Why Invest in Nutrition?

- Of the 11.2 million children under 5 years of age in the Philippines, approximately 3.7 million (34%) are stunted. These undernourished children have an increased risk of mortality, illness and infections, delayed development, cognitive deficits, poorer school performance, and fewer years in school.
- The mortality rate for children under 5 is 34 per 1,000 live births—nearly 45% of these child deaths are attributable to various forms of undernutrition.
- Malnutrition undermines human capital and economic productivity and can limit progress in achieving at least 6 of the 8 Millennium Development Goals and targets set by the World Health Assembly.
- Investing in nutrition in the Philippines is necessary to sustain further gains in development, significantly reduce child mortality, improve children’s school performance, and result in greater economic productivity for the nation.

Summary of Nutritional Status and Priorities

Levels of stunting, low birth weight, and wasting have remained essentially unchanged in the Philippines in the last decade, while levels of overweight and obesity, particularly among women (of whom 27% are affected), have increased. Anemia affects two-thirds of children 6–11 months and 44% of pregnant women, although other micronutrient deficiencies such as vitamin A and iodine have been reduced significantly. Interventions in the Philippines need to address early determinants of stunting and wasting, particularly low birth weight which affects 1 in 5 births, as well as postnatal determinants such as suboptimal infant and young child feeding (IYCF), particularly early initiation of breastfeeding, exclusive breastfeeding, and dietary diversity of complementary foods.

Stunting. A third of children under 5 are stunted in the Philippines, a number that has remained essentially the same in the last decade. Prenatal factors such as low birth weight and maternal malnutrition (including anemia) contribute to stunting in the Philippines, as do suboptimal IYCF practices, including delayed initiation of breastfeeding, low rates of exclusive breastfeeding, and low dietary diversity of complementary foods. According to the 7th National Nutrition Survey, 12–14% of children under a year of age are already stunted, increasing to more than a quarter of children by 1 year of age. Infectious disease and intestinal parasites also play a role in stunting and other forms of malnutrition (such as anemia) in the Philippines.

Maternal overweight and obesity. The Philippines is experiencing the “double burden of malnutrition”—at the same time that a third of children are stunted and 14% of women of reproductive age are underweight, 27% of women are overweight or obese (FNRI and DST 2003). Overweight and obesity are more common in older women than among adolescents. Overweight and obesity among children under 5 has been increasing in the past decade, although overall numbers are still low—from 2.8% in 2003 to 4.8% in 2011.

Anemia. Almost half of pregnant women are anemic, at least partially reflecting low iron supplementation utilization and low deworming coverage. Among children 6–11 months, two-thirds suffer from anemia, roughly twice the rate of the under-5 population as a whole (36%) (FNRI and DST 2003).

Micronutrient deficiencies. Vitamin A deficiency has decreased in the Philippines, estimated to affect 19% of preschool-age children in 2007–2008, down from 40% in 2003 (National Nutrition Council 2012; UNSCN 2010). Iodine deficiency does not appear to be a problem as median urinary iodine concentration among school-age children was 201 ug/L in 2003, which is classified by WHO as “more than adequate” (WHO 2007; National Nutrition Council 2012).
Maternal and Child Malnutrition Indicators in the Philippines

- Underweight (women): 14%
- Overweight/obese (women): 27%
- Overweight/obese (child): 5%
- Low birth weight: 21%
- Stunting: 34%
- Underweight: 20%
- Wasting: 19%
- Anemia (pregnant women): 44%
- Anemia (child): 36%
- Vitamin A deficiency: 19%

Sources: 2011 national status survey (FNRI 2012); anemia, women underweight, and overweight: 6th National Nutrition Survey (FNRI and DST 2003); vitamin A deficiency: UNSCN 2010; low birth weight: UNICEF 2013

Note: The median urinary iodine concentration (UIC) for school-age children is 201 ug/L; the proportion of school-age children with low UIC (< 100 ug/L) is 23.8% (WHO 2007).

Key Drivers of Maternal and Child Malnutrition in Philippines

Immediate and Underlying
- Suboptimal IYCF practices including delayed initiation of breastfeeding, short duration of exclusive breastfeeding, and low dietary diversity of complementary food
- Maternal malnutrition and low birth weight
- Infectious disease burden and inadequate health-seeking behaviors
- Food insecurity due to disaster-prone environment and vulnerability to food price shocks
- Inadequate water, sanitation, and hygiene, particularly water pollution and contamination of drinking water sources with solid waste and poor hygiene/sanitation practices (open defecation in rural areas and low sewerage coverage)

Basic
- Natural disaster-prone and climate-change sensitive environment leading to population displacement as well as illness and contaminated water
- Prolonged conflict in some parts of the country leading to population displacement and insecurity
- Increasing urbanization placing a strain on health systems and increasing the burden of disease among the urban poor in particular
Child Nutrition


Nutritional Status of Children by Age (in Months), 2008

Dietary Practices of Children

Child Health Indicators

Child Mortality

Child Nutrition

Child Mortality

Note: Data are for the time period within the previous 4 years of the survey.
**Maternal Health and Nutrition**

<table>
<thead>
<tr>
<th>Maternal Health Indicators</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal mortality ratio (per 100,000 live births)</td>
<td>99</td>
</tr>
<tr>
<td>Total fertility rate (children per women)</td>
<td>3.3</td>
</tr>
<tr>
<td>Median age at first marriage (of women 25–49 years)</td>
<td>22.2</td>
</tr>
<tr>
<td>Median age at first birth (of women 25–49 years)</td>
<td>23.2</td>
</tr>
<tr>
<td>% of women 15–19 years who have begun childbearing by 19</td>
<td>24.1</td>
</tr>
<tr>
<td>Median number of months since preceding birth (15–49 years)</td>
<td>No data</td>
</tr>
<tr>
<td>% of married women currently using any method of family planning</td>
<td>50.7</td>
</tr>
<tr>
<td>% of married women with an unmet need for family planning</td>
<td>22.0</td>
</tr>
<tr>
<td>% of women 15–49 years with live birth in the past 5 years receiving antenatal care from a “medically-trained” or “skilled” provider (doctor, nurse, or midwife)</td>
<td>91.1</td>
</tr>
<tr>
<td>% of women 15–49 years with birth in the past 5 years who delivered in a health facility</td>
<td>44.2</td>
</tr>
<tr>
<td>% of women 15–49 years with birth in the past 5 years who delivered with a “medically-trained” or “skilled” provider (doctor, nurse, or midwife)</td>
<td>62.2</td>
</tr>
</tbody>
</table>

**Maternal Nutrition Indicators**

| % anemic (pregnant: Hb < 11 g/dL; non-pregnant: Hb < 12 g/dL) | Pregnant 43.9 |
| % of women with birth in the last 5 years given vitamin A supplementation after birth of last child | 45.6 |
| % of women with birth in the last 5 years given any iron supplementation during last pregnancy | 81.3 |
| % of women with birth in the last 5 years who took at least 90 days of iron supplementation during pregnancy of last child | 34.0 |
| % of women with birth in the last 5 years who took deworming medication in last pregnancy | 13.3 |
| % living in houses with iodized salt (above 15 ppm) | 54.5 |

Sources: 2008 Demographic and Health Survey (NSO and ICF Macro 2009); maternal mortality: UNICEF 2012; anemia: 6th National Nutrition Survey (FNRI and DST 2003); iodized salt: FNRI 2012

**Food Security; Diet Diversity; and Water, Sanitation, and Hygiene**

<table>
<thead>
<tr>
<th>Food Security Indicators</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Hunger Index (2013)</td>
<td>13.2 (serious level of hunger)</td>
</tr>
<tr>
<td>% of households with poor or limited food consumption (food insecure)</td>
<td>No data</td>
</tr>
<tr>
<td>% undernourished in total population (2011–2013)</td>
<td>16.2</td>
</tr>
<tr>
<td>Food supply (kcal/capita/day) (2009)</td>
<td>2,580</td>
</tr>
<tr>
<td>Depth of food deficit (kcal/capita/day) (2011–2013)</td>
<td>102</td>
</tr>
</tbody>
</table>

**Diet Diversity Indicators**

| % of dietary energy supply from cereals, roots, and tubers (2008–2010) | 60 |
| Average supply of protein from an animal source (grams/capita/day) (2008–2010) | 26 |


* Compilation of all improved, not shared facilities.
Gender

The Philippines has made steady progress in promoting gender equality. More girls than boys complete high school, but overall the number of adolescents completing high school is about 20%. Other indicators have fluctuated or could be improved. The age-specific fertility rate for adolescent girls 15–19 years was 56 in 1970, in 1998 it was 46, and as of 2008 it rose again to 54. Nearly 16% of women 20–49 years of age are married by the age of 18 and 24% of adolescent girls have given birth to a child by 19 years of age, as indicated in the 2008 Demographic and Health Survey. In that survey, 57% of women reported being employed, among whom 41% reported being able to decide by themselves how to dispose of their income and 54% reported earning less than their husbands. In addition, domestic violence is prevalent—24% of women of childbearing age reported ever having experienced various forms of domestic violence in their lifetime. Seventy-seven percent of women of childbearing age 15–49 years reported participating in decisions about their own health, major household decisions, making purchases for their daily household needs, and visiting relatives, and this is consistent across all age groups among women of childbearing age.

Government Policies and Program Environment: Needs and Challenges

Policies. The Philippines has been graded “strong” in nutrition governance in a past assessment (Engesveen et al. 2009) and in July 2013 the Philippines reiterated its commitment to reducing malnutrition by signing on to the Scaling Up Nutrition (SUN) Movement. The current nutrition plan, the Philippine Plan of Action for Nutrition 2011–2016, developed by the National Nutrition Council (the highest-level policymaking and coordinating body for nutrition), aims to reduce stunting to 20.9%, wasting to less than 5%, and low birth weight to less than 19.6%, and aims to reduce the proportion of “nutritionally-at risk” pregnant women and reduce anemia. The plan also aims to maintain reductions in vitamin A and iodine deficiencies and prevent rises in overweight/obesity among children and adults. Actions set forth by the plan of action are focused on the first 1,000 days (from pregnancy through the first 2 years of life), evidence-based interventions, and targeting more vulnerable groups. Actions include:

- Provision of micronutrient supplementation and fortified foods to address continued vitamin A, iron, and iodine deficiencies
- Capacity building of community-based support groups and health and nutrition workers in IYCF, home fortification of complementary food, establishment of lactation centers in workplaces, IYCF promotion in schools and in the media, and enforcement of the International Code of Marketing of Breast Milk Substitutes
- Promotion of good sanitary practices including handwashing
- Deworming

Nutrition-Specific Policies

The Philippine IYCF Strategic Plan of Action for 2011–2016
Revised Policy on Child Growth Standard, 2010
Philippine Code of Marketing of Breast Milk Substitutes (revised in 2010)
Revised Policy and Guidelines on Micronutrient Supplementation, 2010
Guidelines for the Monitoring of Milk Code Activities, 2009
Adopting New Policies and Protocol on Essential Newborn Care, 2009
Breastfeeding Promotions Act, 2009
Adoption of International Reference Standards, 2003
Zinc Supplementation and Reformulated Oral Rehydration Salt in the Management of Diarrhea, 2007
Revitalization of the Mother-Baby-Friendly Hospital Initiative in Health Facilities with Maternity and Newborn Care Services, 2007
Philippine Food Fortification Act, 2000
Early Childhood Care and Development Act, 2000
Updated Micronutrient Supplementation, 2003
Medium-Term Philippine Plan of Action for Nutrition 1999–2004
Philippine Plan of Action for Nutrition, 1993
• Adoption and implementation of community-based management of acute malnutrition
• Strengthening prenatal nutrition services through improved counseling and supplementation
• Addressing overweight/obesity emergence through promotion of a healthy lifestyle including healthy eating and increased physical activity (National Nutrition Council 2012).

Programs. Since 1991, responsibility for implementation of public health services, including nutrition, was transferred to local government units which include provincial, city, municipal, and village governments. Municipal and village (barangay) local government units and their respective nutrition committees have the main responsibility for nutrition programs (Solon 2006). In the communities, specifically-trained village-based nutrition workers (barangay nutrition scholars) lead community mobilization efforts for nutrition activities, assisted by barangay health workers who receive incentives for their work (ibid). Implementation of the Philippine Plan of Action for Nutrition is the primary responsibility of local government units, with national government agencies providing policy-level support, capacity-building in nutrition program management (including planning, monitoring and evaluation, and coordination), and logistics support (National Nutrition Council 2012). Nongovernmental organizations will also be involved in implementation of the plan of action in close coordination with local government units and national government agencies.

Needs and challenges. The decentralization of health services has increased opportunities for improved allocation of resources and local decision making, but has also created logistical difficulties and greater need for training in nutrition program planning, implementation, and monitoring and evaluation at the lower levels of government (municipalities and barangays) (Solon 2006).

Development Partner Support
• JICA funds several maternal and child health projects that seek to improve and strengthen maternal, newborn, and child health and nutrition services.
• The EU and UNICEF, through the MYCSNIA Program, provide communication and counseling for IYCF, promote consumption of locally-produced micronutrient-rich foods, distribute and promote the use of micronutrient powders, and help local and national institutions with data analysis and interpretation to better inform national policies and programs.
• UNICEF is supporting the government in establishing IYCF support centers for working mothers, distributing fortified rice to vulnerable populations, and supporting treatment centers for acute malnutrition.
• WFP implements school feeding programs in conflict-affected areas, implements food- and cash-for-assets programs, and provides micronutrient-fortified ready-to-use food and micronutrient powders for children 6–24 months to help reduce the prevalence of anemia and other micronutrient deficiencies.
• FAO implements an IYCF project to increase the prevalence of exclusive breastfeeding and reduce the prevalence of malnutrition through promoting continued breastfeeding to 2 years and through the introduction of nutritious locally-available food.
Recommended Nutrition Priorities

Key nutrition priorities for the Philippines include focusing on stunting, maternal undernutrition and low birth weight, maternal overweight and obesity, anemia, and micronutrient deficiencies. USAID has invested on health activities and programs, however none of these resources were allocated to nutrition specifically. Given the slow rate of improvement in the prevalence of stunting, increasing the allocation for nutrition could be used to implement key targeted activities. Among existing USAID-funded activities and programs this includes integrating evidence-based nutrition-specific interventions and actions. Additional opportunities include:

- Expanding efforts to improve IYCF practices specifically related to exclusive breastfeeding, complementary feeding, diet quality, and diet diversity
- Addressing anemia in children under 5 and women of reproductive age
- Expanding technical assistance and support for water and sanitation
- Providing direct technical assistance in nutrition

In terms of opportunities to support the Government of the Philippines, opportunities include:

- Engaging with the government to support the decentralized health system and support the integration of nutrition into the health service delivery system
- Engaging with the government to support community-level governance for nutrition

USAID can also work in close coordination with other donors to:

- Support the SUN Movement and other government initiatives to promote nutrition service delivery
- Align resource allocation to limit duplication of activities and leverage donor investments to strategically invest in nutrition, focusing on areas that need added resources such as IYCF and quality nutrition service delivery

Recommended Indicators to Monitor Nutritional Impact

It is recommended that USAID incorporate the following key nutrition indicators into new and existing implementation plans in order to specifically monitor the impact of USAID programs on maternal and child nutrition status.

1. Prevalence of underweight children under 5 years of age (< -2 SD)
2. Prevalence of stunted children under 5 years of age (< -2 SD)
3. Prevalence of stunted children under 2 years of age (< -2 SD)
4. Prevalence of wasted children under 5 years of age (< -2 SD)
5. Prevalence of underweight women (BMI < 18.5)
6. Women’s dietary diversity: mean number of food groups consumed by women of reproductive age
7. Prevalence of exclusive breastfeeding of children under 6 months of age
8. Prevalence of children 6–23 months receiving a minimum acceptable diet

While nutrition-sensitive interventions can have an impact on the indicators listed above, it is critical to implement nutrition-specific activities that address the direct causes of malnutrition in order to see reductions in these key indicators.
References


FNRI and Department of Science and Technology (DST). 2003. 6th National Nutrition Survey Philippines.


