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Critical Evaluation on COVID19 Pandemic Global Challenges to Food Security

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ABSTRACT

Across the world, the COVID19 pandemic has had a huge impact on food and nutrition security. Efforts to satisfy Sustainable Development Goal (SDG) 2 on Zero Hunger are stalled, and it's estimated that a further 137 million people faced acute food insecurity as 2020 ended. The reasons are many: interrupted food supply chains, high levels of unemployment, loss of incomes, and rising food cost. Climate change and thus the resultant extreme weather events have magnified the challenges. This brief involves strategic action to create resilient food systems amidst the pandemic

Keywords: COVID19 pandemic, food and nutrition security, Development Goal (SDG), Zero Hunger.

INTRODUCTION

The COVID19 Pandemic—which has cost the planet quite 4 million lives so far—has had a huge impact on global food security and nutrition. Before the top of 2019, when the primary cases of the new disease were being reported from China, many people across the planet were already suffering from hunger and malnutrition (See Figure 1). The pandemic—and subsequent lockdown measures that were

imposed by governments as a response—have only worsened the threat to food systems, possibly hastening the approaching global food emergency.[a],[1] Posing more grave threats are political conflicts, natural disasters, and other events like locust swarms in developing regions. Food insecurity is high, and thus the planet appears farther from meeting Sustainable Development Goal (SDG) 2 on 'Zero hunger'.



Figure 1: The Impact of Covid19 on SDG2, ‘Zero Hunger’

Source: SDG Report 2020[2]

Despite progress remodeled the past few decades, the triple burden of under nutrition, obesity/overweight, and diet related micronutrient deficiencies continue many parts of the planet. Ending hunger, food insecurity, and malnutrition would require continued and focused efforts, especially in Asia and Africa—home to the most important populations that have chronic hunger. Any progress in reducing under nutrition will have wide impacts on improving health and lifting people out of poverty.

Global Nutrition Targets and SDG 2

Recognising the need to accelerate action to affect all kinds of malnutrition, the 2012 World Health Assembly (WHA) Resolution 65.6 endorsed a comprehensive implementation plan on maternal, infant and young child nutrition. A set of six global nutrition targets (See Table 1) were specified, targeting 2.2 of the SDGs to “end all kinds of malnutrition”. To align with the 2030 SDG agenda, the WHA targets were extended to 2030.[3] watching the increase in adult obesity and non communicable diseases, WHA included a target to halt the increase in adult obesity and thereby reduce risk of NCD mortality by 25 percent, by 2025.[4]

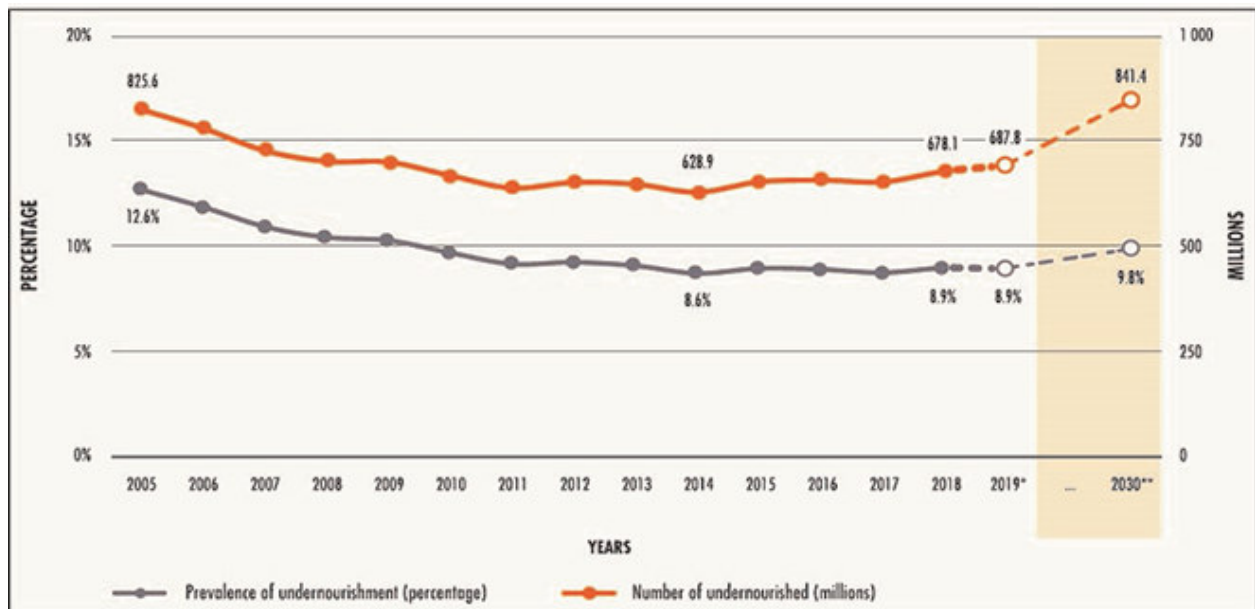
Table 1: Global Nutrition Targets

	2025 Target	2030 Target
Stunting	40% reduction in the number of children under 5 who are stunted	50% reduction in the number of children under 5 who are stunted
Anaemia	50% reduction in anaemia in women of reproductive age	50% reduction in anaemia in women of reproductive age
Low birth weight	30% reduction in low birthweight	30% reduction in low birthweight
Childhood overweight	No increase in childhood overweight	Reduce and maintain childhood overweight to less than 3%
Breastfeeding	Increase the rate of exclusive breastfeeding in the first six months up to at least 50%	Increase the rate of exclusive breastfeeding in the first six months up to at least 70%
Wasting	Reduce and maintain childhood wasting to less than 5%	Reduce and maintain childhood wasting to less than 3%

Source: FAO 2020[5]

Around 690 million people or 8.9 percent of the worldwide population are undernourished.[b],[6] (See Figure 2) Asia is home to majority of the undernourished (381 million); Africa has 250 million, and Latin America and therefore the Caribbean follow, both with 48 million. In 2019, one in every ten people within the planet (750 million) were facing severe food insecurity. Another 83 to 132 million are estimated to be added in 2020, bringing the quantity of

undernourished to quite 840 million, or 10 percent of the population, by 2030.[7] Indeed, many countries and regions are off track to realize the target of ‘zero hunger’: Africa will have half all the world’s undernourished—433 million or 51.5 percent of the realize the target of ‘zero hunger’: Africa will have half all the world’s undernourished—433 million or 51.5 percent of the population—by 2030; Asia will have 330 million (39.1 percent).[8]

**Figure 2: Global undernourishment trends**

Source: FAO 2020[i]

According to Global Hunger Index 2020, hunger is at moderate level worldwide.[10] SubSaharan Africa and South Asia have serious levels of hunger at 27.8 and 26 percent, respectively.[c] (See Figure 3)

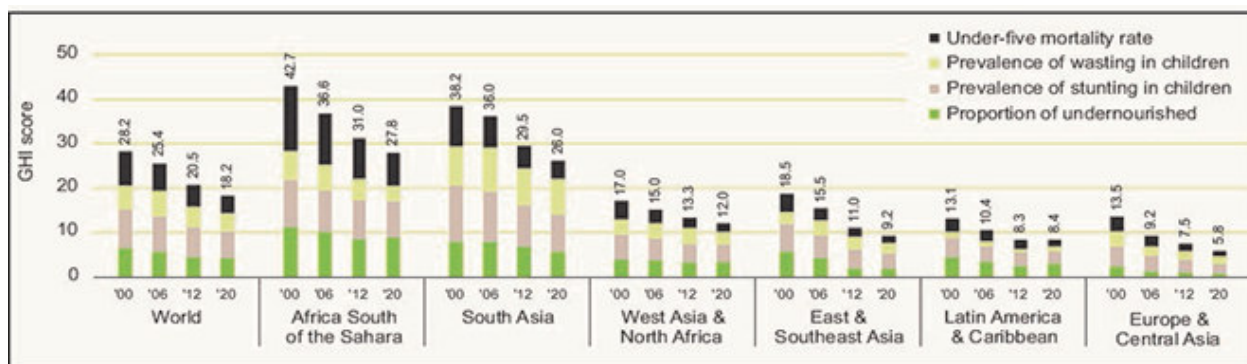


Figure 3: Global and regional trends on Global Hunger Index 2020

Source: <https://www.globalhungerindex.org/trends.html>

Progress towards Global Nutrition Targets

According to the Joint Malnutrition Estimate 2021, stunting has affected 149.2 million (22 percent) of all children under five years aged .[11] Wasting continues to extend at an

alarming pace, reaching an estimated 45.4 million (6.7 percent)M of youngsters in 2020. A similar trend is seen within the incidence of overweight, with 38.9 million (5.7 percent) children affected in 2020. (See Figure 4)

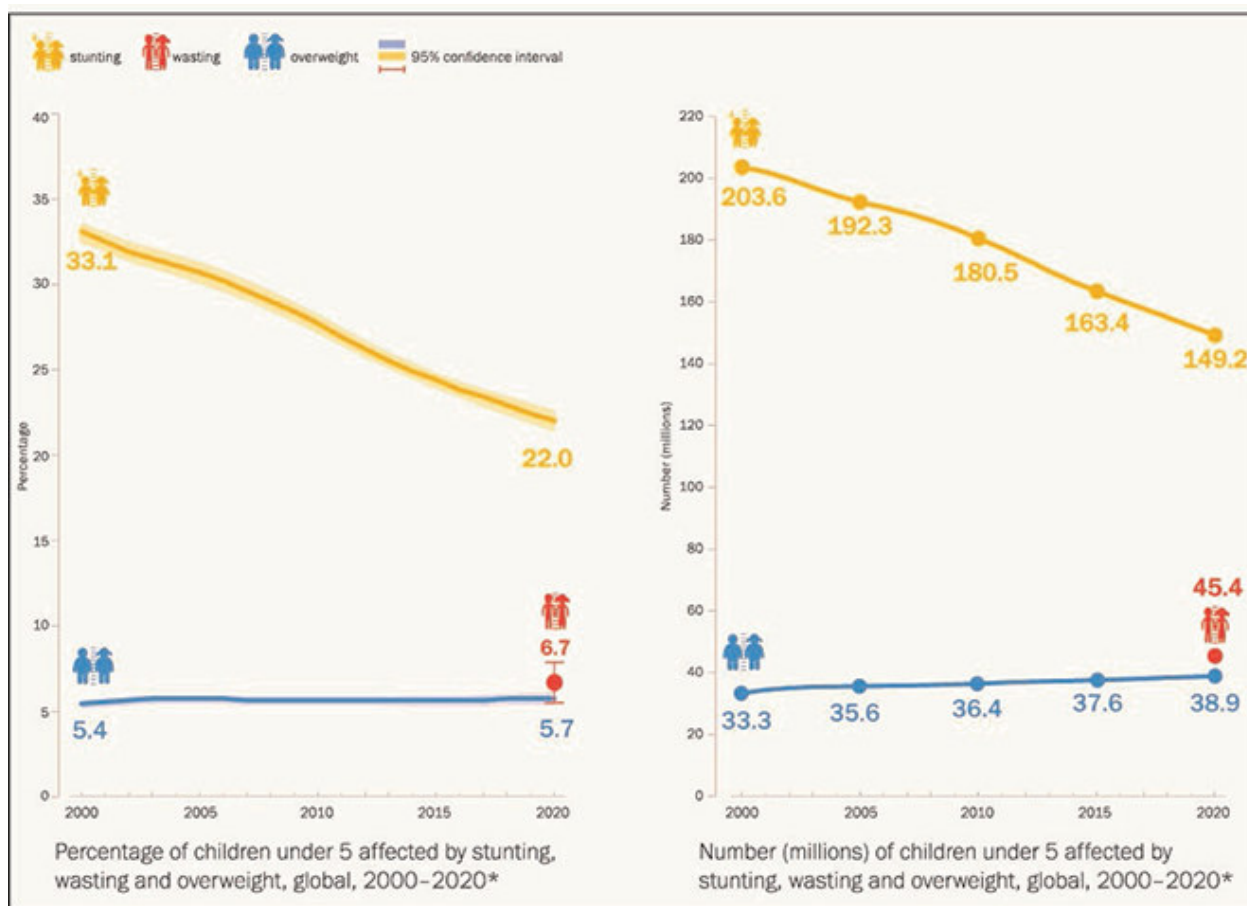


Figure 4: Global prevalence of malnutrition, 2000-2020

Source: UNICEF / WHO / International Bank for Reconstruction and Development Group Joint Child Malnutrition Estimates 2021[12]

To be sure, stunting rates have reduced over the past 20 years. However, certain regions still experience high rates of stunting, and thus rates have reduced over the past 20 years. However, certain regions still experience high rates of stunting, and thus the steepest numbers are in Asia (79 million) and Africa (61.4 million). Trends indicate an enormous fall in stunting rates for SubSaharan Africa, owing primarily to antenatal care given to mothers and increased coverage of immunization and deworming for kids under five.[13] South Asia is that the worst affected, with four out of every 10 children being stunted.[14] Among the South Asian countries, Afghanistan has the absolute best prevalence at 41 percent, followed by India and Pakistan both at 38 percent, and Bangladesh and Nepal both at 36 percent.[15] Stunting prevalence is almost double in children from the poorest wealth quintile, as compared to the richest quintile.

In India, there's socioeconomic disparity within the burden of malnutrition in households.[16],[17] Between 2006 and 2016, adult overweight/obesity doubled as wealth inequalities increased in both rural and concrete slum households. [18] Overall, in South Asia, there are multiple factors that account for variance in child stunting rates: dietary diversity, maternal education, and degree of household poverty. [19] Moreover, poor infant and young child feeding and poor maternal nutrition and sanitation contribute to stunting in South Asia and Sub Saharan Africa. [20]

Globally, 45.4 million (6.7 percent) children under five are wasted, far above the SDG30 and Global Nutrition targets of three percent and 5 percent, respectively. (See Table 1)[21] South Asia accounts for 70 percent (31.9 million) of under five wasting and quite 1 / 4 (27 percent) sleep in Africa. Of the 31.9 million children suffering from wasting in Asia, quite half sleep in South Asia (25 million). A study in South Asia found that the actors related to wasting among children underfive include low maternal body mass index, short maternal height, high number of poorest wealth quintile households, and lack of maternal education.[22],[23]

The prevalence of kid wasting at 14.8 percent in South Asia may be a explanation for concern and involves prioritising action in improving nutrition and healthcare for women before and during pregnancy not only to stop low birth weight, but importantly, for his or her own health and wellbeing.[24] Child wasting across low and middle income countries peak at 03 months and is prevalent at 12-15 months.[25]

This necessitates preventive interventions in pregnant and lactating mothers, and for children below six months of age. New estimates suggest a 14.3percent (6.7 million) rise in child wasting in 2020, about 58 percent children in South Asia and about 22 percent in sub Saharan Africa. [26] As countries continue to grapple with the effects of COVID19 on livelihoods, an additional 3.9 million children in South Asia could suffer from wasting.[27]

The burden of overweight in both under fives and in adults has been on the rise.[28] Globally, about 38.9 million (5.7 percent) of children under five are overweight. Almost half the entire sleep in Asia (18.7 million); the opposite big proportion is in Africa (10.6 million). Trends indicate a big increase in overweight children in Southeast Asia and Northern Africa within the past 20 years. The number increased from 2 million to 4.2 million in Southeastern Asia, and from 2.3 million to three .8 million children in Northern Africa between 2000 to 2020. Increasing trends are observed for the sub regions of Australia and New Zealand (16.9 percent), and Northern America (9.1 percent). Most regions aren't on track to realize the targets on overweight in children. Indeed, the worldwide prevalence in under fives has seen no progress in 20 years.

Figure 5 indicates the share of youngsters suffering from all sorts of malnutrition by income classification of nations. While stunting is on the decline for all income levels, overweight is raising at an alarming pace especially in upper middle and high income countries. Almost two thirds (72 percent) of wasted children under five are in low and middle income countries, as compared to 59 percent of stunted children.

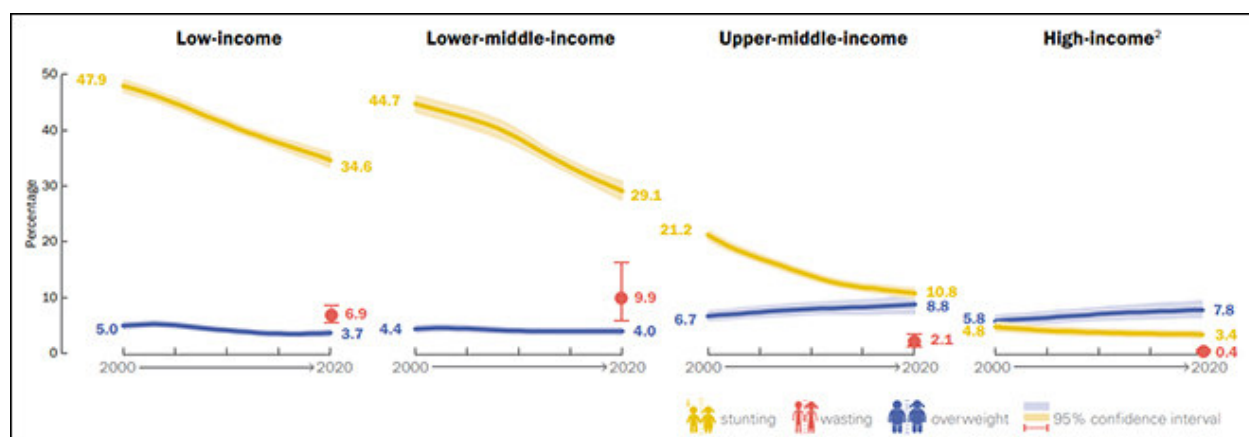


Figure 5: Under fives suffering from stunting, wasting and overweight, by country income classification, 2000–2020

Source: UNICEF / WHO / International Bank for Reconstruction and Development Group Joint Child Malnutrition Estimates 2021[29]

Of all other global targets, exclusive breastfeeding is that the only indicator that appears to be on track to realize a

minimum of the 50percent rate by 2025 (See Figure 6). At present, 44 percent of youngsters are exclusively breastfed

worldwide, with South Asia and East and Southern Africa above the worldwide average at 57 percent and 56 percent, respectively. If the regions continue at an equivalent pace,

they could be ready to achieve both SDG and global targets. Most sub regions have made some progress, except for Latin America and the Caribbean.

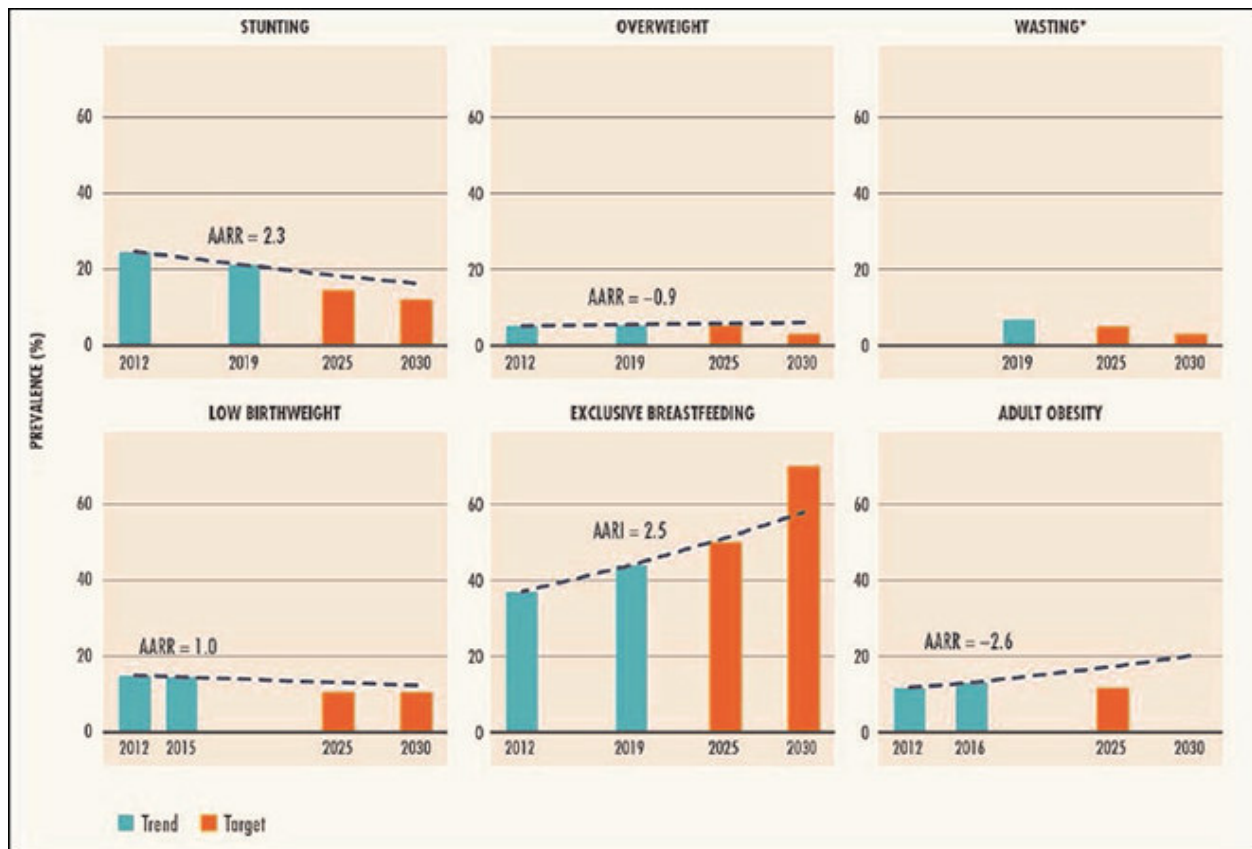


Figure 6: Progress on Global Nutrition Targets

Source: FAO 2020[30]

Nearly 15 percent of infants born worldwide are of low birth weight (less than 2500 gm). Progress on the reduction of low birth weight has been stagnant for the past decades.[31] South Asia, Sub Saharan Africa, and Latin America are low birth weight has been stagnant for the past decades.[31] South Asia, SubSaharan Africa, and Latin America are the highest three regions with the highest prevalence of low birth weight at 28, 13, and 9 percent, respectively. There has been slow progress in achieving the target of 30percent reduction in low birth weight by 2030. Multiple pregnancies, infections, and non communicable diseases can cause low birth weight with adverse consequences, like neonatal mortality rate, poor cognitive development and future risk of cardiovascular diseases.[32],[33] Interventions to improve early and continued access to high quality antenatal care and perinatal services, nutritional counselling, alongside early essential newborn care are critical for preventing and treating low birth weight. [34],[35]Adult obesity continues to rise across all sub regions, and has tripled in the past four decades.[36] Worldwide, about 13 percent of the adult population (11 percent of males and 15 percent of females) are obese.[37] Overweight and obesity is that the fifth leading explanation for global deaths.[38] It also contributes to the increase in risk factor for non communicable diseases like cardiovascular disease, diabetes, and certain cancers.[39]

Impact of Covid19

COVID19 is undermining nutrition and health efforts across low and middle income countries and worst affected are women and children, with the interruption of nutrition services and poor quality of diet pushing women and youngsters into malnutrition.[40] The pandemic has brought a further 140 million people to extreme poverty, living on but US\$1.90 into malnutrition.[40] The pandemic has brought a further 140 million people to extreme poverty, living on but US\$1.90 per day in 2020. [41]

The World Food Programme estimated that the food insecure population would go up to 265 million by end of 2020 alongside a decline in access to child health and nutrition services.[42] A 30percent reduction is estimated within the coverage of nutrition services thanks to lockdowns and therefore the disruption of supply chains. [43] Lancet estimates a minimum need of US\$2.4 billion for four lifesaving interventions: prevention of wasting in children at risk; Treatment for youngsters who are wasted; biannual vitamin A supplementation for children aged 6–59 months (90percent coverage); and mass communication for the protection, promotion, and support of breastfeeding that focuses on caregivers or families of children aged 0–23 months. [44]

SDG 2 ‘Zero Hunger’: Why it Matters

It is crucial to take a position in agriculture and sustainable food production to reduce the hunger threat, improve food security, and build resilience to disasters and shocks.[48] Achieving ‘zero hunger’ will have positive impacts not only on health, but also on the economy, education, equality, and social development. Sustained investment to enhance access to food in both rural and concrete areas, along side social protection, can help within the recovery.[49]

Food Security: Challenges and Strategies

The World Food Summit of 1996 declared: “Food security exists when all people, in the least times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active

and healthy life.”[50] Even before the pandemic, about 2 billion people were already at risk of moderate to severe food insecurity. COVID19 has further undermined efforts to realize the SDG on ‘zero hunger’.

The World Health Organization (WHO) warns that the situation can worsen as experts predict that it will take more time before the pandemic abates.[51],[52] Food productivity could also be affected in the future, especially if the virus is not contained and the lockdown measures continue.[53] Both malnutrition and over nutrition cause the immune system to weaken, making the person vulnerable to COVID19 and setting off a vicious circle of illness and hunger.[54] Disruption to the already inequitable health and nutrition services have had a severe impact on the poor and vulnerable. [55] Increased vulnerability from micronutrient deficiencies and preexisting medical conditions are aggravated during the pandemic.[56]

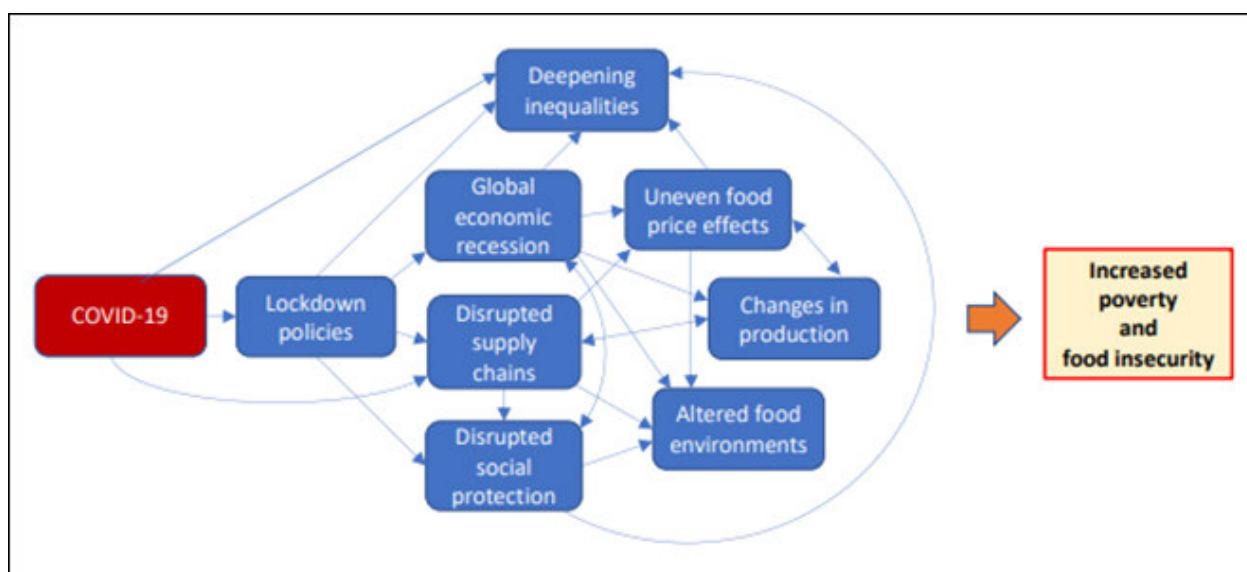


Figure 7: How COVID19 affects food security and nutrition

Source: FAO 2020 Impacts of COVID19 on food security and nutrition [57]

Lockdown and other containment measures have worsened loss of incomes, disruption in food supply chain and social protection, deepening inequality, and resulting in uneven food prices (See Figure 7).[58],[59] The supply chain disruption has led to wastage, as demand dropped and farmers with inadequate storage were left with food they might not sell.[60] Countries with high prevalence of food insecurity were highly suffering from the disruptions in supply chains.[61] Food production cycles that relied on migrant labour were affected thanks to travel restrictions and therefore the closing down of labor facilities to contain the outbreak.[62]

Global economic recession and therefore the associated income reduction have led to loss of livelihood, causing a drop by purchasing power that successively has resulted in food insecurity.[63] About 400 million fulltime jobs were lost in 2020 thanks to lockdown measures.[64] Similarly, around one third of food system livelihoods are in danger thanks to the pandemic. [65]

The economic slowdown has worsened existing inequalities, and has had an impact on food security.[66],[67] With one

in every three people lacking access to safe drinking water and hand washing facilities, there is a high likelihood of contracting infections.[68],[69] Unsafe work conditions, low wages, and lack of protective equipment have further added to the woes of workers.[70] Women have faced additional burdens as frontline workers, unpaid care workers, and food system workers.[71],[72] Furthermore, there has been increased incidence of violence thanks to the pressures of lost livelihoods and made confinement at home.[73],[74] Cash or food transfers are crucial for the susceptible to deal with the economic and health exposures caused by the crisis. Around 90 percent of women in Asia and Africa work in the informal sector and lack social protection.[75] There are other challenges to cash transfer programmes in India, Pakistan, and Tanzania, with women often unaware of their benefits and entitlements.[76],[77],[78] The closure of faculties during the lockdown have led to disruption of the varsity benefits and entitlements.[76],[77],[78] The closure of faculties during the lockdown have led to disruption of the varsity meal programme, affecting the nutrition of some 370 million children.[79]

The pandemic has altered the general food environment as countries pack up informal food markets, which were seen as source of disease transmission.[d] Households have made a shift with consumption of calorie rich staple foods instead of high micronutrient fruits and vegetables.[80] There has also been a shift towards consumption of more processed foods.[81] The renewed interest in community supported agriculture and home gardening to grow their own fruits and vegetables, can help to make sure food security and variety . [82],[83]

Food price increases have also resulted from disrupted supply chains that have affected the cost of shipping.[84] High retail prices and reduced incomes have forced more households to cut down on the number and quality of their food. [85] These localised price increases directly impact food security and nutrition as food becomes harder to access, especially for the poor.

A 2020 rapid phone survey by the World Bank in 48 countries found reduced food consumption and compromised nutrition by families.[86] The crisis has affected the food production with disruption in supply chain of agricultural inputs like seeds and fertiliser, making them scarce and thus costlier .[87],[88] Coordinated action within the food system – production, trade and distribution, and consumption—can significantly reduce economic and food insecurity in production, trade and distribution, and consumption—can significantly reduce economic and food insecurity in populations affected by the pandemic, and support rapid recovery.[89]

RECOMMENDATIONS AND CONCLUSION

Policymakers must intensify efforts to eliminate all sorts of malnutrition and break the intergenerational cycle of poverty. It is estimated that scaling up high impact, nutrition specific interventions altogether low and middle income countries could generate about \$417 billion in economic benefits and end in a 40percent decline in stunting.[90] Every \$1 invested in stunting reduction will generate \$11 in economic returns. More sectors and actors, beyond health and agriculture, need to be involved.

A “food systems” approach to malnutrition requires inclusive policies which will address both supply and demand. It is necessary to strengthen strategic action to deal with people’s needs, now and because the crisis abates, to

create a resilient food system. While daunting and exacting an important toll, pandemics can function a turning point to rebalance and transform food systems, making them more inclusive, sustainable, and resilient.[91] Governments should address short term problems and also those necessary for building longer term resilience.

First, nations must implement policies and channel investments for reducing the value of nutritious food. The imperative is for policies and programmes which will mainstream nutrition across all sectors, beyond health and agriculture. Working towards the worldwide nutrition targets requires inclusive, sustainable and efficient food systems that deliver nutritious food. Urgent action is required to make sure access to the poorest of the poor. Policies got to be aligned towards a nutrition sensitive value chain to reinforce efficiencies in food storage, processing, packaging, distribution and marketing, thereby reducing food losses.

Second, to mitigate the societal disruption and economic shocks caused by the pandemic, more robust social protection programmes got to be initiated to enhance access to healthy and nutritious food. Investing in social protection are often instrumental in strengthening people’s access to food and essential services, particularly for vulnerable groups in both urban and rural settings. There should be better protections for vulnerable and marginalized food system workers and farmers who are disproportionately affected by the crisis. All together, the social protection, healthcare, and food systems can work to satisfy people’s nutritional needs. Such protections would strengthen the resilience of food systems within the face of crises like that unleashed by COVID19.

Third, sustainable and inclusive economic process must be promoted to make more job opportunities and improve living standards. The pandemic has disrupted lives and livelihoods and jeopardized the worldwide economy. Empowering women are going to be key to improved nutrition, as they play a decisive role in their family’s food security. The global 2030 nutrition agenda calls for transformational change and collaborative work to develop strategies, cost-effective interventions and investments in nutrition. These are needed, alongside poverty reduction, the empowerment of girls , and enhancements in maternal health.

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