



# Fiscal Consequences of Ensuring Low Hunger and Poverty in South Asia

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**Abstract.** South Asia has the highest malnutrition and hunger problem. India and Nepal are in the moderate category of the Global Hunger Index with high levels of child malnutrition. Bangladesh and Sri Lanka are in the serious hunger category, with the lowest number of malnourished children. However, poverty levels across South Asia have been decreasing, but the hunger challenge is worsening. As agriculture plays a lesser role in the economy, it is worth mentioning that the food production and distribution system also experienced a decline. Decreased agricultural spending has caused food prices to rise and hunger and malnutrition to persist. Against this backdrop, one of the major policy questions revolves around the role of fiscal policy in ensuring low hunger. Investigating the impact of government expenditure, revenues, and selected fiscal incentives on the agricultural sector is urgent. This paper considers the feasibility of investing more in sustainable food systems than food subsidies. Food subsidies are often a short-term instrument to manage the immediate price shock. Public investments in sustainable agriculture have a dual impact on stable output growth and lower malnutrition. The panel model shows a positive impact of hunger on fiscal deficit and a negative impact of government outlays on malnutrition prevalence.

**Keywords:** Fiscal policy, Sustainable Development Goals, South Asia.

## 1 Food Security and Poverty in South Asia

### 1.1 Scope and Rationale

South Asia occupies below 4 percent of the world's land area. This region is vulnerable to food insecurity challenges, given a larger share (approximately a quarter share) of the world's population. Food inflation, food distribution and nutritional security are the common policy challenges for the government in this region. 44-59 percent of households' expenditures are on food in South Asian countries, excluding Maldives, with a 37 percent average share of food expenditure [1]. Higher food expenditure makes the household more prone to adverse effects of food inflation and food security burdens. Food security in South Asia depends on production levels and the public distribution of food. Therefore, designing fiscal policy to achieve the targets of 'no

poverty' and 'zero hunger' goals of the Sustainable Development 2030 agenda is crucial.

Consequently, fiscal policy is constrained by increasing food inflation and malnutrition burden. Government expenditures on agriculture and allied sector during 2020-2022 in South Asian countries occupy 0.2 percent (for Maldives, Bangladesh and Pakistan) to 4-5 percent (India, Afghanistan, Sri Lanka, Nepal) share of total government outlays. Bhutan has been an exception with above 10 percent share since 2005 for the agricultural sector. Further, the share of public investment in agricultural and food subsidies gradually follows a downward path across these countries. The argument is a trade-off based on internal fiscal deficit vs international funding for sustainable development goals. This paper explores the status of poverty and hunger risks during 2000-2022 and the consequential changes in the fiscal policy in eight South Asian countries.

## 1.2 Poverty, Malnutrition and Hunger in South Asia

When the world is facing high domestic inflationary pressures, food security concerns are getting deeper [2,3,4,5]. Inflation soared in the pandemic times since early 2020, worsening the malnutrition challenges for South Asia the most, as 89 percent of the increased undernourishment is concentrated in this region. Excluding India, all other countries are dependent on food imports of wheat and other staple food items. In 2022, after moderating in 2021, food inflation rose by 53 percent, taking the annual average to 22 percent [2,3] for South Asia. Nepal, Bangladesh, Pakistan and Sri Lanka. As the supply chain disruption continues in the form of the Ukraine invasion and country-specific climatic hazards, converting into a trade ban on major staples, it worsens the food availability in low-income developing regions. South Asia's share in world GDP (according to the purchasing power parity) was 12.3 in 1990, which has risen to 33.58 in 2023. The region holds one-fourth of the world's population, expected to grow by 40 percent by 2050. The prevalence of malnutrition is 30.7 per cent higher than the global average of 22 per cent. The ever-increasing population and higher malnutrition burden make this region one of the most vulnerable to food insecurity. Climate change led to natural resource degradation, as well as persistently high rates of poverty add to the challenges of food insecurity [6]. Further, it also shares 29 to 33 percent of the world's impoverished population living at or below \$ 2.15 per day (the second largest after Sub-Sahara Africa but most prominent in numbers), 7917.7 million. For extreme poverty, defined at \$ 1.90, the numbers stood at 216 million, according to the Global Poverty and Shared Prosperity Report 2018. Global poverty is declining, but the pace of decline is slowing down even before the pandemic's onset. On the contrary, South Asia was the only region that managed a faster decline in poverty rates up to 2019. Although, the Poverty and Shared Prosperity Report 2022 also states that in 2019, South Asia had the highest share of global poverty at both the US\$3.65 (43 percent) and US\$6.85 (42 percent) poverty lines. The poverty line definition has been revised and upgraded with the increasing number of countries falling into the middle-income group. The global poverty measures are now based on PPP 2017 criteria with \$2.15 (\$1.90 earlier for PPP 2011) for low-income countries, \$ 3.65

(\$3.20 earlier) for lower-middle-income countries, and \$6.85 (\$5.50 earlier) for upper middle-income countries. South Asian countries, excluding Maldives and Iran, fall under lower-middle-income countries. Table -1 presents that as the extreme poverty ratios (defined as \$2.15) are declining in South Asia, living standards and food security are not improving accordingly.

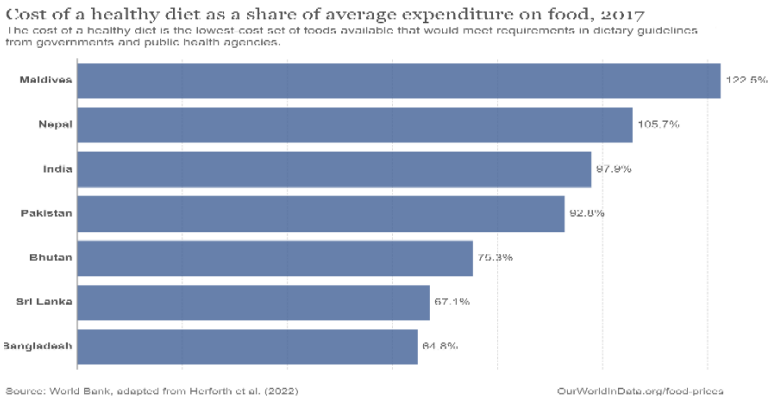
**Table 1.** Selected parameters for poverty ratios.

Countries	National Poverty Line	\$2.15 (PPP2017)	\$3.65 (PPP2017)	\$6.85 (PPP2017)	Multidimensional Poverty Ratio	Population who cannot afford a healthy diet (2021)
Afghanistan	54.5 (2016)	--	--	--	49.4(2020)	--
Bangladesh	24.3 (2016)	13.5	15	87	24.6	78.2
Bhutan	8.2 (2017)	0.9	2.0	40	5.8	51.2
India	21.9 (2011)	10.0 (2019)	12	84	16.4 (2021)	74.1
Maldives	5.4 (2019)	0.0	0.0	4.0	28.4 (2016)	3.4
Nepal	25.2 (2010)	8.2	11.0	80	17.4	76.4
Pakistan	21.9 (2018)	4.9	9.0	84	38.8 (2014)	82.8
Sri Lanka	14.3(2019)	1.0	2.0	49	16	55.5

Source: <https://data.worldbank.org/and> <https://www.worldbank.org/en/programs/icp/brief/foodpricesfornutrition>. The State of Food Security and Nutrition in the World, 2023 and Food Prices for Nutrition 2.0 (published July 2023) presents a comprehensive account of food security and its various dimensions.

Poverty decline for middle-income categories (poverty line defined as US\$3.20 and US\$5.50) has been slower, indicating that a sizeable population which must have experienced a narrow escape from extreme poverty before COVID must have become more vulnerable to low-cost and less nutritive diet as food inflation started escalating post covid. The Shared Prosperity Report 2022 and the Social Protection Report by UNICEF in 2019 have extensively emphasized the urgent need for employment generation and food distribution through inclusive growth and social protection measures for countries vulnerable to higher poverty. Sub-Sahara, East and South Asia countries are identified as the most vulnerable among all major groupings. According to the Report, A [h]ealthy diet is a diet with sufficient [d]iversity and [q]uantity.....achieve [n]utrient [a]dequacy..... against diet-related diseases. A healthy diet is more dependent on access and affordability. For this indicator, the cost of meeting food-based dietary guidelines is computed using the least expensive food combinations available at a point in time in the country, considering its purchasing power parity for all countries. For computing the affordability of a healthy diet, \$3.66 is chosen as the global average cost. For the lower-middle-income countries, it is \$3.88-3.91. More than 50 percent of families in South Asia who cannot afford a healthy diet should be considered as the increasing vulnerability of households, even if the income levels are recovering to pre-pandemic levels. Further, this shows the challenges of the distributional aspect of food security, which directly and

indirectly depend on the nature of fiscal support. India, Bangladesh, and Nepal have been using the public distribution system substantially since the 1980s, but these programmes have not mitigated the concerns of malnutrition and poverty traps. Figure 1 shows that in Maldives have the highest cost of healthy diet and stands at 122.5 percent of the average expenditure on food. On the contrary Bangladesh has the lowest cost of healthy diet. This graph indicates the impact of food inflation on food expenditure.

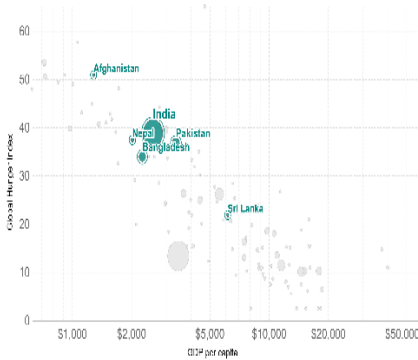


**Fig. 1.** Healthy diets cost more with increasing income levels in South Asia.

World Bank provides an updated explanation on the various categories of food-insecure population using the Food Insecurity Experience Scale. This scale was developed by the Food and Agriculture Organisation (FAO) and includes eight questions. There is a direct relationship between highly food-insecure households and malnourished households. For South Asia, Afghanistan (with severe food insecurity, above 70 percent of households) and Sri Lanka (with mild but rising food insecurity, around 10 percent of households) are the two extremes. It is important to note that during 2023, Nepal, Bangladesh, Pakistan and Sri Lanka have experienced alarming food inflation, particularly for staple grains, milk products, vegetables, and fruits. Other than staple grains, public distribution systems become ineffective and thus increase the pressures of fiscal subsidies.

Global Hunger Index vs. GDP per capita, 2000

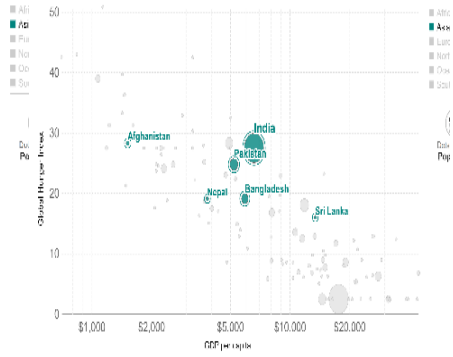
The Global Hunger Index<sup>1</sup> is measured on a 100-point scale where 0 is the best (no hunger) and 100 the worst. GDP per capita is adjusted for inflation and differences in the cost of living between countries.



Source: Consult Worldwide and Vizi Hunger-Index. Data compiled from multiple sources by World Bank. Note: GDP per capita is expressed in International\$ at 2017 prices. OurWorldInData.org/hunger-and-undernutrition • CC BY

Global Hunger Index vs. GDP per capita, 2021

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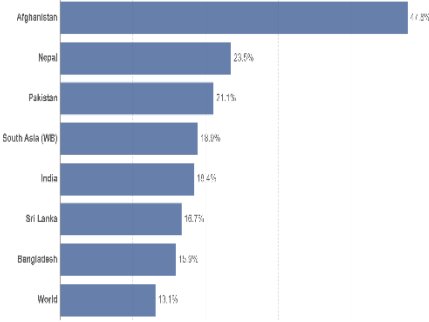
**Fig. 2.** Increased variation in hunger status of South Asia between 2000-2021

Figure 2 presents a comparative relationship between per capita GDP and Global Hunger Index values. South Asian countries have remained in the alarming to serious hunger category in the Global Hunger Index rankings since 2000. World Health Organisation states that the Global Hunger Index is an instrument to monitor the progress of individual countries and their effective policy mechanism towards hunger-related SDGs. The Index covers three dimensions of hunger: insufficient food availability, shortfalls in children's nutritional status, and child mortality. These components broadly cover the extent of malnutrition at the country level.

Further, the Index includes three equally weighted indicators: the proportion of people who are food energy-deficient, as estimated by FAO; the prevalence of underweight in children aged under five years, as compiled by WHO; and the mortality rate of children aged under five years, as reported by UNICEF. Countries are ranked 0-100 (best to worst) after testing the interrelationship between GNI per capita and hunger/undernutrition. The disparity in the Global Hunger Index among countries has increased since 2011. Since 2018, Bangladesh, Nepal and Sri Lanka have experienced better public food distribution policy results than India and Pakistan. Poverty and hunger at a country level are more revealing when child malnutrition of female anaemia levels are analyzed together. Figure 3 depicts the changing status of Nepal and Sri Lanka (i.e., faster deceleration in undernourished population) and the worsening of undernourishment in India to the World and South Asia average performance.

### Share of the population that is undernourished, 2001

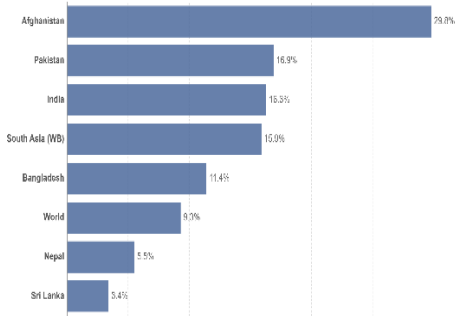
Share of individuals that have a daily food intake that is insufficient to provide the amount of caloric energy required to maintain a normal, active, and healthy life.



Source: Food and Agriculture Organization of the United Nations (via World Bank).  
Note: Countries and regions with rates below 2.5% are coded as 2.5% in the FAO dataset.  
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### Share of the population that is undernourished, 2020

Share of individuals that have a daily food intake that is insufficient to provide the amount of caloric energy required to maintain a normal, active, and healthy life.



Source: Food and Agriculture Organization of the United Nations (via World Bank).  
Note: Countries and regions with rates below 2.5% are coded as 2.5% in the FAO dataset.  
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**Fig. 3.** Decreasing share of undernourished population between 2001-2020.

The higher prevalence of stunting and wasting is the biggest challenge of sustainable development policies for South Asia. It can be observed through figure 4 that India, Sri Lanka and Nepal have a higher prevalence of Wasting. Afghanistan, India, Bhutan and Nepal have higher prevalence of stunting. When the poverty ratios decrease faster towards the SDG target of 3 percent, stunting and wasting will be higher than the target of 13.2 and 3 percent by 2030. Sri Lanka and Maldives have successfully reduced the prevalence of stunting, while Afghanistan and Bhutan are moving faster towards the wasting reduction targets. Therefore, it is interesting to note that with the progression of South Asian countries from Low-income to Low-middle-income countries, the disparities in performance have also been observed to progress. This again emphasizes the fiscal policy effectiveness and effective implementation of policies related to the socio-economic determinants of hunger in the region. The following section briefly discusses the evolution of food security over time, highlighting the various pathways through which hunger and malnutrition can be reduced through effective policies focussing on the agriculture sector.

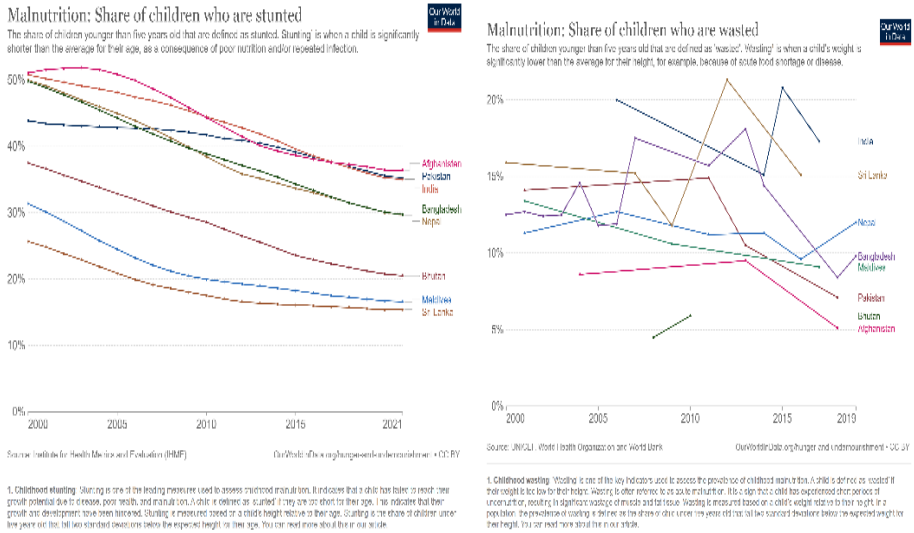


Fig. 4. Highest levels of stunting and wasting in South Asia

1.3 Methods

The central research question of the paper deals with the fiscal consequences of undernutrition and food insecurity on the fiscal deficit of the government. We assume that a higher prevalence of undernutrition and food insecurity leads to higher government expenditure on food subsidies and social protection and, therefore, a higher deficit GDP ratio. Firstly, we analyze the global hunger index and per capita GDP relationship. Then we run a Panel regression test with country fixed effect to see the impact of selected independent variables, viz, the prevalence of undernutrition (UNDERNUT), food inflation (FOODCPI), the share of social protection in total government expenditure (SC\_PROT\_TE), the share of agriculture in total value added (SHAREOFAG), agriculture sector annual growth (AGRGR), government revenue (REVGDP) and expenditure to GDP (EXPGDP) ratio on the fiscal deficit/ budgetary deficit to GDP ratio as the dependent variable. We assume a negative relationship of fiscal deficit with the first three independent variables and a positive relationship with all remaining independent variables. The panel regression results are presented in Table 2. Cross-section fixed (dummy variables) and Period fixed (dummy variables) are used to explain the different positions of countries in terms of higher and lower prevalence of food insecurity and undernourishment. The time selected is 2000-2022, and the time series data for 8 South Asian countries have been obtained from the Asian Development Bank, World Bank open database.

## 2 Food Security to Nutritional Security

Food security is traditionally described as dependent on the levels of agricultural production. Food production levels in modern economies primarily depend on the levels of investment in the agricultural sector. The economies where poverty is still the most significant challenge need more public investment in the agriculture sector. This investment helps break the nexus between poverty and food security via low agricultural production. Tweeten, in his article on Global Food Security in 1999, analyses the Shultz 1964 framework on agricultural transformation and emphasizes that government policies are more critical than agricultural output for food security. The argument lies in a proven hypothesis, over the years, that even if farmers are efficient producers and market forces perform the allocation and distribution, increasing output does not ensure accessibility and affordability of food. With the expanding food production, the likelihood of food and nutritional security becomes dependent on fiscal policy and investment towards the food sector. For public investment, fiscal policy is affected through input subsidies, food subsidies and capital formation.

According to the World Food Program and Global Report on Food Crises 2020, India needs an urgent, careful multistakeholder approach to the growing threat of severe food security crisis (high risk) due to repeated domestic supply shocks. The report says that India is among those countries where the food stocks are adequate, but challenges are related to supply chain disruptions/ inefficiencies, incomplete access of buyers and sellers to the market and incomplete information regarding the nutritional intake and support services and inequalities among the population groups [7]. Even COVID-19 hunger (explicit as well as hidden) was increasing across regions and social groups due to climatic and natural hazards, unstable prices, slowing per capita income growth, widening disparities, forced changes in staple diets, changing patterns in food production, increasing risks and shocks in agricultural activities, marketization and commodification of food security and several others [8,9,10,11,12].

Food security is one of the critical parameters for every development policy discussion. It is an equally challenging concern for the global and regional economy and every nation and household. Depending on the level of income and awareness, the challenge can differ in quantity, nutrition, and preferences. It has always been a development aspect which is proportionally affected by market forces and government intervention [13,14]. Market forces are essential not only because food price volatility affects the poor and vulnerable populations but also because it affects the food systems prevalent through the demonstration effect and income effect. This creates an impact on food and nutrition security for vulnerable households. Government intervention is the other side of the same coin regarding food security. It ensures food availability and access for vulnerable households and provides a policy framework for ensuring lower levels of hunger and better absorption of food by the households. The recent cause of concern has been the rising trend of nutrition-deficient diets and increasing levels of malnutrition despite expanded networks of the National Food Security Program [15,16,17, 18].

The definition of food security has evolved as a multidimensional concept, starting with the World Food Conference in 1974 to the Sustainable Development Goal 2 of



Zero Hunger in 2015[19]. The focus shifted from consistent basic food supplies with stable prices towards zero hunger. The goal of zero hunger is based on the premise that a combination of natural, social and political forces and food shortages creates hunger. The four accepted dimensions, despite the argued mechanisms [20]/ pathways [21,23], are Availability, Access, Utilisation and Stability. Eleven perspectives related to food security issues are proposed where livelihood options, sustainable production and consumption patterns, risk and vulnerability and right to food security are some critical perspectives. The vast literature available on the food security challenges has gradually shifted the focus from poverty as a root cause of hunger to nutritional security, the right to food, gender justice and environmental concerns for the overall food system [22]. FAO's definition of food security has added a gender dimension to food access and availability. Food security depends on resource allocation for food production and the distribution of purchasing power in any economy to purchase food. Women, as the crucial participant in food production, provision and preparation, and their limited access to productive resources become a significant determinant for food security. Further, the status and empowerment of women are affected by access and equity issues in society within the changing economic structure. It has been a near-universal fact that if societies and governments invest in gender equality and female empowerment (equal access to and control over education, healthcare, technology, resources, markets and decision-making), the economic transformation and development process becomes faster and equitable [23, 24]. In recent years, the food sustainability index, developed by the ECONOMIST in collaboration with Fondazione Barilla, emerged as one of the comprehensive measurements. It defines food sustainability in the broadest sense, capturing the performance of the entire food system across 78 countries. There are three critical pillars: food loss and waste, sustainable agriculture, and nutritional challenges. All South Asian countries are not assessed here due to the government's unavailability of information or non-responsiveness.

### **3 Fiscal Policy and Food Security**

*"Investing in resilient, sustainable agriculture and food systems is critical to ending hunger and improving food and nutrition security for all in a changing climate.... Statement by Dirk Schattschneider, Assistant Director-General, Federal Ministry of Economic Cooperation and Development (BMZ), Germany [25].*

In recent years and more importantly, after the Covid-19 pandemic, international funding and development agencies have focused on various special vehicle funding for agriculture and sustainable food systems targeting the food security requirements in low- and middle-income countries [26]. Asian Development Bank focuses on developing Asia for larger investments in similar areas, given that food inflation has hardly hit central Asia and South Asia in recent years. In its September 2022 press release, ADB stated that food insecurity is a regressing factor for Asian and Pacific development. Thus, it plans to manage this challenge by investing at least \$ 14 billion between 2022 and 2025. This assistance targets the 1.1 billion population suffering from a lack of healthy diets due to increasing cost pressures of diet. Furthermore, the

World Bank, through the Global Agriculture and Food Security Program (GAFSP) and Global Food Price Response Program (GFRP), plan to boost public and private sector investment in agriculture and food security safety nets in countries with serious and alarming situation of hunger. Scaling up Nutrition and Global Irrigation programs are another two programs which include South Asia as their focus countries. Given the limited fiscal space with governments across countries in recent years, empirical research focuses more on analyzing the impact of agriculture sector reforms on food security. There is a growing pattern of declining investment share in agriculture out of the total budget outlays of the government and the Gross capital formation.

The Agriculture Orientation Index (AOI) for Government Expenditures is the agricultural share divided by the agriculture-added share of GDP. Agriculture refers to the agriculture, forestry, fishing and hunting sector. The measure is a currency-free index, calculated as the ratio of these two shares. The index value above one indicates a higher orientation towards the sector. All South Asian countries have a poor orientation towards the sector, which has implications for hunger and malnutrition. In Figure 5 Maldives appear on the lowest side, indicating a lesser dependence on agricultural production and a higher dependence on imports other than sea-based food. Bhutan, on the other extreme, indicates the recent policy focus on the government to curb food inflation and maintain the low level of hunger in the country.

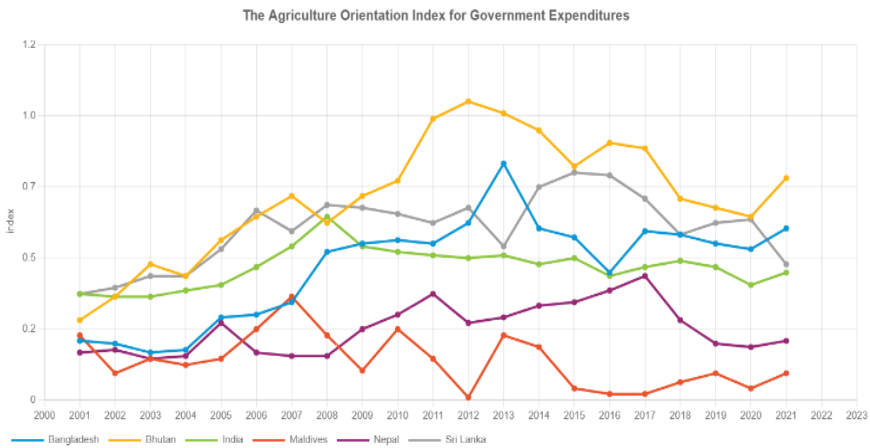


Fig. 5. Decreasing share of agriculture in Government Budget Outlays

Figure 6 exhibits the declining share of agriculture in gross value added with Nepal and Maldives on two extremes. The decline for Bangladesh has been the sharpest in South Asia; therefore, the decreasing malnutrition ratio shows a strong link between food security policy and its practical implementation. Although the shortcomings of the policy implementation became visible in the post-pandemic years, the country has gained substantial support from international funding agencies for transforming into a sustainable food system. Figure 7 shows the growth variations in the agricultural production index. Bhutan and Maldives have large fluctuations in the agricultural output.

Another critical yet common aspect of this decreasing share in value added is the increasing share of non-food items in agriculture exports and increasing imports of food items, which has been the added challenge for food and nutritional security in the country. Policymakers and government must allocate a larger budget for agriculture, given the above 40 percent employment dependence on this sector, excluding Maldives in South Asia. Policymakers are expected to prepare compensatory or counter policies to mitigate the impact of fluctuating food prices and income losses in such countries [26].

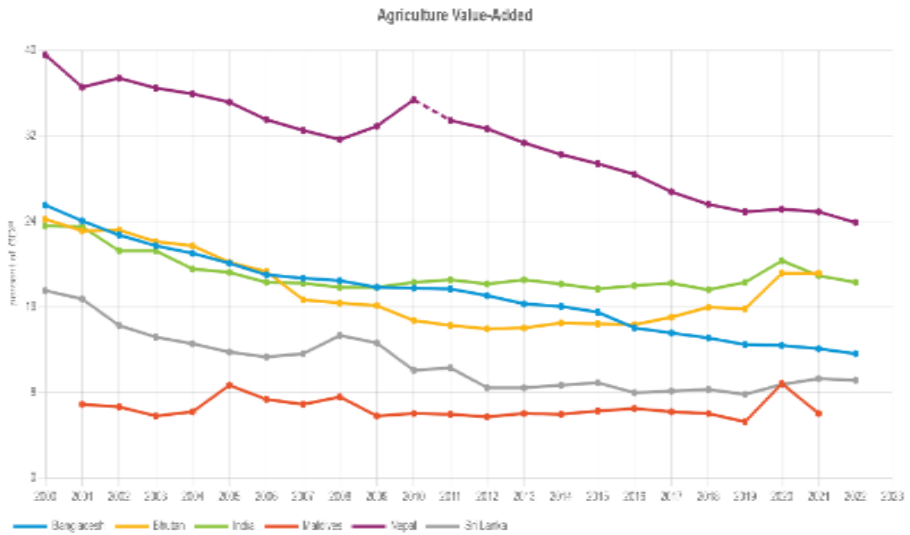


Fig. 6. Gradual Decline of Agriculture Value added.

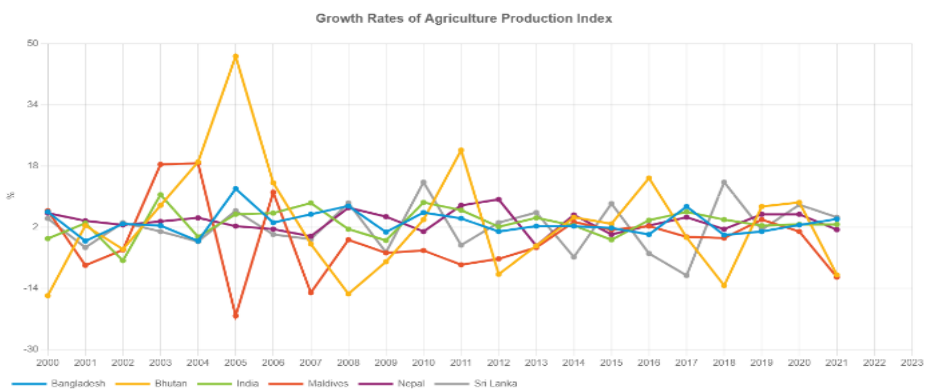


Fig. 7. Increasing fluctuations in the Agricultural Production Index in South Asia

Table 2 presents the panel regression test results with cross-section fixed effects. Undernutrition prevalence has a significant and positive relationship with fiscal deficit and thus proves that higher hunger and poverty increase the deficit levels. Another significant result is the negative impact of the share of agricultural value added on the deficit. As the share of agriculture has declined, there is a larger need for food and agriculture subsidies and social protection for the population experiencing poverty in South Asian countries. Agricultural value-added growth rate shows a positive significant impact on the deficit. The time series data shows that the agriculture growth rate has remained the most volatile, though higher growth helps reduce the deficit.

**Table 2.** PanelRegression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.71530	9.106872	2.274689	0.0287
UNDERNUT	4.190297	1.907853	2.196341	0.0342
SC_PROT_TE	-0.217245	0.388399	-0.559335	0.5792
SHAREOFAG	-8.590673	2.772321	-3.098730	0.0036
AGRGR	0.505450	0.161525	3.129244	0.0034
GDPGR	0.170944	1.008070	0.169576	0.8662
FOODCPI	-0.315514	0.504493	-0.625409	0.5354
REVGDP	11.65062	2.163640	5.384729	0.0000
EXPGDP	-12.81982	2.070745	-6.190922	0.0000
R-squared	0.896402	Mean dependent var	-2.712500	
Adjusted R-squared	0.806435	S.D. dependent var	2.760891	
S.E. of regression	1.214683	Akaike info criterion	3.532208	
Sum squared resid	56.06731	Schwarz criterion	4.607301	
Log-likelihood	-93.15950	Hannan-Quinn criteria.	3.960206	
F-statistic	9.963670	Durbin-Watson stat	2.781447	
Prob(F-statistic)	0.000000			

Agricultural subsidies along with food subsidies are two such instruments of fiscal policy. If appropriately allocated, these subsidies can affect all four dimensions of food security and make the agriculture sector a viable and sustainable growth option. Subsidies have an impact on other sectors of the economy as well as GDP. They are often criticized for maintaining hunger levels, raising fiscal deficits, and promoting corruption and leakages [2]. Moreover, rather than compensating, increasing subsidies causes decreasing GDP growth [27]. Compared to developed countries, increased spending on poverty eradication and agricultural development contributes less to developing country's tax-raising capacity. This limits the fiscal space for development spending in these countries. Thus, low development spending creates a lagging status for SDG goals in these countries. However, subsidies allow for lower consumer prices, lower imports, improved exports, and a slight increase in food availability for individual households. However, all these improvements must be revised to compensate for the climate change shock. Countries with a high poverty ratio and malnutri-

tion burden use consumer food subsidies to cope with price volatility, which becomes counterproductive. The role of the policymakers is to prepare compensatory policies to mitigate the impact of fluctuating food prices and income losses targeting vulnerable groups [27].

..... *“Poorly designed food subsidy programs that lack transparency and accountability in implementation do not benefit poor people. These programs are costly, and waste scarce fiscal resources. Smarter subsidies targeting the most vulnerable groups and complementary to the existing safety nets needs to be prioritized”*..... Jaime Saavedra, World Bank Group’s Acting Vice President for Poverty Reduction and Economic Management.

## 4 Conclusion

Poverty ratios in South Asia have declined faster in the last two decades. Malnutrition and hunger have not declined accordingly. The prevalence of Stunting and Wasting among children, one of the major indicators for sustainable development goals, is one of the highest in South Asia. With the increase in per capita GDP, the ranking and values of the global hunger index during the study period, changed marginally. Maldives and Bhutan have remained the outliers in terms of low poverty and malnutrition levels, though food inflation and undernourishment have risen slightly since 2020. It is important to note that reduction in budgetary outlays for agriculture have consequently led to high food prices and persistent hunger and malnutrition.

This paper presents a discussion on use of fiscal policy and fiscal incentives to reduce hunger and poverty. This paper supports the argument for higher public investment than food subsidies for agriculture sector in South Asia. There is an increasing discussion on regional cooperation among these countries to tackle the hunger and malnutrition challenge. Post-COVID, the agriculture sector has emerged as the significant shock absorber regarding livelihood and, therefore, requires higher budgetary allocations. Food subsidies are often used as a short-term instrument to manage the immediate price shock. Public investments in sustainable agriculture have a dual impact on stable output growth and lower malnutrition. The panel model shows a positive impact of hunger on fiscal deficit and a negative impact of government outlays on malnutrition prevalence. The 8 South Asian countries have a strong connection between their Global Hunger Index and Food Sustainability Index rankings. Panel test results indicate that South Asian countries with a higher prevalence of malnutrition have a higher budgetary deficit. Higher malnutrition indicates higher poverty and hunger, which increases government subsidies and other transfers and, therefore, deficits in volatile agriculture growth. Public investment in agriculture and related activities needs an urgent push. Fiscal incentives are needed for higher private investment in supportive agricultural infrastructure.

Both policy changes will push the production levels of food grains on one side and decrease the price volatility on the other. Country-fixed effects are significant in explaining the fiscal consequences of hunger and malnutrition. Nepal, Bhutan and Maldives have the lowest hunger and poverty prevalence. Maldives has one of the highest

levels of budget deficit in South Asia. Bhutan and Nepal have comparatively lower levels of deficit. Bhutan spends more on agriculture than other countries, and Maldives spends the least on agriculture. All three countries are also more dependent on agricultural imports. Sri Lanka also has lower levels of hunger and malnutrition levels. There has been a significant reduction in malnutrition levels in recent years, but the deficit has been relatively high. The paper emphasizes that countries with higher deficit levels, excluding India and Pakistan, have managed to control their hunger and malnutrition challenges. Investment in agriculture and nutrition, thus, is an urgent requirement for South Asia not only to support stable growth but also to cushion the effect of food inflation.

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