

Chapter 3

THE (UN)AFFORDABILITY OF HEALTHY DIETS IN SOUTH ASIA AND THE IMPLICATIONS FOR NUTRITION-SENSITIVE FOOD POLICIES

Derek Headey and Kalyani Raghunathan

Derek Headey is a senior research fellow, International Food Policy Research Institute (IFPRI), Colombo.

Kalyani Raghunathan is a research fellow, IFPRI, New Delhi.

KEY MESSAGES

- Cost and affordability of healthy diet metrics are critically important new indicators of food insecurity, and reveal that balanced nutritious diets are relatively expensive and unaffordable for many South Asians.
- The share of people unable to afford the global healthy diet in the 2018-2022 period varies between 5 percent in Bhutan to 21 to 57 percent in other South Asian countries. In total, more than 1 billion South Asians cannot afford the global healthy diet.
- There are three major barriers to achieving convergence of actual diets to healthy diets: poverty (low incomes), the high cost of nutrient-dense foods, and weaker preferences for healthy foods compared with unhealthy foods.
- “Healthy diet poverty” is still the main barrier for many South Asians, highlighting the importance of inclusive economic growth as well as the need to scale up nutrition-sensitive social protection with more appropriate coverage, size, nutritional adequacy, and comprehensiveness of transfer packages, and increased intensity of complementary nutrition education interventions.
- High prices are problematic for some nutrient-dense foods, especially fruits, vegetables, and animal-source foods, but there is scope to reduce prices through diversified agricultural investments, improvements in transport, storage, and logistics infrastructure, and more nutritionally oriented trade policies.
- As incomes in South Asia grow, so too does the preference problem: Even though many South Asians cannot afford a healthy diet, factors such as poor nutrition knowledge, convenience, taste, advertising, and status considerations also inhibit consumption of healthy diets. Nutrition education and behavioral change interventions are needed at scale, and throughout the life course, including “double duty” interventions that increase demand for healthy foods and decrease demand for unhealthy foods.

The 1996 World Food Summit defined food security as “all people, at all times, having physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO 1996). While food security is surely a basic human right, ensuring access to nutritious foods—especially those consistent with local customs and preferences—is immensely challenging in South Asia. The household food budget of the average South Asian household is either insufficient to afford the healthy diets recommended by nutritionists and food-based dietary guidelines, or at best only marginally sufficient, so that households opt to consume much less costly diets. Moreover, even if healthy diets are affordable in a strictly monetary sense, households from all socioeconomic classes often choose relatively unhealthy diets, either for reasons of taste, convenience, tradition, or inadequate nutrition knowledge.

Improving the affordability of healthy foods and diets is a critically important intermediate goal for nutrition-sensitive food policies. To understand these challenges, in this chapter we first focus on the most recent evidence on the cost and affordability of healthy diets in South Asia. We then interpret empirical findings through a broadly defined food policy lens, focusing on both how policy-makers could raise incomes to bridge the healthy diet affordability gap and how they could reduce retail prices of nutritious foods in an economically and environmentally sustainable fashion.

HOW (UN)AFFORDABLE ARE HEALTHY DIETS IN SOUTH ASIA?

In the past five years, healthy diet affordability metrics have become influential, starting with pioneering work in South Asia itself (Dizon et al. 2019; Raghunathan et al. 2021) and neighboring Myanmar (Mahrt et al. 2019). Since 2020, these metrics have been published in the State of Food Insecurity and Nutrition (SOFI) reports (FAO et al. 2024), using food price data from the International

Comparison Program (ICP) (World Bank 2023) and income/expenditure distribution data from the World Bank’s Poverty and Inequality Portal (World Bank 2025). Most SOFI reports estimate the cost of a generic global healthy diet derived from commonalities across national food-based dietary guidelines (Herforth et al. 2022; FAO et al. 2024) and based on six food groups reported in Table 3.1. Within each food group, the cheapest food items are selected to meet group-specific calorie targets as well as an aggregate daily intake target of 2,330 kcal for a representative adult. The cost of a healthy diet is then essentially used as a new, nutrition-sensitive food poverty line, and the determination of whether an individual or household can afford a healthy diet depends on whether their food budget (that is, expenditure net of nonfood needs) is sufficient to afford a healthy diet at retail market prices.

Table 3.1 shows the cost of this global healthy diet in seven South Asian countries for the most recent 2021 ICP round. On average, the healthy diet costs \$3.79 per capita per day in 2021 international dollars, although this varies between a low of \$3.11 per day in India to roughly \$4.00 per day in the Maldives and Sri Lanka and almost \$5.00 per day in Bhutan. Factors such as agroecological conditions, remoteness and transport costs, trade policies, and consumer and producer subsidies (especially for staple grains) likely explain these differences in diet costs across South Asian countries. For example, it is notable that the three smallest countries in South Asia (Bhutan, Maldives, and Sri Lanka) have the highest healthy diet costs, most likely because they are more dependent on imports for some key food groups (such as fruits and vegetables) compared to the four larger countries.

The composition of healthy diet costs also sheds light on the potential structural and policy factors explaining these variations. Although starchy staple consumption recommendations usually amount to around 50 to 60 percent of an individual’s total caloric intake, they only comprise 12 percent of healthy diet costs on average in South Asia, with oils and fats accounting for 7 percent, and pulses

TABLE 3.1. The costs of a “global healthy diet” and its six food group components in seven South Asian countries in 2021

	Total healthy diet cost	Oils and fats	Starchy staples	Pulses, nuts, and seeds	Vegetables	Fruits	Animal- source foods
South Asia (N = 7)							
Healthy diet costs	\$3.79	\$0.25	\$0.45	\$0.34	\$0.81	\$0.86	\$1.08
Food cost shares	100%	7%	12%	9%	21%	23%	28%
Bangladesh	\$3.37	\$0.12	\$0.40	\$0.23	\$0.67	\$0.58	\$1.37
Bhutan	\$4.96	\$0.25	\$0.56	\$0.40	\$0.96	\$1.45	\$1.34
India	\$3.11	\$0.24	\$0.42	\$0.37	\$0.64	\$0.53	\$0.91
Maldives	\$3.95	\$0.14	\$0.18	\$0.45	\$1.26	\$0.99	\$0.93
Nepal	\$3.69	\$0.27	\$0.60	\$0.39	\$0.79	\$0.72	\$0.92
Pakistan	\$3.34	\$0.28	\$0.46	\$0.33	\$0.40	\$0.78	\$1.10
Sri Lanka	\$4.13	\$0.43	\$0.53	\$0.24	\$0.93	\$0.98	\$1.01

Source: World Bank (2024a).

Note: Costs are in 2021 international dollars.

and nuts 9 percent. Hence almost three-quarters of healthy diet costs stem from vegetables (21 percent), fruits (23 percent) and animal-source foods (28 percent), with this last group generally either dairy (such as in India) or fish (Bangladesh, Maldives, Sri Lanka). The immediate implication of this simple but striking result is that if a country wants to reduce the cost of a healthy diet, it should primarily focus on policies and programs that would directly or indirectly reduce consumer prices of vegetables, fruits, and animal-source foods.

Of course, the share of the population that cannot afford a healthy diet depends on a country’s distribution of household income or consumption expenditure. While the price data in Table 3.1 pertain to 2021, consumption surveys in South Asia take place in different years, as noted in Table 3.2, and extrapolation or interpolation techniques are used to derive healthy diet (un)affordability estimates for 2021 (Herforth et al. 2022). To give a feel for the extent and depth of the affordability challenge, Table 3.2 first compares the healthy diet costs from Table 3.1 to median consumption per capita (both in 2021 international dollars). For example, the cost of a healthy diet in Bangladesh is \$4.13 per capita, but median consumption for both food and

nonfood needs is just \$4.78 per capita, suggesting a typical consumer cannot afford a healthy diet. Healthy diet costs are also very close to median consumption per capita in India. Comparisons for both Sri Lanka and Pakistan need to be interpreted with caution, as these countries conducted their last household income and expenditure surveys (HIES) prior to the COVID-19 pandemic and before recent economic and political crises that included high rates of inflation.

The last two columns of Table 3.2 report the estimated prevalence of people unable to afford a healthy diet in 2021 and the associated population in millions. In Bhutan, where median consumption is far higher than in other South Asian countries, just 5.6 percent of the population cannot afford a healthy diet, despite Bhutan having the highest healthy diet costs (\$5.48). In the remaining countries, this share ranges from 21.4 percent in Nepal to 31.9 percent in (pre-crisis) Sri Lanka and 57.3 percent in Pakistan, with India also having a high share (51.6 percent). In terms of absolute numbers, the estimates for 2022 suggest that 917 million South Asians could not afford a healthy diet in these six countries.

Furthermore, a number of South Asian countries subsidize staple grains (and in some Indian states,

TABLE 3.2. The cost and affordability of a “global healthy diet” in six South Asian countries in 2022

Country	Year	Source	Healthy diet cost (\$ per capita)	Median consumption (\$ per capita)	Unable to afford healthy diet	
					Prevalence (%)	Population (millions)
Bangladesh	2022	HIES	\$4.13	\$4.78	49.1%	83.1
Bhutan	2022	LSS	\$5.48	\$13.86	5.6%	0.2
India	2021	CPHS	\$3.40	\$3.94	51.6%	729.4
Nepal	2022	LSS	\$3.89	\$7.41	21.4%	7.2
Pakistan	2018	HIES	\$2.91	\$4.07	57.3%	130.1
Sri Lanka	2019	HIES	\$3.70	\$6.91	31.9%	7.2
Total					57%	917

Source: Data from World Bank (2024b).

Note: HIES = Household Income and Expenditure Survey. LSS = Living Standards Survey. The CPHS is the Consumer Pyramids Household Survey, with consumption re-weighted by World Bank staff to redress undersampling of poorer households. Data for Maldives are not reported because of the lack of a recent household income or expenditure survey. Costs are in 2021 international dollars.

pulses), so the true costs for some poor consumers may be somewhat lower than those reported in Table 3.1, and healthy diets somewhat more affordable than those reported in Table 3.2.

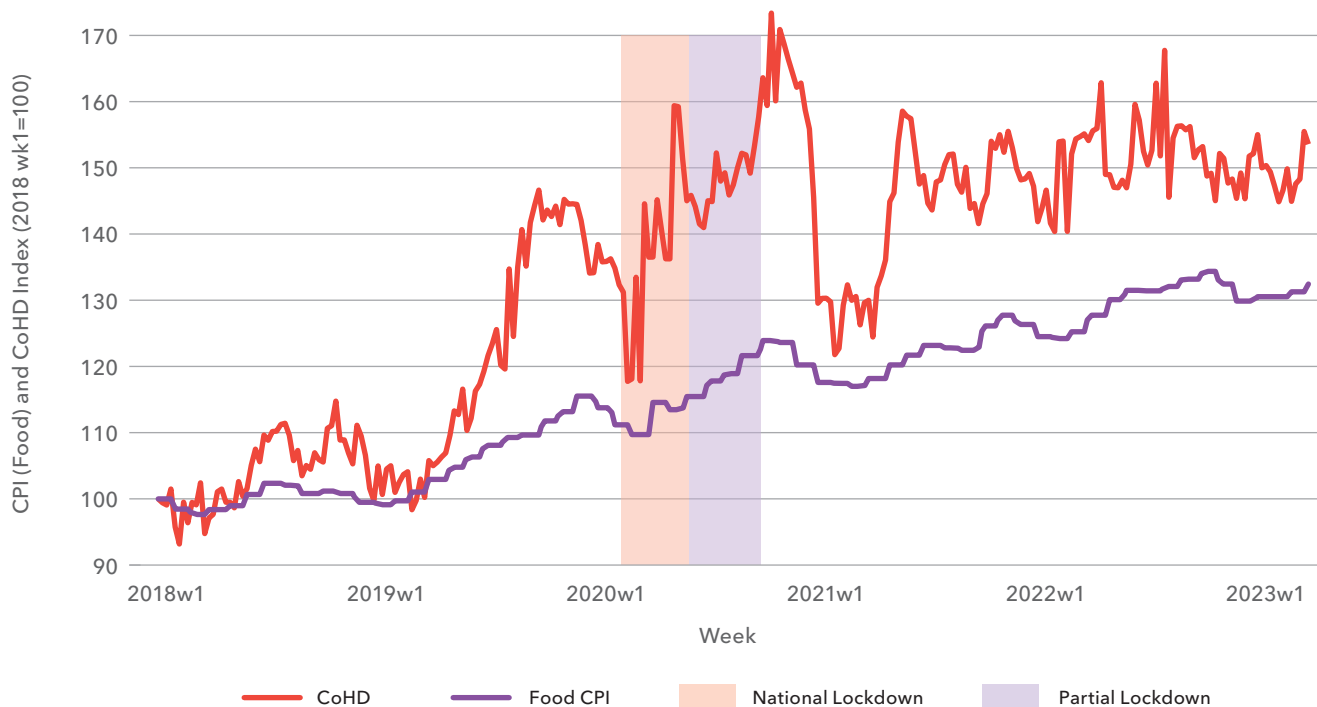
Both food and nonfood inflation have become a major economic problem in South Asia in the wake of the economic impact of large COVID-19 stimulus packages and Russia’s invasion of Ukraine (Abay et al. 2023). While Pakistan and Sri Lanka stand out as having exceptionally high food inflation – reaching 60 percent in Sri Lanka in 2022, and 25 and 38 percent in Pakistan in 2022 and 2023, respectively – other South Asian countries have also struggled with food inflation that is unusually high by recent historical standards. The Reserve Bank of India, for example, considers 6 percent inflation a tolerance threshold, above which it should take monetary policy action.

However, a novel insight from recent research on cost of healthy diet metrics is that indices of healthy food prices can often deviate markedly from the more conventional consumer prices indices (CPIs) used to track food inflation. Such deviations are possible because CPIs are weighted averages across a wide variety of foods that place greater weight on staple foods such as rice, wheat, oils, and

fats. Prices for these nonperishable commodities naturally tend to be less volatile, though South Asian governments also take many steps to keep these prices stable. Similarly, processed foods – though often unhealthy – have much more stable prices than do fresh fruits, vegetables, and animal-source foods, which are often highly perishable and only produced on a seasonal basis

To see this, Figure 3.1 (from Narayanan et al. 2024) compares the food CPI for urban India to a new Cost of Healthy Diet (CoHD) index covering 2018 to early 2023, including an extended period of national lockdown and partial lockdown in 2020. Although both price indices trend upwards, the CoHD index rose substantially faster overall, and was far more volatile than the food CPI, with spikes in 2019 and 2020, and again in 2021. Narayanan et al. (2024) argue that the CoHD should be regularly monitored in India to provide a more nutrition-focused benchmark of food inflation.

Of course, whether inflation in healthy diet costs is an indication of increased food and nutrition insecurity entirely depends on what is happening to incomes. Household income or consumption, however, can be costly to measure, and most governments only conduct nationally representative

FIGURE 3.1. Trends in the food CPI and the cost of a healthy diet in urban India, 2018–2023

Source: Narayanan et al. (2024).

Note: (1) CoHD is normalized to 2018 week 1 and Food CPI to 2018 month 1 prices; (2) CoHD is the national weekly cost of healthy diets across centers with all eight food group prices; and (3) Food CPI is the urban consumer food price index.

surveys every 5 to 10 years. India and Nepal had 10-year gaps between consumption surveys, and as we saw in Table 3.2, Sri Lanka and Pakistan have not conducted national surveys since their economic crises in 2022–2023. How, then, can governments, NGOs, and international development agencies monitor the affordability of healthy diets at higher frequency?

A recent paper by Headey et al. (2024) argues that high-frequency data on the wages of unskilled, semi-skilled, and skilled workers offers a suitable proxy for the incomes of the poor and lower-middle class. Throughout South Asia, the nonfarm poor primarily depend on selling their labor to earn a living, and wages for different occupations tend to follow similar trends. Moreover, Deaton and Dreze (2002) make the argument that the wages of the poor can be thought of as a poverty measure in their own right. Fortunately, most South Asian countries

do collect wage data at high frequency, though government agencies have not yet combined food prices and wages to track the affordability of healthy diets relative to wages, that is, trends in the “health diet wage.”

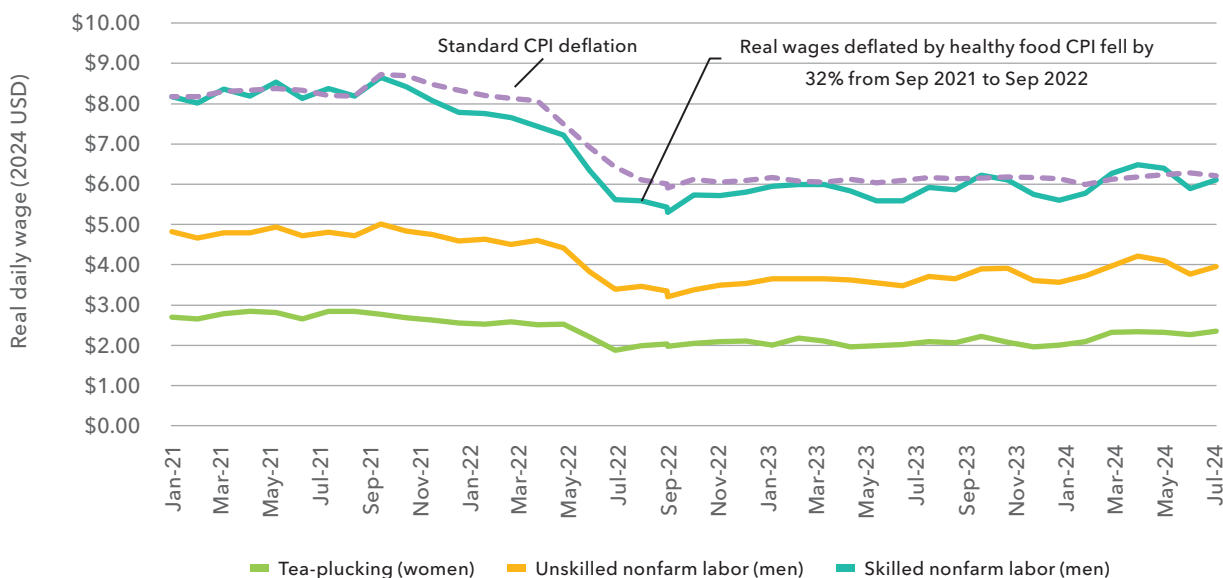
Yet doing so would fill a critically important data gap, especially in crisis-hit countries. Figure 3.2 demonstrates this for Sri Lanka, which saw a 60 percent increase in food prices over just a few months from March to June 2022, following the country’s sovereign debt default and a sharp depreciation of its currency. The Central Bank of Sri Lanka (CBSL 2025) monitors both retail and wholesale prices of a range of healthy foods, as well as wages of men and women in the large tea, rubber, and coconut estate sectors, in rice production, and in manual nonfarm occupations with different skill levels. For the real wage trends reported in Figure 3.2, we deflated wages by a new CPI in which the standard food CPI

component is replaced by a healthy food price index, while the nonfood CPI is left in place. We constructed the healthy diet CPI by first estimating separate price indices for eight different food groups (a fish price index, a fruit price index, and so on) and then applying weights to each food group designed to generate a CPI that is associated with a healthy and balanced diet (see notes for Figure 3.2). In deflating nominal wages for different occupations and genders, we can derive high-frequency (monthly) estimates of changes in the affordability of healthy diets for workers of very low socioeconomic status (for example, tea pluckers) as well as lower-middle-class occupations, such as skilled nonfarm labor (in this case, carpentry and masonry).

We report these real wage trends deflated by the healthy diet CPI over the January 2021 to July 2024 period, which includes the March 2022 onset of Sri Lanka’s exceptionally severe economic

crisis. For skilled nonfarm labor (men), real wages deflated by the healthy foods CPI fell by a remarkable 32 percent from September 2021 to September 2022. A similar reduction is observed for unskilled nonfarm labor for men (–29 percent), and tea plucking for women (–21%), though the graph also reveals that wage rates for women in the tea estate sector are just 60 percent of those for nonfarm wages for men. Finally, the graph shows that despite some macroeconomic recovery in late 2023 and 2024, real wages have scarcely improved since their trough in mid-2022. Figure 3.2 therefore illustrates the critical importance of monitoring wages and healthy diet costs at high frequency, across occupations and genders, and ideally across geographic areas. In South Asia, moreover, constructing such indices would be fairly simple, as most national government agencies in the region already regularly collect a rich array of food price and wage data.

FIGURE 3.2. Trends in real wages of male and female workers of different skill levels during Sri Lanka’s economic crisis deflated by healthy foods consumer price index



Source: Authors’ construct from price and wage data reported in CBSL (2025), as well as the nonfood consumer price index.

Note: For the healthy foods CPI, we first construct price indices for eight food groups and then create an aggregate healthy foods price index by applying weights that would lead to a balanced healthy diet. The food groups and corresponding weights are (1) rice (weight = 20%); (2) other starch staples (potato, plantain) (weight = 5%); (3) beans (weight = 10%); (4) staple vegetables (onions, tomatoes, pumpkins) (weight = 15%); (5) other vegetables (weight = 10%); (6) fruits (bananas) (weight = 15%); (7) fish (weight = 15%); and (8) poultry (meat, eggs) (weight = 10%).

POLICY OPTIONS FOR IMPROVING AFFORDABILITY OF HEALTHY DIETS

In IFPRI's *2024 Global Food Policy Report*, a think piece on global healthy diet affordability challenges (Headey, Hirvonen, et al. 2024) discusses three main barriers to achieving a sustainable shift to healthy diets: poverty, prices, and preferences.

The poverty problem

Too many people in South Asia simply do not earn enough to purchase the recommended quantities of healthy foods in their local food environments. How quickly could economic growth improve the affordability of healthy diets in LMICs? It has been estimated that a 1 percent increase in per capita GDP is typically associated with a 1.3 percent reduction in the number of people who cannot afford a healthy diet (Headey, Hirvonen, et al. 2024), though population growth works in the other direction. So faster economic growth certainly helps, although more inclusive economic growth that raises wages and incomes for the poor will have even larger effects.

However, since large swathes of poor people in South Asia currently have incomes that fall far below the cost of a healthy diet, nutrition-sensitive social protection could offer a more immediate means to bridge affordability gaps (see Chapter 10). A significant problem in South Asia is that although social protection programs often reach large sections of the population (including nonpoor households in some instances), the value of the transfers is so low that they close only a small portion of the healthy diet affordability gap. During the extraordinary circumstances of the COVID-19 pandemic, for example, poorer households in lower-middle-income countries in Asia typically received around \$0.50 per day (in cash or in-kind). For a household of five, that amounts to \$0.10 per individual. Clearly, such a modest transfer could only have a very limited impact on diet quality (Ecker et al. 2023). This suggests that nutrition-focused social protection programs should

consider additional cash or in-kind food supplements for the most nutritionally vulnerable groups. There is surely also scope to scale up social protection in South Asia through internal reallocation of other government expenditures to support social protection programs.

The price problem

The average healthy diet cost in South Asia in 2021 was \$3.79 per day in 2021 international dollars (Table 3.1), raising the question, How can this cost be reduced? In principle, there are a number of ways to reduce prices of healthy foods, but important trade-offs exist in terms of fiscal costs, the speed at which prices might change, equity considerations, and financial sustainability. For example, price subsidies for healthy foods can immediately reduce the real costs consumers face, but such subsidies are costly and likely to be regressive because better-off households consume more nutrient-dense foods than poorer households. Subsidies to staple food production in South Asia almost certainly inhibit diversification into healthy food production and also have serious environmental costs, such as groundwater depletion, but cheaper grains free up room in household food budgets for spending on nonstaple foods, potentially allowing for greater dietary diversification (though income/cash support would do the same).

In the longer term, improving production of healthy foods could have significant effects on relative prices, given that many healthy foods are highly perishable and thus not cost-effectively tradable over long distances. This means that an increase in productivity of egg production, for example, would be expected to reduce real egg prices. This is precisely what has been observed in India and other Asian countries, and indeed at a global level (Morris et al. 2018). However, more systematic modeling and research are needed to understand price effects of productivity improvements both on the farm and in supply chains for nutritious foods, including transport, logistics, and infrastructure considerations.

The preference problem

If, tomorrow, all South Asians were given the incomes required to afford healthy diets, would they actually choose to purchase and consume these diets? Unfortunately, the answer is no. South Asia's dietary transition to unhealthy processed foods is well documented (see Chapter 2). Latent demand for foods dense in unhealthy oils/fats, sugar, and salt is strong in the region, while consumer preferences for vegetables and fruits are generally weak. Hence, income growth/support and cost reductions for healthy foods would be insufficient to move diets in the right direction. Nutrition-oriented policies and programs are needed to shift food preferences at scale through behavioral change communication or food environment interventions. That is the subject of ongoing research in CGIAR and elsewhere, but it obviously constitutes an immense challenge that requires interventions targeted at the individual, household, food environment, and industry levels to facilitate change at scale.

POLICY ACTIONS TO ACHIEVE A SHIFT TO HEALTHIER DIETS

There may be as many as 1 billion South Asians who are unable to afford a healthy diet. Putting healthy diets within reach of all South Asians will require:

1. **Improving national and subnational high-frequency monitoring of healthy diet affordability through improved utilization of food price, wage, and household survey data.** This will provide a stronger evidence basis for interventions, a new dimension to early warnings systems, and a stronger platform for nutritional advocacy at the national level.
2. **More rapid and pro-poor economic growth** reforms that countries can implement to catalyze faster and more equitable growth.
3. **Realignment of agricultural and food policies and investments toward nutritious foods** (including fortified foods and other nutritious processed foods) that make healthier, nutritious diets more affordable, through price and/or income mechanisms.
4. **Improving transportation, infrastructure, storage, processing, and logistics systems** relevant to domestic *and* international trade in food – especially perishable nutritious foods – including both investments in hard infrastructure and development of efficient businesses in the midstream of value chains.
5. **Scaling up nutrition-sensitive social protection with more appropriate** coverage, size, and nutritional adequacy, with comprehensive transfer packages, and with greater intensity of complementary nutrition education interventions.
6. **Scaling up “double duty” interventions to increase demand for healthy foods and decrease demand for unhealthy foods.** More evidence and experimental programming are needed.

More policy-oriented research is needed to provide a strong evidence base to support these actions, but that should not delay more ambitious multisectoral efforts to immediately improve both supply of and demand for healthy diets, for all South Asians, at all times.

Acknowledgments

We would like to thank the report editors and Harold Alderman for constructive feedback and helpful suggestions, which have strengthened this chapter.

REFERENCES

- Abay, Kibrom A., Clemens Breisinger, Joseph Glauber, Sikandra Kurdi, David Laborde, and Khalid Siddig. 2023. "The Russia-Ukraine War: Implications for Global and Regional Food Security and Potential Policy Responses." *Global Food Security* 36: 100675. <https://doi.org/10.1016/j.gfs.2023.100675>.
- CBSL (Central Bank of Sri Lanka). 2025. *Economic and Social Statistics 2025*. CBSL, Colombo, Sri Lanka. Accessed September 1, 2025. www.cbsl.gov.lk/statistics/economic-and-social-statistics/chapter-3.
- Deaton, Angus, and Jean Dreze. 2002. "Poverty and Inequality in India: A Re-Examination." *Economic and Political Weekly* 37 (36): 3729-48. <https://www.jstor.org/stable/4412578>.
- Dizon, Felipe, Anna Herforth, and Zetianyu Wang. 2019. "The Cost of a Nutritious Diet in Afghanistan, Bangladesh, Pakistan, and Sri Lanka." *Global Food Security* 21: 38-51. <https://doi.org/10.1016/j.gfs.2019.07.003>.
- Ecker, Olivier, Harold Alderman, Andrew R. Comstock, Derek D. Headey, Kristi Mahrt, and Angga Pradesha. 2023. "Mitigating Poverty and Undernutrition Through Social Protection: A Simulation Analysis of the COVID-19 Pandemic in Bangladesh and Myanmar." IFPRI. <https://hdl.handle.net/10568/140333>.
- FAO (Food and Agriculture Organization of the United Nations). 1996. *Declaration on World Food Security*. FAO. www.fao.org/4/w3613e/w3613e00.htm.
- FAO, International Fund for Agricultural Development, UNICEF, World Food Programme, and World Health Organization. 2024. *The State of Food Security and Nutrition in the World 2024: Financing to End Hunger, Food Insecurity and Malnutrition in All Its Forms*. <https://doi.org/10.4060/cd1254en>.
- Headey, Derek, Fantu Bachewe, Quinn Marshall, Kalyani Raghunathan, and Kristi Mahrt. 2024. "Food Prices and the Wages of the Poor: A Cost-Effective Addition to High-Frequency Food Security Monitoring." *Food Policy* 125: 102630. <https://doi.org/10.1016/j.foodpol.2024.102630>.
- Headey, Derek D., Kalle Hirvonen, Harold Alderman, Saskia de Pee, and Kalyani Raghunathan. 2024. "Diet Affordability: Understanding the High Cost of Healthy Diets." In *Global Food Policy Report 2024: Food Systems for Healthy Diets and Nutrition*, Chapter 4. IFPRI. <https://hdl.handle.net/10568/141885>.
- Herforth, Anna, Aishwarya Venkat, Yan Bai, Leah Costlow, Cindy Holleman, and William A. Masters. 2022. "Methods and Options to Monitor the Cost and Affordability of a Healthy Diet Globally." FAO. <https://openknowledge.fao.org/handle/20.500.14283/cc1169en>.
- Mahrt, Kristi, David Mather, Anna Herforth, and Derek Headey. 2019. "Household Dietary Patterns and the Cost of a Nutritious Diet in Myanmar." IFPRI Discussion Paper 01854. IFPRI. <https://hdl.handle.net/10568/147128>.
- Morris, Saul S., Kalpana Beesabathuni, and Derek Headey. 2018. "An Egg for Everyone: Pathways to Universal Access to One of Nature's Most Nutritious Foods." *Maternal & Child Nutrition* 14 (S3): e12679. <https://doi.org/10.1111/mcn.12679>.
- Narayanan, Sudha, Kalyani Raghunathan, and Anita Christopher. 2024. "Beyond the Consumer Price Index: Measuring the Cost of a Healthy Diet in India." *Economic and Political Weekly* 59 (32).
- Raghunathan, Kalyani, Derek Headey, and Anna Herforth. 2021. "Affordability of Nutritious Diets in Rural India." *Food Policy* 99: 101982. <https://doi.org/10.1016/j.foodpol.2020.101982>.
- World Bank. 2023. "GDP Price Level Index and PPP-Based GDP Per Capita Index by Economy, 2021." www.worldbank.org/en/programs/icp/data.
- World Bank. 2024a. "Databank | Food Prices for Nutrition." <https://databank.worldbank.org/source/food-prices-for-nutrition>.
- World Bank. 2024b. "Poverty and Inequality Platform Methodology Handbook." World Bank. <https://worldbank.github.io/PIP-Methodology-2022-04/#non-technical-summary>.
- World Bank. 2025. "Poverty and Inequality Platform." Accessed September 1, 2025. <https://pip.worldbank.org/home>.