

Maximizing Social Protection's Contribution to Human Capital Development

SAVING LIVES CHANGING LIVES

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.

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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 decisionmaking 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 gaps¹ 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.

- 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 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.



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.





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: Pakistan

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 antenatal 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: Indonesia

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.

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.



Na	itional	Rastra	BPNT rice + sugar	BPNT rice + eggs	Nutritious package 1	Nutritious package 2	Nutritious package 3
paio gove (II	ibsidy d by the ernment DR per onth)	111,000	111,000	111,000	111,000	165,000	220,000
Ingredients		Rice 15kg	Rice 10kg Sugar 2kg	Rice 9kg Eggs 1.1kg	Rice 6kg Eggs 1.1kg Vegetables 5.1kg	Eggs 1.3kg 1.3kg Vegetables 5.8kg CF* 600g	Eggs 2.2kg Rice 6kg Vegetables 5.1kg CF* Cash 600g 42,561
% RECOMMENDED INTAKE	Protein	19%	16%	14%	13%	17%	19%
	Vit A	0%	0%	2%	19%	25%	27%
% REC	Iron	2%	1%	3%	5%	7%	8%

*CF = Complementary Food



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 Americas⁴, 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



⁴ Based on number of births per 1000 women 15-19 years old from 2006-2017 (www.unfpa.org/adolescent-pregnancy).

Further reading

For all Fill the Nutrient Gap publications please visit: https://www.wfp.org/fillthenutrientgap

Alderman H. Leveraging Social Protection Programs for Improved Nutrition: Summary of Evidence Prepared for the Global Forum on Nutrition Sensitive Social Protection Programs, 2015. World Bank, Washington, DC. 2016.

Bose I, Baldi G, Kiess L, de Pee S. The Fill the Nutrient Gap analysis: An approach to strengthen nutrition situation analysis and decision making towards multisectoral policies and systems change. Matern Child Nutr. 2019; 15:e12793. https://doi.org/10.1111/mcn.12793

Gentilini U. The revival of the Cash versus Food debate. New evidence for an old quandary? World Bank Policy Research Working Paper 7584, World Bank, Washington, DC. 2016.

Ministry of Planning, Development & Reform, Pakistan and World Food Programme. Fill the Nutrient Gap summary report Pakistan. Islamabad. 2018. Available at: https://www.wfp.org/publications/2017-fill-nutrient-gap-pakistan

Olney D, Marshall Q, Honton G, Ogden K, Hambayi M, Piccini S, Go A, Gelli A, Bliznashka L. Leveraging an implementation–research partnership to improve effectiveness of nutrition-sensitive programs at the World Food Programme. Food and Nutrition Bulletin. Article in Press. First published on September 22, 2019. https://doi.org/10.1177/0379572119874273

Sabates-Wheeler R, Devereux S. Social protection and the World Food Programme. World Food Programme Occasional Paper No. 25, World Food Programme. 2018. Available at: https://www.wfp.org/content/occasional-paper-25-social-protection

Contributors

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