Position paper

Nutrition

Background

As things currently stand, Sustainable Development Goal 2 (SDG 2) of ending hunger and all forms of malnutrition (undernutrition, overnutrition and micronutrient deficiency) by 2030 will not be achieved.[1]

For the third year in a row, the number of people worldwide facing hunger was persistently high, and was 152 million more than the level before the COVID-19 pandemic.[2] In 2023, an estimated 733 million people worldwide did not have enough to eat. It is projected that 582 million people will continue to be affected by hunger in 2030.[2] The majority of undernourished people live in rural areas. However, rapid urbanisation in low-income and middle-income countries means that undernutrition is increasingly becoming a problem in towns and cities too. The main drivers of hunger and food and nutrition insecurity are violent conflict, economic shocks – including those related to the pandemic – and extreme weather events caused by advancing climate change.[3]

People who have to live on less than USD 2.15 per day (international poverty line)[4] spend around two thirds[5] of their income on food. Rising prices are making it more difficult to buy food in the quantity and quality required to ensure a varied and healthy diet. According to the United Nations (UN), more than 2.8 billion people (35.4 per cent of the global population, 65 per cent of the population of sub-Saharan Africa) could not afford a healthy diet in 2022[2] and met their calorie needs mainly through consuming staple crops such as wheat, maize and rice.

The economic and social change brought about by urbanisation and globalisation is leading not only to a reduction in people's day-to-day exercise but also to a shift away from traditional dietary patterns. We are witnessing a **nutrition transition**, in which meat consumption is on the rise, as is the consumption of energy-rich and often ultra-processed foods. The result is a massive global increase in overweight and obesity as well as in diet-related non-communicable diseases (diabetes, cardiovascular diseases), including in countries that continue to be severely affected by undernourishment. Around 43 per cent of the global adult population (2.5 billion people) are overweight, and some 16 per cent (890 million people) live with obesity. Today, 22 per cent of all children and adolescents aged 5-19 years are overweight or living with obesity.[6] [7] Worldwide adult obesity has more than doubled since 1990, and adolescent obesity has even quadrupled. It is estimated that by 2035, two children in every five globally will grow up living with overweight or obesity.[6]

In addition to the obvious forms of malnutrition (undernutrition and overnutrition), some two billion people worldwide are affected by **micronutrient deficiencies**, or what is termed 'hidden hunger'.[8] They lack an adequate supply of vitamins and minerals (e.g. iodine, iron or vitamin A) required for healthy physical and mental development. There are direct impacts of micronutrient deficiencies, namely stunted growth, increased risk of infection and restricted physical and mental development and performance. Key to the supply of micronutrients is not only a healthy and adequate diet but also access to health care and social welfare, clean water and sanitation.[9] During the first 1,000 days in particular (from conception to a child's second birthday),

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healthy nutrition is crucial. Malnutrition during this period is, for the most part, irreversible and can lead to a cross-generational cycle of impaired growth and development.

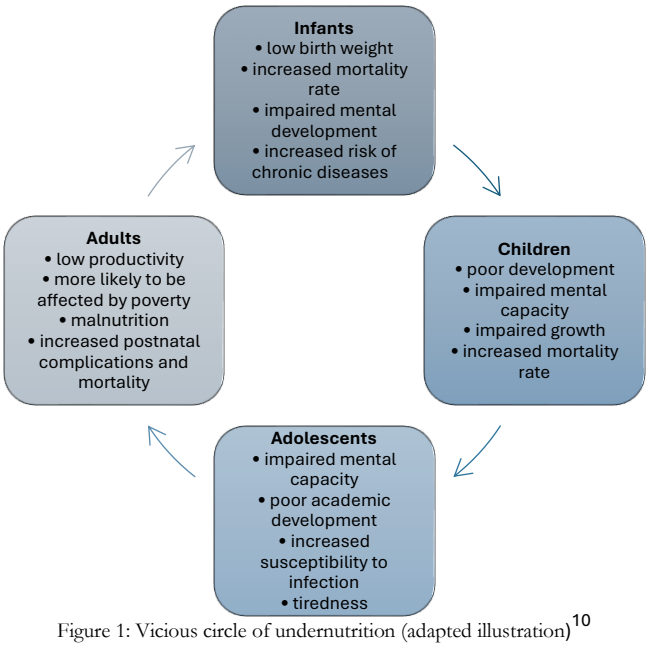

Figure 1: Vicious circle of undernutrition (adapted illustration)[10]

The international **Scaling Up Nutrition (SUN)** [11] Movement advocates for action to be taken during a child's first 1,000 days, as one of the focuses of its work. It brings together governments, UN organisations, civil society, donors, development banks and the private sector. Its vision is a world free from malnutrition in all its forms by 2030, to be implemented in a multi-sectoral, multi-level approach and measures during the first 1,000 days.

Many countries suffer from all three forms of malnutrition (undernutrition, micronutrient deficiency, overweight/obesity) and face a so-called **double or triple burden of malnutrition**. As well as having **repercussions on health**, all forms of malnutrition have **economic consequences**: a society in which many people are unable to perform to their full potential due to poor nutritional status is significantly weakened economically and faces increasing public health expenditure for the treatment of diet-related diseases. The annual costs of malnutrition come to USD 4.1 trillion, a figure which includes productivity losses due to undernutrition and micronutrient deficiencies as well as economic and social costs of overweight and obesity.[12] These calculations do not even include costs of adverse impacts on the environment. By way of comparison, the total is roughly equivalent to Germany's entire economic output (gross domestic product – GDP) for 2022![13] The leading risk factors for global health costs are an insufficient intake of wholegrain products and fruit as well as an excessive sodium intake.[14]

Looking at the **hidden social, health and environmental costs** of current agricultural and food systems, estimates vary between USD 11.6 and 15 trillion per annum, equivalent to around 10-12 per cent of global GDP. Unhealthy eating habits in connection with diet-related, non-communicable diseases account for around 70 per cent of all quantified hidden costs. [15]

Definitions[2]

Hunger describes the subjective sensation experienced by people following a certain period of time without food. It is usually equated to lack of food or chronic undernourishment. Chronic undernourishment occurs if there is insufficient food energy available to meet the human body's minimum energy requirements.

Malnutrition is an umbrella term that includes undernutrition, overnutrition and micronutrient deficiency.

Undernutrition is the outcome of insufficient food intake and/or poor health and hygiene conditions that prevent the body from properly utilising the food consumed.

Overweight and obesity occurs when the food energy intake consistently exceeds the amount required.

Micronutrient deficiencies or **hidden hunger** are the result of an insufficient supply of vitamins and minerals, either because the food available is not sufficiently diverse or because of an increased need for micronutrients in people such as children, pregnant women and breastfeeding mothers.

Stunting is a chronic form of undernutrition in which a child is too short relative to its age. It is a result of long-term malnutrition, often in conjunction with recurring infections and poor hygiene and health conditions, especially during the first 1,000 days of life. Stunting also impairs a child's cognitive and physical development.

Wasting describes an acute form of undernutrition in which a child's bodyweight is too low in relation to its height. It occurs as a result of a sudden lack of food or serious illness.

The global food situation described above illustrates the need for resilient and sustainable agricultural and food systems. At present, these are failing to provide either healthy or affordable food. Furthermore, they are inadequate for the various crises we face and are not environmentally sustainable.

Our position

In this context, GIZ takes the following positions:

■ **Healthy nutrition is the engine of and yardstick for development**

At least 12 of the 17 Sustainable Development Goals (SDGs) are closely linked to nutrition. Improved nutrition is the

foundation for progress in the areas of health, education, employment, women's empowerment and the reduction of poverty and inequality.

■ Investment in nutrition is worthwhile

Investing in nutrition is one of the most cost-effective development measures: every USD invested in nutrition yields a return of USD 23.[12] Investment in nutrition leads to better health, better mental development and better educational attainment in children and young people, and thus to improved productivity in their subsequent adult working lives. As a result, it makes a major contribution to economic development and poverty reduction. Preventing malnutrition is more economical than treating it.

■ A healthy diet needs to be affordable – nutrition and poverty are closely intertwined

Malnutrition and poverty are often mutually reinforcing. Many people living in poverty cannot afford to eat healthily and resort to cheap food that is low in nutrients, which in turn leads to illness and loss in productivity. Breaking this vicious circle requires healthy food to be universally accessible and affordable.

■ Adequate food as a human right

Adequate food is not just the responsibility of the individual, it is also enshrined as a human right, thus placing an obligation on states and governments. The voluntary guidelines of the Food and Agriculture Organization on the right to food provide states with assistance in the implementation of this human right.[16]

■ The first 1,000 days determine the future

The **1,000 days** from conception to two years of age are a crucial window of opportunity for children's physical and cognitive development. Targeted measures are needed to improve nutrition during this critical 1,000-day window. These include guaranteeing access to antenatal care for pregnant women and providing them with micronutrients such as iron and folic acid, promoting exclusive breastfeeding during the first six months followed by the introduction of safe, age-appropriate and nutritious weaning food, and ensuring access to clean water and sanitation. This not only promotes children's growth and development but also helps to prevent illnesses later on in life, such as obesity and diabetes, and secure long-term economic benefits.

■ Extending the focus from 1,000 days to the 8,000 days of childhood and adolescence

While optimal nutrition during the first 1,000 days has a major impact on a child's long-term development, adequate nutrition throughout childhood and adolescence also plays a key role. Access to nutrient-rich food in the **first 8,000 days** (until the age of 21) is essential in developing a child's potential in adult years and in ensuring its well-being.[17] Good nutrition during this period can be promoted through the school system in particular.[18]

■ Health care, clean drinking water and sanitation are essential

Common illnesses (including diarrhoeal diseases and parasites) pose a risk to nutritional status. Access to adequate health care and to clean drinking water and sanitation create the conditions under which the body is able to take in sufficient quantities of food and utilise it.

■ Nutritional knowledge is a basis for the future

Informing young people early about the importance of a nutritious diet and pointing out the dangers of malnutrition helps to prevent undernutrition and malnutrition being passed on to the next generation. Mothers in particular need to know how to nourish their children properly, especially in the first 1,000 days.

■ A diverse range of foods is the most important basis for good nutrition

The more dietary diversity there is, the more likely it is that micronutrient needs will be met. In many contexts, however, nutrition is based on staple foods that are rich in starch, such as rice, wheat, potatoes and cassava. These foods, which are usually inexpensive, make people full but they do not contain all nutrients. Nutritious foods such as vegetables, fruit and animal products (milk, eggs, meat, fish) must be available all year round and must also be affordable for poor families.

■ Fortified foods prevent malnutrition

Fortifying foods with vitamins and minerals is relatively cost-effective. It can be used to prevent or combat malnutrition on a broad scale, especially if the supply of locally available nutrient-rich foods for a healthy and balanced diet is limited. The most commonly known fortification measures include adding iodine to table salt and fortifying vegetable oils with vitamin A.

■ Harnessing the potential of aquatic foods from fisheries and aquaculture

Aquatic foods are rich in essential amino acids and vital micronutrients such as vitamins, minerals and long-chain omega-3 fatty acids, and are therefore an important contributory factor towards a healthy diet. In low-income countries in particular, they are hugely important as a source of both animal protein and essential micronutrients: more than 3.2 billion people cover at least 20 per cent of their average animal protein requirement through aquatic foods.[19] Compared with livestock farming, aquatic food production on average emits less harmful greenhouse gas, requires less animal feed and has fewer adverse impacts on the environment and biodiversity. Small-scale artisanal fisheries and artisanal aquaculture are a key provider of easily accessible and affordable

nutrients for people at risk of food and nutrition insecurity.

■ Gender equality as the key to food and nutrition security

Women's nutrient requirements are greater than men's due to menstruation, pregnancy, childbirth and breastfeeding. They perform a wide range of duties in agriculture, livestock farming, fisheries, aquaculture and caring for the family, especially in child nutrition. For example, they are mostly responsible for buying and processing food, but tend to have little say in how money is used. Within the context of the family, they often consume less food or the quality of the food is poorer. Gender-equitable access to resources, services and knowledge is crucial to making food systems more inclusive and sustainable. To achieve this, it is essential that men, boys and other members of the community are closely involved in the measures.

■ Balanced nutrition also plays an important role in emergency aid and transitional development assistance

Adequate and balanced food is also an important aspect of transfers as part of emergency aid and transitional development assistance, for example following natural disasters or extreme weather events, or in the context of violent conflicts. Besides helping to ensure people's survival, it also prevents deficiency disorders over the long term.

■ Food and nutrition security requires integrated solutions as a response to multiple challenges

The multiple causes of malnutrition mean that integrated approaches are needed to both turn it around and reduce it permanently. These approaches should be structured holistically and also take into account the interactions between the environment, the economy and social aspects in order to develop holistic and sustainable solutions. It is also important to incorporate local communities and indigenous knowledge into the planning and implementation of these integrated strategies so as to make them more effective and increase their acceptance.

■ Linking climate action and biodiversity conservation measures with approaches to food and nutrition security

Promoting climate change adaptation and mitigation and safeguarding sustainability and a healthy planet by protecting livelihoods and (natural) resources are the foundation on which SDG2 'Zero Hunger' can be achieved.

Our recommendations

Promoting rural development and transforming agricultural and food systems can be instrumental in tackling hunger and all forms of malnutrition. Food and nutrition security measures are particularly effective when they are implemented in cooperation with other sectors, such as education or health.

The most important actions recommended by GIZ are set out below:

■ Focus agricultural policy more on those at risk of food and nutrition insecurity

Agricultural policy measures need to focus more on healthy food and on regions and groups at risk of food and nutrition insecurity, in particular children, pregnant women and breastfeeding mothers. Examples of such measures include levying a tax on sugary drinks, cutting subsidies for unsustainable agricultural practices and promoting and labelling healthy food.

■ Make value chains nutrition-sensitive

The nutritional importance of foods should be taken into account both in the criteria for selecting the value chains to be supported and in the support measures themselves. The value chain can then help to improve the availability of and access to high-quality food. Food safety along the value chain also plays an important role as this is the only way in which the quality of food can be maintained and contamination (e.g. with aflatoxins) prevented.

■ Ensure a diverse and high-quality range of food

Ensuring the availability of a diverse and high-quality range of food involves taking measures designed to preserve agrobiodiversity. These include improving access to high-quality seed or recultivating and consuming neglected and underutilised crops. Also important are measures to promote agricultural diversification with the aim of producing healthy food sustainably. Increased production of aquatic foods from sustainable fisheries and aquaculture can likewise play an effective role in diversifying the food supply through nutrient-rich fish, algae or mussels.

■ Create an environment that supports the consumption of healthy food

The consumption of healthy food requires a supportive environment (e.g. availability and labelling of healthy foods) as well as a change in behaviour. Steps should therefore be taken to encourage the variety of nutritious and diverse foodstuffs and to prepare/store these correctly. Nutritional education, for example through social and behaviour change communication (SBCC), is therefore just as necessary as advice on institutional frameworks, such as the adoption/updating of national dietary guidelines. In particular, cooperation with the private sector plays an important role in increasing the accessibility to and affordability of healthy nu-

tritious or fortified foods, improving food labelling or aligning marketing practices with national nutritional guidelines, especially for children and young people.

■ Tackle overweight and the increase in diet-related diseases more robustly

Overweight and obesity are rising rapidly – in adults as well as in children and young people. With the growing consumption of ultra-processed foods, micronutrient deficiency due to unbalanced diets and a decline in day-to-day physical activity (nutrition transition), there is a direct link between nutrition and the increase in non-communicable diseases (NCDs) such as diabetes or cardiovascular diseases. Measures that simultaneously address undernutrition and overnutrition (double-duty actions) must therefore form part of project planning. Promoting exclusive breastfeeding, improving access to nutritious foods, for example through school feeding programmes that place an emphasis on fresh and local foods, and regulating the marketing of unhealthy foods while at the same time fostering a healthy food environment are examples of such measures.

■ Enhance resilience through social protection and higher incomes

In order to generate longer-term results for food and nutrition security, social protection measures (food subsidies, money transfers, food transfers, cash-for-work programmes, school nutrition) designed to enhance resilience should be combined with policy advice for national and regional institutions, education, capacity development and income-generating measures. School nutrition programmes can act as social safety nets promoting access to healthy nutrition and education. Their aim is to provide schoolchildren with safe, varied and nutritious food. Ideally, school nutrition programmes should be combined with agricultural, health and/or water sanitation and hygiene (WASH) measures.

■ Integrate issues of nutrition into different sectors

Nutrition is a cross-sectoral challenge and needs to be integrated into different sectors. The stakeholders in relevant sectors (including agriculture, fisheries and aquaculture, health, education, social protection) should be made aware of nutrition and should work together across multiple sectors to jointly develop approaches to nutrition.

■ Provide nutrition governance to ensure lasting results

Governance in countries with a high degree of food and nutrition insecurity should be improved by supporting favourable institutional frameworks, and by integrating global agendas, successful approaches and lessons learned into national systems (e.g. policies, strategies, action plans).

■ Support global actors

International cooperation should continue its commitment to international initiatives like SUN and platforms such as the Committee on World Food Security (CFS), Nutrition for Growth (N4G) and the UN Food System Summit (UNFSS), and step up the application of findings from global research programmes and networks.

■ Provide stability, peacebuilding and social cohesion

In times of multiple crises, conflicts and natural disasters, the immediate need for food and nutrients must be met efficiently, livelihoods need to be protected and the medium-term and long-term resilience of the affected population strengthened.

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