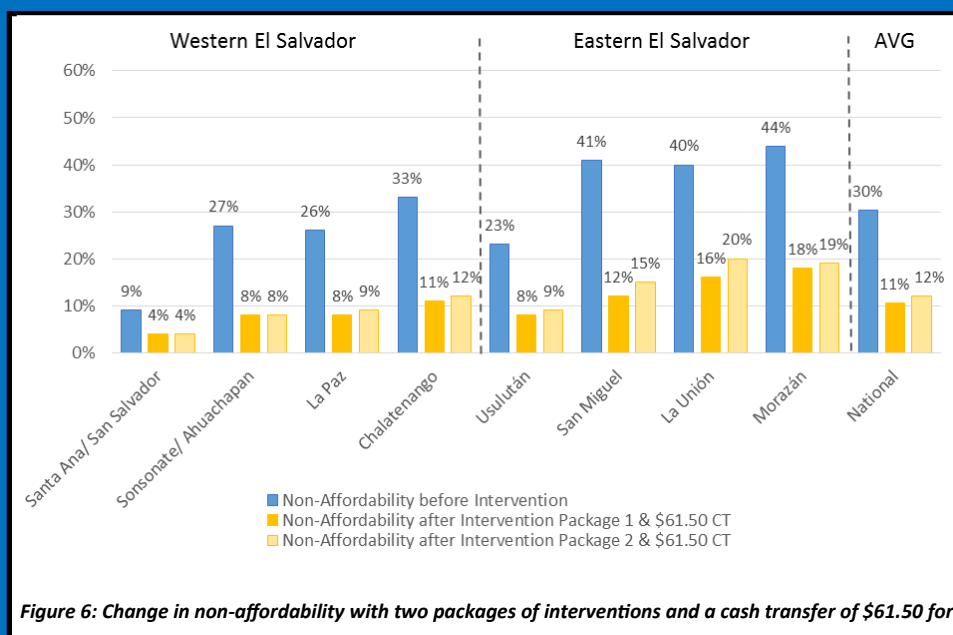


Figure 6: Change in non-affordability with two packages of interventions and a cash transfer of \$61.50 for

## Modelling Cash Transfers

The two optimal intervention packages (Package 1: SC+ & MMT/ Package 2: Fruit and Egg & Chapuditos) were then combined with a monthly cash transfer of \$61.50 to demonstrate the maximum reduction in the non-affordability of SNUT according to the model. Nationally, an average reduction in cost of 19 percentage points – or 63% – is possible for an intervention combining Package 1 with a cash transfer. The relative result of these intervention packages is similar across regions, with higher non-affordability in the Eastern regions.

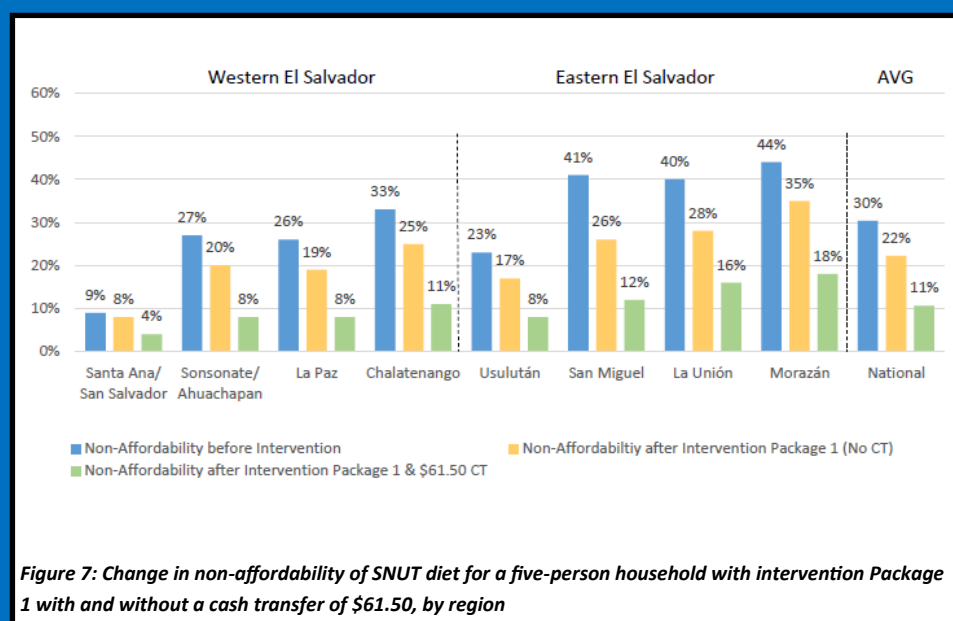


Figure 7: Change in non-affordability of SNUT diet for a five-person household with intervention Package 1 with and without a cash transfer of \$61.50, by region

## Summary of Key Recommendations (developed with stakeholders)

### *Programmatic Interventions*

#### **Target group: Children 6-23 months (and up to 5 years):**

Addressing the micronutrient deficiencies in children under five, especially those aged 6-23 months, through fortifying foods/drinks commonly consumed by this target group and/or home-fortification, in addition to efforts to increase dietary diversity and promote good IYCF practices (see demand creation point below).

In light of the key problem nutrients identified through the FNG process, re-assess the nutrient profile of the specialized nutritious food provided to children 6-23 months and PLW through the national social protection programme (see below in policy recommendations).

#### **Target groups: Pregnant and Lactating Women (PLW) and adolescent girls:**

Tailor interventions to improve micronutrient intake without doing harm on overweight and obesity, in particular for PLW and adolescent girls. For example, fortifying commonly consumed foods and/or supplementation; fresh food vouchers tailored at food rich in the key problem nutrients identified through the FNG process.

#### **Demand side interventions and SBCC:**

- Based on the identified problem nutrients of calcium and zinc for children 6-23 months, promote the consumption of calcium and zinc rich foods (milk, cheese, poultry, beef) as part of IYCF promotion and social behaviour change communication approaches, at community level and through the health system.
- Promote broader efforts (both through public and private sector) to raise demand for good nutrition, dietary diversity and healthy lifestyles at household level, to contribute to prevention of micronutrient deficiencies as well as to the increasing prevalence of overweight and obesity. Effective demand creation for healthy lifestyles, particularly among adolescent girls, will require innovative and out-of-the-box approaches, possibly linked to other non-nutrition programmes and platforms (such as life skills training, employment generation, community mobilisation, or violence prevention).
- Improve access to cold food storage at the household level (i.e. refrigeration) to potentially improve purchase and consumption of nutritious fresh foods.

#### **Supply side interventions to improve affordability and availability:**

- Improve availability of nutritious complementary foods on the market, of adequate nutrient density that meet quality and safety standards.
- Improve access to these foods among the most vulnerable, either through subsidized prices or through vouchers (through social protection platform).
- Currently programming exists that places Super Cereal Plus, a fortified supplementary food, on supermarket shelves and provides vouchers for this food through health centres. This should be scaled up further to make these foods available and accessible.
- Consider developing a logo for foods that are adequately nutritious and safe
- Stimulate private sector initiatives, also through SUN Business network as a potential platform, to improve availability of affordable nutritious fresh foods for children 6-23 months and PLW of adequate nutrient content, quality and safety
- Improve supply chain of transportation, logistic and storage at household level for commodities with higher nutrient content (e.g. sources of animal protein), to contribute to ultimately increase intake of these commodities in more remote areas.



## *Policy Interventions*

National nutrition-sensitive social protection programmes are a very promising platform to incorporate nutrition specific interventions targeted at children 6-23 months and PLW for the most vulnerable households. For example, one way would be to add vouchers for a complementary food with adequate nutrient profile (see below point on SNF) to be targeted at the most vulnerable households through the social protection programme.

- Support national government in the redesign of targeting mechanisms for social protection and social safety net programmes.
- In light of the existing nutrient gap characterization, review nutrient profile of the specialized nutritious food (SNF) provided to children 6-23 months and PLW through the social protection programme, which is currently not the most adequate. Among the products reviewed and included in the CoD analysis Chapuditos seems to most effectively address the identified nutrient gaps (calcium and zinc) for children.
- Review nutrient content/composition of food supplements provided to PLW through public programmes (to prevent overweight and obesity while still addressing MND). Consider increasing access and proper storage of fresh food for vulnerable households.
- Staple food fortification: a) potential for voluntary rice fortification (private sector initiative) b) ensuring compliance with existing mandatory fortification of specific foods to meet required nutrient target by improved quality analysis.
- Support national government to review standards of complementary foods, snacks and other processed foods to set limits for sodium, sugar, trans fat content (for overweight and obesity prevention) and monitor compliance.

For more information please refer to “Fill the Nutrient Gap Report El Salvador”  
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### Special Thanks to:

- Secretaria Técnica de la Presidencia  
Government of El Salvador
- WHO
- FAO
- PLAN
- FUSAL

