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Food Security and Nutrition to Attain SDG-2: A Comparative Analysis of South Asia Region

P. Srinivasa Rao*

Abstract: *Leave no one behind* is the defining principle of the 2030 Agenda for Sustainable Development and its 17 SDGs. The achievement of these goals is now in peril, with only 17 per cent of the SDG targets globally on track. The remaining targets show limited progress or have experienced setbacks. The SDGs index scores across all the country income groups had shown some progress from its baseline levels of 2015. However, the SDG 2 scores on ending hunger and all forms of malnutrition is stagnated to regression in 2023 as compared to 2015 baseline levels. Child stunting and wasting show only marginal reductions, with South Asia and Sub-Saharan Africa particularly affected by rising hunger and high incidence of child stunting and wasting rates. In contrast, overweight children are becoming a challenge in other regions of the world. By 2030, these issues are expected to worsen. Further, the low productivity of labour and yields, declining public investment such as AOI, heavy reliance on agriculture with high incidence of poverty, and socioeconomic inequalities—are hindering SDG-2 progress in South Asia. It necessitates the agri-food systems transformation. Therefore, in achieving SDG-2 targets, especially in South Asia, requires ensuring food and nutritional security for all. Key interventions include providing special assistance, implementing targeted food and cash-based safety net programmes for poor and vulnerable households, expanding budgetary allocations, enhancing financial flows, addressing persistent food inflation, improving access to and affordability of healthy diets, and exempting essential food items from GST. These should be a core agenda to improve the food and nutritional security situation in South Asian countries and India in particular.

Keywords: SDGs, Food Security, Child Malnutrition, South Asia, Agri-Food Systems

1. Introduction

An improved human capital determines the level of productivity, while deprived human capital with the prevalence of hunger and undernourishment adversely affects the growth and well-being of

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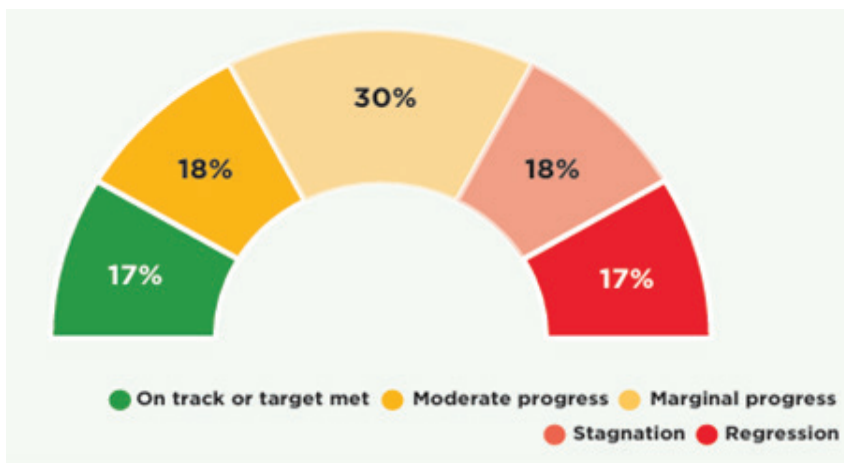
the country. Therefore, advancing human capital helps in fostering economic growth, and it is critical to sustain the growth momentum of the countries, particularly in developing countries. As underlined by the United Nations good nutrition is indispensable to the health and well-being and promotes economic growth and affluence of individuals and communities (UN, 2022, p.1), especially child nutrition is a critical determining factor of productive human capital for the present and future growth prospects. Therefore, good nutrition sets children on the path to survive and thrive. Well-nourished children grow, develop, learn, play, participate and contribute – while malnutrition robs children of their full potential, with consequences for children, nations and the world (UNICEF, 2021, p.2). A well-nourished woman also faces low risks during pregnancy and childbirth, and their children grow well both physically and mentally.

In contrast, increased hunger and undernourishment, poverty with inadequate access to basic amenities, etc., lead to long-term consequences, including hampering the physical and mental health of children and resulting in poor human capital and impeding the socio-economic development further. IFPRI also noted that the economic consequences from low weight, poor child growth, and micronutrient deficiencies represent losses of 11 per cent of gross domestic product (GDP) annually in Africa and Asia, more significant than the loss experienced during the 2008–2010 financial crisis, whereas preventing malnutrition delivers \$16 in returns on investment for every \$1 spent (IFPRI, 2016, p.19). In this context, attainment of the SDG 2 targets on ending hunger and all forms of malnutrition will have a multiple impact on economic growth and human capital. This will have a visible impact on least developed countries and developing countries, necessitating the study of key determinants and challenges to achieve SDG 2 targets. This approach will promote better policy interventions and enable informed decision-making.

1.1. 2030 Agenda and its SDGs

‘Leave no one behind’ is the defining principle of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. However, is the world not on track to meet most of the SDGs by 2030?— is a question that seeks answers. Some progress has been made in certain areas, but the most of the goals are either moving too slowly or have regressed below the 2015 baseline. As UN SDG Report 2024 indicates, of the 169 targets, 135 targets (on which there are time trend data), *only* 17 per cent of the SDG targets are on track and *nearly half* (48 per cent) exhibit moderate to severe deviations from the desired trajectory (of which 30 per cent and 18 per cent showing marginal and moderate progress respectively). Alarming, 18 per cent *show stagnation* and 17 per cent indicate *regression* below the *baseline levels of 2015*.

**Figure 1: Overall SDGs Progress Across Targets
Based on Global Aggregate Data, 2015-2024**



Source: UN, SDG Report 2024.

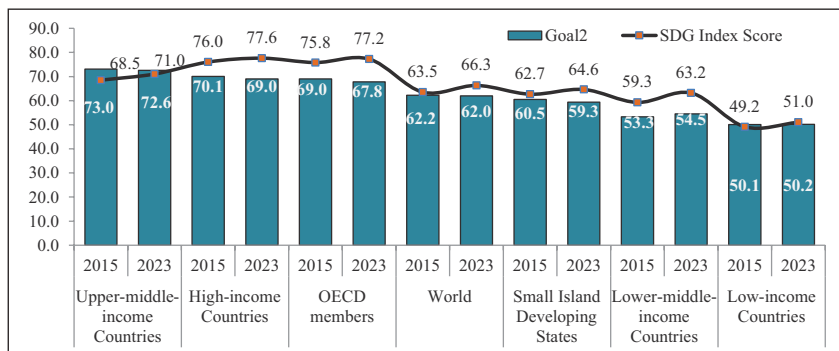
In addition, Sachs *et al.* (2024) stated that, on average, only 16 per cent of the SDG targets are on track to be achieved globally by 2030, with the remaining 84 per cent showing limited progress or a reversal of

progress. Further, SDG progress at the global level has been stagnant since 2020, with SDG-2 (Zero Hunger), SDG-11 (Sustainable Cities and Communities), SDG-14 (Life Below Water), SDG 15 (Life on Land) and SDG-16 (Peace, Justice and Strong Institutions), particularly off track. All of these indicated that ‘unless we act now, the 2030 Agenda could become an epitaph for a world that might have been. Failure to make progress means inequalities will continue to deepen, increasing the risk of a fragmented, two-speed world with widening economic and geopolitical divides. No country can afford to see the 2030 Agenda fail (UN SDG Report, 2023, p.2). Therefore, countries— particularly developing countries— need to be prioritised to give thrust in achieving SDGs, thereby improving the socioeconomic development and furthering National prosperity.

1.2. Global Divergence in Achieving SDGs

The global progress in achieving SDGs has shown a marginal improvement from its baseline levels of 2015. For example, the overall SDGs index scores (measuring the total progress towards achieving all 17 SDGs and indicating a percentage of SDG achievement) have marginally improved globally, from 63.5 in 2015 to 66.3 in 2023 (Figure 2). Such attainments in High-income countries (HICs), OECD and upper-middle-income countries (UMICs) are higher (ranging between 77.6 and 71.0) than the global average, while, it also showed a marginal improvement from its baseline levels of 2015. Both low-income (LICs, 51 per cent) and lower-middle-income countries (LMICs), including Small Island Developing States (SIDS) are respectively below the global average of 66.3 in SDGs Index scores in 2023. And so, the overall progress in the SDGs index across all the country income groups shows some progress from its baseline levels, while, progress on SDG 2 is reversing with a declining trend compared to 2015 baseline levels.

Figure 2: SDG Index and Goal-2 Scores Across Country Income Groups, 2015 and 2023



Source: Based on *Sustainable Development Report 2024* (<https://dashboards.sdgindex.org/rankings>)

Note: SDG Index, the overall score measures the total progress towards achieving all 17 SDGs. The score can be interpreted as a percentage of SDG achievement. A score of 100 indicates that all SDGs have been achieved.

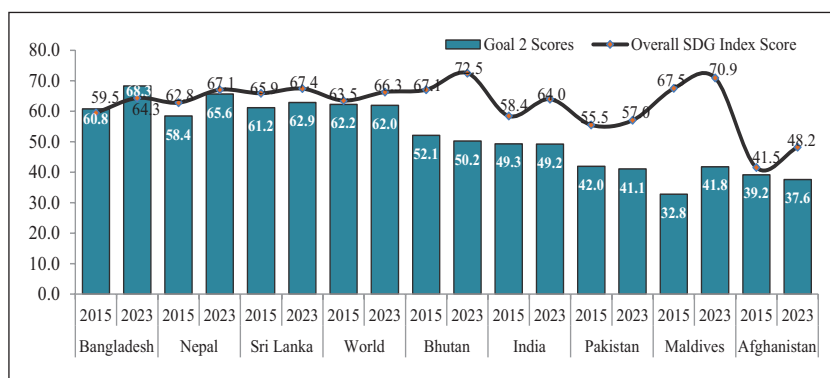
Therefore, the SDG 2 progress on ‘Zero hunger’ across all country income groups is reversing and it regressed in 2023 compared to 2015 baseline levels. Hence, the global progress on SDG 2 shows stagnation to regression in 2023 with 62.0 per cent compared to 62.2 in 2015 levels. LICs and SIDS are below the global average, while UMICs, HIC and OECD countries are above the global average, with scores between 72.6-67.8 in 2023, respectively. In contrast, LICs, LMICs and SIDs lagged behind the global average as well as other country income groups. The SDG 2 scores for LMIC slightly improved with considerably lagging to the global average as well. About 50 per cent of targets are unmet in LICs and it required a major push and double the current state of progress to achieving SDGs, including SDG 2 targets by 2030.

2. Review and Performance of SDG 2 in South Asian Countries

Developing countries, in particular, South Asia and Sub-Saharan African countries are affected most by a prevalence of hunger and child malnutrition. This study, therefore, reviews the progress on SDG 2 targets on ending hunger and all forms of malnutrition among SDG regions,

particularly South Asian countries. Figure 3 shows that the regional divergence is visible in achieving the overall 17 SDGs among the South Asian countries. To attain SGD2 targets on ending hunger, including food insecurity and all forms of malnutrition is very much challenging to these countries, particularly for Afghanistan, Maldives, Pakistan, India and Bhutan. Meanwhile, Bangladesh, Nepal, and Sri Lanka are advancing in achieving SDG 2 targets in the South Asian region and these are above the global average. This uneven progress needs to be examined towards the promotion of the necessary interventions to tackle the situation by making informed decisions and improving the policy mechanisms to achieve the SDG2 targets among the South Asian countries further.

Figure 3: SDG Index and Goal 2 Scores among South-Asian Countries, 2015 and 2023



Source: As given in Figure 2.

Note: SDG Index the overall score measures the total progress towards achieving all 17 SDGs. The score can be interpreted as a percentage of SDG achievement. A score of 100 indicates that all SDGs have been achieved.

2.1. SDG 2 Targets on Hunger and Nutrition

Child nutritional outcomes including stunting (height-for-age), wasting (weight-for-height) and overweight (weight-for-height)¹ are determined by the diverse aspects, which underline the better participation of all

stakeholders and sectors. In 2012, the World Health Assembly (WHA) Resolution 65.6 endorsed a comprehensive implementation plan on maternal, infant and young child nutrition, which specified a set of six global nutrition targets by 2025 aim to:

- 40 per cent reduction in the number of children under 5 who are stunted
- 50 per cent reduction of anaemia in women of reproductive age
- 30 per cent reduction in low birth weight
- Ensure that there is no increase in childhood overweight
- Increase the rate of exclusive breastfeeding in the first 6 months up to at least 50 per cent
- Reduce and maintain childhood wasting to less than 5 per cent

The adoption of the UN Sustainable Development Goals in 2015 enshrined the objective of “ending all forms of malnutrition,” by 2030. SDG 2 on Zero Hunger and its target 2.1 focused on ‘ending hunger and ensure accessibility of safe, nutritious and sufficient food all year round’. While target 2.2 aimed to end all forms of malnutrition, including achieving the WHA targets related to stunting and wasting in children under age five, and addressing the nutritional needs of adolescent girls, pregnant and lactating women, and older persons (Table 1). Achieving these targets will help to improve future growth prospects with an improved human capital, and it is essential to address regional imbalances in socio-economic indicators further. The United Nations monitoring and tracking framework evaluates the progress made on all SDGs, including SDG-2, across the countries and among SDGs regions. This will also underline the key challenges to achieve the goal by 2030. Such a mechanism would help to make informed decisions and better policy interventions by the member countries.

Table 1: SDG-2 Targets Related to Food Security and Nutrition Achieved by 2030

SDG-2 Target	Global Indicator
2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	2.1.1 Prevalence of undernourishment 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	2.2.1 Prevalence of stunting (height for age < -2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age 2.2.2 Prevalence of malnutrition (weight for height > +2 or < -2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight) 2.2.3 Prevalence of anaemia in women aged 15 to 49 years, by pregnancy status (percentage)

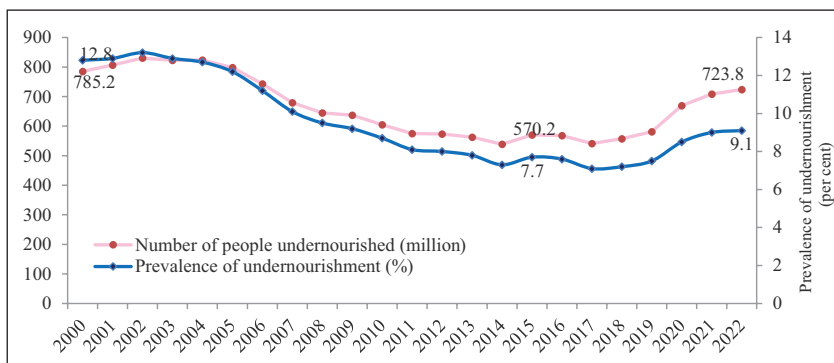
Source: UN. (2024). *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development.*, General Assembly in A/RES/71/313, Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs), United Nations.

2.2. Persistence of Hunger and Food Insecurity

The SDG 2.1.1 target is to measure the prevalence of undernourishment and it aims to a world- free of hunger (i.e., an amount of calories that is insufficient to cover her/his energy requirement for an active and healthy life) by 2030. The current progress on reducing global undernourishment is reversing, showing an increasing trend that affected around 9.2 per cent of the world population in 2022, compared to 7.7 per cent in 2015 and 8.6 per cent in 2010(Figure 4). In absolute terms, the number of

undernourished people (millions) globally increased to 723.8 in 2022 and 733.4 in 2023 from 570.2 million in 2015, respectively. These numbers are quite high in both Sub-Saharan Africa and Central Asia and Southern Asia region, with higher-levels of undernourishment at 22.1 and 15.4 per cent in 2020-2022 (at 3-year average). It shows a continuous rise as compared to 18.3 and 13.2 per cent in 2014-2016 and is higher than the global average of 9.2 per cent as well as other regions of the world (Figure 5).

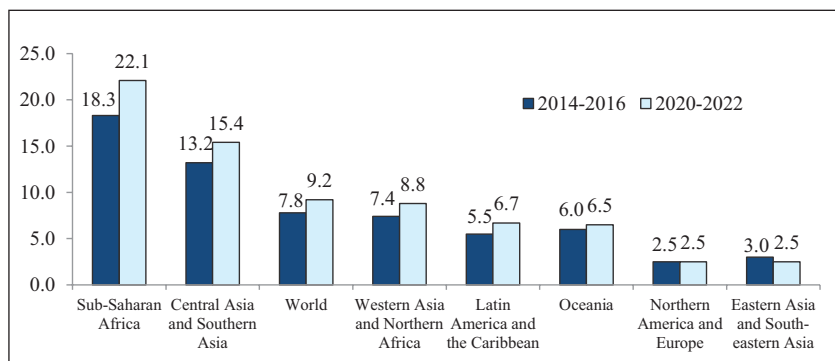
Figure 4: Trends and Pattern of Undernourishment at Global Levels, 2000-2022



Source: Based on FAOSTAT.

Undernourishment in the South-Asia region is clearly visible, with a rising trend from 12.1 per cent in 2014-16 to 14.1 per cent in 2021-2023, and these levels are higher than the world's average, leading to high persistence of hunger among the South Asian countries (Figure 6). Both Afghanistan and Pakistan are critically suffering from hunger and the level of undernourishment has increased from 20.0 and 11.8 per cent in 2014-2016 to 29.4 and 18.9 per cent in 2021-2022, respectively. Such high persistence of hunger in India is also visible, with an increase from 12.2 to 14.0 per cent during the same period. These levels are far above among the South Asian countries as well as higher than the world's average in hunger.

Figure 5: Prevalence of Undernourishment (per cent), 2014-2022

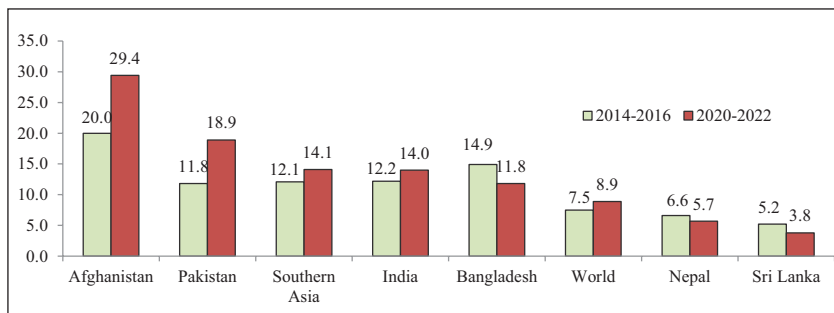


Source: Based on FAOSTAT.

Notes: A 3-year average of 2014-2016 and 2020-2022.

In addition, the global progress of SDG 2.1.2 on the prevalence of moderate or severe food insecurity in the population is also reversing, from 21.2 per cent in 2014 to 29.6 per cent in 2022 (Figure 7). The relative share of the population suffering from severe food insecurity (i.e. running out of food and going a day or more without eating, likely experiencing hunger) increased to 11.3 per cent in 2022 from 7.8 per cent in 2014. These levels in both Sub-Saharan Africa and Central Asia and Southern Asia are extremely high with an increased risk of food insecurity, followed by Western Asia and Northern Africa, and Latin America and the Caribbean regions, respectively higher than the global average (Figure 8). The food security situation in Northern America and Europe has improved, which shows a declining trend, and Eastern Asia and South-Eastern Asia, including Oceania, are below the global average and showed an increased trend of food insecurity in 2020-2022 as compared to 2014-2016, respectively.

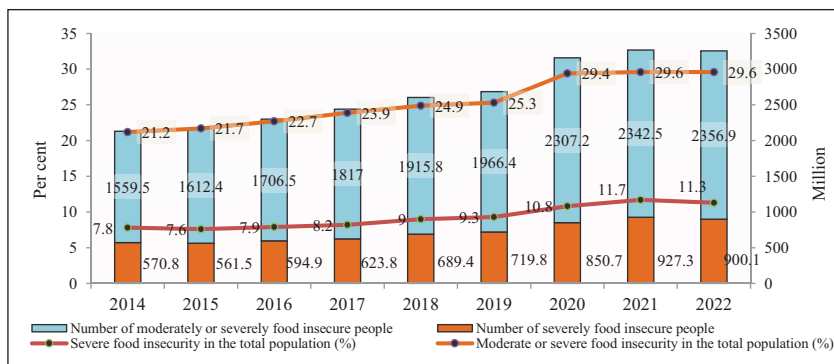
Figure 6: Undernourishment in South-Asian Countries, 2014-2022 (per cent)



Source: Based on FAOSTAT.

Note: (i) A 3-year average of 2014-2016 and 2021-2023. (ii). Data is not available for Maldives and Bhutan.

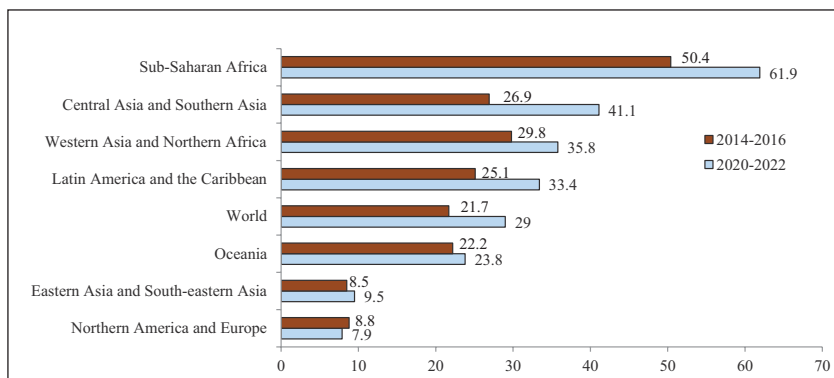
Figure 7: Global Trends in Moderate and Severe Food Insecurity, 2014 to 2022



Source: Based on FAOSTAT.

Further, the COVID-19 pandemic and geopolitical tensions have worsened global hunger and food insecurity, affecting all sections of society. United Nations (2022, p.25) indicated that from 2014 until the onset of COVID-19 and conflicts, hunger and food insecurity gradually increased. Current conflicts are disrupting global food supplies and it has created the biggest food crisis since World War II, and both conflict and the pandemic have exacerbated child malnutrition.

Figure 8: Moderate or Severe Food Insecurity in the Total Population (per cent) -All Age, 2015-2022



Source: Based on FAOSTAT.

Note: 3-year average of 2015-2017 & 2020-2022.

Rising hunger and household food insecurity have led to an increase in all forms of child malnutrition, mortality, and morbidity. Such a situation is exacerbated further due to a lack of access to nutritious and healthy diets. This makes certain sections (including children and women) and regions more vulnerable to persistent with hunger and undernutrition further. For example, nearly 1 in 11 people globally, and one out of every five in Africa faces hunger. It includes both Sub-Saharan African and South Asian countries that are suffering from hunger and require much support to feed dying people and save lives.

3. Determinants and Performance of SDG 2.2 on Nutritional Outcomes

Child Malnutrition under age five— undernutrition in particular stunting (being too short for their age), wasting (weight-to-height) and being overweight— are emerging global challenges. This hurts economic growth, besides impeding human capital. Such adverse impact is more visible in developing countries with higher levels of child malnutrition further. The vast literature described the wide range of determinants which effects on child nutritional outcomes. Evidence shows that children in food-secured households are safeguarded from chronic malnutrition,

including the prevalence of child undernutrition (Hasan *et al.*, 2023; Saaka and Osman, 2013; Schmeer and Piperata, 2016). In contrast, food insecurity in households adversely affect the health outcomes of children, including chronic energy deficiency and underweight (Abdurahman *et al.*, 2016). Besides, nutritional provision for women, including children's birth weight and feeding practices with household access to sanitation and status of poverty, are closely associated with stunting and poor linear growth in children (Aguayo, *et al.*, 2016). Household amenities and assets are also consistently linked to child health (Karlsson *et al.*, 2020).

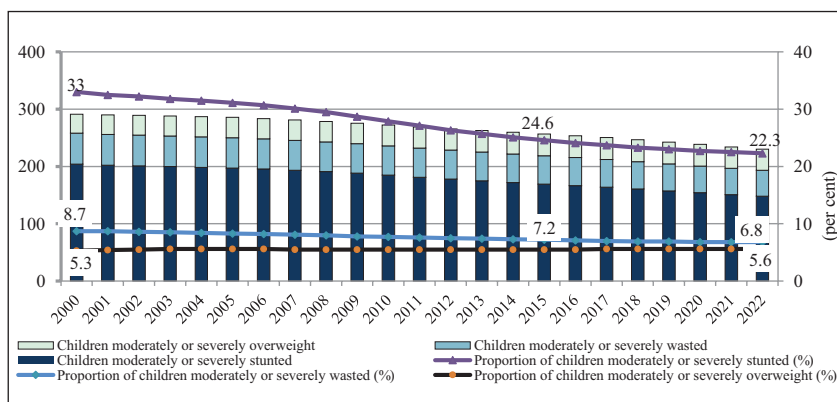
Better household incomes, improved women's empowerment with maternal education, dietary diversity and provision of essential health services are critical factors to alleviate under-five stunting more rapidly (Ayelign and Zerfu, 2021). In addition, religion, caste, father's occupation and family size emerged as significant predictors of undernutrition (Rehan *et al.*, 2020). Several child indicators, family and environmental factors (such as home type, drinking water sources, and electricity) affect child stunting (Yani *et al.* 2023). Nambiar *et al.* (2024) argued that biological, socio-economic, and environmental factors such as women's body mass index, anaemia in children, poverty, household sanitation facilities, and institutional births were established in child's nutritional outcomes. While Castro-Bedriñana *et al.* (2021) indicate that to reduce stunting in rural areas, it is important to include factors related to agri-food production.

Underperformance in these underlying determinants, coupled with rising disparities, has led to an increase in all forms of malnutrition—particularly affecting poor and vulnerable countries adversely, with growing barriers to achieving better nutritional outcomes. In this context, the present section attempts to examine malnutrition among the SDGs regions and to study the country-level performance in the South Asia region in achieving SDG 2.2 targets on ending all the forms of malnutrition, including anaemia among women. This will help to understand the regional and country levels divergence and thus induce the necessary corrective mechanisms through effective policy interventions and stakeholder's collaboration to achieve SDG 2.2 targets, leading to better nutritional outcomes.

3.1. Levels and Trends in Child Malnutrition: Global Scenario

Global progress toward SDG 2.2 on ending all forms of malnutrition shows signs of stagnation and even a declining trend. Indicators SDG 2.2.1 and 2.2.2, which track child malnutrition under the age of five—specifically stunting and wasting—show a slight decline, with stunting decreasing from 24.6 to 22.3 per cent and wasting from 7.2 to 6.8 per cent between 2015 and 2022. Conversely, the prevalence of overweight children has been increasing. Stunting and wasting levels remain particularly high in Central and Southern Asia (29.4 and 13.7 per cent, respectively) and Sub-Saharan Africa (31.3 and 8.3 per cent). These figures are significantly high, as these regions account for the largest proportions of stunted and wasted children globally (Table 2).

Figure 9: Trends of Child Malnutrition at Global Levels, 2000-2022



Source: Based on FAOSTAT.

In addition, the Joint Child Malnutrition Estimates 2023 also underlined that nearly all children affected by stunting lived in Asia and Africa is 52 and 43 per cent of the global share. More than three-quarters of all children with severe wasting reside in Asia and another 22 per cent live in Africa (UNICEF *et al.*, 2023, p.2). Based on the current trends, the UN SDG Report 2024 also estimated that by 2030, three-quarters of children under age five with stunting resided in Central and Southern Asia (36.7 per cent) and sub-Saharan Africa (38.3 per cent). More than

half of those affected by wasting also lived in Central and Southern Asia (56.2 per cent) and almost one quarter in sub-Saharan Africa (22.9 per cent). Both these regions are global hotspots of child undernutrition by 2030 and far above the global average of 19.5 per cent and 6.8 per cent in stunting and wasting and are above the global target of 3 per cent by 2030.

**Table 2: Levels and Trends in Child Malnutrition under Age 5
(per cent), 2015 and 2022**

Sl. No.	SDGs Regions	Stunted children		Wasted children		Overweight children		Anaemia in pregnant women aged 15-49	
		2015	2022	2014	2022	2015	2022	2015	2019
1.	Sub-Saharan Africa	34.5	31.3	8.3	5.7	3.6	3.7	46.8	46.2
2.	Central and Southern Asia	36.0	29.4	14.2*	13.7	2.8	2.9	46.9	46.2
3.	World	24.6	22.3	7.5	6.8	5.5	5.6	36.6	36.5
4.	Northern Africa and Western Asia	19.7	17.9	7.3\$	4.9	10.0	9.8	32.7	32.3
5.	Eastern and South-Eastern Asia	14.7	13.9	9.2^	4.2	7.1	8.0	26.2	26.2
6.	Latin America and the Caribbean	12.1	11.5	1.3	1.4	7.7	8.6	22.3	21.9
7.	Europe and Northern America	4.1	3.8	na	na	8.5	7.6	16.7	17.1

Source: Based on UNSTATS and Statistical Annexes of UN SDG Report, 2024.

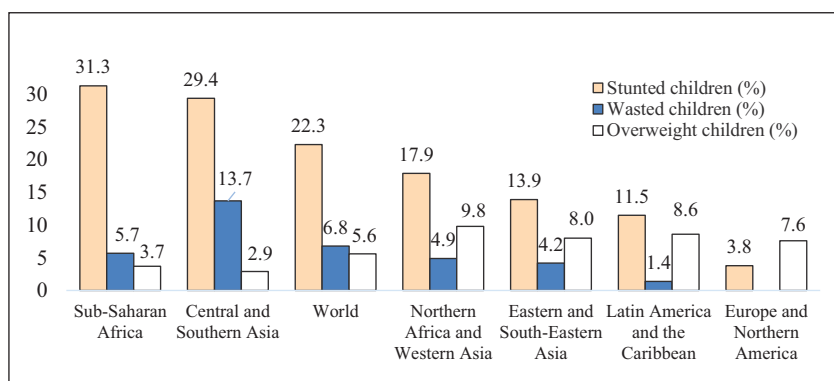
Notes: (i). Moderately or severely Stunted, Wasted and Overweight Children under age 5.

(ii). ‘*’ ‘\$’ and ‘^’ represents Southern Asia, Northern Africa and South-Eastern Asia, respectively.

In addition, the global burden of overweight among children under age five shows a slight increase to around 37 million in 2022, nearly 4 million increased since 2000. This relative burden of overweight among children in Oceania is at 13.9 per cent excluding Australia and New Zealand (and it is about 19.3 per cent by considering these two countries),

followed by Northern Africa (12.3 per cent), Southern Africa (11.4 per cent) and South America (9.7 per cent) are severely affected regions in the world in 2022 over 2015. Such rising trends cause life- threatening deceases among children, and they emerge as a global challenge that requiring serious attention. This is also a worrisome issue along with the problem of undernutrition, such as stunting and mainly wasting faced by the underdeveloped countries from South Asian and Sub-Saharan African regions.

Figure 10: Child Malnutrition Across SDGs Regions Under Age 5, 2022 (per cent)



Source: Table 2.

Note: Data on wasted children (per cent) in Europe and Northern America is not available

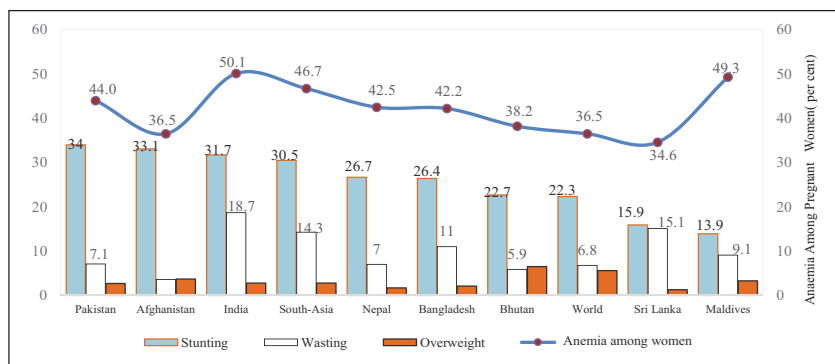
Furthermore, the global progress on SDG 2.2.3 on the prevalence of anaemia in women aged 15 to 49 years by pregnancy status has stagnated at 36.5 per cent since 2015. Both Sub-Saharan Africa, and Central and Southern Asia are above the global average with 46.2 per cent, while Europe and Northern America, followed by Latin America and the Caribbean are below the global average with 21.9 and 17.1 per cent. There is a visible association between a high prevalence of anaemia among women and a high incidence of child undernutrition, such as stunting and wasting, which is evident in both Sub-Saharan Africa and Southern Asia region.

3.2. Child Malnutrition in South Asian Countries

The relative size and levels of child malnutrition faced by South Asia region are clearly visible and are significantly higher in the world with higher levels of stunted and wasted children. This issue was also highlighted by several studies, including the multilateral agencies (some of these details were given in the previous section also). It also necessitated that analysing child malnutrition across South Asian countries is critical in identifying the most affected countries with higher levels of child malnutrition in the region. This will help to map the hotspot of child malnutrition in the region, which will, in turn, make informed decisions and induce better policy interventions to address the problem of child malnutrition, etc.

Table 3 shows the progress on SDG 2.2.1 and 2.2.2 on child malnutrition and SDG 2.2.3 on the prevalence of anaemia among pregnant women aged 15 to 49 years across the South Asian Countries. The level of child stunting and wasting, including anaemia, among pregnant women in the region is significantly high with a declining trend. Stunted children under age five show a declining trend from a high of 37 per cent in 2015 to 30.5 per cent in 2022. However, these are substantially higher than the global average of 24.6 per cent and 22.3 per cent. With 14.3 per cent of wasted children under age five living in South-Asia only and it is considerably higher than the global average of 6.8 per cent in 2022. This shows that more than 50 per cent of wasted children are living in the South Asia region, while, the level of overweight is 2.8 per cent, which shows a rising trend. It also shows that the prevalence of anaemia among pregnant women is significantly higher, with 46.7 per cent as compared to a global average of 36.5 per cent in 2022.

Figure 11: Child Malnutrition in South Asian Countries, under Age 5 (per cent)



Source: Table 3.

Notes: Stunting, Wasting, and Overweight in 2022 and Anemia among pregnant women for 2019.

Table 3: Trends in Child Malnutrition under age 5 yrs in South-Asian Countries (Per cent)

Sl. No.	Country	Stunting		Wasting	Overweight		Anaemia in pregnant women (per cent) aged 15-49	
		2015	2022	2022	2015	2022	2015	2019
1.	Afghanistan	40.5	33.1	3.6	4.7	3.7	37.3	36.5
2.	Bangladesh	35.1	26.4	11.0	2.0	2.1	43.3	42.2
3.	Bhutan	27.3	22.7	5.9*	7.2	6.5	39.9	38.2
4.	India	38.3	31.7	18.7**	2.2	2.8	50.6	50.1
5.	Maldives	15.5	13.9	9.1 ^a	5.2	3.3	48.2	49.3
6.	Nepal	36.0	26.7	7.0	1.4	1.7	43.5	42.5
7.	Pakistan	41.4	34.0	7.1 ^{\$}	4.0	2.7	45.8	44.0
8.	Sri Lanka	16.4	15.9	15.1 [^]	1.3	1.3	33.8	34.6
	South-Asia	37.0	30.5	14.3	2.6	2.8	47.5	46.7
	World	24.6	22.3	6.8	5.5	5.6	36.6	36.5

Source: Based on (i). UNICEF, WHO and World Bank. 2023 and (ii).UNSTATS. Prevalence of Anemia among women with reproductive age 15-49 years (per cent)

Notes: '**' 2010, '**' 2020, 'a' 2017, '\$' 2018 and '^' 2016 respectively.

Box 1: Child Malnutrition in India

Child malnutrition in India is visible, with higher levels of stunted and wasted children under age five. The National Family Health Survey-5 (NFHS) for 2019-21 showed some progress in declining child malnutrition in India compared to NFHS-4 in 2015-16. It also reported that in some Indian States child undernutrition in 2019-21 is considerably high and is above the all-India average. Table 4 shows the proportion of children suffering from stunting (height-for-age) in Meghalaya, Bihar, Uttar Pradesh, Jharkhand, Gujarat, and Madhya Pradesh, while wasted children (weight-for-height) in Maharashtra, Gujarat, Bihar, Jharkhand, and Assam and underweighted children in Bihar, Gujarat, Jharkhand, Maharashtra, Madhya Pradesh, Karnataka, and Assam respectively high among the Indian States.

Table 4: Highly Affected States, 2015-16 & 2019-21 (per cent)

Sl. No.	State	Stunting		Wasting		Underweight		SDG 2 Scores in SDG India Index*	
		2015-16	2019-21	2015-16	2019-21	2015-16	2019-21	2020-01	2023-24
1.	Meghalaya	43.8	46.5	15.3	12.1	28.9	26.6	37	52
2.	Bihar	48.3	42.9	20.8	22.9	43.9	41.0	31	24
3.	Uttar Pradesh	46.3	39.7	17.9	17.3	39.5	32.1	41	50
4.	Jharkhand	45.3	39.6	29.0	22.4	47.8	39.4	19	28
5.	Gujarat	38.5	39.0	26.4	25.1	39.3	39.7	46	41
6.	Madhya Pradesh	42	35.7	25.8	19.0	42.8	33.0	43	48
7.	Karnataka	36.2	35.4	26.1	19.5	35.2	32.9	53	56
8.	Assam	36.4	35.3	17.0	21.7	29.8	32.8	41	47
9.	Maharashtra	34.4	35.2	25.6	25.6	36.0	36.1	44	45
10.	Chhattisgarh	37.6	34.6	23.1	18.9	37.7	31.3	37	40
	All-India	38.4	35.5	21.0	19.3	35.8	32.1	47	52

Source: (i).GoI. (2021). Ministry of Health and Family Welfare, NFHS-5, 2019-21; (ii). NITI Aayog, SDG India Index, 2020-01 & 2023-24

Notes: (i).2015-16 and 2019-21 are based on NHFS 4 and NHFS 5, respectively.

(ii). Consider the States which has higher levels of child malnutrition in total 28 States (8 UTs are not included).

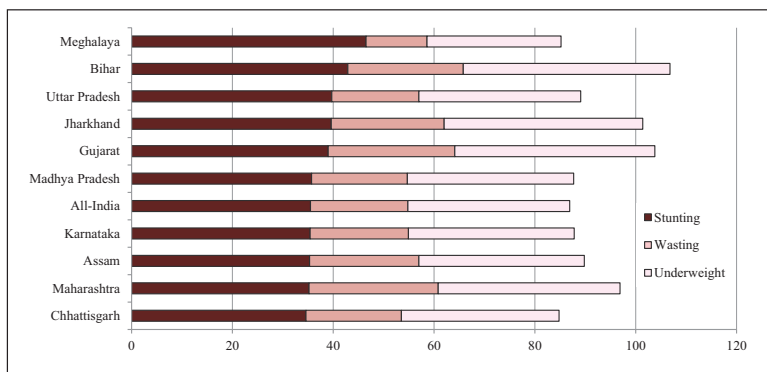
(iii). ‘*’ A score of 100 implies that the State has achieved the targets set for 2030.

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Furthermore, there are States namely Bihar, Jharkhand, and Gujarat are significantly suffering from all three forms of child undernutrition as stunting, underweighted and wasting, while, in Maharashtra both wasting and underweighted children are substantially high among the States and are far above the all-India average in child undernutrition outcomes in 2019-21, respectively.

Figure 12: Child Malnutrition with Highly Affected States, 2019-21



Source: Table 4.

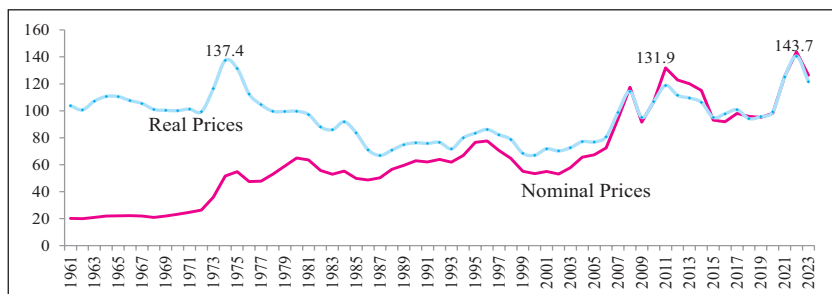
Note: Under age five at per cent.

Besides, there are countries, namely Pakistan, Afghanistan, and India, affected mainly by higher levels of stunted children in the region, with 34.0, 33.1 and 31.7 per cent in 2022. These are far above the global average of 22.3 per cent. India is the only country which had a high prevalence of wasted children, followed by Bangladesh and Sri Lanka. The relative share of anaemia among pregnant women aged 15-49 was also considerably high in India and Maldives with 50.1 and 49.3 per cent, respectively. This essentially required policy interventions, including effective implementation of the targeted food and cash-based safety net programmes for poor and vulnerable households and thus key to enhancing the food and nutritional security situation in the South Asian countries.

4. Food Inflation and Lack of Affordability for Healthy Diets

The persistence of high food inflation is hostile to SDG 2.c progress on limiting extreme food price volatility and thus aggravates global food insecurity and hunger. It also led to the unaffordability of healthy diets (measured by the average cost of diet relative to income, indicating people's economic access to healthy diets). Such as, global consumer food prices by the end of 2020 were higher than during any month in the previous six years (FAO, 2022, p.18). It aggravated and increased further due to the COVID-19 pandemic, and conflicts. The FAO Food Price Index climbed by 52 per cent between 2019 and 2022 (Figure 13 and 14), with prices for cereals increasing by 60 per cent, dairy products by 45 per cent, meat by 19 per cent, and oils by a remarkable 125 per cent increase as compared to pre-COVID-19 pandemic levels (FAO, 2024, p.24). Moreover, the United Nations (UN) argues that globally the burden of prices moderately to abnormally high food prices (this was relatively stable since 2016) faced by countries had increased to 47 per cent in 2020 from 16 per cent in 2019. It reached a new record high of 58.1 per cent in 2022 respectively. This represented a nearly fourfold increase from the 2015–2019 average level of 15.2 per cent and nearly 60 per cent of countries faced moderately to abnormally high food prices in 2022 (UN, 2022, p.29. 2024, p.11). Such price acceleration is more visible in developing countries with rising food insecurity and child malnutrition.

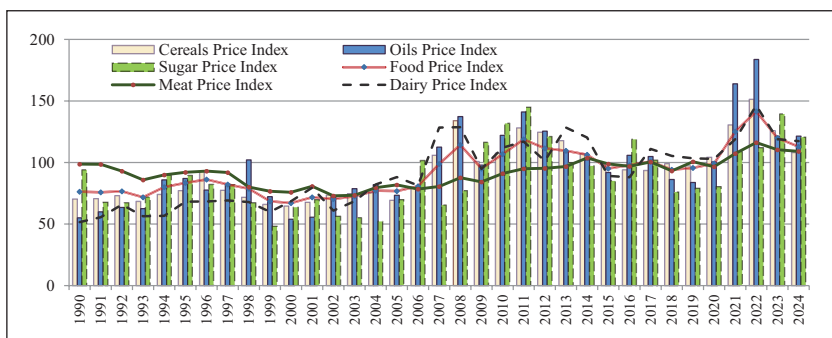
Figure 13: Global Food Price Index: Real and Nominal Prices for Food in 1961-2023



Source: Based on FAO, Food Price Index.

The price burden in Sub-Saharan Africa, Northern Africa and Western Asia, and Central and Southern Asia regions is clearly visible and it shows a steady increase in 2022 over the previous years. Such price burdens in Europe and Northern America, Latin America and the Caribbean have reached their peaks from its lower prices (Figure 15). Further, the consumer price in food indices among South Asian countries was continuously high in 2022 as compared to 2015 levels (Figure 16). These levels are notably high in Pakistan, Sri Lanka, Bangladesh, Bhutan, Nepal, and India with rising prices for food products. These countries are witnessing the high food inflation and above the global and regional average. Notably, Maldives and Afghanistan had lower-prices with high incidences of hunger and child stunting in Afghanistan and anaemia among pregnant women in Maldives simultaneously high.

Figure 14: FAO-Food Price Index for Selected Commodities, 1990-2024

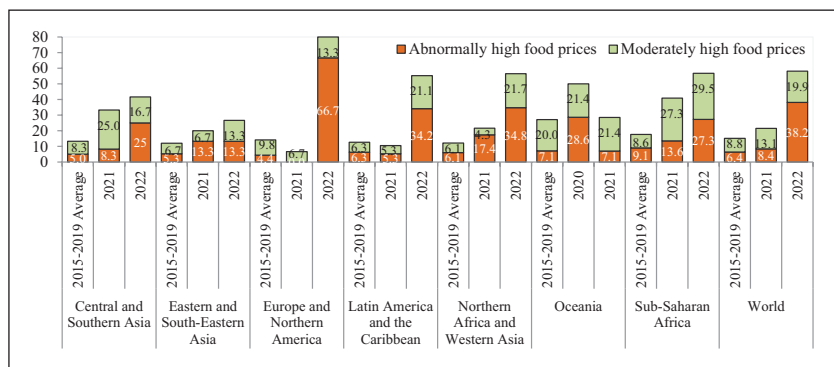


Source: Based on FAO, Food Price Index 2024.

Owing to the high international food prices resulted in a rise in the import costs of food, and which affected food security and highly dependent food imports, developing countries are impacted significantly. FAO also argues the world's food import bill was estimated to be at an all-time high of nearly USD 2 trillion in 2022, an increase of 10 per cent (nearly USD 181billion) from the 2021 level, driven mostly by higher prices. Further, the global agricultural input import bill was estimated to increase by 48 per cent in 2022 to USD \$ 424 billion (FAO, 2023, p.12).

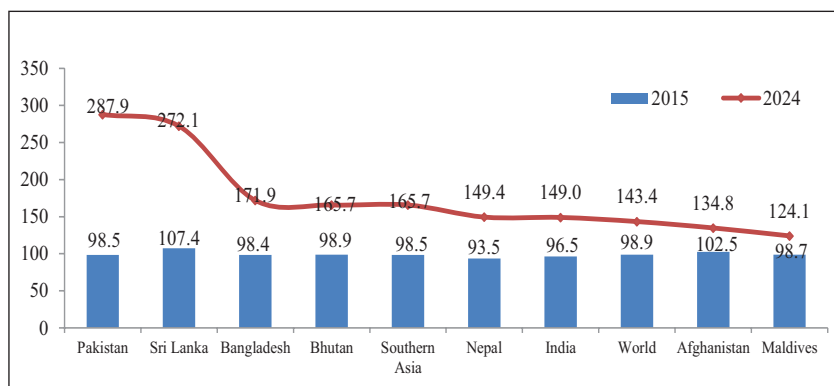
High prices for food, fuel, and fertilisers drive the overall inflation in almost all economies and thus increase the number of people unable to afford a healthy diet around the world.

Figure 15: Countries affected by moderately to abnormally high food prices (per cent), 2015-2022



Source: Based on UNSTATS.

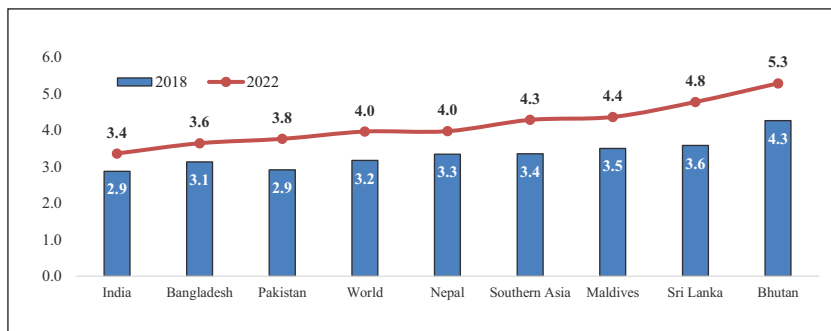
Figure 16: Consumer Prices in Food Indices among South Asian Countries



Source: Based on FAOSTAT.

Note: CP in Food Indices (2015 = 100) and it refers to January 2015 & January 2024 only.

Figure 17: Cost of a Healthy Diet (CoHD), per person per day (PPP dollar), 2022 vs. 2018



Source: Based on FAOSTAT (July 2024, SOFI report)

The high cost of a healthy diet (CoHD) with inadequate access to nutritious foods across the regions and people drives an increase in all forms of malnutrition including overweight and obesity, due to poor diet quality. The latest FAO Report 2024 estimates that more than one-third of people in the world, about 2.8 billion (about 35.4 per cent of people) could not afford a healthy diet in 2022. This percentage of the population that could not afford a healthy diet is highest in LICs, with 71.5 per cent as compared to 52.6 per cent in LMICs, 21.5 per cent and 6.3 per cent in UMICs and HICs, respectively. This also indicates that unhealthy dietary and food practices are dominated globally, leading to increased mortality and non-communicable diseases etc. Figure 17 shows the per capita cost of a healthy diet in South Asia is above the global average in 2022 as compared to 2018 levels. It is high in Bhutan, Sri Lanka and Maldives, while, India, Bangladesh and Pakistan have noted the lower cost of a healthy diet. However, these are above the 2018 levels. As a result, the poor-quality or unhealthy diet preferences and practices, such as foods high in sugar, fat, salt, etc., hold back the overall development of children with rising overweight and diet-related diseases. This situation is aggravated further due to persistent food inflation, conflicts, climate change, etc.

5. Structure and Challenges in Transition of Agri-Food Systems in South Asia

The dominance of the agriculture sector in South Asian countries is clearly visible, indicating that the level of dependency on livelihoods and incomes is considerably higher than the world average with the low level of per capita labour productivity (Table 5). The share of agriculture in GDP and employment in South Asia is 16.5 and 41.5 per cent in 2022. These are above the world average of 4.3 per cent and 26.4 per cent, respectively. The global Agriculture value added per worker is USD 4,046, which is around 50 per cent higher than the South Asia region, with USD 2,092 in 2022. Maldives is above the world average, and has less dependence on agricultural employment and incomes, and Sri Lanka is very close to the global average in most of these parameters. Other South Asian countries are highly dependent on the agriculture sector's contribution to GDP and employment with lower levels of per capita labour productivity. Interestingly, agriculture value added per worker in Pakistan has increased from USD 2,549 in 2015 to USD 3,046 in 2022.

In addition, the global quantified hidden costs of agrifood systems (from GHG and nitrogen emissions, water use, land-use change, unhealthy dietary patterns, undernourishment, and poverty) amount to USD 10.8 trillion or more trillion or higher (at a 95 percent confidence) and extended to USD 12.7 trillion in 2020 (PPP). The dominant quantified hidden costs arise from dietary patterns that increase the risk of diseases and may lead to lower labour productivity. These costs in low-income countries (LICs) accounted for 27 per cent of GDP, largely due to poverty and undernourishment (FAO, 2023, pp.xx to xxi). In this backdrop, the agri-food systems transformation is critical to tackling these challenges. It necessitates relevant and suitable policy interventions, including increased public spending, and investments in agri-food systems and reduction of food loss and waste are essential.

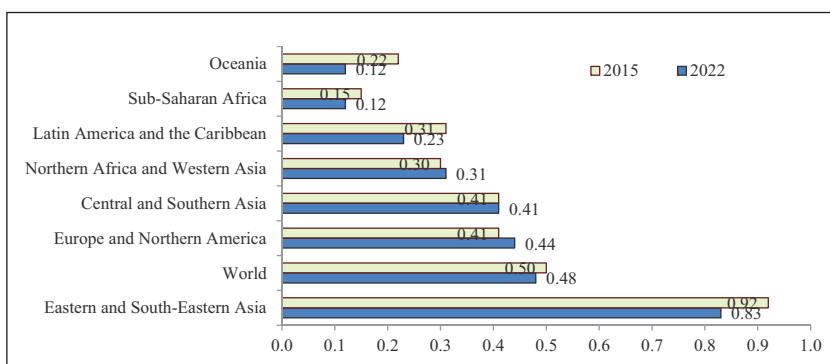
Table 5: Agri-Food Systems in South-Asian Countries

Sl. No.	Country	Agri-GDP and Supply of Food				Employment				Agriculture value added per worker (USD at constant 2015)	
		Agriculture, forestry, and fishing, value added (per cent of GDP)		Per Capita Food supply (kcal/capita/day)		Employment in agriculture (per cent of total employment)		Female employment in Agriculture (per cent)			
		2015	2022	2015	2022	2015	2022	2015	2022	2015	2022
1.	Afghanistan	20.6	33.7	2257	2243	44.3	45.6	66.1	47.8	1,143	1,323
2.	Bangladesh	14.8	11.2	2505	2581	43.5	35.7	60.2	53.4	1,119	1,416
3.	Bhutan	12.0	14.7		3215	58.0	44.0	66.4	54.4	1,358	1,945
4.	India	16.2	16.6	2432	2589	44.2	42.9	57.6	59.2	1,664	2,061
5.	Maldives	5.5	5.1	2702	2653	8.3	7.9	2.5	2.2	15,568	13,502
6.	Nepal	26.5	20.9	2711	2931	64.7	61.5	77.7	74.0	1,490	1,713
7.	Pakistan	23.3	22.3	2421	2443	41.0	36.4	71.9	66.8	2,549	3,046
8.	Sri Lanka	8.2	8.5	2691	2802	28.7	26.5	32.3	26.5	3,016	3,109
	South Asia	16.7	16.5	2463	2584	43.8	41.5	59.2	58.8	1,705	2,092
	World	4.2	4.3	2895	2985	28.4	26.2	27.4	25.7	3,498	4,046

Source: Based on WDI, World Bank and FAOSTAT.

The SDG progress of 2.a.1 on the Agriculture Orientation Index (AOI)² indicates government spending in agriculture and allied activities and it is a declining trend from 0.50 per cent in 2015 to 0.48 per cent in 2022 (Figure 18). Eastern and South-Eastern Asia is the only region with the highest ratio of 0.83 per cent in AOI, which showed regression from its high of 0.92 per cent in 2015 levels. Both Sub-Saharan Africa and Oceania, followed by Latin America and the Caribbean and Northern Africa and Western Asia are below the world average in AOI in 2022.

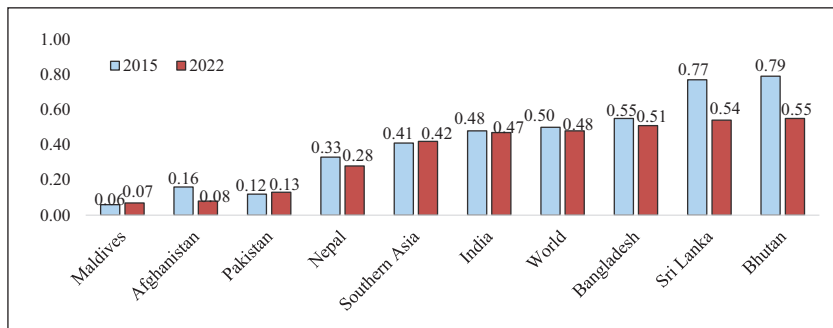
Figure 18: Agriculture Orientation Index (AOI) for Government Expenditures



Source: Based on UNSTATS.

South Asia region is very close to this world average at 0.42 per cent, with the incidence of inequalities among the South Asian countries (Figure 19). Bhutan, Sri Lanka and Bangladesh are above the global and region-levels, while Maldives, Afghanistan, Pakistan and Nepal are below the regional and world average in AOI in 2022. India is very close and below the world average with a declining trend. This indicates that higher levels of government spending devoted to non-agricultural activities and spending on agriculture against the sector value-added contribution to the GDP of the economy is considerably low. Such a low-level of public spending on the agriculture sector will increase the agri-food systems challenges globally and thus holding back the progress in achieving SDG2 targets.

Figure 19: South Asia: Agriculture Orientation Index for Government Expenditures



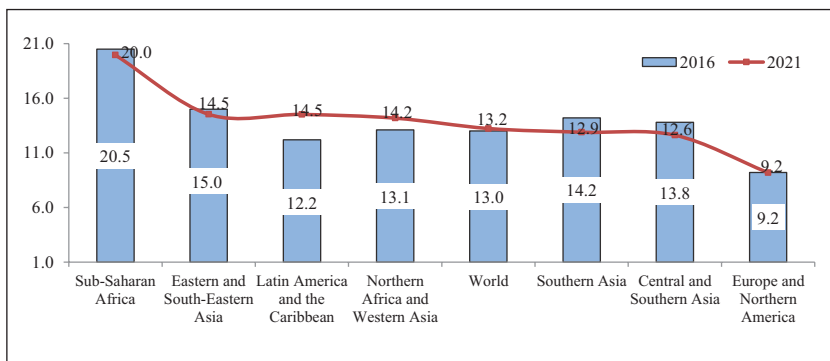
Source: Based on UNSTATS.

Furthermore, achieving SDG target 12.3 on halving per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains, including post-harvest losses, is also essential to achieve SDG 2 on zero hunger. In 2021, around 13.2 per cent of food produced globally was lost after harvest and during transport, storage, wholesale and processing (Figure 20). This ratio of food loss in Sub-Saharan Africa is significantly high at 20.5 per cent, followed by Eastern and South-Eastern Asia, Latin America and the Caribbean and Northern Africa. In both Latin America and the Caribbean and Northern Africa, the percentage of food loss is increasing in 2021 as compared to 2016 and other parts of the world. While South Asia is very close to the global average, Europe and Northern America and Central and Southern Asia³ are below the global average in food loss in particular.

In addition, the UN argues that in 2022, an alarming 19 per cent of all food at the retail or consumption stage was wasted, totalling 1.05 billion metric tons of all food available to consumers. FLW also generate 8 to 10 per cent of greenhouse gas emissions in each year, costing over \$1 trillion and straining land resources and biodiversity (UN SDG Report 2024, p.32). Therefore, the reduction of the FLW globally and in developing countries, particularly is a policy concern to attain SDG 2

targets. It required a better post-harvest management including improved logistics, infrastructure, innovations and technologies, including better connectivity of markets to end consumers, etc.

**Figure 20: Food loss Among SDG Regions, 2016 and 2021
(percentage)**



Source: Based on UNSTATS.

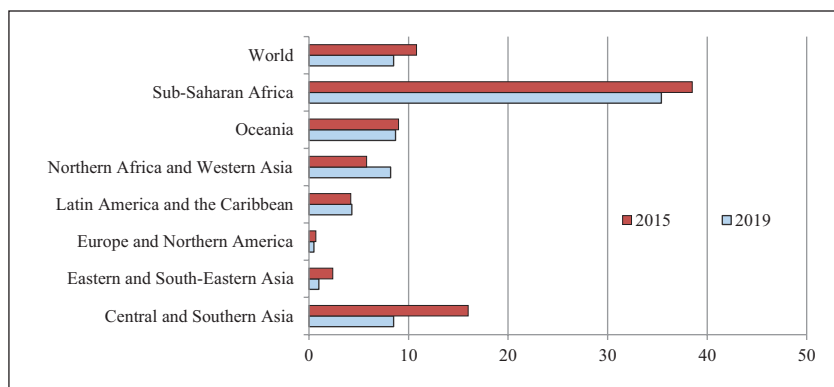
Due to insufficient data availability at the country-levels the remaining three SDG 2 targets are not included in this study. The SDG 2.3 target to double the agricultural productivity and incomes of small-scale food producers, SDG 2.4 on ensuring sustainable food production systems—including resilient agricultural practices—and the SDG 2.5 target on maintaining the genetic diversity of seeds, cultivated plants, farmed and domesticated animals, and their related wild species by 2020, may be limiting in terms of understanding the actual progress on SDG 2 targets globally and across South Asian countries, respectively.

6. Poverty and Inequality

The incidence of poverty and inequalities are interlinked with persistent food insecurity and undernourishment. This will adversely affect the standards of living with deprived human capital. Such characteristics are visible in Low-Income Countries (LICs), and Lower-Middle-Income countries (LMICs) and countries from Sub-Saharan Africa and South Asia region. FAO also argues both poverty and inequalities are underlying

determinants of hunger and undernourishment affects negatively on food security and nutritional outcomes (FAO, 2021, p.21). This situation exacerbates certain sections and regions where the level of poverty and inequalities are higher.

Figure 21: Proportion of Population below International Poverty Line (per cent)



Source: Based on UNSTATS.

Note: Estimated extreme poverty at less than US \$2.15 a day, as per in 2017 PPP terms.

Figure 21 shows the proportion of the population living below the poverty line (with less than US\$ 2.15 a day) globally and among the regions. It declined to 8.3 per cent in 2019 from 27.0 per cent in 2002, while it increased to 9.2 per cent in 2020. These figures are higher than the 1998 and 1990 poverty levels (UN, 2022, p.4). Although, the level of poverty declined to below 9 per cent globally, and its trend of reduction was clearly visible among the regions except for Sub-Saharan Africa, shows necessary action and attention is required. The severe poverty levels in Sub-Saharan Africa region were substantially higher at 35.4 per cent in 2019, and it was three times higher than the global average as well as other regions of the world. This situation is further exacerbated due to the COVID-19 pandemic, conflicts, economic downturn, extreme weather events such as droughts, floods and loss of agriculture incomes, etc. Hence, the progress made on hunger and undernutrition, including the reduction of malnutrition among children, was reversing

with increased poverty and inequalities, etc. This will further aggravate the vulnerabilities of deprived health, education and lack of access to provision of safe drinking water, sanitation services etc.

Accordingly, reduction of poverty and inequalities, supported by an improved household's socio-economic status, including household wealth, women's nutrition and education, and sanitation services, are critical for reducing child malnutrition issues like stunting and wasting (Laillou *et al.*, 2020; Lukwa *et al.*, 2020; Jose *et al.*, 2018; Nie *et al.*, 2019; and Narayan *et al.*, 2019). This will enhance the household's capacity to access adequate and nutritious food, resulting in a reduction of hunger and child malnutrition globally among the regions in particular.

7. The Cross-Sectional OLS Regression Analysis

The cross-sectional Ordinary Least Squares (OLS) regression results indicate that increases in public expenditure on agriculture and allied activities, agricultural productivity per worker, and per capita food supply are associated with decreases in undernourishment (POU). The Model 1 indicates it and thus every one-unit increase in government expenditure on agriculture and allied activities, agricultural productivity per worker, per capita food supply, undernourishment decreases by approximately 1.10, 0.0016 and 0.021 units respectively (Table 6). These are significant at the 10 per cent, 1 per cent and 1 per cent levels. Further, AOI is significant at 10 per cent levels in Model 3 with the negative coefficient (-35.6) suggests that increased the relative share of government spending in agriculture and its allied activities as compared to agriculture value added to GDP of economy will reduces the POU considerably.

Models 4 to 6 indicate an inverse relationship between child stunting and agricultural indicators, and a positive association with anaemia among women. The negative coefficients for government expenditure in agriculture (-1.69), agricultural value added per worker (ranging from -0.0011 to -0.016), per capita food supply (-0.014), and AOI (-1.72) indicate that each one-unit increase in these indicators is associated with a considerable reduction in child stunting.. These are statistically significant and suggest that each incremental increase of these indicators

Table 6: OLS Regression Results: Undernourishment and Child Stunting, 2022

Dependent/ Independent variables	(1)	(2)	(3)	(4)	(5)	(6)
	POU	POU	POU	Stunting	Stunting	Stunting
Govt. Exp in agriculture	-1.106* (0.55)			0.301 (0.53)	-1.699*** (0.37)	
Agri. Value added per worker	-0.0016*** (0.0002)	-0.0014*** (0.0003)	-0.00201*** (0.0004)	-0.0011*** (0.0002)	-0.0016*** (0.0004)	
Per Capita Food supply	-0.021*** (0.004)	-0.020*** (0.005)		-0.0141** (0.0041)		
AOI		-13.23 (8.89)	-35.66** (10.54)			-1.72 (3.810)
Anaemia among Pregnant women					0.499*** (0.117)	
Female EmPLY in Agriculture					0.185* (0.0837)	0.167*** (0.03)
POU						0.606*** (0.09)
Cost of Healthy Diets						1.08* (0.48)
Constant	80.3*** (10.9)	75.43*** (12.25)	30.12*** (5.992)	66.01*** (9.483)	10.07 (6.597)	7.98** (2.20)
Observations	10	10	10	10	10	10
R-squared	0.905	0.894	0.671	0.710	0.939	0.954

Source: Authors' own calculation.

Notes: Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

is associated with reductions in child stunting. On the other hand, anaemia among women, female employment in agriculture, the prevalence of undernourishment, and the cost of healthy diets are positively associated with child stunting. A one-unit increase in each of these indicators leads to a significant rise in child stunting. Therefore, to reduce child stunting, reduction of these indicators is essential and these are matter of policy of concern to address the prevalence of child stunting.

As a result, the policy attention is required in agri-food systems transformation with an increased agricultural value added per work, growing the relative share of government spending on agriculture, accessing and affordability of food with lowering the cost of healthy diets and reducing anaemia among pregnant women. These are key determinants to reduce the incidence of hunger and child stunting in South-Asian countries.

8. Summary and Conclusions

Global progress in achieving all 17 SDGs is marginally improved, while in achieving SDG2 targets on ending hunger and all forms of malnutrition is stagnated to reversing in 2023 as compared to 2015 baseline levels. A marginal reduction in child stunting and wasting has also been observed. The same trend of progress has been observed across all country income groups. The high incidence of hunger, child stunting and wasting levels in both Sub-Saharan Africa and South-Asia regions is clearly visible. Meanwhile, the rising incidence of overweight children has become a challenge for other regions of the world. Further, the low-income countries (LICs), LMICs, Small Island Developing States (SIDS), and countries in South Asia and Sub-Saharan Africa have significantly unmet SDG 2 targets, lagging behind the global average in achieving other SDGs also. This high incidence of regional divergence across country income groups with a rising gap in achieving SDG 2 targets as compared to all other SDGs is adversely affecting global food security and nutrition. Such a situation is exacerbated further due to a lack of access to nutritious and healthy diets with persistence of food inflation and poverty. This makes certain sections (including children and women) and regions more vulnerable to persistent hunger and undernutrition.

The high dependency on farm activities with lack of regular incomes, livelihoods and high youth unemployment and the persistent poverty ratio and income inequalities, inadequate access to socioeconomic amenities etc., act as an obstacle to ending hunger and undernutrition. These characteristics are more visible in developing countries in particular, Sub-Saharan Africa and South Asian countries. The slow recovery from COVID-19, global economic slowdown, climate change impacts, geopolitical tensions, rising food and fertilizer prices, and widening SDG finance gaps have hindered progress towards SDG 2, worsening global hunger and food insecurity. As a result, both Sub-Saharan Africa and South Asian regions are recognized as global hunger hotspots with high persistence of undernourishment and child undernutrition such as stunting and wasting, anaemia among women, etc. These regions required major support to feed the dying people and save children's lives.

8.1. Recommendations and Way Forward

Developing countries, in particular, South Asia and Sub-Saharan African countries, need to prioritise in achieving SDG 2 targets on ending hunger, food insecurity and all forms of malnutrition. The attainments of SDG 2.1 and 2.2 targets are extremely important in achieving their full potential for growth and development and in improving the standards of living of the multitude of populations located in these regions. The effective implementation of targeted food and cash-based safety net programmes for poor, vulnerable households, women and children are also crucial to achieve these targets.

Policy attention is also a pre-requisite to address regional divergence in achieving overall SDGs and attainment of SDG 2 targets within the country and across the countries also. A special assistance, including accessing social safety nets, and humanitarian aid for low-income countries (LICs) and lower-middle-income countries (LMICs) in Sub-Saharan Africa, South Asia, and other vulnerable countries, is essential to combat hunger and malnutrition. This must be a global agenda. Including the effective implementation of the developed countries' commitments, enhancing the multilateral organisations and global fora such as the

G20 support is vital to these least developed and developing nations for effective implementation and thus meet SDG 2 targets. Prioritising these actions can foster a more inclusive and sustainable approach to tackle food insecurity and nutritional challenges.

Expanding the budgetary allocations to ensure food and nutritional security and promoting agri-food systems transformation should be a core agenda in developing countries and to achieve SDG 2 targets in South-Asian countries. This includes enhancing the relative share of public expenditure on agriculture and allied activities, addressing yield and labour productivity gaps through better access to low-cost innovations and investments by small, marginal, and women farmers, and digitalising the sector—all of which are vital for a sustainable, resilient, and equitable transformation of agri-food systems. These measures are crucial for adapting the changing climate conditions and conflicts, ultimately leading to improved food security and nutrition.

The reduction of food loss and waste (FLW) along food value chains right from production, including post-harvest losses to consumption, is critical to ensure global food security and nutrition. FLW is a global challenge and it is significantly high in least developed and developing countries due to inadequate infrastructure, farm and market linkages, logistic and supporting technologies and innovations. Addressing these bottlenecks is indispensable in achieving SDG 2 targets. This will also help in attaining SDG 12 (responsible consumption and production), promote the efficient use of natural resources, and escape the triple planetary crises of climate change, biodiversity loss, and pollution, besides helping to achieve SDG 2 targets.

Combating the socio-economic barriers and inequalities, including addressing the regional divergence in underlying determinants that drive food insecurity and child malnutrition, should require effective policy intervention and thus help in improving both food security and nutritional situation. Besides, reduction of poverty and, unemployment among youth, enhancing farm and farmers' incomes and providing sustainable livelihoods are critical determinants in achieving SDG 2

targets. Therefore, accessing socioeconomic amenities and enhancing household incomes and assets are interplay in ending hunger with improved nutritional outcomes. In contrast, the high incidence of poverty and socioeconomic inequalities will escalate hunger and all forms of malnutrition. The evidence-based intervention is also essential to tackle this issue in a targeted manner and thus enables to identify the suitable solutions to tackle these challenges further.

Fostering collaboration among stakeholders and ensuring the active participation of women and children, raising awareness with localizing of the SDGs to fit community needs is essential to achieve SDG 2 targets. Creating socioeconomic opportunities for diverse social groups and communities to engage in the developmental process and the targeted and integrated approach, such as focusing on specific issues while acknowledging the interconnectedness of various goals and sectors, can effectively tackle food security and nutritional challenges in a well-informed and inclusive manner.

The interrelation between access to financing and reduction of hunger and child malnutrition is clearly established (FAO, 2024) and thus, limited access and flow of finance prevailed undernourishment. Both inadequate financing for food security and nutrition, along with the rising cost of a healthy diet (CoHD)—including taxes on food products and multiple GST rates on essential items—are likely to reduce disposable incomes, make healthy diets unaffordable, and further escalate undernourishment and child malnutrition. It led to long-run growth implications of the country.

Financing for food security and nutrition with effective reduction of CoHD, including exemption of GST on essential food items, should be a food and nutritional security agenda in developing countries like India in particular to address hunger and all forms of malnutrition such as the attainment of SDG 2.1 and SDG 2.2 targets. Therefore, policymakers need to take this into consideration when setting GST rates on food items. Additionally, ensuring adequate financing flows will help overcome undernutrition and hunger, thereby supporting progress toward achieving the SDG 2 targets. FAO (2024) also highlighted that,

in 2022, the percentage of the population unable to afford a healthy diet was highest in low-income countries (LICs) at 71.5 per cent, followed by lower-middle-income countries (LMICs) at 52.6 per cent, compared to 21.5 per cent in upper-middle-income countries (UMICs) and 6.3 per cent in high-income countries (HICs).

Achieving the 2030 agenda and its SDG 2 targets by developing countries requires major structural reforms, including mobilising and enhancing resources, both domestic as well as global financing flows and assistance should be increased to meet the SDGs finance gap in developing countries. Indeed, the UN SDG Report 2024 underlined that the SDG financing gap in developing countries now stands at \$4 trillion per year. Furthermore, the external debt stock in low- and middle-income countries remains at unprecedentedly high levels. About 60 per cent of low-income countries are at high risk of debt distress or already experiencing it. This trajectory threatens to reverse a long-term trend towards more income equality among countries.

Closing the SDGs finance gap, along with accelerating the growth performance in developing countries through accessing financial resources and providing more fiscal space, are key to achieving SDGs. Such interventions not only improve the food security and nutritional needs of the countries but also help to improve the quality of human capital, including better child growth and better economic growth trajectory for most of developing countries.

Promoting collaborative actions and support from developed countries and multilateral organisations to ensure global food security and nutrition and particularly in Asia and African countries is extremely important to achieve SDG 2 targets. This includes providing humanitarian assistance on an emergency basis in both Sub-Saharan Africa and Southern Asia, and expanding support to countries in need of food—particularly least developed countries, including LIFDCs and NFIDCs—which is also essential for achieving SDG 2 targets on zero hunger and eliminating child undernutrition

Effective implementation of the several G20 initiatives helps in achieving SDG 2 targets on ending hunger and malnutrition. The G20 Deccan High-Level Principles on Food Security and Nutrition, 2023 and the G20 Brazilian initiative on Global Alliance against Hunger and Poverty, 2024, etc., need to support the needy countries and provide assistance to South-Asian countries and Sub-Saharan African region to enhance food security and nutritional situation.

To sum up, in achieving SDG 2 targets in South Asian countries involves a multifaceted approach, including enhancing household incomes and access to basic amenities while reducing poverty, unemployment, and inequalities. Along with collaboration among stakeholders and sectors, integrating public and private sector efforts and promoting non-farm activities. Digitalization, innovations including agri-tech eco-systems, and improved infrastructure, is crucial for transforming agri-food systems and boosting economic growth. All these essentially require a suitable policy intervention, especially in South Asian countries and thus, enhancing productivity, incomes, and sustainable livelihoods are prerequisite to enhance food security and better nutritional outcomes.

Endnotes

- ¹ As per WHO Child Growth Standards both Stunting and wasting are indicative to lower than 2 standard deviations below median, while overweight greater than 2 standard deviations above median respectively.
- ² Agriculture Orientation Index (AOI) indicates the share of government expenditure on agriculture as compared to the share of agriculture value added to the GDP of the economy. The high ratio of AOI showed the government prioritized agriculture spending on various aspects relative to the agriculture sector's contribution to economic value-added. As per the latest data,
- ³ Due to lack of data availability in South Asia countries, the progress on reduction of FLW, are not included.

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