FNG Ethiopia
Executive Summary

Over recent decades, Ethiopia has made considerable progress in reducing the prevalence of stunting, yet, 37 percent of children under five years of age remain affected. Stunting generates an economic loss of ETB 55.5 billion (USD 1.8 billion) every year, equivalent to approximately 16 percent of Ethiopia’s Gross Domestic Product (GDP) (1). Persistent rates of child wasting, widespread micronutrient deficiencies and poor quality of diets for both children and adults are among some of the nutrition related challenges faced by Ethiopians. In an effort to understand and address factors determining access to nutritious diets in Ethiopia, and building on the findings of the Cost of Hunger Study of 2013 and the Zero Hunger Strategic Review of 2019, the Ethiopian Public Health Institute (EPHI) of the Ministry of Health, with technical assistance from the World Food Programme (WFP), conducted a Fill the Nutrient Gap analysis (FNG) in 2020. The analytical process sought to understand local drivers that affect the availability, cost and affordability of a nutritious diet.

Process

The FNG process began at the end of 2019, through a multi-stakeholder inception meeting and was followed by a technical training of EPHI and partners. Identification of data, analysis and modelling was conducted from January to October 2020, with technical discussions and validation of results with stakeholders conducted between October and December 2020.
Methodology

The two-pronged FNG approach consists of a review of existing secondary literature and a Cost of the Diet analysis (which uses linear programming for lowest cost diet optimization). Consumer Price Index food prices (November 2018 - October 2019) were used to estimate the minimum cost of energy sufficient and nutritious diets at zonal and regional level. Expenditure data from the Ethiopian Socioeconomic Survey (ESS) of 2015-2016 was used to assess the extent to which Ethiopian households are able to access these diets.

Main findings

6. Households mostly depend on markets for access to fresh, nutritious foods, such as vegetables, fruits, and meat, whilst grains are sourced from own production. Rural households mostly rely on homestead production for eggs and dairy products, although consumption is limited. Prices of these nutritious foods have increased in recent years, whilst grain, sugar and oil prices have decreased; meaning access to nutritious diets could be more difficult.

7. Improving access to nutritious diets and associated changes to consumption patterns can have implications for climate outcomes as well as nutrition. Enabling and promoting nutritious, sustainable, diets should be a priority.

8. Agricultural production is largely focused on staples, whilst the supply and availability of fresh, nutritious foods, such as fruit and vegetables, is insufficient. Current levels of domestic production are not able to adequately meet the nutrient requirements of a growing population.

9. Agricultural production is largely small-scale and subsistence-based, with limited opportunity for growth and development. Innovating agricultural practices, diversifying production and adopting high quality seeds and biofortified and fortified commodities could improve access to nutritious diets.

10. Infrastructure and access to markets for sale and purchase also determine household ability to access nutritious, diverse diets. Investment in road networks, transport and market functionality could positively impact nutrition outcomes.

11. Post-harvest, large-scale fortification could improve access to key nutrients that are low in national food supply or unaffordable for most households. Biofortification through improved seeds and soil fertilizers could improve nutrient intake.

12. Poverty is a basic cause of malnutrition and limits households’ access to nutritious diets. Shocks can significantly hamper progress towards poverty reduction and further limit nutritious diet access. If nutrition sensitive, safety nets could increase resilience and access to nutritious diets.

13. School meals have the potential to improve nutritious diet access for children and adolescents. However, greater inclusion of micronutrient-poor foods is needed to meaningfully contribute to children’s nutrient needs.

1. Almost all households in Ethiopia would be able to afford to meet their energy needs (93%). However, only one out of four households (26%) would potentially have access to a nutritious diet. Based on the results of the Cost of the Diet analysis, diets meeting the needs of multiple nutrients would cost between three to five times the cost of energy sufficient diets. A nutritious diet was estimated to cost at least five times more than what a household in the lowest expenditure decile spent on food.

2. Current diets in Ethiopia are poor and non-diverse, with little inclusion of animal-source foods, vegetables and fruit. Nutritious, diverse and nutrient-rich diets are a prerequisite for preventing malnutrition. In Ethiopia consumption is largely based on staple grains and oil.

3. Adolescent girls and pregnant and lactating women are most at risk of having inadequate diets, as the cost of meeting nutrient requirements are highest for these groups. Diet costs are predominantly driven by requirements for micronutrients such as vitamin B12, iron and calcium, for which animal-source foods are key sources, although expensive. Providing a daily or weekly MMT or IFA doses to pregnant and lactating women or adolescent girls, respectively, could drastically reduce the cost of meeting nutrient requirements.

4. Diets of breastfed and non-breastfed children are suboptimal. Encouraging age-appropriate breastfeeding and providing access to diverse and nutritious complementary foods could reduce the cost of meeting nutrient requirements.

5. The availability and intake of non-nutritious, processed foods is increasing, especially for children and adolescents in urban areas. The real cost of nutritious diets would be higher when energy-dense and micronutrient-poor snack foods are frequently consumed.
Stakeholder identified priorities by sector

During a series of virtual thematic workshops held in December 2020 and attended by the wider group of stakeholders involved in the FNG process, the main findings of the FNG analysis were shared and discussed with participants to identify priority areas for action. Based on the sector recommendations, the study team summarized the following prioritized interventions and activities by sector.

Health and nutrition

- Prioritize advocacy and education to change the focus from diets that are just focused on meeting energy needs to diets that are rich in multiple (micro)nutrients. Stimulate the demand for nutritious foods (e.g. fruit and vegetables).
- Address increasing consumption of, and access to, ultra-processed and unhealthy snack foods.
- Promote behaviors and actions that contribute to good nutrition (e.g. SBC and focus on vulnerable groups).

Social protection

- Further action is needed to make the Productive Safety Net Programme (PSNP) more nutrition sensitive.
  - Target PSNP households with SBC.
  - Consider cost and affordability of nutritious diets when selecting transfer values and content.
  - Take actions to diversify diets of beneficiary households, such as introducing conditions that promote nutrition (e.g. fresh food vouchers). Prioritize complementary interventions for households that have children under 2 years/individuals within the first 1000 days to address stunting.

Education

- Improve the nutrient content of school meals.
  - Estimate the cost of interventions for improving school meals to ensure that they are more nutrient-rich.
  - Include multiple micronutrient powders in school meals for vulnerable children.
  - Diversify school meals through school garden initiatives and increased procurement of nutritious foods through home grown school feeding programmes.
  - Improve nutrition knowledge through school curriculum and in collaboration with religious leaders.

Agriculture

- Prioritize production of and access to nutritious foods.
  - Revise horticulture products prioritized under government extension services.
  - Encourage crop diversification through extension services for mid and small-scale producers, including home and school-level gardens.
  - Support the establishment or scale-up of poultry production or horticulture within the proximity of schools to ensure supply of nutritious foods for school meals.
  - Ensure short dairy value chains and best practices around production of milk for school consumption.
  - Improve and increase agricultural extension services, including quality of training and number of trained staff.
  - Monitor effective implementation of the National Nutrition Sensitive Agriculture (NNSA) Strategy.
• Address issues of poor productivity in the agricultural sector, especially regarding nutritious food (improved seeds, fertilizer, technology, mechanization, post-harvest technology, food safety regulations etc.).
• Promote climate smart agriculture (incorporate feasible technologies and knowledge sharing into extension services).
• Encourage increased participation in and inclusion of women in agricultural production (e.g. through scale-up of extension services).

**Infrastructure**

• Improve infrastructure related to access to and provision of power and water, including solar, to facilitate production, processing and transport of nutritious foods.
• Improve infrastructure associated with markets and access to markets (transport, roads, cold chain, storage and facilities) in order to improve access to nutritious foods and encourage/increase demand for production of these foods.

**Private sector (public sector engages, enables and regulates)**

• Improve the micronutrient content of staple foods and pulses.
  • Share evidence to promote efficacy of fortification and biofortification from global and national experience.
  • Consider the feasibility and benefits of introducing mandatory fortification of cereals and other staple foods to improve micronutrient content.
• Introduce legislation to support the adoption of biofortified varieties of grains, pulses, and other foods to increase micronutrient content.
• Support local supply of seeds and inputs for production of biofortified foods.
• Encourage the local production of nutrient supplements (iron and folic acid and multiple micronutrient supplements) and fortified special foods.
• Encourage or support activities that would increase the availability of nutritious convenience or healthy snack foods.