



## Cost-effective & sector-specific recommendations for improving nutrition outcomes in Pakistan: Evidence from the Fill the Nutrient Gap Analysis

### Malnutrition in Pakistan

Sustainable Development Goal 2.2 provides an urgent challenge and opportunity to identify effective, evidence-based and sustainable solutions to end malnutrition by 2030.

Malnutrition prevalence is at alarming levels in Pakistan and rates have remained severe or even deteriorated over the last 50 years. The degree of burden varies across the country but in all cases progress is hampered by the complexities of poverty, food insecurity, low dietary diversity, increasing prevalence of overweight and obesity, rapid rates of population growth and urbanization, and vulnerability to natural and human-induced shocks.

Meeting nutrient needs is a prerequisite for preventing malnutrition but it can only be done in combination with other proven health interventions. The needs of children under two, pregnant and lactating women, and adolescent girls should be addressed most urgently.

### The Fill the Nutrient Gap (FNG) analysis

The FNG analysis was designed to identify the main barriers to achieving nutritious diets and inform decision-making on multisectoral nutrition actions targeted towards the most vulnerable. This is achieved through two processes. The first process reviews available national data on health, food security, nutrition, availability and access to nutritious foods, and consumer behaviours and beliefs. The second process is referred to as linear programming. It helps to better understand the role of unaffordability and also models potential solutions to making nutritious foods more affordable. The FNG method in Pakistan engaged and involved stakeholders from a range of government, donor, UN and non-government institutions, representing the nutrition, food security, agriculture, health and education sectors, as well as academia and the private sector.

## Summary

Malnutrition prevalence is at alarming levels in Pakistan. Meeting nutrient needs is a prerequisite for preventing malnutrition especially for the most vulnerable - children under two, pregnant and lactating women and adolescent girls. Yet nutrition is not the responsibility of any one sector alone and requires a multisectoral commitment to overcome the enormous challenges. The Pakistan Fill the Nutrient Gap (FNG) analysis identified 10 main points to support evidence-based decision-making and identify prioritized interventions that can be incorporated into the Multisectoral Nutrition Strategy and included in PC-1 and PC-2 budgets. There is much Pakistan must do. By taking action now, the country can accelerate progress towards improving nutrition indicators in an effort to support its commitment to Sustainable Development Goal 2.2 – to end malnutrition by 2030.

|    | <b>KEY FINDINGS</b>   |
|----|---|
| 1  | Affordability is the greatest barrier to achieving nutritious diets, especially for the most vulnerable. Two out of three Pakistani households are unable to afford a diet that meets their nutritional needs and 5 percent are even unable to afford a diet that meets only their energy needs.  |
| 2  | The prevalence of child malnutrition in Pakistan is very high. Two out of five children under 5 years of age are stunted as per the 2017-2018 National Nutrition Survey (NNS). Acute malnutrition also affects 18 percent of children, putting them at a higher risk of disease and death. Recent data suggests that childhood overweight and obesity are increasing. This double burden of malnutrition has negative short and long term consequences on health, education, human capital and the economy.   |
| 3  | High rates of child malnutrition highlight a problem with the nutritional status and diets of women and adolescent girls. One fifth to one quarter of infants in Pakistan are born too small and a quarter of children are already too short for their age before they reach 6 months. This indicates that women's diets prior to and during pregnancy, and whilst breastfeeding, do not meet their needs.  |
| 4  | The quantity and quality of diets is a problem at household and individual levels, especially for women and children. Overall only 39 percent of households regularly eat enough of the foods that can ensure adequate nutrition and the majority of the population does not consume enough vitamin A, iron, zinc or protein. Only 3 percent of infants and young children are consuming a wide enough range of foods often enough to meet their nutrition needs. This indicates a lack of dietary diversity and inadequate meal frequency. Even in urban areas, the percentage of infants and young children consuming diets that were adequately diverse (6.2 percent) was only slightly higher than in rural areas.  |
| 5  | Universally poor diets are indicated by high prevalence of micronutrient (vitamin and mineral) deficiencies across geographical areas and wealth quintiles. In Punjab, 58 percent of the poorest children were deficient in iron and 57 percent were deficient in vitamin A. This was only slightly different from children in the highest wealth group (59 percent for iron and 51 percent for vitamin A). Deficiency rates for women are similar across wealth groups and urban/rural areas, indicating that even if families have greater access to nutritious foods, they are not consuming nutritious diets.   |
| 6  | The double burden of malnutrition – the simultaneous occurrence of undernutrition and overweight in the population – is a growing concern and indicative of a nutrition transition. Nationally almost 40 percent of women are overweight or obese according to the 2017-18 NNS. Overweight is affecting the more affluent in society; in Islamabad (the capital territory of the country), it was estimated that three in five women were overweight and obese mothers. The double burden of malnutrition is becoming more apparent, with almost 1 in 7 women being undernourished (14.4%) alongside a high prevalence of overweight (24.0%) in the same population. This burden is also present among children under five and is expected to increase in future generations as stunted children are at risk of becoming overweight in adulthood.   |
| 7  | Nutrition challenges are compounded by the rapid pace of population growth and urbanization and are highly susceptible to natural and human-induced shocks. With an urbanization rate of 3 percent per year, half of Pakistan's population is predicted to live in urban areas by 2030. This will place extreme pressure on health services, housing, employment and resources, and will increase the population in already crowded urban slums. In addition, an average of one in five households was affected by a climate shock (flood, earthquake, drought and the resulting price hikes) in the three years preceding 2016. The negative impact of shocks is always greatest in areas of high poverty.   |
| 8  | Meeting the nutrient needs of adolescent girls is a challenge and a priority. The nutrient needs of an adolescent girl are the most expensive to meet, accounting for as much as one third of the cost of a nutritious diet for a six-person household. One fifth of 19-year-old girls in Pakistan are either pregnant or already have a child. Ensuring adequate diets for this target group is essential for their own growth and development and that of any children they may have.   |
| 9  | To improve access to, and affordability of, nutritious diets for individual target groups and households, intervention packages to fill the nutrient gap could be used singly or in combination. The interventions modelled by the FNG analysis included vouchers for nutritious foods, cash transfers, specialized nutritious foods and food fortification. These interventions were modelled in different combinations, with and without cash transfers, to show the potential impact of multisectoral interventions and strategies. The modelling showed that a combination of public and market-based platforms is required to reach different segments of the population. It also showed that a conditional cash transfer for the household combined with nutrition-specific interventions targeting the most vulnerable, offered the greatest potential to improve the affordability of nutritious diets in Pakistan. |
| 10 | There is a need for the continued promotion of strong and consistent multisectoral action and investment in nutrition. The SUN Movement in Pakistan has made great strides in bringing people together around the common goal of ending malnutrition. This momentum must be scaled up. Now is the time to translate policies into actions.  |



## Prioritised Interventions

The FNG highlighted the significant and multi-faceted nutrition challenges facing Pakistan. The cost of nutritious foods, coupled with poor dietary practices, contributes to the significant levels of malnutrition across the country. Through provincial and national FNG workshops, representatives from the health, education, social protection, agriculture, media and food fortification sectors converged to review and discuss the FNG findings. Together they identified and agreed on prioritized interventions and activities to improve access to nutritious diets and overall nutrition.

| SECTOR               | PRIORITISED INTERVENTIONS  |
|----------------------|--|
| Social Protection    | Incorporate nutrition-sensitive activities into existing social protection programming for target groups by: developing multisectoral working teams; reviewing existing programmes and; piloting conditional cash transfer programmes incorporating a mix of cash, vouchers for locally available nutritious foods, and in-kind provision of specialized nutritious foods. |
| Health and Nutrition | Undertake formative research to understand current knowledge, practices and barriers to appropriate infant and young child feeding.  |
|                      | Allocate provincial budgets for evidence-based infant and young child feeding promotion and increased access to nutritious foods.  |
|                      | Implement provincial infant and young child feeding strategies, including development of evidence-based social behaviour change communication, training and support of health workforce, counselling at health services, and multimedia campaigns to promote good practices, including WASH.   |
|                      | Undertake simultaneous activities to increase access to nutritious foods, such as special fortified complementary foods and locally available nutritious natural foods.  |
|                      | Commercialize specialized complementary foods for women and children to increase access to safe, specialized nutritious foods; develop demand creation activities.   |
|                      | Improve provision of family planning services, especially for adolescent girls.  |
| Fortification        | Develop/harmonize fortification legislation and standards for uniformity and ease of implementation, passed down to provincial level in accordance with the national standards.  |
|                      | Monitor and enforce legislation; strengthen capacity of provincial fortification alliances to plan and implement fortification programme.  |
|                      | Build technical capacity of industry.  |
|                      | Increase access to, and demand for, fortified staples (wheat flour, salt and cooking oil).   |
| Education            | Incorporate nutrition education into school curricula.   |
|                      | Incorporate nutrition into university health syllabuses.   |
|                      | Build a national workforce of nutrition professionals, including development of tertiary nutrition courses.  |
|                      | Scale up nutrition-sensitive school feeding including piloting of nutritious school meal programmes for primary schoolchildren and adolescent girls; link home-grown school feeding with smallholder farmers; scale up successful school feeding models and;   |
| Agriculture          | Promote diversity of local production and nutritious food availability, including piloting activities to support local production of nutritious, diverse foods. Include biofortified foods from home and small-scale production. Provide greater access to nutritious local foods using voucher transfer via markets.  |
|                      | Advocate for greater investment in, and support of, agricultural sector.   |
|                      | Improve support of food producers who have limited resources, including improved market linkages and storage capacity.   |

## How the FNG findings can be used to benefit Pakistan

Now is a crucial time for nutrition policy and programmes in Pakistan as the national government is in the process of finalizing the Multisectoral Nutrition Strategy. The findings of the FNG will be useful in refining this strategy. It is essential that both government and non-government entities across different sectors appreciate the need to invest wisely in nutrition, and make decisions based on evidence in order to reap tangible results and adequately respond to Pakistan's significant malnutrition burden. These results highlight economic access as a significant, but not isolated, barrier to adequate nutrient intake. Nutrition is not the responsibility of any one sector alone, and improvements will only be achieved if all sectors work together on solutions that address all the main causes and consider local context.

The FNG analysis identified multiple interventions using different entry points across a range of sectors. If combined, these interventions could effectively reduce the cost of nutritious diets and increase their affordability for the most vulnerable in the population. The food system should be leveraged to increase availability and access to safe, affordable, nutritious food through private sector initiatives, combined with regulatory framework strengthening and social protection and safety net programmes for the most vulnerable. An important follow-on from the launch of the national Multisectoral Nutrition Strategy should be the development or review of provincial policies and strategies, to incorporate new evidence and harmonize efforts whilst adapting them to the local context.



The full FNG report contains findings pertaining to each sector, and the results of the linear programming analysis and intervention modelling are provided for each target group covering rural and urban areas across the four provinces. The FNG can be used as a leveraging tool for beginning, reigniting or fuelling planning conversations with multisector stakeholders in each province. It can also be used to identify complementary sector-specific opportunities to address malnutrition. The national and provincial SUN Secretariats have been instrumental in the FNG process in Pakistan. They should continue their commitment to improving nutrition by providing leadership across sectors and stakeholders. With Pakistan's next Five Year Plan currently under development, the prioritized interventions identified for provincial and national actions should be taken on board to reach the most vulnerable areas and target groups. The necessary budget allocations must be committed, either as a pilot or feasibility assessment phase through a PC-2, or scaled-up interventions through PC-1. In this way, Pakistan can accelerate progress towards improving nutrition indicators and achieving SDG 2.

