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Mind the Gap
Country Case Study
ECUADOR

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About the Mind the Gap Report

Achieving Sustainable Development Goal 2 (Zero Hunger) by 2030 is increasingly at risk due to the combined impacts of climate change, conflict, COVID-19, and rising living costs, which have reversed progress in reducing global hunger. Social protection systems, while essential for supporting vulnerable populations, often fail to account for nutritional needs—a key element in breaking the cycle of poverty, vulnerability, and malnutrition. This oversight represents a missed opportunity to advance the objectives of SDG 2, especially in a context where hunger has been rising since 2015.

Amid these challenges, the Mind the Gap report explores the role of social protection systems in addressing affordability gaps of nutritious diets. It is structured around the **Fill the Nutrient Gap (FNG)** analytical approach, which aims to understand the drivers affecting the availability, cost, and affordability of nutritious diets in specific contexts. The policy objective is to identify and implement interventions to improve diets, especially of nutritionally vulnerable people, including through the integration of nutrition into social protection systems. Through case studies from 12 diverse national contexts, the report presents actionable social protection pathways for reducing the affordability gap of nutritious diets and improving food security and nutrition outcomes.

Further information and evidence on the FNG can be accessed at: wfp.org/fillthenutrientgap

FNG
FILL THE NUTRIENT GAP
SYSTEMS ANALYSIS FOR NUTRITION

Contents

I. Overview of the malnutrition burden and poverty situation

Ecuador faces a triple burden of malnutrition with a significant need to improve access to healthy, nutritious diets. In 2016, this triple burden, including chronic non-communicable diseases (NCDs) such as diabetes and hypertension, was estimated to cost 4 percent of Ecuador's GDP through its strain on healthcare systems and impact on children's learning abilities, ultimately affecting workforce productivity (1). National data from 2018 indicates that one in four children under five suffered from stunting (23 percent), while the prevalence of wasting remains low (2).

In June 2023, nearly one third of Ecuadorians (27 percent) lived under the national poverty line (3). Poverty is an important determinant of malnutrition with more children in the lowest wealth quintile stunted and suffering from anaemia than those in the highest quintile (4). Chronic malnutrition in indigenous children is almost twice as high as that of mestizo or white children (5). Regional disparities also exist, with higher rates of stunting among children under 5 in rural areas (21 percent) compared to urban (15 percent) (5).

Overweight and obesity are increasing for all age groups, which is an important public health concern as it increases the risk of developing diet-related NCDs with implications for mortality, healthcare costs and productivity (6). Nationally in 2018, 8 percent of children under the age of 5 and more than 36 percent of school-age children (5–11 years) were overweight or obese (2). More than 38 percent of adolescents were overweight or obese (2), with a burden twofold higher than the national average among Afro-Ecuadorian teenagers (7).

In 2018, 77 and 73 percent of adult women and men were overweight or obese respectively (2). Overweight and obesity disproportionately affect indigenous Ecuadorians and Afro-Ecuadorians (4).

Such high overweight and obesity prevalence rates may be linked to poor dietary intake, indicated by the nationwide excess carbohydrate – particularly rice – and fat intake (8). In contrast, national consumption of fruits and vegetables is very low at 183 g/day (8). Prevalence of snacking and consumption of ultra-processed foods are very high, with national consumption of soda reported by 82 percent of people in 2016 and snacking by 64 percent (8).

Micronutrient deficiencies are prevalent across the lifecycle. In 2019, 24 percent of children under 5 were estimated to have anaemia (9). The rate of anaemia is triple for adolescent girls compared to adolescent boys (14 vs 4 percent in the 15–19 age range) (10). Data from 2018 shows that 17 percent of women of reproductive age suffered from anaemia (9). Respectively, 86 percent, 82 percent and 97 percent of these women fail to meet the iron, vitamin A and calcium recommended daily intakes (RDI). Among adolescent girls (14–18 years), 97 percent did not meet the RDIs for iron and calcium and 85 percent did not meet the RDI for vitamin A (10). Micronutrient deficiencies during these stages of the life cycle are not only detrimental to the individuals affected, but also potentially impact future generations as maternal anaemia is associated with low-birthweight infants and decreased iron stores for the baby, increasing the risk of impaired development (11).

II. Country priorities on nutrition and social protection

NUTRITION POLICY FRAMEWORK

Ecuador has several national nutrition policies and frameworks. The intersectoral strategic plan for the reduction and prevention of chronic child malnutrition (2021–2025) (12) and the intersectoral plan on diets and nutrition (2018–2025) (13) aim to reduce childhood stunting, wasting and obesity through comprehensive, multisectoral nutrition plans.

In 2013, the Government of Ecuador launched a national School Feeding Programme. Legislation exists for mandatory salt iodization and taxes on sugary beverages. There are also policies to reduce sodium intake, eliminate industrially produced trans fatty acids and minimize the impact of unhealthy food advertising targeted towards children. Ecuador defined food-based dietary guidelines in 2018 with plans to revise in 2025.

SOCIAL PROTECTION POLICIES AND PROGRAMMES

The Government of Ecuador is committed to protecting the poor and vulnerable. The *Buen Vivir* (Good Living) concept underpins Ecuador's social protection system, which includes nutrition and social protection as part of a holistic understanding of well-being. This concept contributed to the creation of the Ministry of Economic and Social Inclusion, which oversees the translation of *Buen Vivir* to multisectoral social protection policies that entitle citizens to the right of good living, including prevention of malnutrition and adequate access to food (14).

The social protection system includes social assistance and social insurance components under the National Social Inclusion and Equality System. The four social assistance programmes implemented by the Ministry of Economic and Social Inclusion provide income support targeted to (i) low income households with children under 18 years old (*Bono de Desarrollo Humano* - Human Development Grant);[1] (ii) poor households with the potential to carry out productive and income generating activities (*Crédito de Desarrollo Humano* - Human Development Credit Programme); (iii) low income seniors over 65 years old (*Pensión Adulto Mayor* - Pension for the Elderly); and (iv) people with disabilities (*Pensión para personas con discapacidad* - Pension for Persons with Disabilities and *Bono Joaquín Gallegos Lara* - Joaquín Gallegos Lara Allowance) (15).

One example of a nutrition sensitive programme is *Misión Ternura*[2] which provides a comprehensive multisectoral package to support and improve early childhood care with an emphasis on the first 1,000 days of life. *Misión Ternura* isimplemented in 30 cantons in 15 provinces, targeting more than 8000 children with the highest rate of malnutrition, housing deficit, lack of access to water and poverty. The aims of the programme from 2018 to 2021 were to reduce chronic malnutrition for children under the age of 2 by 10 percent, increase the percentage of children under 5 participating in early childhood development programmes, make family education in child development universal, and increase the prevalence of exclusive breastfeeding in the first 6 months of life (16).

1 If households are in an extreme poverty situation and have children under 18 years old, the programme includes additional benefits. In this case, the programme is called *Bono de Desarrollo Humano Variable* (Human Development Variable Grant).

2 This programme has now transitioned into the Ecuador Grows Without Child Malnutrition Strategy.

Social spending in Ecuador had doubled between 2006 and 2016 from 4 to 8 percent of GDP, with large spending increases on education, health and social housing, but limited spending on social assistance programmes (17). Targeting challenges combined with limited social assistance spending translates into low coverage of the poorest people. Eligibility to social assistance is determined by proxy means tests through the Social Registry which uses a socioeconomic welfare index to classify households. Between 2019 and 2023, 550,000 additional people were included in the Social Registry, improving coverage from four to nine out of ten households (18).

Ecuador was severely impacted by the COVID-19 pandemic (19) and the government responded by expanding its social protection programmes. The main measure was the Healthy Emergency Family Protection Grant (*Bono de Protección Familiar*) which provided two payments of USD 60 for families that were earning less than USD 400 a month and were not receiving other cash transfers. The Nutritional Support Voucher (*Bono de Apoyo Nutricional*), created and supported by WFP, provided a one-time payment of USD 240 for households with pregnant women or mothers with children under the age of 3 who live in poverty[3] and which were already registered with the Ministry of Economic and Social Inclusion. It applied a 'first 1,000 days' perspective and showcased successful, temporary horizontal expansion of social protection interventions in times of crisis.

3 Targeting criteria included households in extreme poverty, poverty and vulnerability (1–4 deciles in the Social Registry) which were not receiving cash-based transfers from the Ministerio de Inclusión Económica y Social.

III. WFP's approach

The Fill the Nutrient Gap (FNG) analysis in Ecuador was implemented as a collaboration between WFP and the Ministries of Health and Economic and Social Inclusion between April and September 2018 (20). The FNG took on a multisectoral approach to identify bottlenecks that drive malnutrition across the food system, with an emphasis on availability, cost and affordability of a nutritious diet (20). Throughout the FNG process, consultations were held with various stakeholders including representatives of Ministries, non-governmental organizations and UN agencies across the health, agriculture, social, development and education sectors to validate the analysis and identify entry points to improve nutrient intake and affordability of nutritious diets for target groups.

A Cost of the Diet analysis was conducted in all 24 provinces, divided into rural and urban areas, and was complemented with a comprehensive review of secondary data and literature on food systems and nutrition. The contribution of existing social protection programmes towards improving access to nutritious foods was reviewed as part of the FNG. Areas were identified where social assistance programmes and other sectors overlapped and could be aligned to strengthen the nutrition response.

Cost of the diet analysis in the Ecuador FNG

The cost of the diet analysis was conducted using prices extracted from the 2014 INEC Household Survey, which was also used to obtain food expenditure data. In Costa and Sierra provinces, seasonal analyses for dry and rainy seasons were also conducted. The lowest costs of a diet that meets energy requirements and a diet that meets requirements for macro and micronutrients were estimated using the FNG methodology (26) for a modelled household consisting of five individuals: breastfed child (12–23 months), child (3–4 years), adolescent girl (14–15 years), breastfeeding woman and adult man.

The cost of the diets was then compared to household food expenditure to determine the proportion of households unable to afford the costs (called 'non-affordability'). The gap between the lowest cost nutritious diet and the food expenditure of a household is referred to as the affordability gap.

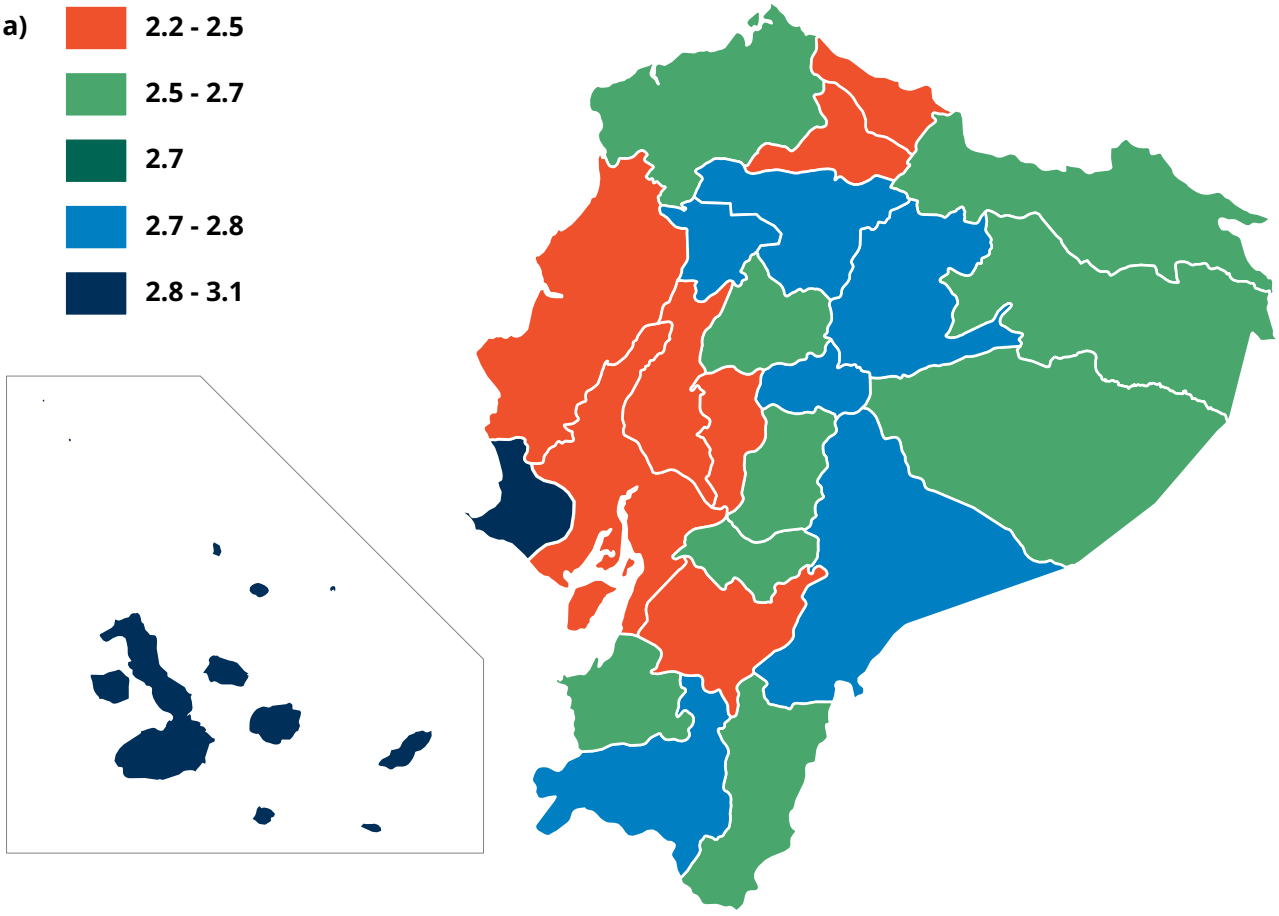
Intervention modelling for the *Plan Intersectorial de Alimentación y Nutrición* (PIANE) and *Misión Ternura* programme were conducted in six provinces (divided into rural and urban) from Costa, Sierra and Amazonia regions following discussions with stakeholders on priority areas.

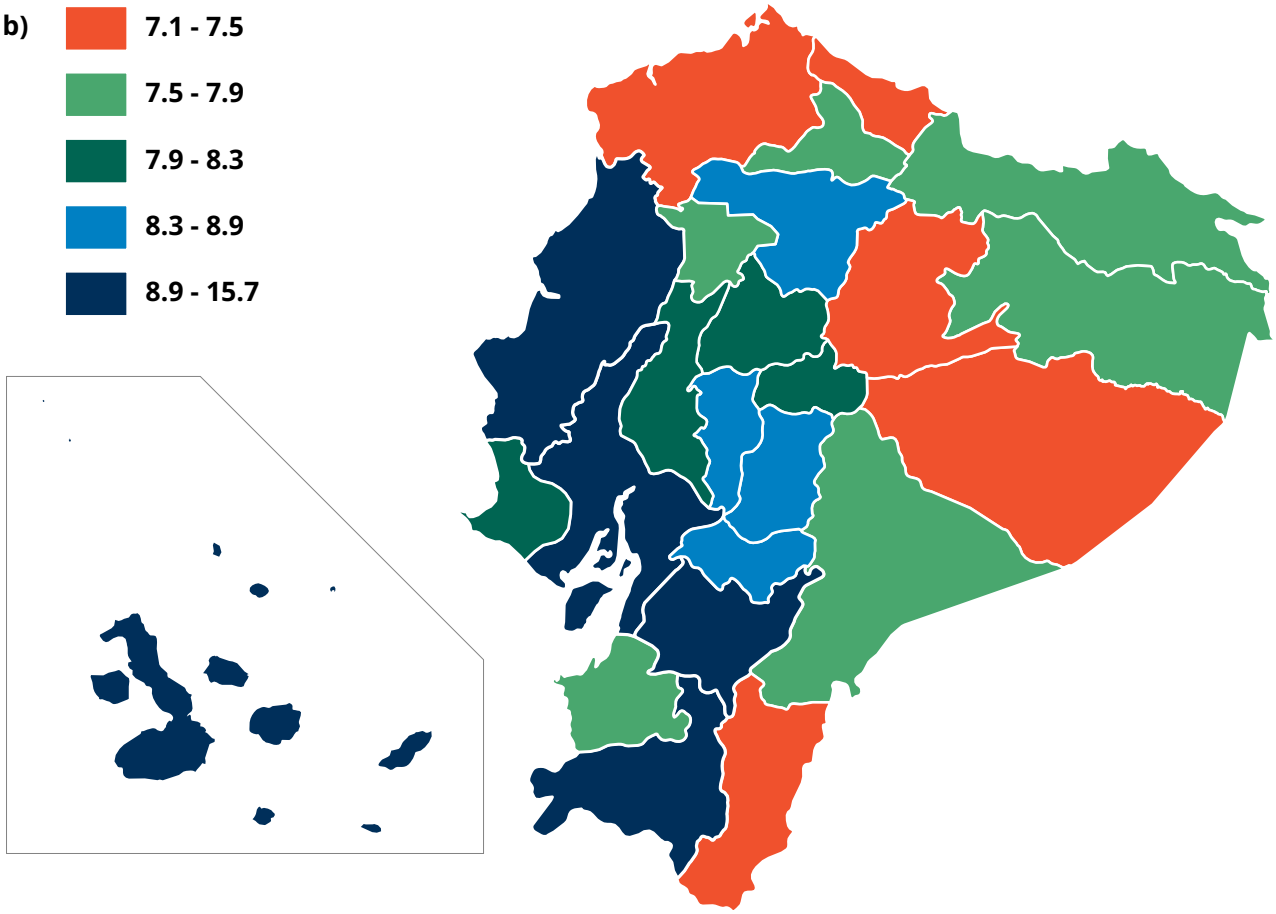
IV. Findings of the FNG

COST AND AFFORDABILITY OF THE NUTRITIOUS DIET

The cost of a nutritious diet was 3.5 times higher than that of an energy-only diet at USD 8.60 per day for a five-person household as compared to USD 2.50 per day. These costs varied regionally with the cost of the nutritious diet highest in Galapagos, at more than USD 15 per day, and the coastal provinces (Guayas, Azuay, Manabi) at more than USD 9 per day, and lowest in the provinces of the Amazon (Carchi, Pastaza, Napo), at slightly above USD 7 per day (Figure 1).

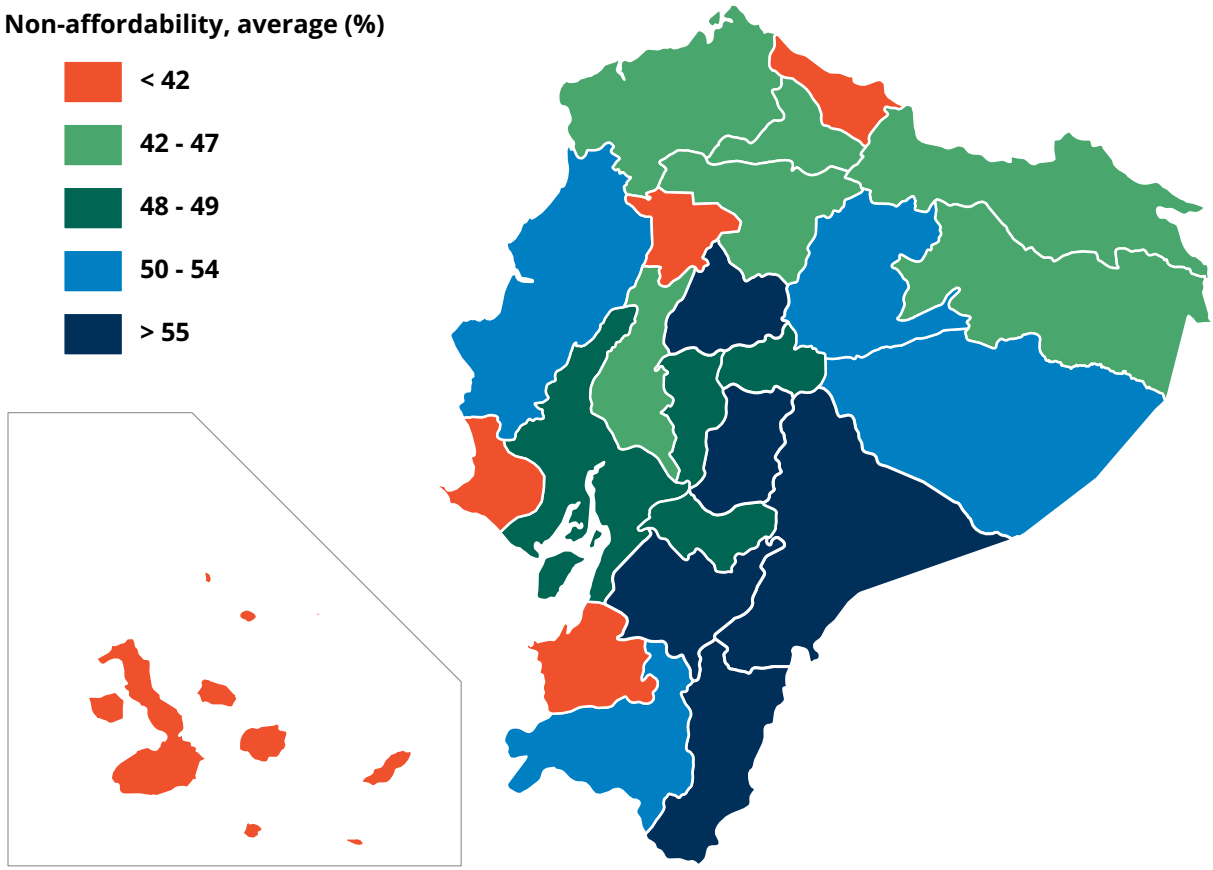
Figure 1: Daily cost of the energy-only (a) and nutritious (b) diets in Ecuador, for a five-person household in 2014 (average across the two seasons for coastal and Sierra provinces) (FNG 2018)





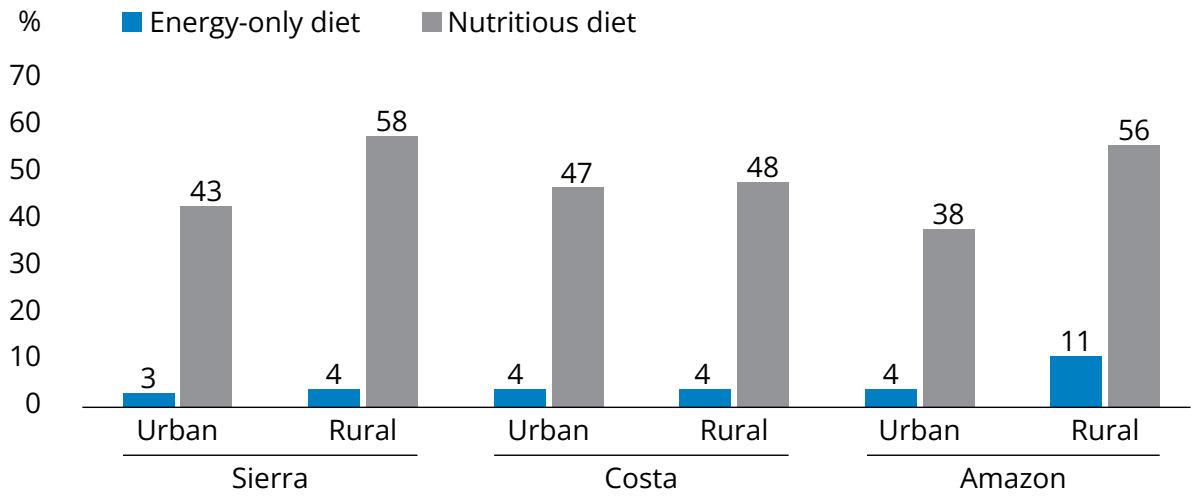
Nationally, only 4 percent of households could not afford an energy-only diet; however, 48 percent of households could not afford a nutritious diet. There were geographical variations in non-affordability of the nutritious diet with high rates of more than 50 percent in Chimborazo, Morona Santiago, Azuay and Manabi provinces, which are spread across all three main regions (Figure 2). Non-affordability of the energy-only diet in the provinces of Morona Santiago (11 percent) and Napo (13 percent) were also notably higher than the national and regional averages.

Figure 2: Percentage of households that do not have access to a nutritious diet (FNG 2020)



As well as geographical, there is a rural–urban divide in the costs and affordability of nutritious diets. While the cost of the nutritious diet is higher in urban areas than rural areas (USD 8.70 vs USD 8.30), non-affordability of the nutritious diet is higher in rural areas (53 percent average) compared to urban areas (45 percent average) (Figure 3).

Figure 3: Percentage of urban and rural households unable to afford energy-only and nutritious diets (FNG 2020)

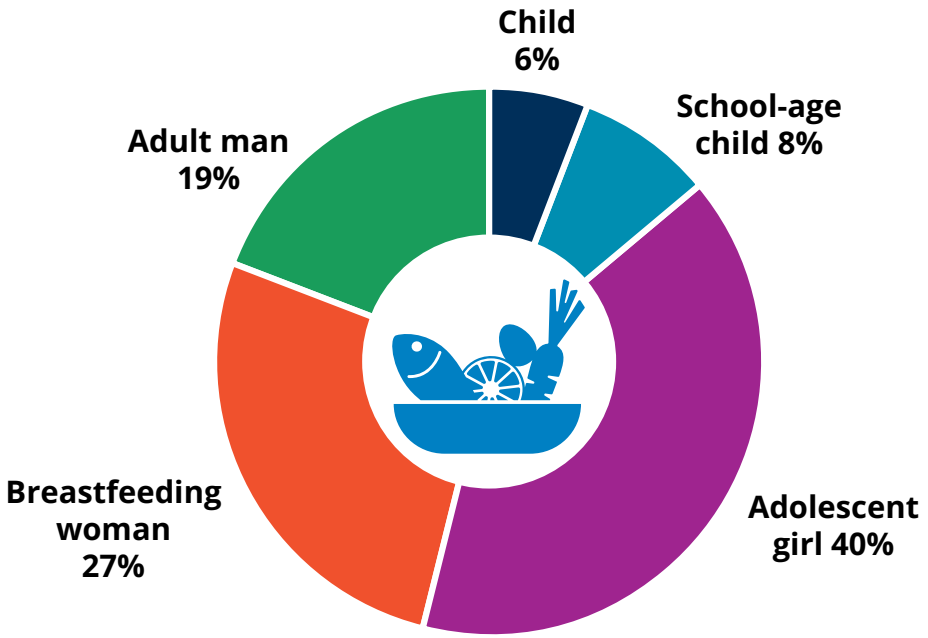


VULNERABLE GROUPS

Adolescent girls and pregnant and breastfeeding women have relatively higher requirements of specific nutrients such as iron, folic acid and vitamin B12. In the modelled household, this is reflected by the adolescent girl and breastfeeding woman together having the highest cost of nutritious diets within the household, representing 67 percent of the household's cost of a nutritious diet (Figure 4). Actual intra-household food allocation may not consider these differential nutrient needs and the corresponding greater need for diversity in the diet, which comes at a higher cost, and therefore targeted interventions such as supplementation are often needed to help cover the nutrient requirements of nutritionally vulnerable individuals.

Children aged 12–23 months have a lower cost of nutritious diet compared to other household members as they consume less food, and the modelled diet assumes optimal breastfeeding which covers a large portion of their nutrient needs. This age group, however, is nutritionally vulnerable as their smaller stomachs mean that meals must be provided at higher frequency and need to include nutrient dense foods to cover nutrient requirements (21).

Figure 4: Distribution of the daily cost of a nutritious diet for the modelled household across individual household members (FNG 2020)

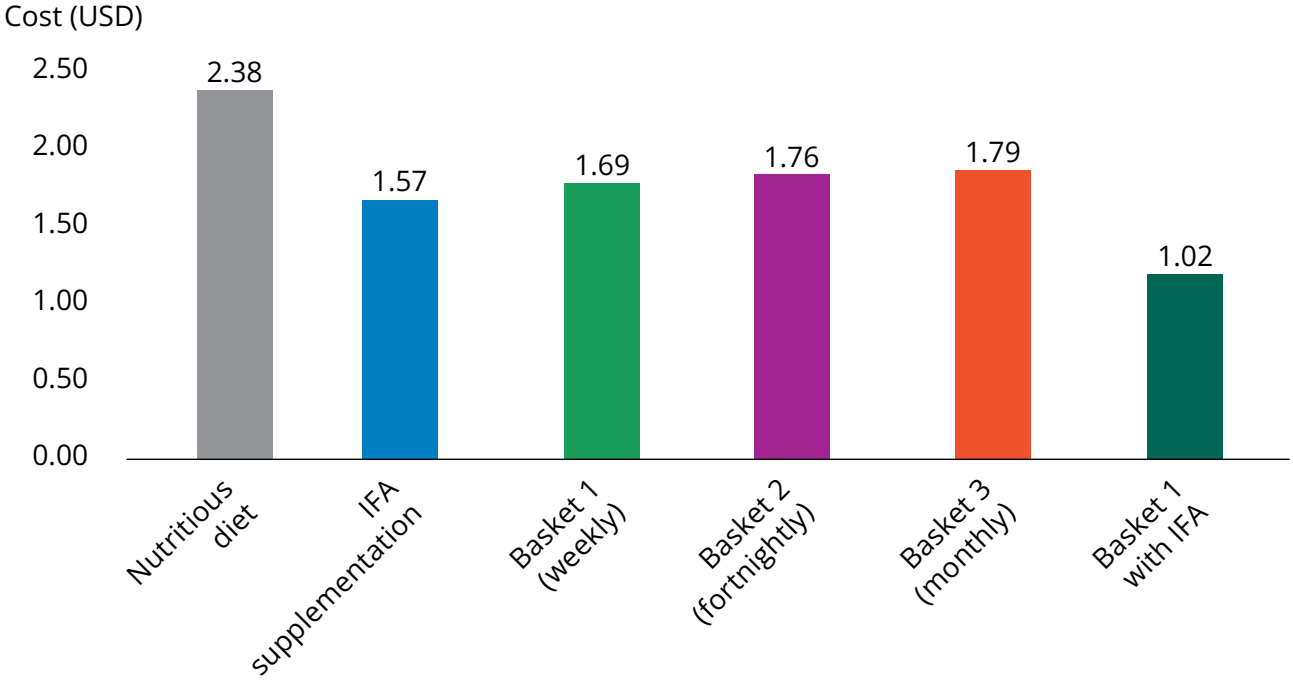


V. Using the FNG to inform social protection programmes

CONTRIBUTION OF SOCIAL PROTECTION TO REDUCING THE AFFORDABILITY GAP

Poor nutritional status of mothers before and during pregnancy, as well as while breastfeeding, can have important implications for the child. This makes pregnant and breastfeeding women an important target group. The FNG modelled a package that could be provided by the *Misión Ternura* for this group, including different food baskets provided at different frequencies (weekly, fortnightly and monthly) and tailored to products available in different regions,[4] iron and folic acid (IFA) supplementation and a combination. The food basket lowered the cost of a nutritious diet by at least 25 percent, and the IFA lowered the cost by 33 percent; combined, the two could lower the cost by up to 57 percent (Figure 5). The results demonstrate how diets of breastfeeding women can improve through the provision of nutritious foods and supplements.

Figure 5: Modelled impact of *Misión Ternura* packages of interventions on the cost of nutritious diets for pregnant and breastfeeding women

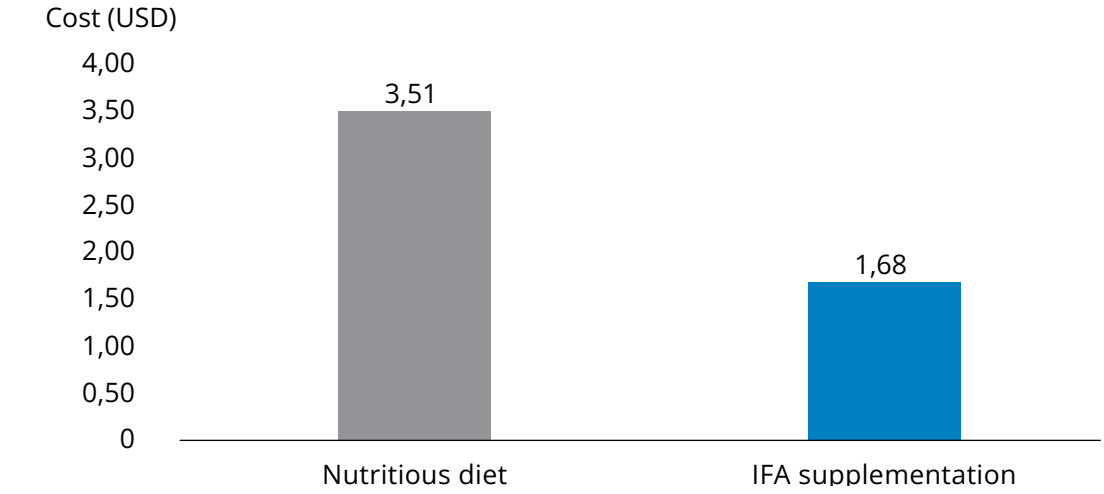


Ecuador has the highest teenage pregnancy rate in the Americas – in 2015, one in five adolescents were pregnant or had a child. In the Amazon region the rate is even higher at more than 30 percent (10). Teenage pregnancies entail risks for the mother and the baby who is at higher risk of morbidity and mortality due to low birthweight, stunting and higher micronutrient deficiencies.

4 Food basket included dairy, fruits, vegetables, meat, legumes, eggs and a cereal (quinoa, oatmeal, maize).

Adolescent girls are a nutritionally vulnerable group with a disproportionate share in households' nutritious diet cost (22). However, under the *Misión Ternura* programme (at the time of the 2018 FNG analysis), this group did not receive any nutrition specific intervention alongside the existing interventions of family planning services, pregnancy control support and continuity of schooling. Considering the high rate of teenage pregnancies, nutrition specific interventions for all pregnant adolescents should be considered. Nutritional requirements increase during pregnancy and are higher for pregnant adolescents than that of pregnant adult women (23). The FNG model on the impact of providing IFA supplementation to adolescent girls (Figure 6) showed that provision of IFA lowered the cost of a nutritious diet by 53 percent.

Figure 6: Modelled impact of IFA supplementation on the cost of the nutritious diet of adolescent girls



VI. Bridging research with policy and action

The high rate of unplanned teenage pregnancies, combined with the economic challenge of achieving nutritious diets, puts adolescent girls at higher risk of malnutrition, with further implications for their children. However, at the time of the FNG analysis, the *Misión Ternura* package did not include nutrition specific interventions for adolescent girls. Through the use of analytics, the FNG recommended that adolescent girls should be provided with IFA supplementation as well as a value voucher to improve access to and consumption of nutritious foods. For the interventions to be more effective, the FNG also recommended increasing visibility of adolescent girls as a priority group and training health, education and social protection sector professionals to ensure their services are tailored to adolescent needs.

Building on the FNG findings and recommendations, and recognizing the challenges of early pregnancies, WFP piloted a multisectoral 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. WFP worked closely with the Ministry of Economic and Social Inclusion and United Nations Population Fund as part of the *Misión Ternura* programme.

The programme for pregnant adolescents delivered cash transfers (USD 50 per month) to over 650 pregnant girls under 19 years alongside campaigns on reproductive and sexual rights, which were implemented in collaboration with the education and health sectors. The cash transfer value was determined using FNG data. Among pregnant adolescent girls receiving cash transfers, assessments showed that dietary diversity improved in 60 percent of girls, and 70 percent attended at least five medical check-ups during pregnancy (24).

The evidence generated by this programme made visible the specific needs for adolescents in the prevention and care of early pregnancies, considering nutrition, protection against gender violence and sexual and reproductive rights. It highlighted the insufficiency of public services to address this problem comprehensively and emphasized the need to improve intersectoral and inter-institutional coordination.

These efforts also informed WFP's response to the COVID-19 pandemic. Together with the national government, the 'Nutritional Support Bonus' was created, which was the first non-contributory emergency insurance programme with an explicit focus on food and 'the first 1,000 days'.

Using the evidence generated by these two projects, WFP also developed and disseminated advocacy material that contributed to the design and implementation of the *Bono Infancia Con Futuro* programme, which is a national social protection programme aimed at pregnant women, with an explicit focus on nutrition and 'the first 1,000 days'. This programme was launched in 2022 and includes, for the first time in Ecuador, the delivery of cash to adolescents. As of 2023, the programme reached 75,000 pregnant women and girls (25).

VII. Bibliography

1. Economic Commission for Latin America and the Caribbean & WFP. The cost of the double burden of malnutrition. 2017.
2. INEGI. National Health and Nutrition Survey (ENSANUT) 2018.. 2019. https://www.inegi.org.mx/programas/ensanut/2018/default.html#Documentacion.
3. Instituto nacional de estadistica y censos. National Survey of Employment, Unemployment and Underemployment (ENEMDU). 2023.
4. Ramírez-Luzuriaga, M., et al. Malnutrition inequalities in Ecuador: differences by wealth, education level and ethnicity. s.l., vol. 23: Public Health Nutrition, 2020.
5. Instituto Nacional de Estadística y Censos. Encuesta Nacional sobre Desnutrición Infantil (ENDI). 2023.
6. Shekar, M., & Popkin, B. M. Obesity: Health and Economic Consequences of an Impending Global Challenge. Washington, D.C.: World Bank, 2020.
7. Freire, W. B., et al. Tomo I: Encuesta Nacional de Salud y Nutrición de la población ecuatoriana de cero a 59 años. ENSANUT-ECU 2012. Quito, Ecuador: Ministerio de Salud Pública/Instituto Nacional de Estadísticas y Censos, 2014.
8. Aguirre, Nikolay, et al. Food and Nutrition Security in Ecuador. February 2018.
9. WHO. Global Health Observatory Data Repository/World Health Statistics. World Bank. https://data.worldbank.org/indicator/SH.ANM.CHLD.ZS.
10. Ministerio de Salud Pública del Ecuador & Instituto Nacional de Estadística y Censos. Encuesta Nacional de Salud y Nutricion. 1st edition, , vol. 1. Quito, Ecuador: s.n., 2014.
11. WFP. Ecuador Country Strategic Plan (2017–2021). 2017.
12. Plan Estratégico Intersectorial Para la Prevención y Reducción De la Desnutrición Crónica Infantil. Gobierno del Encuentro: Juntos lo logramos. 2021. https://www.infancia.gob.ec/wp-content/uploads/2021/09/Plan-Intersectorial.pdf.
13. Ministry of Public Health. Policy – Intersectoral Food and Nutrition Plan Ecuador 2018–2025. WHO Global database on the Implementation of Nutrition Action (GINA). 2018. https://extranet.who.int/nutrition/gina/en/node/40702.
14. Gobierno de la Republica de Ecuador. Buen Vivir Plan Nacional 2013–2017. 2013. http://doi.org/10.15446/dfj.n15.50535.
15. International Bank for Reconstruction and Development. Project Appraisal Document on a Proposed Loan in the Amount of US$350 Million to the Republic of Ecuador for a Social Safety Net Project. World Bank. 13 March 2019. https://documents1.worldbank.org/curated/en/485571554602436973/pdf/Ecuador-Social-Safety-Net-Project.pdf.
16. Mission Tenderness begins its intervention in the first five cantons of the country. Government Platform for Social Development. https://www.salud.gob.ec/mision-ternura-inicia-su-intervencion-en-los-cinco-primeros-cantones-del-pais/#:~:text=Misi%C3%B3n%20Ternura%20es%20una%20propuesta,de%20la%20educaci%C3%B3n%20familiar%20en.
17. Approach Paper: Ecuador Country Program Evaluation. World Bank. 29 September 2022. https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ap_ecuador-cpe.pdf.
18. Gutierrez, N., and Rodriguez-Novoa, L. Social registries: A gateway to social and economic inclusion. World Bank Blogs. 2023. https://blogs.worldbank.org/latinamerica/social-registries-social-and-economic-inclusion-ecuador.
19. Xavier Jara, H., Montesdeoca, L., & Tasseva, I. Ecuador's social protection system failed during the pandemic. United Nations University. 18 March 2021. https://www.wider.unu.edu/publication/ecuador-%E2%80%99s-social-protection-system-failed-during-pandemic.
20. WFP. Fill the Nutrient Gap Ecuador – Full Report. 2020.
21. UNICEF. Fed to Fail? The Crisis of Children's Diets in Early Life. Child Nutrition Report. 2021. https://data.unicef.org/resources/fed-to-fail-2021-child-nutrition-report/.
22. Bose, I., et al. The difficulty of meeting recommended nutrient intakes for adolescent girls. Global Food Security, vol. 28. 2021.
23. WHO. Vitamin and mineral requirements in human nutrition. 2004. http://apps.who.int/iris/handle/10665/42716.
24. WFP. Maximizing Social Protection's Contribution to Human Capital Development: Fill the Nutrient Gap (FNG) and Social Protection. August 2022. https://docs.wfp.org/api/documents/WFP-0000113930/download/.
25. Bono Infancia Futuro. Infancia Con Futuro. https://www.infanciaconfuturo.info/.
26. Bose, I., et al. 2019. "The 'Fill the Nutrient Gap' analysis: An approach to strengthen nutrition situation analysis and decision making towards multisectoral policies and systems change". Maternal & child nutrition, 15(3): e12793.

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