SAVING LIVES
CHANGING LIVES

# Maximizing Social Protection's Contribution to Human Capital Development

FILL THE NUTRIENT GAP ANALYSIS

WFP
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# Fill the Nutrient Gap (FNG) and Social Protection

**Maximizing the contribution of social protection to human capital through nutrition**

Adequate nutrition can drive human capital development by preventing stunting and allowing children to reach their full potential, leading more productive and healthier lives.

National social protection programmes have an instrumental role in improving nutrition. Social protection programmes can reach underserved populations, who are difficult to access through health and nutrition platforms. When social protection programmes are appropriately designed and tailored, they can reduce economic barriers to nutritious diets for vulnerable groups across the lifecycle.

Analytical tools such as the World Food Programme's **Fill the Nutrient Gap (FNG)** analysis enable policymakers and programme managers to evaluate and compare the potential contribution of social protection programmes to nutrition, informing national dialogue to make social protection work better for nutrition and human capital development.

FNG analysis identifies bottlenecks across the food system driving malnutrition, such as inadequate consumption of nutritious foods, with an emphasis on availability, cost, and affordability of a nutritious diet. FNG analysis identifies the characteristics of households least able to afford or access nutritious diets across food environments and seasons, unpacking the underlying factors driving the cost of nutritious diets, and highlighting the nutritious foods most challenging to access, and for whom.

FNG analysis models the impact of social protection interventions (social safety nets, school feeding programmes, conditional/non-conditional cash transfers etc.) on the ability of households and individuals to access nutritious diets. FNG facilitates a policy dialogue between nutrition, social protection, health, education, agriculture and other sectors for coordinated decision-making based on analytical findings.

Based on FNG evidence and a solid understanding of the challenges households and individuals face accessing nutritious diets there is great potential for social protection to support the most vulnerable by providing and linking to programmes and services needed for optimal nutrition and health.

In combination with transfers to increase access to nutritious foods, social protection programmes can serve as delivery platforms for social and behaviour change interventions for better nutrition and can incentivize health-seeking and preventative behaviours.

**FNG estimates transfer size gaps[1] and provides evidence to:**

1. Review the extent to which a social protection transfer could improve access to nutritious foods and adjust transfer size to better meet objectives.
2. Ensure optimal targeting of households with nutritionally vulnerable individuals such as women, children and adolescent girls.
3. Develop strategies to improve awareness of nutritional needs, promote healthy behaviours, increase demand for nutritious foods and channel resources towards healthy diets.
4. Maximize the impact of social protection programmes on food and nutrition by combining transfers with the provision of foods (in-kind or through commodity vouchers) or services that meet specific food and nutrition needs.

**How can Fill the Nutrient Gap analysis inform social protection programming?**

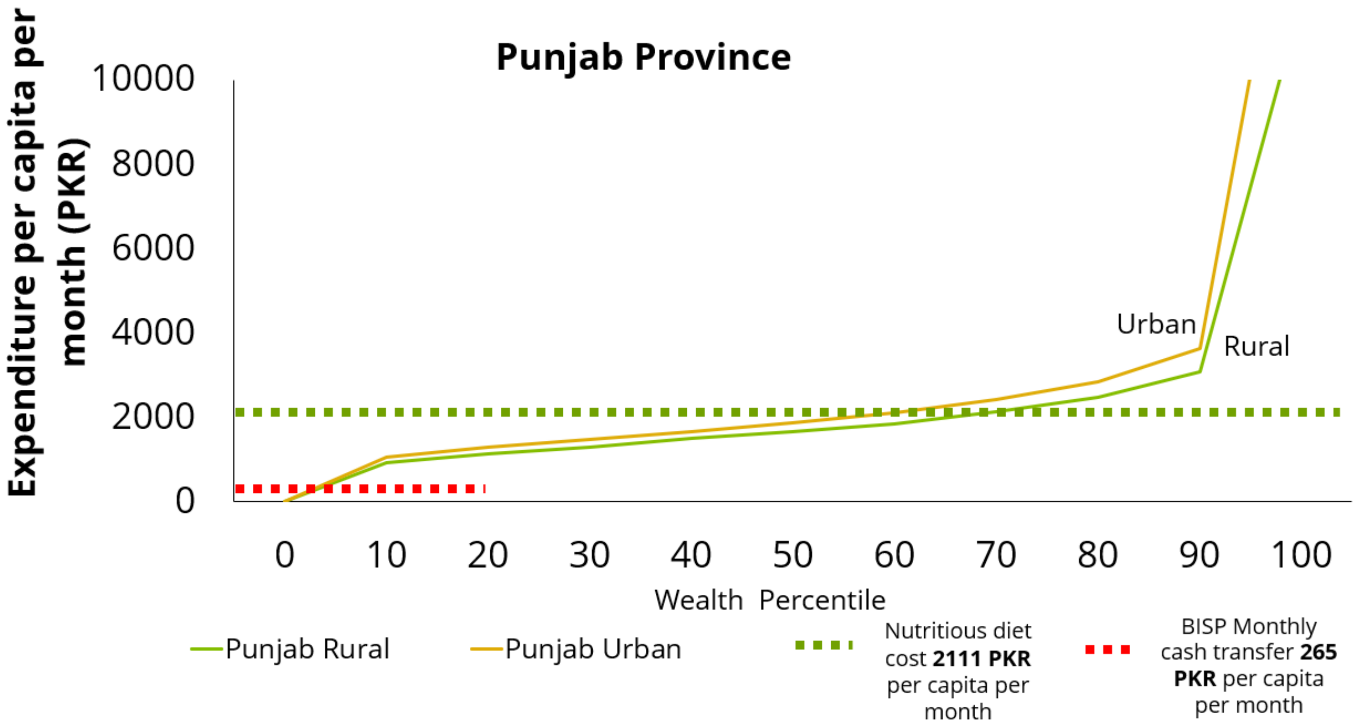
Using the Cost of the Diet (CotD) software, FNG analysis estimates the minimum cost of a nutritious diet from locally available foods. By comparing this information to household food expenditure data, FNG analysis estimates the percentage of households in a population who would

1 - FNG defines a transfer size gap as the monetized difference between household resources to purchase or produce food and the cost of a nutritious diet for a given population.

be unable to afford a nutritious diet. Benchmarking the affordability analysis against current coverage and transfer size of social protection programmes, FNG analysis can provide estimates of their adequacy (coverage, frequency , transfer size, etc.) to enable all households to access nutritious diets.

Figure 1 presents an example from the province of **Punjab** in Pakistan, where non-affordability of a nutritious diet has been estimated at between 65 and 75 percent of households in urban and rural areas. The Benazir Income Support Programme (BISP) cash transfer with an amount of 265 Pakistani rupees (PKR) monthly per capita is very small compared to the PKR 2,111 cost of a nutritious monthly per capita and contributes little to a household's ability to access a nutritious diet. This finding led to the addition of a nutrition-sensitive component to the BISP programme in Pakistan, described in the following section of this brief.

**Figure 1**: Proportion of households in Punjab, Pakistan for whom a nutritious diet is not affordable given: 1) the gap between current household food expenditure and the cost of a nutritious diet, 2) BISP coverage and 3) transfer amount.




*Expenditure curves from the 2014 HIES (Pakistan Bureau of Statistics. Government of Pakistan 2015)*

# Examples of FNG findings to improve human capital and nutrition around the world

**Strengthening transfers with Specialized Nutritious Foods and services to reduce stunting through social protection**

FNG analysis helped the **Pakistan** government evaluate different mixed modality options to complement cash transfers with nutrition-specific interventions. FNG analysed the affordability of meeting nutrient requirements by comparing market-based interventions (fortified wheat flour, micronutrient powder) plus free provision of Specialized Nutritious Foods (SNF) with a fresh food voucher plus SNF provision.

A locally produced SNF proved to be the most promising avenue for improving nutrition through social protection. It offered potential reductions in the nutrient intake gap, it had a proven impact on nutritional status as found by Aga Khan University studies and it provided opportunities to collaborate with the health sector to offer integrated services for pregnant and breastfeeding women and children aged 0–23 months.

The nutrition-sensitive conditional cash transfer component that is being added to the social protection package targets pregnant and breastfeeding women during the first 6 months after delivery and children aged up to 24 months. It is delivered through the basic health unit and includes: 3-monthly visits for ante-natal care; immunizations; growth monitoring and nutrition education; SNF for women during pregnancy and lactation and for children aged 6–23 months; and a small cash transfer to encourage the uptake of the services. To encourage birth spacing only one child per household can be enrolled at a time.

In the next three years the programme will reach 350,000 young children, pregnant women and breastfeeding mothers.

**Informing the transfer value and food voucher composition for nutrition**

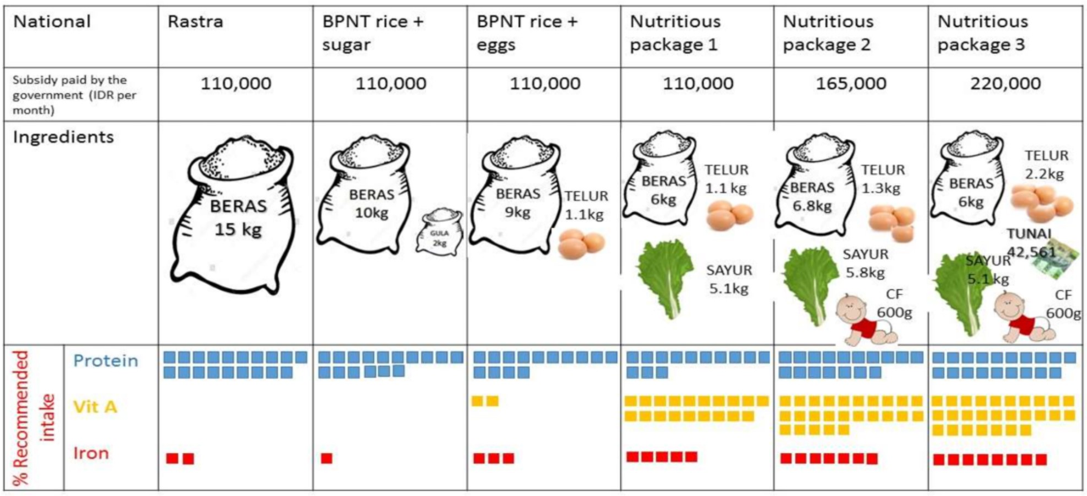
In **Indonesia** the FNG team supported the government's planning commission (BAPPENAS) with a CotD analysis when the subsidized rice programme (Raskin) transitioned to a commodity-specific e-voucher programme (BPNT)[2] delivered to 15.6 million people. FNG analysis assessed purchasing power for nutritious diets and evaluated the nutrient contribution from the commodity-specific transfers (e-vouchers). The cost of the nutritious diet was estimated at approximately 1,200,000 Indonesian rupiah (IDR) per 4-person household per month, of which the e-voucher (worth IDR 110,000) would cover 9 percent.

Other social protection programmes, including coverage of education and healthcare costs, would also contribute to improving affordability of nutritious diets by reducing household expenditure on those needs. FNG analysis resulted in a change from providing rice, oil and sugar through the BPNT programme to a more nutritious combination of rice and eggs, with green leafy vegetables provided when available.

Modelling results showed that without increasing the cost of commodities providing rice and eggs or rice, eggs and green leafy vegetable would increase the nutritional value substantially and could ensure a minimum level of micronutrient intake (Figure 2).

Other recommendations were to increase the transfer value by 50 percent, to add a fortified infant cereal for children aged 6–23 months to the commodities eligible for purchase and to increase transfer value by 100 percent to allow households to purchase further nutritious foods of their choice, especially vegetables, in addition to the fortified infant cereal. The government has since increased the e-voucher value by approximately 35 percent.

**Figure 2**: Proportion of Nutrient content of different options for commodity-specific transfers in Indonesia[3].




2 - BPNT programme formally changed to Program SEMBAKO (Staple Food Program) in January 2020. E-voucher value increased from IDR 110,000 to 150,000 monthly per household.

3 - Each square in the bottom row is equal to 1 percent of the recommended intake.

### Identifying nutritional vulnerabilities

Complementing analysis of the affordability of a nutritious diet for a household, FNG analysis also analyses the cost of a nutritious diet for individuals across different life stages. Generally, FNG analysis finds that the cost of a nutritious diet increases steeply in early adolescence, spikes in late adolescence and then remains high throughout adult life. Adolescent girls have high nutrient requirements and need very nutrient-dense foods that tend to be more expensive. This puts them at risk of not meeting their nutrient needs, and more so than adolescent boys (Figure 3).

In **Somalia**, the nutritional vulnerability of adolescent girls is about 30 percent higher than adolescent boys. The FNG's secondary data review includes a review of socioeconomic and gender vulnerabilities which compound nutritional risks.

In **Ecuador** FNG analysis found that an adolescent girl's minimum cost nutritious diet would require almost 40 percent of the total cost of a modelled five-person household. When teens are pregnant nutritional needs increase, but diet composition and portion sizes typically remain the same. After teens give birth, mothers and babies often eat from the same dish.

Ecuador has the highest teenage pregnancy index in the Americas[4], with 55,000 teenage mothers giving birth in 2017, 10,000 of whom were aged 10-14.

Based on FNG findings, WFP Ecuador with Ecuador's Ministry of Economic and Social Inclusion and UNFPA implemented a pilot multi-sectoral intervention to prevent teenage pregnancy and address nutritional vulnerability in pregnant adolescents in provinces along the Colombian border with a high population of Venezuelan migrants.

The intervention delivered cash transfers (USD 50 per month) to 650+ pregnant teens under 19 years old alongside campaigns on reproductive and sexual rights in collaboration with education and health sectors, reaching 6,500 participants.

Among adolescent girls receiving cash transfers, 60 percent improved dietary diversity and 70 percent attended at least five medical check-ups during pregnancy.

**Figure 3**: Comparison of adolescent boys' and girls' nutrient needs and cost of a nutritious diet in Somalia.