



# Anticipated impacts of COVID-19 on all forms of malnutrition

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May 19, 2020

Saskia Osendarp, Micronutrient Forum

The Global Nutrition Report 2020 launched last week showed that the world was NOT on track to eliminate hunger and all forms of malnutrition by 2030, not even before COVID-19

## The state of global nutrition

Progress towards the global nutrition targets is too slow and deeply unfair. Global patterns hide significant inequalities between and within countries

### Maternal, infant and young child nutrition targets



#### Anaemia

In 2016, anaemia affected **613.2 million** women of reproductive age, 35.3 million of whom were pregnant.

OFF COURSE



#### Exclusive breastfeeding

In 2018, **42.2%** of infants 0–5 months were exclusively breastfed.

SOME PROGRESS



#### Low birth weight

The latest estimate (2015) is that there are around **20.5 million** children with low birth weight.

SOME PROGRESS



#### Childhood stunting

In 2018, **149.0 million** children were stunted.

OFF COURSE



#### Childhood wasting

In 2018, **7.3%** of children were wasted, equivalent to **49.5 million** children.

OFF COURSE



#### Childhood overweight

In 2018, **5.9%** of children were overweight, equivalent to **40.1 million** children.

OFF COURSE

# The COVID-19 Pandemic poses an unprecedented threat for hunger and malnutrition globally and further increase inequalities.

## Unicef warns lockdown could kill more than Covid-19 as model predicts 1.2 million child deaths

'Indiscriminate lockdowns' are an ineffective way to control Covid and could contribute to a 45 per cent rise in child mortality

## Risk of hunger pandemic as COVID-19 set to almost double acute hunger by end of 2020

New WFP figures indicate additional 130 million lives and livelihoods will be at risk

“The estimates suggest that a 10% decline in GDP per capita will lead to an increase of 5% in stunting rates or an extra 7 million stunted children.” <https://www.ifpri.org/blog/biblical-steroids-and-across-generations-coming-food-and-nutrition-crash-can-be-averted-if-we>

## Unicef: 6,000 children could die every day due to impact of coronavirus

Disruption of essential maternity and health services is the biggest crisis faced by under fives since second world war

- [Coronavirus - latest updates](#)
- [See all our coronavirus coverage](#)

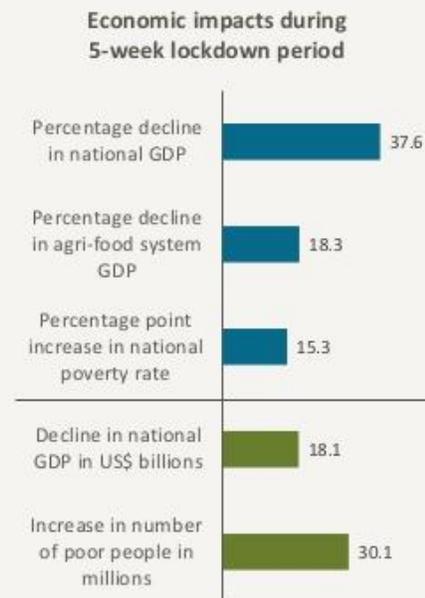


▲ Soro Sali, 39, at the regional hospital of Korhogo, Côte d'Ivoire. Soro's sister-in-law died giving birth to triplets, so she and her three sisters are taking care of the 10-day-old babies. Photograph: Frank Dejongh/Unicef

# Poverty rate increases by 15% in Nigeria during lock-down, with implications for the Agri-Food System despite exemptions.

## Lockdown Imposes Heavy Economic Costs

- **National GDP is estimated to fall by 38% during the 5-week lockdown**  
(US\$18 bil. in lost GDP)
- **Food system is adversely affected by falling consumer & export demand**  
(18% agri-food GDP decline, despite exemptions)
- **National poverty rate increases by 15%-points during the lockdown**  
(30 million more people temporarily living below the US\$1.90-a-day poverty line)

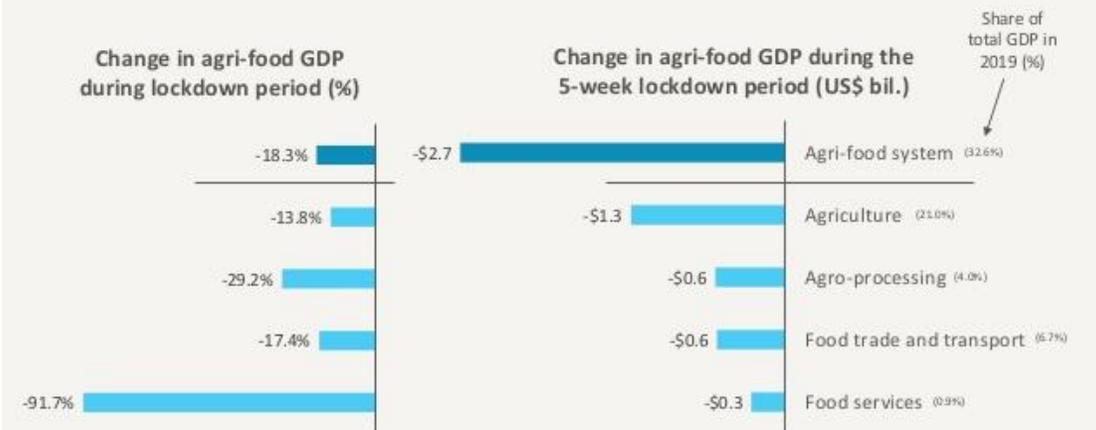


Source: Nigeria SAM Multiplier Results

## Impacts on the Agri-Food System

**Food supply is exempt from most restrictions, but it is still indirectly affected by falling consumer incomes & other shocks**

(food services is directly affected by the closing of hotels, restaurants & bars, but this is a small component of the overall agri-food system)



Source: Nigeria SAM Multiplier Results

Source <https://www.ifpri.org/blog/covid-19-lockdowns-are-imposing-substantial-economic-costs-countries-africa>

# In East Africa, WFP estimates an increase of 34-42 million people more food insecure in the next 3 months due to COVID-19 and its consequences

**WFP**  
World Food Programme

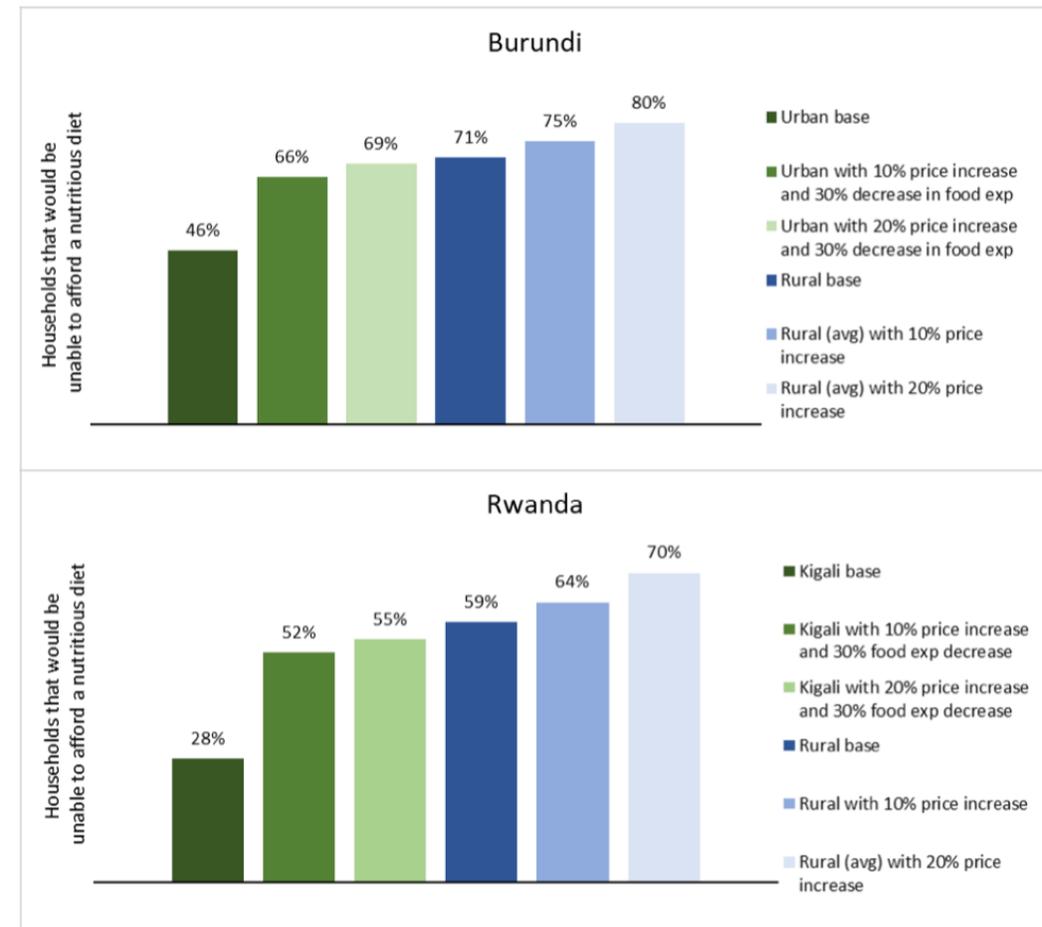
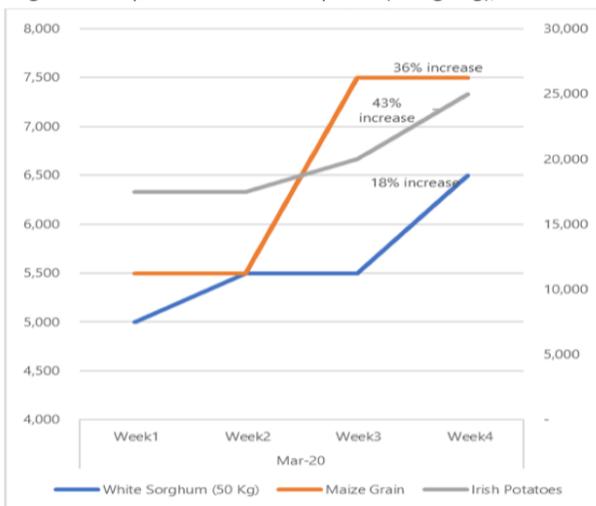
## Impact of COVID-19 outbreak on livelihoods, food security and nutrition in East Africa

Regional Bureau Nairobi | Release 2.0, 15 April 2020

### Key messages

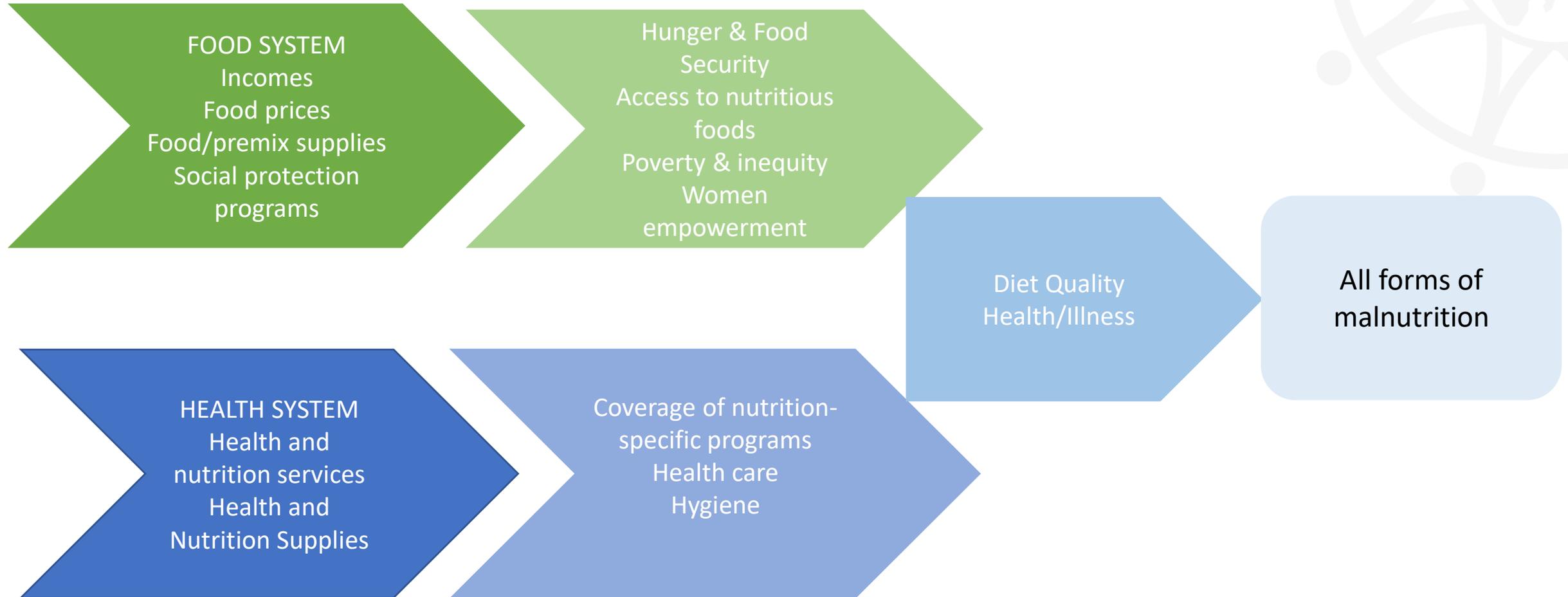
- Since its first detection on 13<sup>th</sup> March, the COVID-19 cases have grown considerably in the region, now reaching close to 1,000 cases and 16 deaths as of 15<sup>th</sup> April. The spread is still moderately low considering that the total global cases have now reached about 2 million with more than 125,000 deaths.
- Despite the various measures in place, projection of current trends indicate that virus is likely to spread further and likely to have significant impact on the economy, and to livelihoods, food security and nutrition of the populations.
- WFP estimates that a total of 20 million people are food insecure in the region and this is likely to increase to between 34 to 43 million during the next three months due to COVID-19 and its consequences.

Figure 9: Staple food wholesale prices (50 kg bag), Juba



Source: <https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000114452.pdf>

# Conceptual Framework on how COVID-19 impacts malnutrition



# COVID-19 and Hidden Hunger (micronutrient malnutrition)

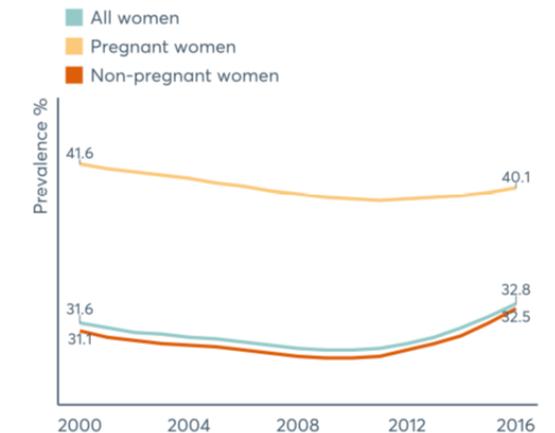
**COVID-19 means there is a real risk the gains we have made in reducing hunger and malnutrition will be lost.**

These gains must be protected through increased and well-targeted aid, as well as domestic resources, focused on nutritional well-being. More equitable, resilient, sustainable systems for food and health security are key for the future.

[globalnutritionreport.org](http://globalnutritionreport.org)



## Anaemia in WRA

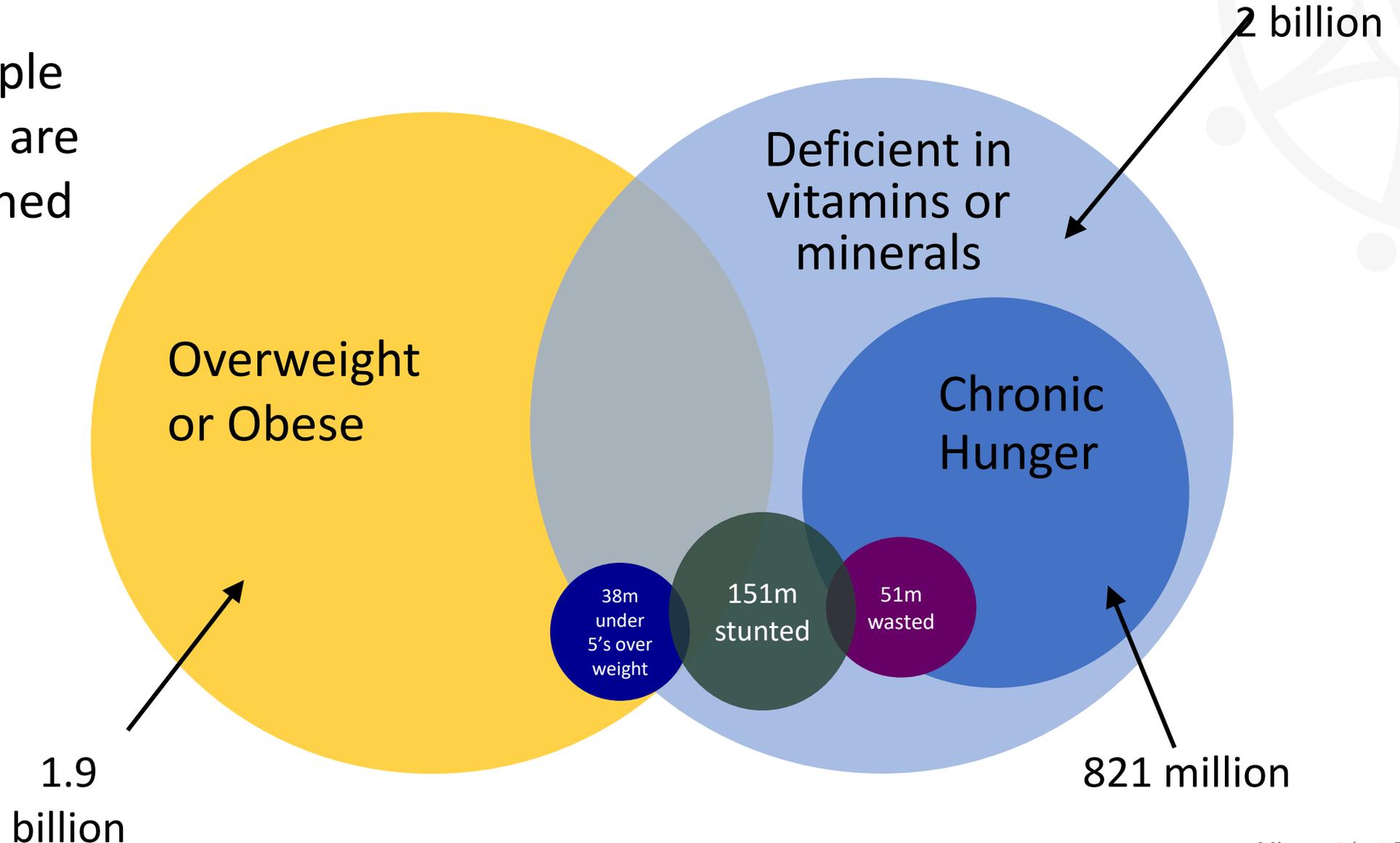


Source: WHO Global Health Observatory.

Notes: WRA = women of reproductive age.

# Hidden Hunger or micronutrient malnutrition is a global problem.

1 in 3 people worldwide are malnourished



To understand the impact of COVID on micronutrient nutrition, we have to remember all micronutrient intervention strategies:

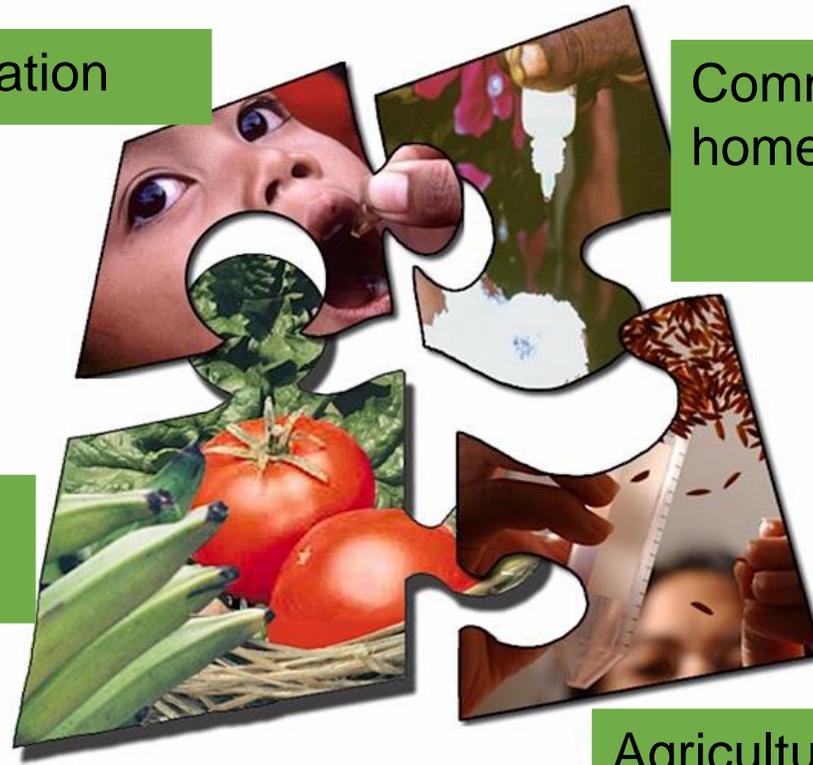
## HOW TO ENSURE ADEQUATE MICRONUTRIENT INTAKES:

Supplementation

Commercial- and home- fortification

Dietary Diversity

Agricultural and Biofortification

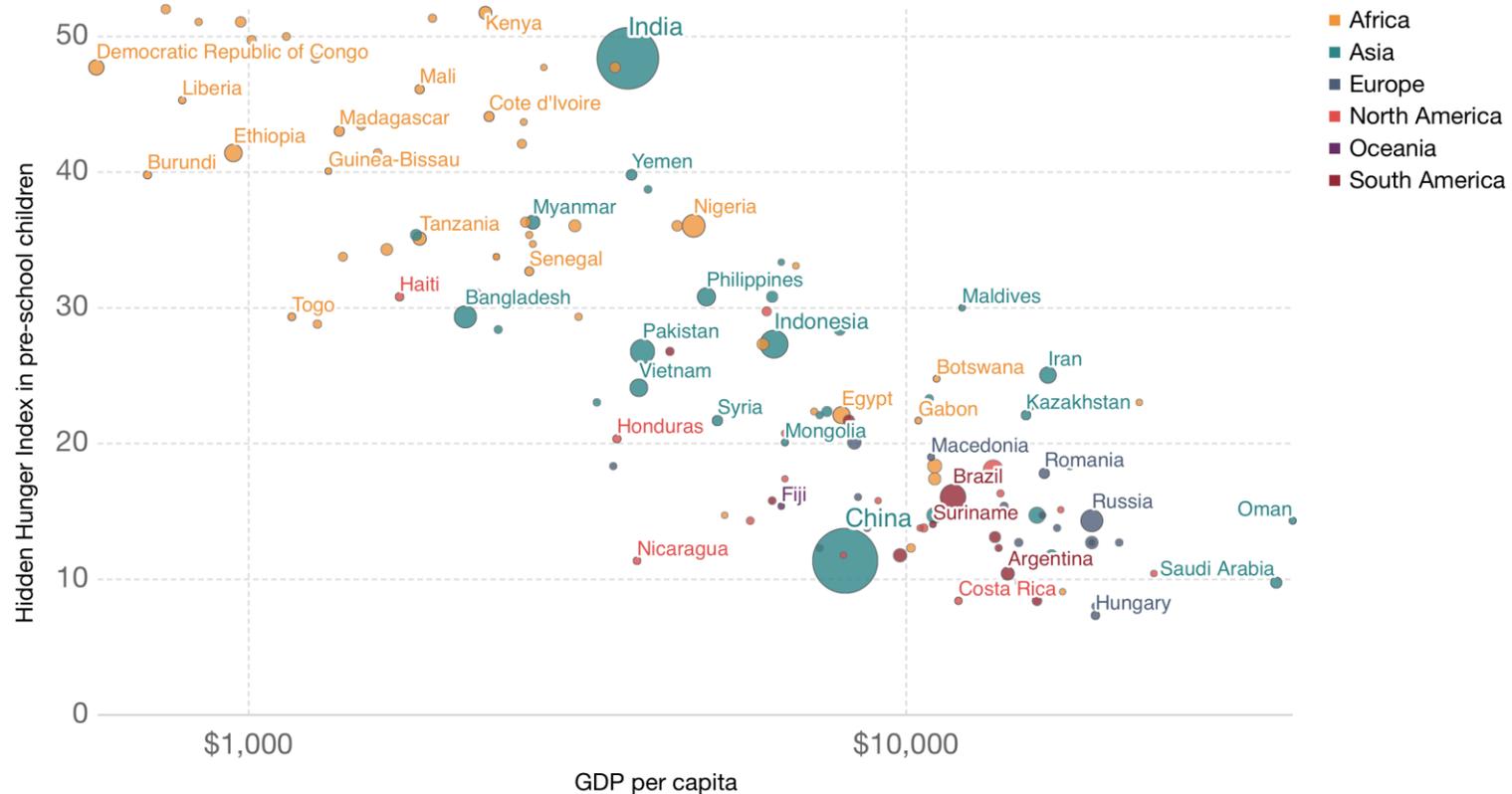


# Micronutrient malnutrition is strongly correlated with GDP per capita while current projections predict a 10% of global GDP decline due to COVID

## Hidden Hunger Index vs. GDP per capita, 2009

Shown is the Hidden Hunger Index for preschool-age children, which is calculated as the average of three deficiency prevalence estimates: preschool children affected by stunting, anemia due to iron deficiency, and vitamin-A deficiency. A higher index value indicates more severe nutritional deficiencies. GDP per capita is adjusted for price differences between countries and measured in international-\$.

Our World in Data



Source: Muthayya et al. (2013); Feenstra et al. (2015) Penn World Tables 9.1

OurWorldInData.org/micronutrient-deficiency/ • CC BY

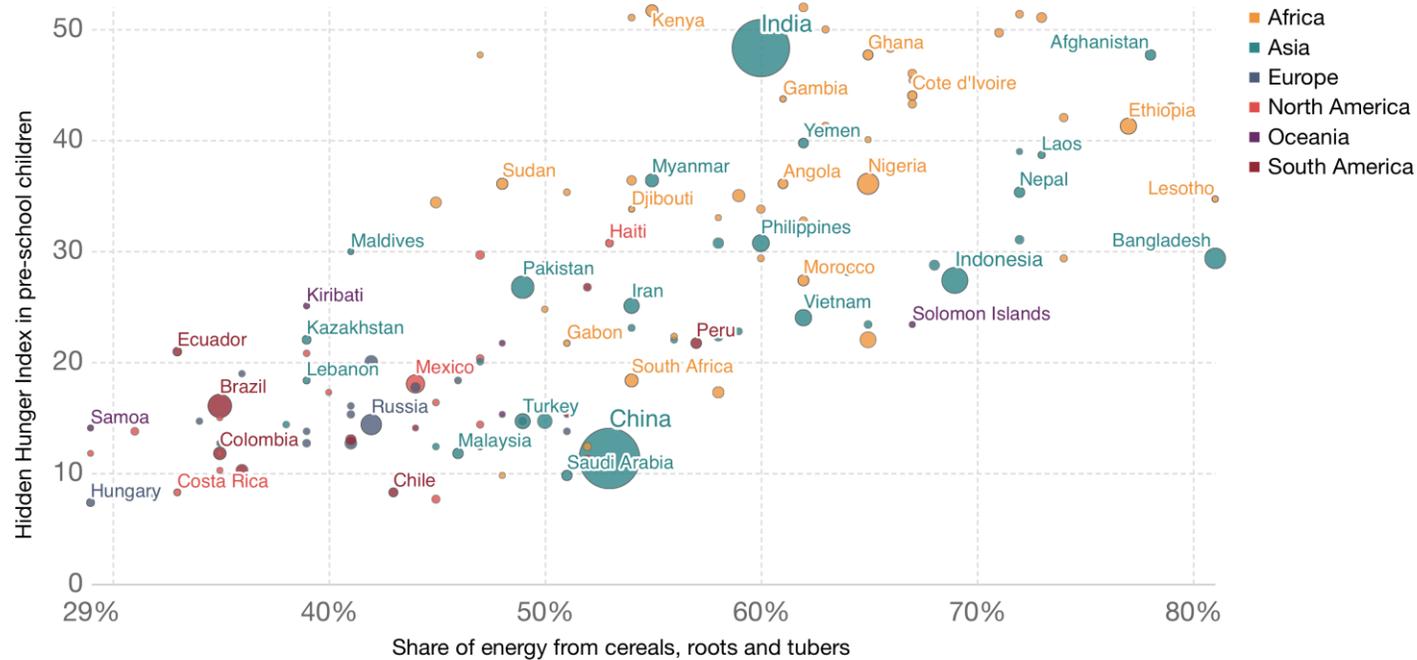
# Hidden Hunger is correlated with dietary diversity: countries with a smaller % of nutritious foods in their diet have a higher prevalence of Hidden Hunger



## Hidden Hunger Index vs. share of energy intake from cereals, roots and tubers, 2009

Our World in Data

The Hidden Hunger Index in pre-school children (HHI-PD), measured as an index of three deficiency prevalence estimates: preschool children affected by stunting, anemia due to iron deficiency, and vitamin-A deficiency, measured against the share of energy intake derived from cereals, roots and tubers (an indication of poor dietary diversity) in a given population. The HHI-PD score ranges between the best and worst possible scores of 0 and 100.



Source: Share of energy from cereals, roots and tubers - FAO (2017), Hidden Hunger Index in pre-school children - Muthayya et al. (2013), Population (Gapminder, HYDE(2016) & UN (2019))  
 OurWorldInData.org/micronutrient-deficiency/ • CC BY

# The availability of nutritious foods in particular is affected by COVID19 measures

- What are nutritious foods:
  - Animal source products
  - Fruits and vegetables
- Production of these foods is labour intensive and therefore more impacted by social distancing
- These foods are more susceptible to perishing and food waste when markets are disrupted
- These foods are more expensive and the first to be dropped from the household menu when incomes fall



# In addition, micronutrient intervention programs are affected/suspended during COVID19:

- Health care intervention programs delivering micronutrient supplements are affected:
  - Vitamin A supplementation for preschool children
  - IFA/MMS supplementation for pregnant women
  - MNP distribution for young children
- Large scale food fortification programs are affected:
  - Premix availability suffers from international supply chain disruptions
  - Lock down affects transportation of premixes to (small scale) millers and of fortified foods to markets.



The Global  
Alliance  
for Vitamin A

## UNIVERSAL VITAMIN A SUPPLEMENTATION FOR PRESCHOOL-AGED CHILDREN IN THE CONTEXT OF COVID-19: GAVA CONSENSUS STATEMENT

VERSION DATE: APRIL 7, 2020

### PURPOSE

This Global Alliance for Vitamin A (GAVA) consensus statement aims to provide guidance on vitamin A supplementation (VAS) for preschool-aged children\* through campaigns and routine health and nutrition services during the COVID-19 pandemic. This guidance is not intended to replace national guidance. Rather, it serves as a consensus document based on GAVA's review of WHO guidance for other services that use mass campaigns (e.g. vaccination) and routine health delivery platforms. The guidance will be amended as new information and evidence emerges.

# Guidelines on managing micronutrient malnutrition during emergencies are partly still applicable

United Nations System Standing Committee on Nutrition

## Assessing micronutrient deficiencies in emergencies

### Current practice and future directions

OCTOBER 2007



World Health Organization World Food Programme unicef

Joint statement by the World Health Organization, the World Food Programme and the United Nations Children's Fund

## Preventing and controlling micronutrient deficiencies in populations affected by an emergency

Multiple vitamin and mineral supplements for pregnant and lactating women, and for children aged 6 to 59 months

### BACKGROUND

Deficiencies of micronutrients are a major global health problem. More than 2 billion people in the world today are estimated to be deficient in key vitamins and minerals, particularly vitamin A, iodine, iron and zinc. Most of these people live in low income countries and are typically deficient in more than one micronutrient. Deficiencies occur when people do not have access to micronutrient-rich foods such as fruit, vegetables, animal products and fortified foods, usually because they are too expensive to buy or are locally unavailable. Micronutrient deficiencies increase the general risk of infectious illness and of dying from diarrhoea, measles, malaria and pneumonia. These conditions are among the 10 leading causes of disease in the world today (1).

The groups most vulnerable to micronutrient deficiencies are pregnant women, lactating women and young children, mainly because they have a relatively greater need for vitamins and minerals and are more susceptible to the harmful consequences of deficiencies. For a pregnant woman these include a greater risk of dying during childbirth, or of giving birth to an underweight or mentally-impaired baby. For a lactating mother, her micronutrient status determines the health and development of her breast-fed infant, especially during the first 6 months of life. For a young child, micronutrient deficiencies increase the risk of dying due to infectious disease and contribute to impaired physical and mental development.



PIERRE VIROT

One way to meet the recommended daily intake of micronutrients is to provide foods fortified with micronutrients (2-3). Fortified foods, such as corn-soya blend, biscuits, vegetable oil enriched with vitamin A, and iodized

# Organisations are providing guidelines on nutrition in the context of COVID-19



## Infant and Young Child Feeding in the Context of COVID-19

Brief No. 2 (v1)

30 March 2020



## Protecting Maternal Diets and Nutrition Services and Practices in the Context of COVID-19

Brief No. 4

22 April 2020



## COVID-19 AND NUTRITION: SUN MOVEMENT INFORMATION NOTE

8 April 2020

While responding to the urgent and unprecedented COVID-19 pandemic, it is critical that measures are taken to protect and promote good nutrition. This should be done through an adequate integration of nutrition actions into COVID-19 response plans and the protection of existing nutrition programming, especially for the most vulnerable. The role of SUN Government Focal Points and country multi-stakeholder platforms (MSPs) will be critical to minimise the direct and indirect effects of COVID-19 on malnutrition (see Box 1).

This information note provides initial considerations and actions for SUN Government Focal Points and country MSPs to help them engage in national COVID-19 response efforts. Given the emerging situation across countries, new evidence and resources are expanding daily. The priorities included in this information note should be considered a starting point and stakeholders should continue to review and consider emerging evidence and guidance (see Box 2).

# Recommendations to address Hidden Hunger during COVID19:

- Scale-up cost-effective programs and interventions that we know work:
  - Promotion of healthy diverse diets
  - Promotion of breastfeeding
  - Bio-fortification and large-scale food fortification
  - Vitamin A supplementation
  - Multiple Micronutrient Supplementation during pregnancy
- Invest in integrated, innovative food systems approaches that address all forms of malnutrition:
  - Price policies and cash vouchers
  - Eggs for children
  - Small-quantity lipid supplements for 6-24 mo old children
- Monitor the impact of intervention to further build the evidence base

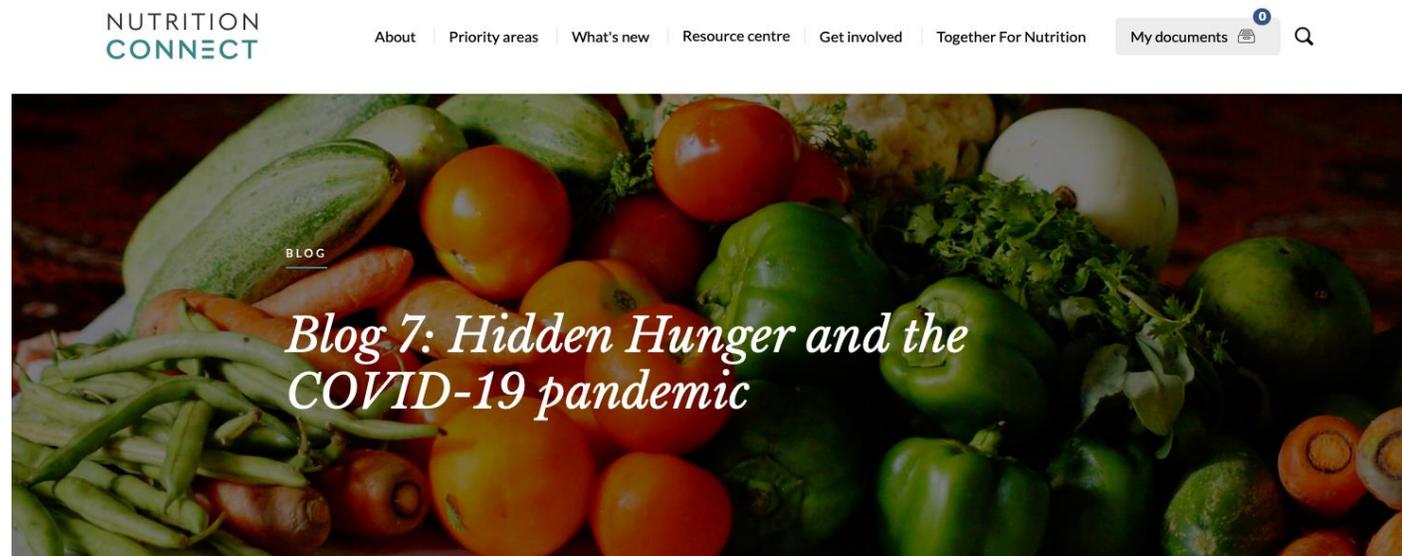


<https://nutritionconnect.org/news-events/hidden-hunger-and-covid-19-pandemic>

# Growing concerns on impact of COVID-19 on Hidden Hunger

“If we are not careful, this pandemic may set us back several years in our efforts to deliver on SDG2. But it doesn’t have to - it is our collective responsibility to prevent this from happening and make sure that we continue to make progress on eliminating all forms of malnutrition by 2030.”

<https://nutritionconnect.org/news-events/hidden-hunger-and-covid-19-pandemic>



*In blog 7 of our blog series on opportunities for building back better food systems and nutrition, Saskia Osendarp, Executive Director of the Micronutrient Forum and Visiting Associate Professor at Wageningen University, and Aynsley Morris and Reed Atkin, both with the Micronutrient Forum, discuss how the COVID-19 pandemic may result in short- and long-term disruptions to food systems, decreased availability of nutritious foods, and a rise in the global prevalence of all forms of malnutrition, including micronutrient malnutrition or “Hidden Hunger”. To prevent a rise in all forms of*