SAVING LIVES CHANGING LIVES



# Fill the Nutrient Gap **Philippines**

SUMMARY REPORT



With support from November 2018



World Food Programme



### Fill the Nutrient Gap Philippines | SUMMARY REPORT

#### The nutrition situation in the Philippines is alarming

Malnutrition is widespread across the Philippines. There has been little progress in addressing undernutrition, and overnutrition has emerged as a serious concern. This growing double burden hinders the country's potential for social and economic development. Thirty three percent of children under the age of 5 years (4 million children) are stunted and unlikely to reach their full mental and physical potential. Overweight and obesity rates of adults have nearly doubled over the last two decades (up to 31 percent), contributing significantly to public health problems.

Despite overall economic growth, the percentage of stunted children has not reduced in 15 years due to several factors including poverty, natural and manmade disasters, low consumer demand for nutritious food, agriculture policies focused predominantly on rice selfsufficiency, low prioritisation from government agencies to address nutrition, and limited commitment and capacity of local government units to deliver nutrition interventions. Poor infant and young child feeding is indicated by an increase in stunting, from medium prevalence (17 percent) in children aged 6–11 months to very high prevalence (36 percent) in children aged 12–23 months.

Increasing overweight and obesity rates follow changes in the food environment and a concurrent shift of consumer preferences toward energy-dense processed food. There is, too, an increase in sedentary lifestyles that comes with rapid urbanisation.

Addressing malnutrition sustainably must take a lifecycle approach, targeting all children, adolescent girls and

pregnant and lactating women, with a range of interventions adapted to the local context and coordinated across multiple levels and sectors of government. The Government of the Philippines recognises that addressing the malnutrition challenge requires broad cooperation and commitment from several government agencies, other public sector entities and the private sector, notably those across the food, health and social protection systems.

The commitment to improve nutrition must be taken seriously at national and local levels, and coordination must be strengthened. The Philippines Plan of Action for Nutrition 2017–2022 (PPAN) addresses the shortcomings of previous plans and outlines the interventions needed to improve the current nutrition situation. Nutrition programming can only be as strong as the national leadership, the regional resources available to support and encourage local actors, the local will and capacity to implement effective nutrition-specific and nutritionsensitive interventions, and the coordination across sectors and levels of government. Development partners can play an active role to fill gaps in programming and provide technical assistance.

The way forward is to ensure access to the information and evidence that is required to inform and prioritise a range of effective interventions targeted at vulnerable populations. Interventions must be context-specific and appreciate the inequality of access to nutritious food, purchasing power and nutritional status, the rapidly developing economy and urbanising environment, and the vulnerability of populations under threat of natural and manmade disasters and living in geographically isolated and disadvantaged areas. Several factors need to be addressed: constraints of availability, physical and economic access, and choice of nutritious food from supply (food system) to demand (public sector services and consumers). This requires strong commitment, good understanding and clear acknowledgment of a shared responsibility to address the alarming nutrition situation. It also requires effective coordination across local government, including the health, agriculture, social welfare and development, and education sectors, plus development partners and the country's extensive private sector.

#### Fill the Nutrient Gap (FNG) in the Philippines: Purpose

In response to the Government of the Philippines' goal of improving nutrition outcomes and delivering on the objectives outlined in the PPAN, the Food and Nutrition Research Institute (FNRI) and the World Food Programme (WFP), supported by UNICEF, collaborated to conduct an FNG nutrition situation analysis in 2018. The FNG process brought together stakeholders from a variety of sectors including health, agriculture, social welfare and development, education and the private sector.

The FNG analysis and its stakeholder engagement process facilitated a greater understanding of food systems and nutrition contexts across the country. The results from the FNG are to be used to support operationalisation of the PPAN by identifying and prioritising context specific policies and programme packages that can improve nutrient intake of key target groups through improved access and choice of nutritious food.

### FILL THE NUTRIENT GAP: SITUATION ANALYSIS FOR DECISION-MAKING ON NUTRITION

The FNG analysis is used to identify which nutritionspecific and nutrition-sensitive interventions are most appropriate in a given context to improve availability, physical access, affordability and choice of nutritious foods, which are required to have an adequate nutrient intake. Barriers arising from any of these systems can contribute to inadequate nutrient intake, one of the two direct causes of malnutrition (the other being disease).

The analytical process was developed by WFP with technical support from research institutes: the University of California, Davis; the International Food Policy Research Institute (IFPRI, Washington DC); Epicentre (Paris); Harvard University (Boston); Mahidol University (Bangkok), Save the Children (SC-UK, London) and the United Nations Children's Fund (UNICEF). The FNG provides a framework for strengthened situation analysis and multi-sectoral decision making that identifies context-specific barriers to adequate nutrient intake among specific target groups. It engages different sectors, across the food, health and social protection systems in particular, to propose cost-effective strategies to overcome barriers. It has been used in almost twenty countries to date.

The FNG combines review of secondary data and information with linear programming (LP) analysis using the CotD software developed by Save the Children United Kingdom. The analysis considers a range of factors that reflect or affect dietary intake, including local malnutrition characteristics; the enabling policy environment; type and availability of nutritious foods in local markets; affordability of nutritious foods; nutrient intake; local practices; and cost optimization.

The consolidated information is analysed and the findings are reviewed by a multi-sectoral group of stakeholders, at relevant levels, to come to a shared understanding of the issues, context and solutions. Through this consultation process, context-specific optimal policy and programme actions, including possible entry points for interventions, are jointly identified for different sectors, for example, health, social protection and across the food system, and stakeholders from the public and private sectors.

#### **FNG in the Philippines: Process**

The FNG process in the Philippines took place from April to November 2018, with inception meetings in April, validation of preliminary results in national and subnational technical meetings in October, and the dissemination of final results and development of recommendations in meetings with technical staff and policy influencers in November.

The analysis comprised a comprehensive literature review of available secondary data sources in combination with linear programming (LP) using the Cost of the Diet (CotD) software. The aim of the FNG analysis was to identify policies and intervention packages best suited to improving access to nutrients. It analysed the context-specific barriers to adequate nutrient intake and modelled interventions defined in the PPAN and the First 1,000 Days programme, passed into law in 2018 to address the health and nutrition of infants, young children, pregnant and lactating women and adolescent girls.

The FNG assessment was led by the Food and Nutrition Research Institute (FNRI) and the WFP country office and headquarters in partnership with UNICEF. At the start of the process the Philippines the FNG team met with government, non-government, United Nations (UN), and other development partners to introduce the FNG process, collate key secondary data sources and identify interventions and

entry points for CotD analysis and modelling. Stakeholders identified target groups as those connected to the first 1,000 days from conception to a child's second birthday, preschool and school age children, pregnant and lactating women and adolescent girls.

During the analysis phase over 130 secondary data sources were reviewed. LP analysis was conducted to estimate the cost of a nutritious diet and percentage of households unable to afford a nutritious diet in all 17 regions of the Philippines, and to model interventions in seven priority regions identified by stakeholders (MIMAROPA; Bicol; Western Visayas; Eastern Visayas; SOCCSKSARGEN; NCR; and ARMM).

To validate the results, preliminary findings were presented to partners and stakeholders in bilateral meetings, a national workshop and four regional consultations with representatives from MIMAROPA, Western Visayas, NCR and ARMM.

During the finalisation phase, stakeholders collaborated to develop recommendations based on FNG findings in a technical workshop. Findings and stakeholder recommendations were then launched in a high level meeting with policy makers. The detailed FNG process in the Philippines is illustrated in Figure 1.

Define Focus	Inception meeting with government, NGOs, UN agencies and other development partners		Secondary data received from stakeholders
		Phase 1 Apr-May 2018	Consensus achieved on target groups and level of analysis
	Bilateral stakeholder meetings		On-going and potential interventions identified
			Modelling plan developed
Analysis	Secondary data mapping and analysis	Phase 2 May-Sep 2018	Preliminary FNG analysis completed
	CotD analysis and intervention modelling		
Validation	Discussion and validation of preliminary results in bilateral meetings, national-level workshops and regional-level consultations	Phase 3 Oct 2018	Adjustment to LP models and additional analysis
			Results validated by national and regional stakeholders
Finalization	National level multi-stakeholder FNG workshop	Phase 4 Nov 2018	Development of FNG recommendations

Figure 1: The FNG process in the Philippines.

### COST OF THE DIET ANALYSIS

The CotD software uses LP to understand the extent to which poverty, food availability and prices may affect the ability of people to meet their nutrient needs. Using price data collected from markets or from secondary sources, the software calculates the amount, combination and cost of local food that is required to provide individuals or households with their average needs for energy and their recommended intakes of protein, fat and micronutrients<sup>1</sup>. These diets are calculated within defined constraints to prevent the inclusion of unrealistic types or amounts of food and the provision of excessive amounts of nutrients.

The FNG approach defines the Staple Adjusted Nutritious Diet: the lowest cost nutritious diet that includes the typical staple food and excludes food that is considered taboo<sup>2</sup>. This diet is referred to as the 'nutritious' diet throughout this summary. Population expenditure data is compared to the cost of the nutritious diet and is used to estimate the proportion of the population that would not be able to afford it. This non-affordability can be estimated and compared across different regions, seasons or countries.

As part of the FNG process, CotD analysis was undertaken for the 17 regions defined in the 2015 Philippines National Nutrition Survey (NNS). For all regions except the National Capital Region (NCR), separate analyses were conducted for urban and rural areas. The 2015 NNS provided data on food prices and availability, based on 24 hour household observation surveys. The 2015 Family Income and Expenditure Survey (FIES) provided data on household food expenditure, including monetised consumption of selfproduced food.

The lowest cost of a nutritious diet was estimated for a model household of five members, which included a breastfed child of 12–23 months, a child of 6–7 years, an adolescent girl of 14– 15 years, a lactating woman and an adult man. Two rice-based meals per day were included to account for approximately 50 percent of dietary energy from preferred staples. This was done for all household members except the child aged 12–23 months, who received one portion per day. Additional servings of rice could be selected by the software.

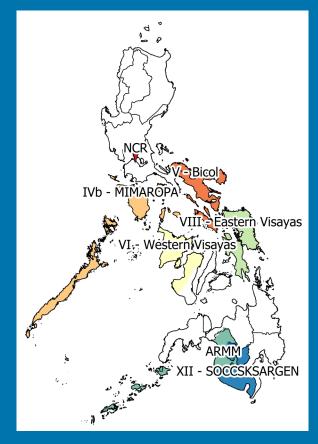
CotD software was used to model interventions proposed by stakeholders with the objective of improving the affordability of a nutritious diet for individuals and/or households. Based on the severity of malnutrition indicators and the prioritisation of ongoing programmes, stakeholders identified seven regions for intervention modelling: MIMAROPA; Bicol; Western Visayas; Eastern Visayas; SOCCSKSARGEN; NCR; and ARMM (Figure 2).

The selection of potential interventions for modelling was informed by secondary data review and stakeholder consultations. It included:

- increased availability of local nutritious food;
- different types of complementary food or specialised nutritious foods (SNF) made available through the market and/or social safety nets;
- micronutrient supplementation;
- fortification of staple food and;
- conditional cash transfers for vulnerable households.

The modelled interventions are theoretical and would need to be accompanied by complementary behaviour change interventions to promote nutritious choices by consumers.

Figure 2: Regions included in intervention modelling analysis.



<sup>1.</sup> As defined by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). The need for 9 vitamins and 4 minerals is included.

<sup>2.</sup> This diet is not intended to reflect what individuals or households are currently eating, nor should it be used to develop food-based recommendations or dietary guidelines.

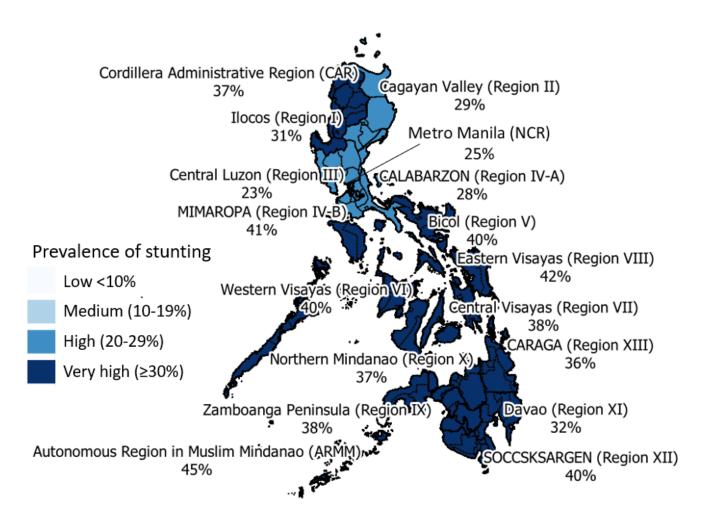
#### **Malnutrition overview**

After a reduction in stunting prevalence from 45 percent in 1989 to 34 percent in 2003, little improvement has been seen. The 2015 prevalence of 33 percent is classified as very high by WHO (based on new 2018 classifications). Stunting prevalence correlates with poverty – 50 percent of children in the poorest socio-economic strata are stunted compared to 15 percent in the richest. Stunting prevalence is high or very high in all regions of the Philippines, ranging from 23% in Central Luzon to 45% in ARMM (Figure 3). Stunting is higher in rural than in urban areas (38 percent and 28 percent respectively). Stunting prevalence is 17 percent among children aged 6-11 months and 36 percent for children aged 12-23 months. This suggests dietary inadequacies during the period when breastfeeding should be frequent and complementary feeding should be diverse.

Wasting prevalence has remained unchanged since 1989, fluctuating between 6 and 8 percent. Anaemia rates have decreased across all groups since 2003, but rates are still at 25 percent among pregnant women, 41 percent for children aged 6–11 months, 25 percent for children aged 12–23 months and 14 percent for children aged 24–35 months.

The prevalence of overweight and obesity among adults has nearly doubled from 17 percent in 1993 to 31 percent in 2015. Among adults, 35 percent of women and 27 percent of men are overweight or obese. Nine percent of adolescents aged 10–19 are already overweight or obese. Overweight and obesity correlates to wealth – 44 percent of adults in the richest socio-economic strata are overweight or obese compared to 17 percent in the poorest.

Figure 3: Stunting prevalence in the Philippines by region (National Nutrition Survey, 2015)



## **FNG in Philippines: Findings<sup>3</sup>**

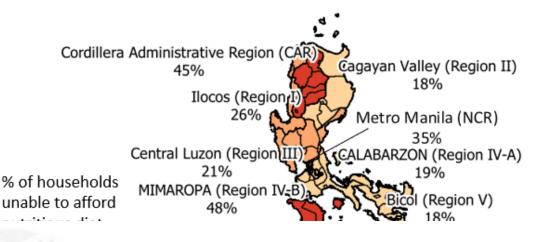
# 1.

WHILE ALMOST ALL HOUSEHOLDS WOULD BE ABLE TO AFFORD A DIET THAT MEETS ENERGY NEEDS, ONE THIRD WOULD NOT BE ABLE TO AFFORD A DIET THAT MEETS NUTRITIONAL NEEDS. NON-AFFORDABILITY OF A NUTRITIOUS DIET IS ASSOCIATED WITH STUNTING PREVALENCE. THE MINIMUM WAGE IS INSUFFICIENT TO ACCESS A NUTRITIOUS DIET.

Nationwide the average cost of the energy-only diet for the modelled five person household was PHP (Philippine peso) 108 per day. Ninety seven percent of households would be able to afford this diet. The average cost for the nutritious diet was PHP 206. One third of households would not be able to afford a nutritious diet, ranging from 18 percent in Bicol to 59 percent in Northern Mindanao (Figure 4). A strong correlation was found between stunting prevalence and the non-affordability of a nutritious diet by region, which suggests that economic access to nutritious food is a barrier to providing a nutritious diet to young children. The costs of energy-only and nutritious diets were compared to the minimum wage level, ranging from PHP 210 per day in MIMAROPA to PHP 444 per day in NCR. If one member of the FNG model household were paid a minimum wage for five days per week and 70 percent of this wage were spent on food, households in two of the 17 regions would not be able to afford an energy-only diet. If households spent 42 percent of their wage on food, which is the national average for the percentage of expenditure spent on food, households in 13 out of the 17 regions would not be able to afford an energy-only diet. Regardless of whether they spent 42 percent or 70 percent on food, in all regions the model household would not be able to afford a nutritious diet if paid a minimum wage only.

4Ps (Pantawid Pamilyang Pilipino Program), the nationwide conditional cash transfer social safety net, provides households with a maximum of PHP 1,400 per month. This amount alone provides less than one third of the cost of an energy-only diet for the modelled five person household. This suggests that further interventions would be needed to ensure access to a nutritious diet for vulnerable households.

Figure 4: Percentage of households unable to afford a nutritious diet by region.







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