Ending Hunger and Malnutrition in South Asia:
Who is Left Behind?

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南アジアにおける飢餓と栄養失調の終息：
取り残されているのは誰か？

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Ending hunger in South Asia (SA) is significant from a Zero Hunger perspective because, SA is home to nearly one-fourth of the world's population. This study takes into consideration a number of parameters to understand hunger and malnutrition in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Hunger is analyzed by SDG2.1 and Global Hunger Index (GHI); malnutrition is analyzed by SDG2.2, GHI and World Health Organization (WHO) classification. In Southern Asia the Prevalence of Undernutrition has been steadily decreasing for every country during 2004–06 to 2016–18 and reached nearly 15 percent from more than 21 percent. Except Bhutan and Sri Lanka, every other country in South Asia shows significant reduction in the percentage share of children moderately or severely stunted. Afghanistan, Bhutan, Nepal, Pakistan has proportion of children moderately or severely wasted below 10 percent, India has nearly 21 percent, Bangladesh and Sri Lanka have nearly 15 percent of children moderately or severely wasted. In South Asia, there has been a dramatic rise in the numbers of children under 5 years of age who are overweight along with increase in the percentage of obese in adult population during 2012 and 2018. Afghanistan, Bangladesh, India, Nepal and Pakistan suffer from a serious level of hunger and Sri Lanka has moderate hunger according to Global Hunger Index (GHI) 2018. Therefore, it is observed that throughout South Asia hidden hunger prevails and countries face multiple burden of malnutrition along with moderate food security. Access as well as affordability of balanced, nutritious and diverse diets is thus important for South Asian nations. However, in South Asia overall trends in hunger and undernutrition are improving which shows signs of hope while achieving an acceleration in the reduction of hunger and achieving SDG 2 in this region remains a big challenge.

1. The Zero Hunger Goal

SDG 2 is one of the 17 United Nations Sustainable Development Goals (SDGs) targeted for global development set to be achieved by 2030 adopted in September 2015. All UN countries of the world have agreed to work towards achieving these goals. Sustainable Development Goal (SDG) 2 or Zero Hunger targets to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture. The State of Food Security and Nutrition in the World 2019 report reveals that globally hunger is on the rise and millions of children are still affected by undernourishment. According to the

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report, slightly more than 700 million people (9.2 percent of the world population) were exposed to severe levels of food insecurity in 2018. This scenario confirms that these people have possibly experienced hunger and are broadly consistent with those of the prevalence of undernourishment. The report also adds that in Southern Asia (SA) severe food insecurity increased from less than 11 percent in 2017 to more than 14 percent in 2018. Major consequences of undernourishment are stunting or being 'too short for one's age,' and wasting or being 'dangerously thin for one's height.' Globally, the prevalence of stunting among children under five years is decreasing, with 21.9 percent affected in 2018. The number of stunted children has also decreased from 165.8 million in 2012 to 148.9 million in 2018. Although this represents a 10.1 percent decline over this six-year period, it falls short of the 20 percent decline required over the same period to be on track for the 2030 target of reducing the number of children by one-half with reference to the 2012 baseline. Since 2000, the rate of stunting in South Asia has fallen from approximately half of all children to over a third, but this still constitutes the highest regional child stunting rate worldwide. Furthermore, South Asia's child wasting rate has slightly increased since 2000 (GHI, 2018).

The current population of Southern Asia is 1.81 billion during 2018 which is equivalent to 24.81% of the total world population that includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Ending hunger in South Asia (SA) is significant from a Zero Hunger perspective because, SA is home to nearly one-fourth of the world's population with life expectancy at birth 68.0 years (2017). South Asian GDP size is 3.458 trillion USD (2018) that is only 4% of world GDP. According to latest World Bank data (2019), GDP per capita in South Asia is $2,000, second lowest after Africa ($1900) and far below the world average $111,400. Considering this enormous population, achieving Zero Hunger by 2030 appears to be an increasingly challenging task. Given the figures and trends of hunger and malnutrition observed in South Asian countries during the last decade, it is crucial to understand each country status. In particular, in which categories of hunger and malnutrition countries are making progress or lagging behind are essential to identify to plot national strategies.

Hunger and nutrition for the countries are analyzed from FAOSTAT, WHO and World Bank dataset. It might appear too early to comment on the progress according to SDG indicator since countries are adopting these estimates very recently, less than four years. Therefore, this study takes into consideration other parameters to understand hunger and malnutrition in these countries. Hunger is analyzed by SDG2.1 and Global Hunger Index (GHI); malnutrition is analyzed by SDG2.2, GHI and World Health Organization (WHO) classification. SDG2 thus helps to map the current hunger and nutrition situation and way forward.

Next section describes the status of hunger and nutrition among South Asian Countries using selected targets and indicators. South Asia has a large population therefore, the importance of hunger and malnutrition has been looked at using various measures. Attempts have been made to analyze the present status and find out which countries are left behind the targeted pace. Key challenges have been identified based on the current situation and finally the way forward is discussed.
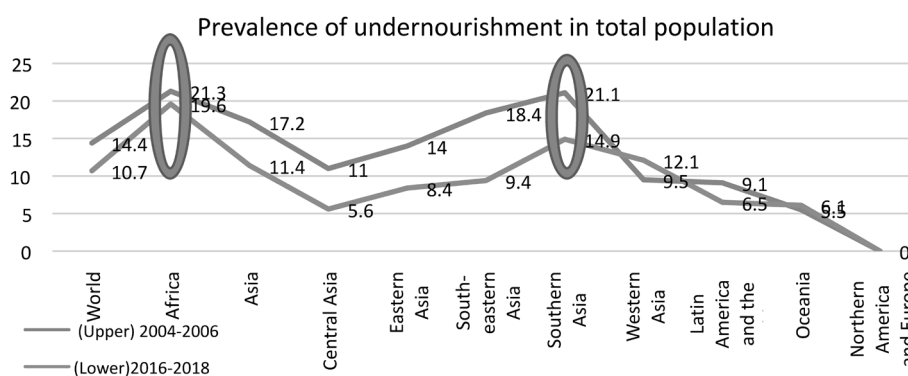
2. SDG2 in South Asia

There are 169 Targets that specify 17 SDGs and 232 Indicators to represent the metrics by which the world aims to track whether these Targets are achieved. For SDG2, the UN has defined 8 Targets and 13 Indicators. This study concentrates its analysis on Target 2.1 that aims to end hunger by 2030 along with Target 2.2 that aims to end all forms of malnutrition by 2030. More specifically, indicator 2.1.1 or Prevalence of Undernourishment (PoU) and indicator 2.1.2 or prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) are two indicators used for monitoring progress in hunger reduction under the SDGs. Whereas child undernutrition reflected through prevalence of stunting among children under 5 years of age or indicator 2.2.1; and indicator 2.2.2 that is used for monitoring prevalence of malnutrition among children under 5 years of age, by wasting and overweight.

2.1 Ensuring access to food for all (SDG Target 2.1)

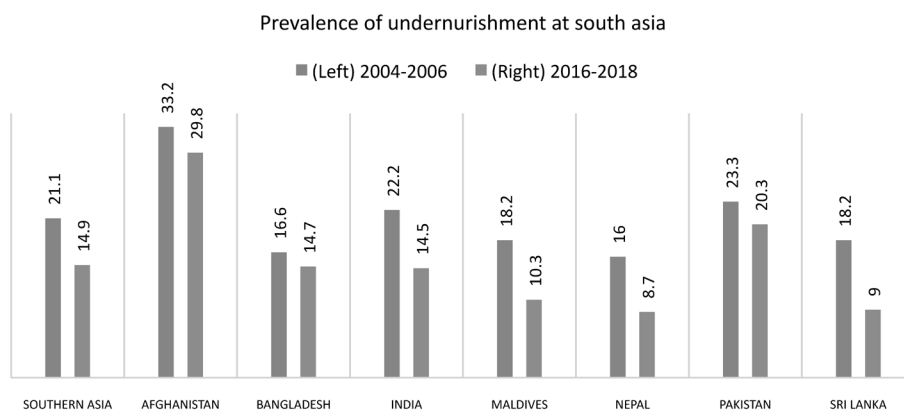### 2.1.1 Prevalence of undernourishment (PoU) in total population (Indicator 2.1.1)

To understand what is the world scenario and where South Asia stands with respect to target 2.1 that portraits Hunger through Prevalence of undernourishment (PoU) in total population. According to Food and Agriculture Organization of the United Nations (FAO) (2019) PoU is "an estimate of the proportion of the population that lacks enough dietary energy for a healthy, active life. It is FAO's traditional indicator used to monitor hunger at the global and regional level, as well as SDG Indicator 2.1.1." Again, "undernourishment is defined as the condition in which as individual's habitual food consumption is insufficient to provide the amount of dietary energy required to maintain a normal, active, healthy life."

Figure 1 illustrates the gradual change in hunger situation in the world between 2004–06 and 2016–18. In general, across most regions the prevalence of hunger has fallen since the millennium. Recently, the highest statistics is encompassed by Africa (19.6%) and within Asia, Southern Asia (14.9%) possesses the highest level of hunger. Globally hunger has fallen from 14.8 percent of total population

Figure 1. Prevalence of undernourishment (PoU) in total population (%)

Source: FAO, IFAD, UNICEF, WFP and WHO. 2019

Prevalence of undernurishment at south asia

Figure 2. Prevalence of undernourishment (PoU) in South Asia

Source: FAO, IFAD, UNICEF, WFP and WHO. 2019

in 2000 and reached its lowest levels in 2015 at 10.6 percent before rising to 10.8 in 2016. According to Food and Agriculture (FAO, 2019) approximately 1 in 9 people in the world were undernourished in 2017. Despite the decline found in the data, with increasing world population, an estimated 821 million people were undernourished in 2017 up from 784 million in 2015 establishes significant presence of hunger.

In Southern Asia the PoU has been steadily decreasing for every country during 2004–06 to 2016–18 and reached nearly 15 percent from more than 21 percent. As Figure 2 shows, Nepal, Sri Lanka and Maldives have reduced the percentage of people with undernourishment significantly, almost twice, compared to that 12 years before. Meanwhile, Afghanistan (29.8%) and Pakistan (20.3%) have PoU above 20 percent whereas Bangladesh (14.7%) and India (14.5%) have nearly 15 percent as shown in Figure 2. During 2018 the population in Southern Asia was 1,891,454,121 which is 24.8% of world population confirms that South Asian countries possess large number of undernourished people.

2.1.2 Access to food for all: prevalence of moderate or severe food insecurity based on the FIES

Food insecurity is defined by the UN FAO as the "situation when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life." Food insecurity can be caused by a number of factors, including the unavailability of food, unaffordable food, and unequal distribution of food between household members. Food insecurity is one of the major causes of poor nutrition.

Food insecurity is measured by the FAO using its Food Insecurity Experience Scale (FIES). In 2016, 9.3 percent of the world population were defined as severely food insecure by the UN FAO based on the FIES global reference scale. Number of Severely Food-insecure People in Southern Asian during 2015 to 2017 is 201.2 million according to FAO, IFAD, UNICEF, WFP and WHO (2019) report. This

indicator is categorized as tire 2 [1] and thus country specific data are unavailable.

2.2   Ending Malnutrition (SDG Target 2.2)

Child undernutrition reflected through stunting, wasting and obesity

SDG 2.2 aim to end "all forms of malnutrition" by 2030. Malnutrition is defined by FAO as an "abnormal psychological condition caused by inadequate, unbalanced or excessive consumption of macronutrients and/or micronutrients. Malnutrition includes undernutrition and overnutrition as well as micronutrient deficiencies." Thus malnutrition covers a broad spectrum and affects the population throughout the lifecycle, from conception through childhood and into adolescence, adulthood and older age. The consequence of undernourishment is called Undernutrition that can be acute—resulting from an immediate crisis in food access, inadequate nutrient intake and/or infection—or chronic, with cumulative deleterious effects over long periods. In contrary, overnourishment is defined as 'food intake that is continuously in excess of dietary energy requirements' resulting in the risk of diet-related non-communicable diseases (NCDs) and other health conditions.

For children, two consequences of undernourishment are largely known. Stunting or being 'too short for one's age,' and wasting or being 'dangerously thin for one's height.' Finally, the state of being 'deficient in vitamins and minerals' is called 'micronutrient malnutrition.' Most recent data from FAO (2019) reveals that stunting has been decreasing in nearly every region since 2000. Still, more than 1 in 5 children under 5 years of age (149 million) were stunted in 2018. Globally, 49 million children under 5 were affected by wasting and another 40 million were overweight in 2018.

Recognizing that accelerated global action is needed to address the pervasive and corrosive problem of the double burden of malnutrition, in 2012 the World Health Assembly Resolution 65.6 endorsed a Comprehensive implementation plan on maternal, infant and young child nutrition, which specified a set of six global nutrition targets that by 2025 aim to:

1. achieve a 40% reduction in the number of children under-5 who are stunted;
2. achieve a 50% reduction of anaemia in women of reproductive age;
3. achieve a 30% reduction in low birth weight;
4. ensure that there is no increase in childhood overweight;
5. increase the rate of exclusive breastfeeding in the first 6 months up to at least 50%;
6. reduce and maintain childhood wasting to less than 5%.

2.2.1   Stunting

The FAO, IFAD, UNICEF, WFP and WHO (2019) report reveals that globally, the prevalence of stunting among children under five years is decreasing. Nevertheless, to achieve the 2030 target of halving the number of stunted children, progress needs to be accelerated since 149 million children are still stunted. To understand trends and patterns of stunting among children (under 5 years of age) in South Asian region, following Table might help. Except Bhutan and Sri Lanka, every other country in

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[1]   Tier 2 indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.

Table 1. Proportion of children (under 5) moderately or severely stunted (%) in South Asia

Country	Time Period	Value (%)	Target 2025
Afghanistan	2004	59.3	
	2013	40.9	
Bangladesh	2000	51.1	
	2014	36.2	
Bhutan	2008	25.6	
	2010	24.6	
India	2006	47.8	
	2015	37.9	
Maldives	2001	31.9	40% reduction
	2009	18.6	
Nepal	2001	57.1	
	2016	36	
Pakistan	2001	41.5	
	2018	37.6	
Sri Lanka	2000	18.4	
	2016	17.3	

Source: UN Global SDG Indicators Database, 2019 https://unstats.un.org/sdgs/indicators/database/; FAO, IFAD, UNICEF, WFP and WHO. 2019

South Asia shows significant decrease in the percentage share of children moderately or severely stunted. However, the statistics of 2018 for Afghanistan, Bangladesh, India, Nepal, Pakistan are over 30 percent and that for Southern Asia is 32.7 percent. This scenario alarts that a large number of children in this area is stunted and in South Asian countries, current progress on reducing malnutrition is not adequate to achieve the 2025 and 2030 global nutrition targets.

2.2.2 Wasting

Globally, 49.5 million children under five years of age are wasted, two-thirds of whom live in Asia (FAO, IFAD, UNICEF, WFP and WHO, 2019). This is still a large number (7.3 percent) to reach the target of reducing and maintaining childhood wasting to less than 5 percent by 2025 and 3 percent by 2030. In South Asia, Afghanistan (9.5%), Bhutan (5.85%), Nepal (9.64%), Pakistan (7.1%) has proportion of children moderately or severely wasted below 10 percent as shown in Table 2. India has the largest percentage, nearly 21; Bangladesh and Sri Lanka have nearly 15 percent of children moderately or severely wasted in South Asia.

2.2.3 Obesity

Globally, overweight affected 40.1 million children under five years of age in 2018. Between 2000 and 2018, the prevalence of overweight in children under 5 years of age increased from 4.4% to 5.9% in the world (SDG database, 2019). The prevalence of childhood overweight is increasing in all regions of the world, particularly in Africa and Asia. In South Asia, there has been a dramatic rise in the numbers of children under 5 years of age who are overweight. Only for Pakistan the rate declines from 4.8 percent in 2001 to 2.5 percent in 2018 as shown in Table 3. Bhutan has the highest share, nearly 8 percent of children moderately or severely overweight in 2012 and Bangladesh and Sri Lanka has that of nearly 2 percent in 2016–18. It can be said that for the world data, there has not been a significant change in prevalence or numbers of children under five affected by overweight between 2012 and 2018 (5.5% to 5.9%). However, the numbers are certainly alarming for individual countries in South Asia with the increasing growth observed lately.

Recent data published by FAO (2019) confirms that globally, adult obesity continues to rise, from

Table 2. Proportion of children moderately or severely wasted (%) in South Asia

Country	Time Period	Value (%)	Target 2025 (%)	Target 2030 (%)
Afghanistan	2004	8.6		
	2018	9.5		
Bangladesh	2000	12.47		
	2018	14.38		
Bhutan	2008	4.7		
	2010	5.85		
India	2006	20.03		
	2018	20.79		
Maldives	2001	13.4	<5	<3
	2009	10.78		
Nepal	2001	11.32		
	2018	9.64		
Pakistan	2001	14.2		
	2018	7.1		
Sri Lanka	2000	15.5		
	2012	21.4		
	2016	15.1		

Source: UN Global SDG Indicators Database, 2019 https://unstats.un.org/sdgs/indicators/database/; FAO, IFAD, UNICEF, WFP and WHO. 2019

Table 3. Proportion of children moderately or severely overweight (%) in South Asia

Country	Time Period	Value	Target 2025/2030
Afghanistan	2004	4.6	
	2018	5.4	
Bangladesh	2000	0.93	
	2018	1.58	
Bhutan	2008	4.4	
	2012	7.57	
India	2006	1.91	
	2018	2.41	
Maldives	2001	3.9	No growth
	2012	6.13	
Nepal	2001	0.67	
	2018	1.2	
Pakistan	2001	4.8	
	2018	2.5	
Sri Lanka	2000	1	
	2012	0.6	
	2016	2	

Source: UN Global SDG Indicators Database, 2019 https://unstats.un.org/sdgs/indicators/database/ FAO, IFAD, UNICEF, WFP and WHO. 2019

11.7 percent in 2012 to 13.2 percent in 2016 that does not put us on track to meet the global target to halt the rise in adult obesity. The most common metric used for assessing the prevalence of obesity is the body mass index (BMI)[2] scale. Measured BMI values are used to define whether an individual is considered to be underweight, healthy, overweight or obese. According to WHO, an individual with a BMI between 25.0 and 30.0 is considered to be 'overweight' since a BMI greater than 30.0 is defined as 'obese' as defined by WHO.

The prevalence of obesity in adults for South Asian countries are plotted in Table 4. Each country shows an increase in the percentage of obese in adult population during 2012 and 2018. The rise in the prevalence of overweight in children (discussed in previous section) and adults is alarming, as obese people face far more severe health consequences and higher mortality risks compared with non-obese people. As of 2016, about a third of overweight adolescents and adults, and 44 percent of overweight children aged 5–9, were obese according to the State of Food Security and Nutrition in the world 2019

[2] The World Health Organization define BMI as: "a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m^2). For example, an adult who weighs 70 kg and whose height is 1.75 m will have a BMI of 22.9."

Table 4. Prevalence of obesity in adult (18 years and older)

Area	Prevalence of obesity in the adult population (%)	
	2012	2016
World	11.7	13.2
Southern Asia	4.2	5.2
Afghanistan	3.7	4.5
Bangladesh	2.6	3.4
Bhutan	4.5	5.8
India	3	3.8
Maldives	5.9	7.9
Nepal	3	3.8
Pakistan	6.3	7.8
Sri Lanka	4.3	5.4

Source: FAO, IFAD, UNICEF, WFP and WHO. 2019

report. Besides, between 2000 and 2016 the prevalence of obesity more than doubled among children (11.2% to 20.6%) and adolescents (9.9% to 17.3%).

It is thus evident from section 2.2 that all South Asian countries are burdened with multiple forms of malnutrition. Despite some evidence of improved dietary diversity, the quantity and nutrient adequacy of the food consumed need to be enhanced. The prevention and control of overweight and obesity through the promotion of healthy diets and lifestyle need to be prioritized. Existing situation hence create opportunity for various challenges in relation with hunger and nutrition.

3. Key Challenges of Hunger and Malnutrition in South Asia

3.1 Hunger in South Asia

The problem of hunger is complex, and different terms are used to describe its various forms. Hunger is usually understood to refer to the distress associated with a lack of sufficient calories.

Globally hunger has fallen from 14.8 percent in 2000 to 10.8 percent in 2016. But this progress has not been consistent with some increase over the last three years. Global hunger reached its lowest levels in 2015 at 10.6 percent before rising to 10.8 in 2016.

Worldwide, the level of hunger and undernutrition falls into the serious category, with a GHI score of 20.9. This is down from 29.2 in 2000, equating to a decline of 28 percent. Underlying this improvement are reductions in each of the four indicators used to assemble the GHI: (1) the prevalence of undernourishment, (2) child stunting, (3) child wasting, and (4) child mortality. Despite these improvements, the question remains whether the world will achieve Sustainable Development Goal (SDG) 2, which aims to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture, by 2030. If progress in reducing hunger and undernutrition continues on its current trajectory, an estimated 50 countries will fail to achieve low hunger according to the GHI by 2030.

The Global Hunger Index is a peer-reviewed annual report, jointly published by Concern Worldwide and Welthungerhilfe, with the aim to trigger action to reduce hunger around the world. GHI is designed to comprehensively measure and track hunger at the global, regional, and country levels.[3]

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[3] https://www.globalhungerindex.org/about/#fn-01

Table 5. Global Hunger Index

	Afghanistan	Bangladesh	India	Nepal	Pakistan	Sri Lanka
1992	49.3	52.4	46.4	43.1	43.4	31.8
2000	52.4	38.5	38.2	36.8	37.8	27
2008	39.2	32.4	36	29.2	35.1	24.4
2018	34.3	26.1	31.1	21.2	32.6	17.9
Rank	111	86	103	72	106	67
Status	Serious	Serious	Serious	Serious	Serious	Moderate

Source: https://www.globalhungerindex.org/

Table 5 shows GHI for selected country of our interest. The 2018 GHI scores of South Asia and Africa south of the Sahara, at 30.5 and 29.4, respectively, reflect serious levels of hunger. The GHI is read as "low" with scale ≤ 9.9; "moderate" for 10.0–19.9; "serious" for scale 20.0–34.9; "alarming" for scale 35.0–49.9 and "extremely alarming" for scale ≥ 50.0. Thus Afghanistan, Bangladesh, India, Nepal and Pakistan suffer from a serious level of hunger and Sri Lanka has moderate hunger according to GHI 2018. It is thus a great concern for each South Asian countries selected in this paper. Bhutan and Maldives could not be included in the 2018 Global Hunger Index because of lack of data.[4]

In South Asia, the rates of undernourishment, child stunting, child wasting, and child mortality are unacceptably high. As a result, GHI scores are high in South Asian countries which is driven by lack of food and poor-quality diet that create high rates of undernourishment, reflecting a lack of calories for a large population and sometimes inadequate child caregiving practices, an unhealthy environment, or all of these factors.

Existing scenario of global hunger does not necessarily mean lack of food supply world-wide. Agriculture today produces more food in terms of calories than is required by current population. In all regions of the world the current level of food supply is sufficient to meet the population's energy requirements. In spite of that, about 11% of the world's population consumes an amount of food that is insufficient to cover their minimum energy requirements, that is, they are undernourished (SFA, 2019). South Asian countries has nearly 16% of population suffering from undernourishment and that is a large number considering the huge population in this region. Although every country has quite successfully provided food to a growing human population, to ensure sustainable food and agriculture (SDG2), vast improvements are needed to ensure food security and healthy nutrition for all in South Asia.

3.2 The pathway from food access to malnutrition

The dietary energy consumption per person is the amount of food, in kcal per day, for each individual in the total population. Food consumption expressed in kilocalories (kcal) per capita per day is a key variable used for measuring and evaluating the evolution of the global and regional food situa-

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[4] https://www.globalhungerindex.org/bhutan.html

Table 6. Global and regional per capita food consumption (kcal per capita per day)[5]

Region	1964–1966	1974–1976	1984–1986	1997–1999	2015	2030
World	2358	2435	2655	2803	2940	3050
Developing countries	2054	2152	2450	2681	2850	2980
Near East and North Africa	2290	2591	2953	3006	3090	3170
Sub-Saharan Africa[a]	2058	2079	2057	2195	2360	2540
Latin America and the Caribbean	2393	2546	2689	2824	2980	3140
East Asia	1957	2105	2559	2921	3060	3190
South Asia	2017	1986	2205	2403	2700	2900
Industrialized countries	2947	3065	3206	3380	3440	3500
Transition countries	3222	3385	3379	2906	3060	3180

Source: WHO; https://www.who.int/nutrition/topics/3_foodconsumption/en/

Table 7. Daily caloric supply (kcal/person/day) in SA

	Afghanistan	Bangladesh	India	Maldives	Nepal	Pakistan	Sri Lanka
2000	1790	2258	2380	2435	2257	2398	2315
2005	1948	2372	2270	2459	2406	2359	2350
2010	2104	2439	2442	2718	2560	2432	2465
2013	2090	2450	2459	2732	2673	2440	2539
Minimum Dietary Energy Requirement (2008)*	na	1770	1780	1800	1730	1740	1800
Dietary Energy Consumption (kcal/person/day) 2006–08*	na	2270	2360	2550	2340	2280	2370

Source: https://ourworldindata.org/food-per-person; FAOstats database (food balance sheets); *FAO

tion. Analysis of FAOSTAT data shows that dietary energy measured in kcals per capita per day has been steadily increasing on a worldwide basis. Although the changes has not been equal across regions, availability of calories per capita from the mid-1960s to the late 1990s increased globally by approximately 450 kcal per capita per day and by over 600 kcal per capita per day in developing countries as shown in Table 6.

In short, it would appear that the world has made significant progress in raising food consumption per person. Similarly, South Asian countries are no exception in showing steady increase in the energy consumption lately as shown in Table 7.

It is evident that growth in food consumption has been accompanied by significant structural changes and a shift in diet away from staples such as roots and tubers towards more livestock products and vegetable oils. FAOSTAT, 2003 data suggest that per capita energy supply has declined from both animal and vegetable sources in the countries in economic transition, while it has increased in the

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[5] Daily caloric supply (kcal/person/day) as reported by the UN Food and Agricultural Organization (FAO). Daily caloric supply is defined as the average per capita caloric availability.

Table 8. 2018 Global Nutrition Report

On track for 0 targets	On track for 1 target	On track for 2 targets	On track for 3 targets	On track for 4 targets
100	44	35	10	5
Afghanistan Bhutan India Maldives Pakistan	Nepal Sri Lanka	Bangladesh		

Source: https://globalnutritionreport.org/reports/global-nutrition-report-2018/appendix-2-countries-track-global-nutrition-targets/

developing and industrialized countries. Similar trends are evident for protein availability; although the global supply of protein has been increasing, per capita supply of vegetable protein is slightly higher in developing countries, while the supply of animal protein is three times higher in industrialized countries. All these points to a significant gap in consumption for major food items. Thus, the supplies and affordability of nutrient-dense foods need to be enhanced to bridge the nutrient gap.

3.3 Country progress against global targets

The *2018 Global Nutrition Report* tracks country progress against the following targets: child overweight, child wasting, child stunting, exclusive breastfeeding, diabetes among women, diabetes among men, anaemia in women of reproductive age, obesity among women and obesity among men. The report assessment includes the best available data for 194 countries from various sources and plots which countries are on track for none, one, two, three and four of the nine targets. Table 8 shows success or sluggish progress of the countries and Bangladesh is in the best position among others in South Asia with two targets on track. Next are Nepal and Sri Lanka and other countries are not performing well in any of the targets. Following, specific country cases are discussed to better understand the hunger and nutrition situation.

Sri Lanka

Considering the case of Sri Lanka, Sri Lanka is dependent on local food production and it has been on the rise due to increased domestic food production and importation. At present, 80 percent of Sri Lanka's annual food requirement is produced domestically and 20 percent is imported. As per WFP (2019), Sri Lanka is nearly self-sufficient in rice, the staple diet and self-sufficiency rates of animal protein products exceed 97 percent. Local production of other main supplementary food items such as vegetables and green leaves, pulses, root crops, spices and fruits exceed 70 percent of total availability according to WFP. Besides, per capita income has registered substantial increases over the last ten years, increasing twice from GDP per capita (PPP at constant 2011$) 5543 $ in 2000 to 11955$ in 2018 (WDI, 2019). Overall poverty levels for long term gives an indication of improved economic access to food along with improved the physical access to markets during the last ten years. Despite the recent economical and infrastructural progress in Sri Lanka, food and nutrition insecurity outcomes are reflected in major immediate concerns—high levels and disparity of malnutrition and micronutrient deficiencies as discussed in this study. Hunger is moderate in Sri Lanka but still there in hidden form.

Therefore, availability of adequate food at the national level does not necessarily ensure economic and physical access to food at the household level.

Maldives

Maldives mark the highest GDP per capita PPP of $13611 (constant 2011 international $) in the region. However, there is very low production of food in this country of islands, and therefore, the country imports most of its food, which increases price and making it harder to get sufficient amounts of fresh food. Obesity is largely due to increased consumption of packaged, unhealthy foods and a limited knowledge of proper nutrition. In some island communities, accessing fresh fruits, vegetables and legumes throughout the year can be a problem—and throughout the country, less than 6.5 percent of Maldivians are eating enough healthy produce, according to the Ministry of Health.

Health status of children in the Maldives has improved dramatically in just ten years with rates of undernutrition among children nearly halved, and rates of exclusive breastfeeding jumped from 10 to 64 percent. Despite these improvements, malnutrition rates for children under age 5 are still high for a middle-income country. Nearly one in five children is stunted, caused by a lack of adequate nutrients at an early age, debilitating both cognitive and physical growth for the rest of a child's life. In addition, 17.3 percent of children in the Maldives are underweight while 10.6 percent are wasted. As a result, all these malnutrition status existing among children have not kept pace with the rest of the country's rapid development because unhealthy social norms, along with limited national systems of monitoring nutrition rates, made it easy for nutrition issues to be inadequate. Lately, the triple burden of malnutrition—a shift towards the coexistence of food insecurity, undernutrition, and overweight within the same geographies—is an emerging challenge in Maldives.

Pakistan

According to World Food Program (2018), food availability situation in Pakistan is stable in the country since the production of main staple crops—wheat and rice are sufficient. Food security remain of concern despite satisfactory supply of food due to a combination of militant activity, natural disaster, and economic instability. A 2018 national nutrition survey showed that 60 percent of the population still faces food insecurity—particularly women—to an adequate and diverse diet. The survey also showed that 15 percent of children under 5 suffer from acute malnutrition, the second highest rate in the region, nearly 44 percent of children are stunted, 32 percent are underweight and the majority of children under 2 consume less than half of their daily energy requirements, with low levels of vitamins and minerals. An average Pakistani household spends 50.8 percent of monthly income on food that makes them particularly vulnerable to shocks, including high food prices, impact of climate change and population displacements.

Nepal

GHI rank for Nepal is 72, second lowest among the South Asian countries but with a serious level of hunger. The Zero Hunger Strategic Review (ZHSR), conducted by WFP in 2017–18, ensures that Nepal suffers from serious food insecurity and malnutrition despite commendable progress on these

fronts. WFP reports that one quarter of Nepal's population live below the national poverty line, on less than US$0.50 per day. During 2016 to 2018, approximately 36 percent of Nepali children under 5 are stunted, while 27 percent are underweight, and nearly 10 percent suffer from wasting due to acute malnutrition. Nepal has made strides in reducing undernourishment in recent years. Data shows overall available food energy increasing from 2,855 kcal/capita/day in 2011 to 2,922 kcal/capita/day in 2013, with the gap between rural and urban populations further narrowing. However, nearly 41% of the population does not have access to minimum calorie intake (NPC 14th Plan). Even when food is physically available, it may not be affordable; therefore, poverty and household incomes are directly related to food insecurity. In a recent report released by the International Food Policy Research Institute (IFPRI), almost two million people are considered undernourished in Nepal (IFPRI, 2017).

It is evident that micronutrient deficiency, or "hidden hunger," is most commonly caused by poor dietary diversity and is a pervasive problem in Nepal due to diets high in staple foods that are dense in calorie but low in bio-available protein and micronutrients and lead to deficiencies in essential nutrients such as protein, vitamin A, iron, and iodine. Recently, food preferences in Nepal have shifted from healthier and more nutritious traditional foods toward alternative food that have compounded malnutrition problems. Malnutrition thus slows economic growth as it feeds a cycle of poverty due to low productivity, poor cognitive function and increased health costs (WFP, 2019).

Bhutan

The Government of Bhutan has expressed its firm commitment to achieving the Sustainable Development Goals (SDGs) by 2030. However, the impacts of climate change are expected to lead to more frequent and intense disasters that threaten to reverse Bhutan's progress to date. The majority of the population depend on the agricultural sector to survive, and protecting the country's food and nutrition sector is an important step towards reaching Zero Hunger across the country. While Bhutan has seen immense growth along with impressive reductions in poverty, it remains a predominantly agriculture-based society, with the majority of the population relying on agriculture for their livelihoods. World Bank data describes that most of the country's arable land is cultivated by small farm holdings —an average size of 1.2 hectares—which produce most of the crop and livestock. However, despite importing 34% of its cereal needs, nearly one out of three Bhutanese suffer from food insecurity. Additionally, nearly 27 percent of Bhutanese households consume less than the daily minimum calorific requirement of 2,124 kcal, resulting in nearly 30 percent of the population facing malnourishment and related health issues such as stunting.

According to WFP (2019) Malnutrition levels have substantially reduced in Bhutan recently. Stunting of children under 5 has decreased from 33.5 percent in 2010 to 21 percent in 2015. Anemia remains a severe public health issue and according to the WHO, 44 percent of children under 5 and one in three adolescent girls are anemic. Health problems related to a lack of balanced diets and lifestyle changes continue to pose challenges to the achievement of SDG2, and non-communicable diseases account for 70 percent of the reported disease burden across all age groups.[6]

India

According to FAO estimates in 'The State of Food Security and Nutrition in the World, 2019' report, India is home to a quarter of all undernourished people worldwide (194.4 million) making the country a key focus for tackling hunger on a global scale. Its score is 31.1 in the GHI, among the worst in the world, and below close neighbors Bangladesh and Nepal in the SAARC region. In the last two decades, per capita income in India more than tripled. However, malnutrition was the top cause of death and disability in 2017, followed by dietary risks including poor diet choices, according to the 2017 Global Burden of Disease study by the University of Washington. Obesity and overweight increased by 9.6 and 8 percentage points in men and women, respectively, in 2015–16 compared to a decade ago, while non-communicable diseases were responsible for 61% of all deaths in 2016. India become the third largest market for packaged food and that explains a lot.

Recently India celebrated two laws, the National Food Security Act (NFSA) of 2013 relating to food and nutrition security, and the National Rural Employment Guarantee Act (NREGA) of 2005 for income guarantee from rural employment. In addition, reported growth of India's GDP grew by 4.5 times in the past 20 years with doubling of food grains production and the tripling of per capita consumption that portrays significant anticipation to the improvement of food and nutrition situation. However, India will have to lift 48,370 people out of hunger every day to achieve zero hunger by 2030 as per IndiaSpend's analysis. Furthermore, India is not on track to achieve any of the nine nutrition goals adopted by WHO member countries in 2012 and 2013 to reduce all forms of malnutrition by 2025. According to the ministry of health and family welfare's National Family Health Survey-4 (2015–16), less than 10% of children receive adequate nutrition in the country.

Bangladesh

According to the Country Investment Plan Review 2019, Bangladesh is experiencing a multiple burden of malnutrition, where various forms of malnutrition coexist within the same community, same household or even in the same person. The FAO estimates of prevalence of undernourishment (SDG 2.1.1)—15.1% in 2014–16, 15.2% in 2015–17 down to 14.7% in 2016–18—show that Bangladesh is on track to meet the SDG target of 10% by 2030. Malnutrition among women declined significantly in the last decade but close to one-fourth of all women remain underweight and one-fifth stunted. While regional and socio-economic disparities persist, child undernutrition is on track.

These achievements are among the most sustained reductions in child undernutrition in the world and if the current trend is maintained, the World Health Assembly target of a 40% reduction between 2012 and 2025 in the number of under-five children who are stunted will be met early. IFPRI and FAO explain this attainment through, "largely by using innovative public policies to improve agriculture and nutrition". While agriculture growth was spurred by supportive policies, other policies such as family planning, stronger health services, growing school attendance, access to drinking water and sanitation

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[6] https://blogs.worldbank.org/endpovertyinsouthasia/what-are-we-doing-improve-food-security-bhutan

and women's empowerment also played a role to improve the situation.

Notwithstanding these promising trends, the levels of undernutrition observed remain very high and of public health concern with a staggering 4.5 million children still suffering from stunting. Simultaneously, presence of overweight or obesity among nearly half of the adult women complicates this immense burden malnutrition. Moreover, marked nutritional disparaties exist across socioeconomic groups, between urban and rural areas, and across regions. Interventions to improve dietary diversification for nutrient adequacy among women of reproductive age, especially adolescent girls, and young children are needed despite the fact that agriculture sector in Bangladesh has managed to triple its rice production, significantly increased fish, vegetable and horticulture production since the independence of the country in 1971. Although presence of functional markets has contributed to ensure food availability across the country, increasing challenge remains to keep the pace of production with the growing population, declining soil fertility, imbalanced use of fertilisers, declining groundwater and climate change in Bangladesh.

Afghanistan

In the 2018 Global Hunger Index, Afghanistan ranks lowest among other South Asian countries and 111th out of 119 qualifying countries. With a score of 34.3, Afghanistan suffers from a level of hunger that is serious. Besides, Afghanistan has a complex set of challenges that comprises climate change and natural disasters, demographic shifts, limited job opportunities, pervasive gender inequalities, food insecurity and transparency concerns. Over half of the Afghanistan's population lives below the poverty line, and food insecurity is on the rise, largely due to conflict and insecurity. Food insecurity rose dramatically between 2014 and 2017 in Afghanistan. For instance, number of people who lack reliable access to sufficient quantities of nutritious food has risen from 33 to 44 percent, with about 13.2 million people according to the Afghanistan Living Conditions Survey 2016–2017 (ALCS).[7] As a consequence, young population—more than two-thirds of which are under the age of 25—are predominantly affected. Undernutrition is thus of particular concern at Afghanistan in women, children, displaced people, returnees, households headed by women, people with disabilities and the poor.

3.4   Social and Economic Cost of Malnutrition

Global panel on Agriculture and food systems for nutrition[8] published that causes of nutritional deficiencies are multiple and are interrelated as we found in this study as well. Multisectoral approaches in nutrition are therefore indispensable to address underlying causes of all forms of malnutrition—undernutrition, micronutrient deficiencies, and overweight and obesity. Malnutrition not only hindering achievement of the 2030 Goals but also costing countries economically and socially both—directly and indirectly—on individuals, families and nations that are unacceptably high.

The study measures very high social cost of malnutrition by "disability-adjusted life years" due to child and maternal malnutrition and due to overweight and obesity. The brief highlights that adult

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[7]   http://www.fao.org/afghanistan/news/detail-events/en/c/1157902/
[8]   https://glopan.org/cost-of-malnutrition

earnings are reduced by 2.4% for every 1% loss in potential attained height. Further global economic cost of malnutrition is incurred through compromised learning, poor school performance, compromised adult labour productivity, and increased health care costs. All these could account for as much as 5 percent of global gross domestic product (GDP), which is equivalent to US$3.5 trillion per year or US$500 per person. Not only that, costs of undernutrition and micronutrient deficiencies are estimated at 2–3 percent of global GDP, equivalent to US$1.4–2.1 trillion per year and the cumulative cost of all noncommunicable diseases, for which overweight and obesity are leading risk factors, were estimated to be about US$1.4 trillion in 2010. The challenge for policy-makers is how to address these problems while at the same time avoiding or reversing the emergence of overweight and obesity.

The State of Food and Agriculture 2013: Food systems for better nutrition report argues that improving nutrition and reducing these costs must begin with food and agriculture. The traditional role of agriculture in producing food and generating income is fundamental. Agriculture and the entire food system can contribute more significantly to eradicate malnutrition by appropriate interventions in every steps of inputs and production, processing, storage, transport and retailing, and finally to consumption. Economic benefits of investment associated with actions to improve food systems, diets and nutrition are evident worldwide. It is estimated that from every US$1 invested in reducing wasting and stunting, a US$18 return is achieved. With significant challenges and high return, with a benefit-to-cost ratio of almost 13 to 1, investing in the reduction of undernutrition and micronutrient deficiencies must therefore continue to be the highest nutrition priority for the global community in the immediate future.

4. The Way Forward

This study explored the causes of malnutrition and the progress of South Asian countries towards zero hunger at the fourth year of SDG initiative. It is observed that throughout South Asia hidden hunger prevails, countries face multiple burden of malnutrition and moderate food security is a common problem across regions. The access as well as affordability of balanced, nutritious and diverse diets is important for South Asian nations. However, in South Asia the overall trends in hunger and undernutrition are improving which shows signs of hope. Although achieving an acceleration in the reduction of hunger and achieving SDG 2 in this region remains a big challenge. The policies and plans in the pipeline need to be implemented in order to address the root causes of hunger realizing that nutrition security is the bigger concern of which access to food is a segment. Policy interventions should thus count family level food security along with nutrition security or hidden hunger for child survival, maternal health and overall healthy population. Policies that ensure "No one is left behind" are conducive to equitable and sustainable growth, ensure productive capacity development, public participation and the realization of human rights need to be implemented. Dietary guidelines and nutrition education programs need to be integrated at every step of the food chain to inform and influence food demand and consumption. South Asian countries thus require better governance of food

systems which will eventually help them to fulfil SDG Goal 2.

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