

# The European Commission's Knowledge Centre for Global Food and Nutrition Security

## Nutrition - 03/2022

#### **Headlines**

- Malnutrition affects all regions, age and socioeconomic groups and sexes.
- The COVID-19 pandemic has exacerbated the nutrition crisis globally.
- Countries are facing multiple forms of malnutrition, and no country is untouched by at least one form of malnutrition.
- The number of children with stunting has been declining except in Africa, but in general progress to tackle all forms of malnutrition remains slow.
- Scaling up effective nutrition interventions, and incorporating a gender and life-cycle approach, are essential actions to tackle all forms of malnutrition.
- In addition to nutrition-specific interventions (those that address the immediate determinants of malnutrition), well-designed nutrition-sensitive (addressing the underlying determinants of malnutrition) programmes can positively impact on a variety of nutrition-related outcomes in both women and children.
- The impact of nutrition sensitive actions from different sectors (agriculture, food, education, etc.) can be boosted through a multisectorial integrated approach.
- One such nutrition-sensitive action could be the promotion of agro and biodiversity in farms aimed at improving diet quality which could also promote the transition to more sustaible food systems.

#### Background

Malnutrition in all its forms is a universal problem, affecting health in all regions, age and socioeconomic groups and sexes [1]. Stunting, an outcome of chronic malnutrition, reflects growth retardation in children due to continuous and prolonged exposure to unfavourable conditions leading to undernutrition. These include poor diets and an unhealthy environment. Stunted children are vulnerable to impaired development, both physical and mental. Over the medium term, stunting represents an irrevocable socioeconomic loss for the societies in which it is prevalent. The number of children with stunting has been gradually declining in all regions, except Africa. It continues to affect 149.2 million children under five in 2020 [2].

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Wasting or acute malnutrition occurs when an individual experiences poor nutrient intake (quality and/or quality) and/or frequent or prolonged illnesses. It is characterized by extreme weight loss and, in its severe form, increases risk of disease and death; severely wasted children are, on average, 11 times more likely to die than their healthy counterparts [3]. In 2020, wasting persisted at alarming rates; 45.4 million children under five years of age were wasted, of which 13.6 million were severely wasted [2].

These figures may further increase due to the COVID-19 pandemic which is causing a severe setback to the already limited progress towards meeting the nutrition targets by 2025. It is projected that an additional number of 9.3 million and 2.6 million children will be respectively wasted and stunted between 2020 and 2022 [4]. At the height of the crisis in April 2020, 199 countries had closed their schools and 370 million children were suddenly deprived of what for many was their main meal of the day [5].

Overweight and obesity are defined as abnormal or excessive weight gain that may impair health. It occurs when there is an energy imbalance between calories consumed and calories expended. They are a risk factor of non-communicable diseases like diabetes, coronary heart disease and stroke, as well as cancer. Globally, 38.9 million children under five and 2.2 billion adults were overweight in 2020; women have a higher prevalence of obesity than men (16.2% compared to 12.3%) [1].

Joint Research Centre Figure 1: Global malnutrition burden: Global number of people with different forms of malnutrition, last available year.



Source: Reproduced from the Global Nutriton Report 2021

Micronutrient deficiencies are another form of malnutrition, defined as suboptimal nutritional status caused by a lack of intake, absorption or use of one or more essential vitamins and/or minerals, like iron. In 2020, iron deficiency anaemia affected 571 million of women of reproductive age [2].

Many countries, especially low- and middle-income countries (LMICs), are now facing a "double burden" of malnutrition [6]. They continue to face high levels of undernutrition (including micronutrient deficiencies), as well as a rapid upsurge in overweight and non-communicable diseases.

In order to track progress on the reduction of malnutrition in all its forms, the World Health Assembly (WHA) set six global targets aimed at improving maternal, young child and infant nutrition by 2025 [7], as well as a set of voluntary targets for noncommunicable diseases (described in Figure 2).

The European Union (EU) set up in 2014 the Action Plan on Nutrition outlining the elements necessary to combat undernutrition in an accountable and more effective way. In it, the EU committed to allocating EUR 3.5 billion to nutrition between 2014 and 2020 and to supporting partner countries in reducing the number of stunted children under the age of five by at least 7 million by 2025 [8], representing 10% of the WHA target. At the 2021 Nutrition For Growth Summit, the EU announced a new pledge of EUR 2.5 billion to reduce all forms of nutrition. This new pledge will also help to deliver on the above commitment to reduce the number of stunted children.

The sixth progress of the Action Plan [9] provides an update on achievements with respect to these two ambitious commitments. The EU's EUR 3.5 billion global pledge has been surpassed by EUR 800 million, and the proportion of children suffering from stunting has fallen by an average of 6.2 percentage points. The report analyses the impact of the COVID-19 pandemic and points the strong causal connection between the widespread reductions in household income and the fact that modest gains made in reducing global maternal and child undernutrition now stand to be reversed. The analysis reinforces the EU's conviction that what works best for improved nutrition is a locally adapted, sustained, multi-sectoral and rights-based approach with a strong focus on tackling entrenched inequalities such as those relating to wealth and gender.



Source: Reproduced from the Global Nutrition Report 2021.

#### Nutrition, gender, and the life-cycle approach

One of the strategic priorities of the Action Plan on Nutrition at country level is to scale up actions to reach people throughout the life cycle as shown in Figure 3 [10]. It shows the inter-linkages in the nutritional well-being of individuals across the different stages of life and across generations.

Figure 3- Nutrition throughout the life cycle: proposed causal links



Source: reproduced from WHO 2014

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Nutrition throughout the life-cycle clearly underpins the important gender dimension of nutrition, starting with a girl's poor nutritional status in adolescence, continuing during pregnancy and throughout the life-cycle of the new-born [11].

Before pregnancy, both the socio-economic and physical environments in which children are conceived dictate their nutritional course over the months and years ahead. During pregnancy, the micronutrient status of the mother can have a further impact on immediate, short-term and long-term outcomes for the child [11].

Targeting women of reproductive age has thus become a priority and new indicators have been developed to measure improvement in their nutrition and diet outcomes. Together with other donors, the EU funded the development of the Minimum Dietary Diversity for Women of reproductive age indicator (MDD-W) [11] as well as the adaption of the of the Diet Quality Questionnaire (DQQ), a standardized tool to collect the MDD-W indicator, along with new indicators that capture dietary risk factors for non-communicable diseases [20].

The upcoming CFS Voluntary Guidelines on Gender Equality and Women's and Girls' Empowerment in the Context of Food Security and Nutrition will further contribute to ensuring food security and nutrition for all, thereby reinforcing the EU's ambitious commitments to strengthen its strategic, gender-transformative and rights-based approach in tackling the root causes of gender inequality at all levels of international engagement [9].

#### Nutrition-specific and Nutrition-sensitive actions

While essential to alleviate suffering, the scaling up of nutrition specific-interventions, which address the immediate causes of malnutrition, will not be enough to achieve the WHA targets. If the ten effective nutrition specific interventions identified by the Lancet [12] were to be implemented to 90% coverage, this would still only reduce stunting by 20%. A recent systematic review assessing reconfirms the effectiveness of these interventions as well as the inclusion of newer interventions [13]. Further reductions in stunting will need to be addressed through tackling underlying and basic causes of undernutrition by implementing nutrition-sensitive interventions [13] [14]].

Nutrition-sensitive actions draw on complementary sectors such as agriculture, health, education, and social protection to tackle the underlying determinants of nutrition including poverty, food insecurity, and limited access to adequate care, and to health. water and sanitation services [15]. Recent evidence shows that well designed nutrition-sensitive agricultural programmes may improve a number of nutrition determinants in both mothers and children, but they are more effective for nutrition when they include social and behaviour change communication (SBCC) as well as women's empowerment and are multisectoral [13] [16]. Furthermore, a recent review of the evidence has shown that such indirect nutrition strategies, especially malaria prevention and WASH interventions, have an impact on nutrition [14]. They also identified that integrated interventions, for example, diet, exercise and behavioural therapy, are the most effective for preventing and managing childhood obesity [14].

One of such nutrition-sensitive actions could be the diversification and preservation of biodiversity at farm level which have shown positive nutritional outcomes for smallholder farmers [17] [18]. Diversifying food production systems to deliver higher dietary quality at local level can also contribute to the transition to sustainable food systems [17].

The EU Reference Document on nutrition provides guidance on how nutrition can be integrated in these other sectors, both in terms of programme design but also in terms of the EU's planning processes. It outlines the types of actions that can help to achieve improved nutrition outcomes [19].

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