Fill the Nutrient Gap (FNG) Afghanistan

Price fluctuations and loss of livelihoods - the COVID-19 pandemic makes a nutritious diet less affordable

Summary

We estimate the impact of price changes and income shocks on the cost of a nutritious diet in Afghanistan based on a Fill the Nutrient Gap (FNG) analysis carried out in 2020. Combining Cost of the Diet (CotD) information with the economic profile of the livelihoods most affected by COVID-19 (such as casual and skilled labour, small business, and petty trade), we highlight geographic priority areas for targeting the population that may have moved below, or further below, the threshold of affordability of a nutritious diet. Using this method we estimate that the lowest cost nutritious diet may cost at least 6 percent more, on average, between March and September 2020. This is based only on staple food price which increases the nutritious diet cost by approximately AFN (Afghani) 500, putting an additional 3 percent of households at risk of not being able to afford a nutritious diet. Usually food prices decline during this season.
Although no updated income and expenditure information was available, using the World Bank’s projections for income reduction we show that loss of income would have increased the proportion of households unable to afford a nutritious diet from 76 to 85 percent in urban Kabul, and from 98 to 99 percent in rural Daykundi. Those who could not afford a nutritious diet are pushed further away from even the lowest cost diet, worsening diet quality and increasing food insecurity and malnutrition. To substantiate these findings and enable more detailed analysis, monitoring price changes by collecting data with expanded food lists covering fresh nutritious foods, crucial for designing and managing a response to current and future price shocks.

**INTRODUCTION**

Food choices are largely determined by food prices and income, and fluctuations in either of these can have a direct effect on the food and nutrition security of a population. If prices of nutritious foods were to increase or if household income were to decrease, affected households would be unable to afford nutritious foods. This could lead to a decrease in their dietary diversity and an increased reliance on cheaper staple foods, resulting in reduced intake of nutrients that are vital for adequate health and development.

The 2020 State of Food Security and Nutrition in the World (SOFI) report recognizes that “unaffordability of healthy diets is due to their high cost relative to people’s income”. As estimated by the SOFI report, healthy diets are unaffordable for 3 billion people globally, with half of those not being able to afford a diet meeting only required levels of essential nutrients. With disruptions to global supply chains and an economic crisis brought on by the COVID-19 pandemic, food insecurity is increasing. Low-income households are not resilient to shocks that create a combination of livelihood losses, decreased household income, and food price increases, especially of fresh nutritious foods. Vulnerable individuals within those households are at risk of undernutrition, i.e. stunting, wasting and micronutrient deficiencies. Particular attention must be paid to the first 1,000 days, i.e. to women and girls who are pregnant or breastfeeding and to children under the age of 2 years, because negative impacts on nutrition during these stages can have long-lasting effects on the health and nutritional status of the individual and affect economic outcomes.

In contexts such as Afghanistan where nutritious diets were unaffordable for 88 percent of households even before the COVID-19 pandemic, it is crucial to monitor and react adequately to any fluctuations in income levels and prices of nutritious foods. This could be through interventions that improve access to and affordability of nutritious diets, particularly for nutritionally vulnerable groups such as pregnant and lactating women, children and adolescent girls. The economic shock triggered by COVID-19 led to a 2 percent contraction of the economy in 2020 for the first time since 2003, and affected food access by impacting on household incomes and increasing prices. This is likely to have exacerbated non-affordability of the nutritious diet. Severely acute food insecurity increased from 33 percent of the population in 2019 to 36 percent in 2020, putting an additional 4 million individuals at risk of being severely food insecure. Improved understanding and capacity to respond to these shocks can help the government and other development and humanitarian partners in Afghanistan to prevent food and nutrition insecurity crises, enabling them to mitigate long-term effects and the risk of further economic damage to the country.

**MAIN MESSAGES**

1. **Livelihoods and Income**

The estimated impact of the COVID-19 pandemic on livelihoods is concentrated in provinces such as Kandahar, Nangarhar and Paktya where much of the upper middle wealth quintile lives. Although individuals living in these provinces are relatively better off than a large portion of the population, they are at high risk of falling into poverty and being unable to afford a nutritious diet. For those households in lower wealth quintiles, any income shock could potentially put a nutritious diet even further out of reach for them.

In Figure 1 we compare the wealth status of a province (i.e., the proportion of households in the upper middle wealth quintiles, 40–80 percentile) with estimates from the WFP’s Research, Assessment and Monitoring (RAM) unit of the impact of COVID-19 on different livelihoods in Afghanistan.
This impact estimate groups livelihoods that are particularly vulnerable to income shocks (such as casual and skilled labour, small business, petty trade and those dependent on remittances or begging and charity), and identifies the provinces where these livelihoods are concentrated. Highlighted in purple are provinces where more than 40 percent of households are classified as experiencing a high impact on income due to the reduction in economic activity and quarantine and isolation measures. More than 40 percent of the population in these provinces is in upper middle wealth quintiles. This suggests that in these areas COVID-19 shocks would have affected households that are usually able to sustain their living without - or with very little - social assistance, but have now been put at risk of falling into poverty.

**Figure 1:** Comparing households with livelihoods particularly impacted by COVID-19 with percentage of households in third and fourth wealth quintiles. Purple dots indicate provinces with more than 40 percent of households in livelihoods particularly impacted by COVID-19, and a high proportion in the third and fourth wealth quintiles (CotD 2020, Seasonal Food Security Assessment 2019)

The World Bank estimated that the national poverty rate in Afghanistan may increase from 55 percent in 2016-17 to between 61 and 72 percent in 2020 depending on the magnitude of the impact of the COVID-19 pandemic. This could force an additional 1.9–6 million people into poverty. Given that the data used in the CotD analysis are from before the COVID-19 shock, we modelled the likely impact of the recent decline in income levels on non-affordability of energy-only and nutritious diets. From the three scenarios set out by the World Bank, we show the results of a moderate scenario where incomes reduce by 24 percent in urban areas (Figure 2) and 16 percent in rural areas (Figure 3).

Figure 2 shows the household monthly food expenditure curves before a shock for urban Kabul (labelled ‘base scenario’), and the costs of the energy-only diet (e.g., AFN 438 in Kabul) and nutritious diet (AFN 1125 in Kabul). The points at which the expenditure curve intersects with the horizontal cost lines provides the rate of non-affordability of the diets because household food expenditure below this line is less than the cost of the nutritious diet. The affordability gap, which is the difference between household food expenditure and the cost of the nutritious diet, is shown in the graph with vertical arrows. The lower a household’s food expenditure, the bigger the affordability gap. Assuming a constant proportion of total expenditure on food, a decline in income levels would cause food expenditure to fall. Graphically, this would shift the food expenditure curve down and to the right compared to the base scenario. This would lead to an increase in non-affordability rates for energy-only and nutritious diets, and an increase in the affordability gap.

*World Bank (2020) Afghanistan Development Update July 2020: Surviving the Storm*
In urban Kabul, the non-affordability of the nutritious diet increases from 76 to 85 percent of households. The non-affordability of the energy-only diet increases more after the income shock, from a baseline of 22 percent to 37 percent of households. An increase in the affordability gap occurs at all levels.

For instance, households in the middle quintile (40–60 percentile) would go from being able to cover, on average, 64 percent of the cost of the nutritious diet in the base scenario to only 49 percent of the cost following an income shock.

**Figure 2:** Projected changes in affordability levels and gap from an economic shock in urban Kabul (CotD 2020, World Bank 2020)

Figure 3 shows that in rural Daykundi non-affordability of the energy-only diet increases from 27 to 41 percent, indicating that even meeting only energy needs could become unattainable for a large proportion of the population. For example, households in the second-lowest quintile (20–40 percent of expenditure) that were able to cover most of the cost of the energy-only diet (98 percent) would only be able to cover 83 percent of it following an income shock. Non-affordability of nutritious diets is already extremely high at 98 percent and increases to 99 percent. However, even in this scenario of a small change in non-affordability of the nutritious diet, there will be an increase in the affordability gap. A greater impact from interventions would be needed to cover the gap. For instance, in the base scenario, the households in the middle expenditure quintile were, on average, able to afford just 30 percent of the nutritious diet cost from their existing incomes. Following a decline in their incomes they would only be able to cover 25 percent of the nutritious diet cost. Similarly, those in the second highest quintile (60–80 percent) would go from being able to cover an average of 42 percent of the cost of the nutritious diet to covering only 35 percent of the cost.

**Figure 3:** Projected changes in affordability levels and gap from an economic shock in rural Daykundi (CotD 2020, World Bank 2020)
2. Price Fluctuations
Impact of changes in the market prices of staple foods are more pronounced in the south western and central provinces, and can make a nutritious diet unaffordable for even more households.

Since the onset of COVID-19, WFP, in conjunction with other partners, has been carrying out regular market monitoring to track changes in food prices. After a rapid surge in prices between March and May 2020, most commodities stabilized towards the end of the year, although not dropping back to pre-COVID-19 levels. To truly understand the impact of price fluctuation on the cost of the nutritious diet, we would need updated price data for all food items. However, given that the only updated price data available are for staple commodities (such as cereals, legumes and oils) we adjust for the prices of these food commodities to reflect the change in price that occurred between March and September 2020. We keep prices of all other food groups (such as fruit, vegetables and animal source foods) constant, at the same level as the baseline. We find that even a change in prices of basic food items translates to changes in the cost of a nutritious diet, going as high as 16 percent in provinces such as Parwan (Figure 4). Changes in the Food Consumer Price Index (CPI) during the period of March to September 2020 were atypical. For example, in 2017, 2018 and 2019 the food CPI declined between 0.9 and 2.4 percent during the months of March and September, while in 2020 the same index saw an increase of 2.2 percent.\(^5\)

**Figure 4:** Estimated changes in the cost of the nutritious diet based on market price data (WFP 2020)

The average change between urban and rural areas is similar at 5 and 6 percent respectively, but wide disparities are visible across provinces. The southwestern and central provinces in particular experience a higher increase in the cost of the nutritious diet. Costs increased nearly everywhere (Figure 4), which may reflect not only the price shocks caused by COVID-19 restrictions but may reflect a mix of other drivers, including normal variation due to availability or harvests. Cost increases are particularly high in provinces where median food expenditure is comparatively low, suggesting that price changes occurred particularly in poorer areas (Figure 5).

Figure 5: Change in cost of the nutritious diet and median food expenditure (WFP 2020, ASFSA 2019)

Figure 6 compares the percentage of households in critically vulnerable livelihoods and the percentage of price change by province. The highest changes in costs are observed in provinces where households are expected to be less affected by income losses due to the COVID-19 shock. However, some provinces, such as Kandahar and Faryab, are affected by changes and fluctuations in income and prices. This two-pronged impact can lead to the deterioration of food and nutrition security for households that possibly did not require social assistance before COVID-19 and may not receive adequate support to overcome the shock. Households that were already food insecure are now at risk of being further impoverished.

Figure 6: Comparing the percentage of households that are active in livelihoods most vulnerable to the economic impacts of the COVID-19 pandemic and estimated price changes in the cost of the nutritious diet by province (WFP 2020)
Even a small change can have significant consequences in the current scenario. In urban Kabul, just the increase in staple prices over the last 6 months indicates that an additional 3 percent of households would fall below the lowest cost of a nutritious diet (Figure 7). All other households that were already below that threshold are now an additional AFN 400 per month further away from being able to afford a healthy, nutritious diet. Similarly, in rural Uruzgan, as can be seen in Figure 8, the change in prices increases non-affordability from 85 to 88 percent of households. The affordability gap also increases, indicating that additional funding is required for large parts of the population to afford a nutritious diet.

This is particularly important as non-affordability in Afghanistan is already very high. Given that the majority of the population is unable to purchase fresh, nutritious foods to meet their nutrient requirements, understanding the affordability gap that needs to be bridged becomes an important factor in designing effective social protection and safety mechanisms which are able to target the vulnerable and address changing needs.

3. Data Needs

Insufficient data adequately capturing changes in the prices of fresh, nutritious foods have been collected in Afghanistan. To assess how nutrition is impacted by COVID-19 and other shocks, and to identify suitable next steps to mitigate the impact of the shocks, it is necessary to expand information on prices and availability of foods, and expenditure on nutritious foods to allow for calculation of precise estimates of who is unable to meet nutrient needs and to what extend.