A young child with dark skin and curly hair is sitting on a light-colored tiled floor. The child is wearing a white, patterned, off-the-shoulder garment and is eating from a blue bowl. In front of the child is a white plate with a pile of yellowish food, possibly rice or a similar grain. The background is a plain, light-colored wall.

Child Nutrition and the Climate Crisis

UNICEF Framework
for Action

unicef 
for every child

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THE CHALLENGE

Child malnutrition and climate change are two of the greatest threats facing nations today. They converge geographically, share common systemic and societal drivers, and exacerbate one another. Millions of families are struggling to meet children’s nutritional needs under the strain of climate change, while greenhouse gas emissions from food systems remain one of the main drivers of the climate crisis.

The scale of the challenge is immense. According to the latest UNICEF child nutrition data, more than one in four children under 5 years of age experience severe child food poverty and more than one in five are not growing or developing well due to stunting (chronic malnutrition), while overweight and obesity are rising rapidly among older children and adolescents.^{1,2} At the same time, nearly half of the world’s children live in countries at extremely high risk of the impacts of climate change (Box 1).³

No region or country is free from the impacts of child malnutrition or climate change. However, disadvantaged children living in poverty and in low- and lower middle-income countries are disproportionately affected.

These children and families face greater challenges in accessing nutritious diets and nutrition services and have limited capacity to cope with and adapt to the consequences of climate change.⁴

BOX 1

The UNICEF Children’s Climate Risk Index

The UNICEF Children’s Climate Risk Index ranks countries based on how vulnerable children are to environmental stresses and extreme weather events.⁵

Almost every child on earth is exposed to at least one climate and environmental hazard, shock or stress, such as heatwaves, cyclones, air pollution, flooding and water scarcity.

Approximately 1 billion children – nearly half of the world’s children – live in countries that are at an ‘extremely high risk’ from the impacts of climate change. And yet these countries are among those least responsible for creating the problem; the 33 extremely high-risk countries collectively emit just 9 per cent of global carbon dioxide emissions.



More than **one in four children** experience **severe child food poverty** in early childhood



More than **one in five children** under 5 years of age are not growing and developing well due to **stunting**



More than **one in five children** aged 5–9 years are living with **overweight or obesity**



Almost **one in two children** live in countries at **extremely high risk of climate change**

The climate crisis is a child nutrition crisis

Despite decades of steady progress on child nutrition, 45 million children under 5 years of age are affected by wasting, 147 million suffer from stunted growth and development due to chronic malnutrition and 340 million have micronutrient deficiencies, while 148 million children aged 5–9 years are living with overweight or obesity.^{6–8}

Climate change is pushing more children into malnutrition and threatening to slow and even unwind progress towards the Sustainable Development Goals' child nutrition targets.⁹ There is clear evidence that extreme heat and precipitation increase the risk of child undernutrition,^{10–15} and the outlook is worsening as the climate crisis deepens. By 2050, an additional 28 million children will suffer from wasting (acute malnutrition) and an additional 40 million will suffer from stunting (chronic malnutrition) in the absence of timely action on climate change.¹⁶ Climate change is also fuelling a rise in overweight and obesity by: (1) increasing food and water scarcity, which drives up food prices and forces families to shift to lower-cost, energy dense ultra-processed foods; and (2) causing extreme heat, which discourages physical activity.¹⁷

Climate change contributes to child malnutrition through multiple pathways, acting on the enabling, underlying and immediate determinants of maternal and child nutrition (*Figure 1*). These impacts arise from increasing temperatures, unpredictable and erratic weather patterns (temperature and precipitation), rising sea levels, ocean warming and ocean acidification, as well as climate shocks and stresses, such as floods, windstorms, wildfires, droughts and extreme heat.

By 2050, an additional 28 million children will suffer from wasting (acute malnutrition) and an additional 40 million will suffer from stunting (chronic malnutrition) in the absence of timely action on climate change.

Climate change destabilizes the enabling environment for nutrition. Its effects contribute to livelihood and income losses, lower agrifood productivity and quality, biodiversity losses, ecosystem changes and infrastructure damage. In addition, it drives population displacement and migration. These combined challenges hinder economic growth, shift political priorities and divert funding from essential social sectors, thereby deepening existing inequalities.

Climate change affects every step of the food supply chain. The impacts reduce crop yields and nutrient value; reduce livestock and fish growth, health and reproduction; destroy crops and kill livestock and fish; and disrupt food distribution and storage. This diminishes the availability, affordability and quality of food, creating enormous difficulties for vulnerable families to access nutritious, diverse and safe foods for their children.

At the same time, current food systems are generating more than one third of all greenhouse gas emissions globally, further exacerbating children's vulnerability to climate shocks, stresses and malnutrition.¹⁸ This is mostly because of agricultural practices, including land conversion, deforestation and fertilizer and livestock emissions, but also due to food losses, food waste and the carbon impacts of processing, packaging and transporting food.

Across the globe, the massive growth in the production and marketing of cheap, ultra-processed foods is intensifying the challenges to climate and child nutrition. These foods often contain ingredients – such as meat, palm and soy oils – and have packaging that are linked to more biodiversity loss, greenhouse gases and plastic pollution than other foods.¹⁹ They are also low in essential nutrients and high in sugar, salt and unhealthy fats, and displace more nutritious foods from the diets of children, predisposing children to overweight, obesity and other forms of malnutrition.

Water and sanitation systems are increasingly strained by climate change. Rising global temperatures and climate shocks and stresses cause water scarcity and floods, damage

sanitation facilities and encourage the spread of diseases that precipitate malnutrition, such as diarrhoea, respiratory infections and malaria. The rising burden of malnutrition and diseases place greater pressure on the health system – which itself contributes about 5 per cent of global greenhouse gas emissions^{20, 21} – while extreme weather events disrupt access to essential nutrition services by damaging health infrastructure and affecting supply chains, transportation and communication networks. Schools, which provide a platform to reach school-age children with essential nutrition services and education on nutrition and climate change, are similarly disrupted by climate shocks and stresses.

Climate variability, shocks and stresses are also putting immense pressure on public sector budgets at a time when increased investment in social protection systems is needed to reduce vulnerabilities, poverty and inequalities, respond to climate shocks and stresses, and facilitate positive climate adaptation and mitigation measures.²² Only 9 per cent of the population is covered by some form of social protection in the 20 countries most vulnerable to the climate crisis, compared to 52 per cent globally.²³ Where social protection programmes do exist, they are often fragmented in scope, inadequate in coverage and benefit size, and inflexible to the changing needs that arise as a consequence of climate change.^{24, 25}

Amidst this climate crisis, families are overburdened with the daily struggle of earning a living, sourcing food, water and fuel, and caring for the family. Women are especially affected in contexts where harmful gender norms and discriminatory laws mean they shoulder the bulk of domestic and childcare responsibilities and have limited access to decent work, assets, income and social networks to cope with the effects of climate change. The disruptions caused by extreme weather events compromise women's ability to provide consistent nurturing care to their children, including appropriate feeding and hygiene practices, as well as meet their own nutrition and care needs.^{26, 27} Cultural and social norms also influence dietary preferences and practices, with both positive and negative implications for child nutrition and the planet.

During pregnancy, women are more vulnerable to extreme heat and diseases such as malaria that are exacerbated by climate change. These conditions impact their health and well-being and increase the risk of low birthweight and preterm delivery.²⁸ Women are also more likely to compromise the quality and quantity of their dietary intake in order to prioritize other family members, especially during food shortages.

Children who suffer malnutrition as a result of the climate crisis face even greater vulnerability to subsequent climate events, creating a dangerous, self-perpetuating cycle. This vicious cycle threatens children's immediate survival, nutrition and development, and weakens their learning and future work productivity, reducing the human capital needed to respond to the climate crisis.²⁹

Children who suffer malnutrition as a result of the climate crisis face even greater vulnerability to subsequent climate events, creating a dangerous, self-perpetuating cycle.



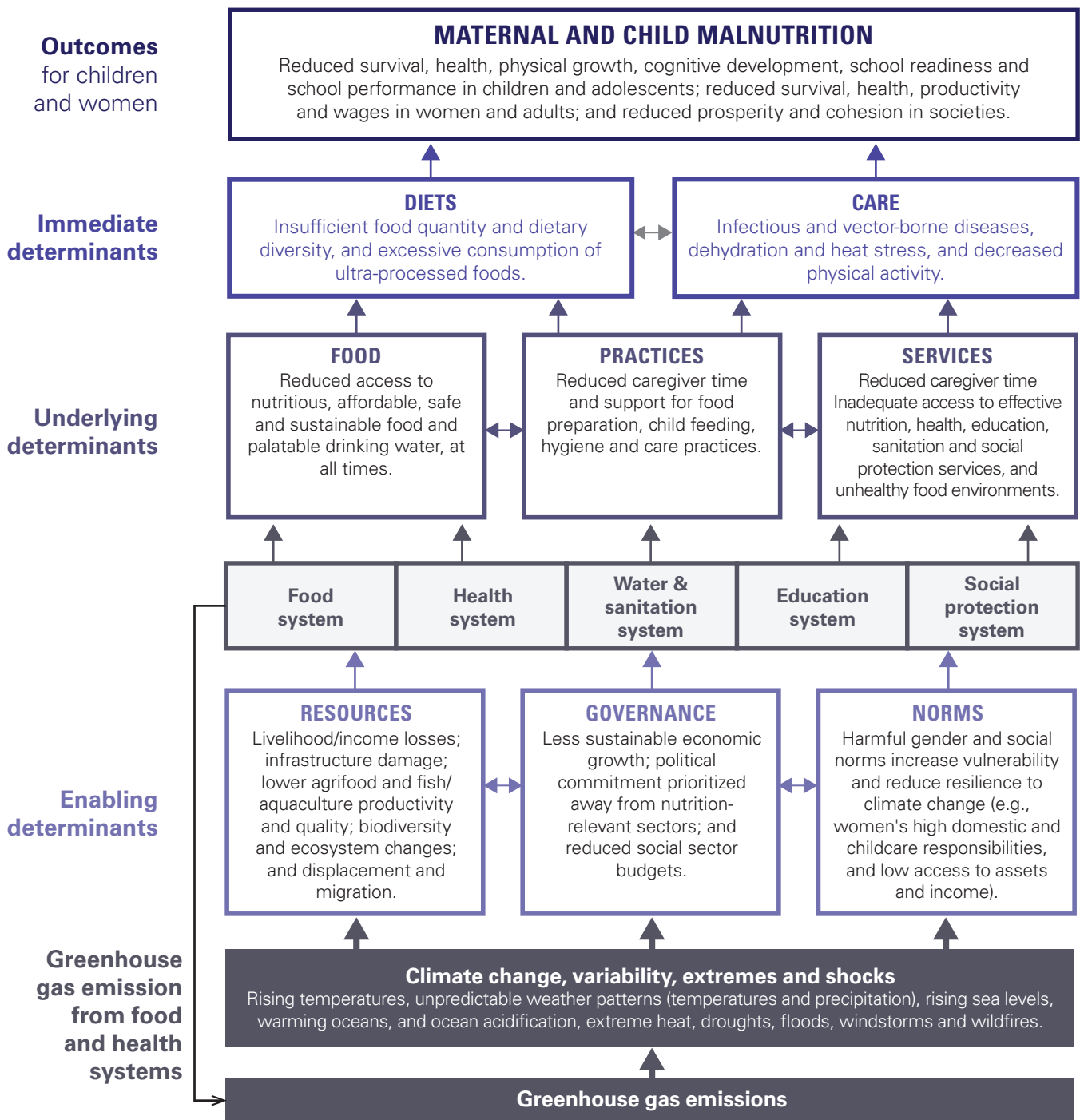


FIGURE 1: Conceptual framework for maternal and child malnutrition, indicating the effects of climate change on the immediate, underlying and enabling determinants



THE OPPORTUNITY

Improving child nutrition and tackling climate change simultaneously is not only possible but essential. Child malnutrition and climate change are inextricably linked, and the pathways to improving child nutrition and mitigating climate change can overlap, creating an opportunity for systemic, sustainable solutions.

When five essential systems – food, health, water and sanitation, education and social protection – are adapted to minimize harm from climate change impacts (‘climate adaptation’), they can ensure children’s access to nutritious and safe diets, essential nutrition services and positive nutrition practices at all times, including climate shocks

and stresses. This enables children to grow, develop and reach their full potential, which in turn strengthens human capital to tackle the climate crisis.

At the same time, appropriate actions must be taken to reduce greenhouse gas emissions and preserve vital carbon sinks, particularly through transforming the food system (‘climate mitigation’). This will ensure that the nutritional needs of children and broader environmental goals are met in a sustainable and mutually reinforcing manner.

Co-benefits for child nutrition and climate change are possible and highly desirable because they mean that actions aimed at either improving child nutrition, climate

adaptation or climate mitigation have a positive effect on one or both of the others (Box 2). For example, actions to reduce the consumption of ultra-processed foods not only protect against all forms of child malnutrition but also reduce greenhouse gas emissions associated with the production and packaging of these foods.

Mitigation actions can have important benefits for other aspects of the planetary crisis, including biodiversity loss and pollution. For example, clean cooking stoves can lower biodiversity loss (by decreasing wood harvesting) and pollution (by reduced wood burning), as well as greenhouse gas emissions (by maintaining carbon sinks). These benefits can drive demand for emission-reduction actions, including in countries where greenhouse gas emissions are relatively low.

Climate action processes and tools

To advance progress on child nutrition and climate action, relevant actions must be included in national processes aimed at achieving the goals, commitments and targets in the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.

The UNFCCC was adopted in 1992 with the aim of stabilizing atmospheric concentrations of greenhouse gases to prevent dangerous human interference with the climate system. It sets out the legal framework and basic principles, mechanisms and entities to support climate-related decision-making processes at the international level.

The UNFCCC created the Paris Agreement, which came into force in 2016, to strengthen the global response to the threat of climate change. It sets targets to limit global temperature rises and commits participating countries to climate actions with respect to mitigation, adaptation, loss and damage.

In addition, the Global Goal on Adaptation, established under the Paris Agreement, aims to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change. The UAE Framework for Global Climate Resilience, adopted in 2023, aligns closely with this goal, and sets targets for increased climate resilience across key sectors, including food and agriculture, water, health and livelihoods.

Key climate terms

Climate adaptation	Actions taken to modify systems or practices to minimize harm from expected or actual climate change impacts.
Climate governance	Purposeful mechanisms and measures for deciding, financing, managing, implementing and monitoring policies and measures at national and global levels that are aimed at preventing, adapting to or mitigating the risks posed by climate change.
Climate mitigation	Actions taken to reduce the human impact on climate, including strategies to reduce greenhouse gas sources and emissions and enhance greenhouse gas sinks.
Climate resilience	The ability of systems and communities to cope with, recover from and adapt to the effects of climate shocks and stresses.
Climate-smart	Actions that aim to reduce greenhouse gas emissions and increase resilience to climate change

See Glossary for list of all climate terms used in this document.

Examples of co-benefits for child nutrition, climate change and planetary health

Breastfeeding reduces greenhouse gas emissions associated with the production and distribution of breastmilk substitutes and supports the survival, growth and development of young children.

Therapeutic foods, nutrition supplements and nutritious foods sourced for public programmes from climate-smart, localized and sustainable supply chains improve child and maternal nutrition, strengthen resilience to climate change and support planetary health.

Large-scale food fortification is a low-carbon approach to delivering essential vitamins and other micronutrients to vulnerable populations and can help counter the impacts of climate change on the nutritional quality of food.

Climate-smart and nutrition-sensitive agriculture and livestock production improve the supply of climate-resilient nutritious foods (including indigenous pulses, tubers and animal-source foods), displace higher carbon foods from diets, protect biodiversity, support planetary health and promote dietary diversity.

Healthy school food environments teach children about nutrition and sustainable food production, nurture a connection with nature, and ensure the availability of nutritious, safe and sustainable foods and free palatable drinking water at school.

Diets free from ultra-processed foods protect against all forms of malnutrition in children, including overweight, stunting and micronutrient deficiencies, are lower in greenhouse gas emissions and reduce plastic pollution.

Lower consumption of animal-source foods, particularly red meat (by individuals not at risk for undernutrition or micronutrient deficiencies) reduces the risk of overweight, obesity and diet-related non-communicable diseases, and lowers greenhouse gas emissions and biodiversity loss associated with livestock-rearing.

Clean cooking stoves improve the lives of women and girls in vulnerable communities by reducing the burden of collecting firewood and easing the preparation of nutritious meals, while reducing household pollution, greenhouse gas emissions and deforestation.

Social cash transfer programmes provide predictable and regular cash payments to households or individuals that can contribute to improving financial access to nutritious foods, reducing vulnerability to climate change and increasing the capacity to cope with climate shocks and stresses.



Long-term climate strategies, nationally determined contributions and national adaptation plans assist countries in achieving the commitments in the Paris Agreement (Box 3). They provide important opportunities to ensure that child nutrition and climate action are prioritized at country level because they set the climate change mitigation and adaptation priorities of nations, which direct where and how climate financing should be invested.

BOX 3

National climate action processes and tools

Long-term climate strategies: These national strategies include transformation measures towards reducing greenhouse gas emissions in the long-term. They support the implementation of long-term national policies, serve as a roadmap for nationally determined contributions, guide a just transition, and improve conditions for implementing nationally appropriate mitigation actions.

Nationally determined contributions (NDCs): NDCs represent each country's commitments to reduce national greenhouse gas emissions and to adapt to the impacts of climate change. They provide a framework for countries to ensure climate action is built into every sector and a mechanism to coordinate efforts to lower emissions and protect citizens from the worst impacts of this crisis. NDCs are reviewed and updated every five years.

National adaptation plans (NAPs): Led by governments, the NAP process involves analysing climate risks and vulnerabilities, identifying and prioritizing adaptation options, developing implementation strategies, integrating adaptation into budgets and reporting progress. Countries can utilize the NAP process and its outcomes to update and improve the adaptation elements of NDCs.



UNICEF FRAMEWORK FOR ACTION

The climate crisis is a child nutrition crisis: the irrefutable links between child malnutrition and climate change and between the food system and greenhouse gas emissions, must be a core consideration in advocacy, policy and programme action to improve children's nutrition and planetary health.

The UNICEF Framework for Action on child nutrition and climate change is guided by the UNICEF Nutrition Strategy (2020–2030), the UNICEF Sustainability and Climate Change Action Plan (2023–2030), and the UNICEF Agenda for Child Nutrition and Climate Action.

- The **UNICEF Nutrition Strategy** calls for the protection and promotion of diets, services and practices that support optimal nutrition, growth and development for all children, adolescents and women, everywhere, including in communities impacted by climate change.³⁰ The Nutrition Strategy seeks to activate five nutrition delivery systems, the five systems with the greatest potential to deliver nutritious and sustainable diets, essential nutrition services and positive nutrition practices at scale: the food, health, water and sanitation, education and social protection systems.
- The **UNICEF Sustainability and Climate Change Action Plan** commits UNICEF to help governments and communities build low-carbon, resilient essential services for children, including nutrition services, equip young people to be champions for the planet, and accelerate a just transition to a nature-positive and carbon-neutral world.³¹
- The **UNICEF Agenda for Child Nutrition and Climate Action** sets out UNICEF's agenda to position child nutrition within climate action.³² The agenda and its actions aim to prevent child malnutrition in populations exposed to the climate crisis and to support global and national efforts to mitigate climate change.

Three action areas

To advance child nutrition and climate action, UNICEF nutrition programmes will focus on three action areas:

ACTION AREA 1 | ADAPTATION

Protect children’s diets, nutrition services and nutrition practices from climate change

ACTION AREA 2 | MITIGATION

Promote nutritious diets, nutrition services and practices that are beneficial for the planet

ACTION AREA 3 | GOVERNANCE

Position child nutrition and climate action in evidence-based policies, plans and financing

Each action area has a set of three key actions that collectively cater to the diverse country contexts in which UNICEF works (Table 1). UNICEF will tailor its programming to each country’s unique context by taking into account the status and drivers of child nutrition, the extent to which climate change is impacting child nutrition, and the contribution of children’s food environments, nutrition services and dietary practices to greenhouse gas emissions.

To avoid deepening existing inequities, it is crucial to carefully consider the potential impact of climate adaptation and mitigation actions on access to nutritious diets, essential nutrition services and positive nutrition practices.³³ For example, to ensure that the future food supply is nutritionally adequate and sustainable, both the nutrient content and

resilience of food chains should be considered. In addition, a dietary shift away from animal-source foods may not be appropriate for children and women at high risk of undernutrition and micronutrient deficiencies (see Box 4).

UNICEF programming on child nutrition and climate action will complement the efforts led by other UNICEF programmes – including health, education, water and sanitation and social protection – to protect children from the climate crisis and ensure a fair and inclusive transition to a sustainable, low-carbon world. UNICEF nutrition programmes will therefore pursue a convergent approach with other UNICEF programmes to address the interconnected challenges to child nutrition, climate adaptation and mitigation.

TABLE 1: UNICEF framework for action

ACTION AREA 1: ADAPTATION Protect children’s diets, nutrition services and nutrition practices from climate change	ACTION AREA 2: MITIGATION Promote nutritious diets, nutrition services and practices that are beneficial for the planet	ACTION AREA 3: GOVERNANCE Position child nutrition and climate action in evidence-based policies, plans and financing
<p>Key actions:</p> <p>1.1 Promote the availability and consumption of nutritious, safe, affordable and sustainable foods for children through climate-resilient food systems.</p> <p>1.2 Strengthen the resilience of the health and education systems to deliver essential nutrition services and promote positive nutrition practices for children.</p> <p>1.3 Strengthen the social protection system to reduce children’s nutrition vulnerability and the nutrition impacts of climate shocks/stresses.</p>	<p>Key actions:</p> <p>2.1 Increase the availability of nutritious and sustainable foods and reduce the carbon footprint of supplies for essential nutrition services.</p> <p>2.2 Build healthy food environments for children that promote the consumption of nutritious, safe and sustainable diets.</p> <p>2.3 Promote and support feeding and dietary practices that are beneficial for child nutrition and the planet, appropriate to context.</p>	<p>Key actions:</p> <p>3.1 Position the food and nutrition rights of children at the heart of climate action agendas at national, subnational and community levels.</p> <p>3.2 Integrate evidence-based climate-smart nutrition considerations into policies, strategies and plans.</p> <p>3.3 Unlock financial resources to support climate-smart nutrition actions, prioritizing the most vulnerable children.</p>

BOX 4

Meeting the nutrient needs of vulnerable children, adolescents and women

A dietary shift away from animal-source foods (dairy products, eggs, fish, poultry and meat) can reduce greenhouse gas emissions, ecosystem degradation and the risk of diet-related non-communicable diseases, but is not appropriate for children, adolescents and women in all contexts.

Children in early life: Between birth and 2 years of age, a child's brain grows to 75 per cent of adult size and body weight quadruples. These vast changes mean that children have greater nutrient needs before age 2 than at any other time in life. The recommended foods to best match these unique dietary requirements include animal-source foods – dairy products, eggs, fish poultry and meat – which provide a dense and easily digestible source of essential vitamins and other micronutrients, as well as high-quality protein for growth and cognitive and motor development. These foods are recommended daily for young children, irrespective of the contexts in which they live.³⁴

Children, adolescents and women at risk of undernutrition and micronutrient deficiencies: In low-and middle-income countries, children, adolescents and women are vulnerable to undernutrition (stunting, wasting and thinness) and micronutrient deficiencies, often because nutritious diets and nutrition services are unavailable, unaffordable or inaccessible. In these contexts, it can be challenging to meet nutrient needs through a plant-based diet – especially during periods of rapid growth and development in childhood, adolescence and pregnancy – and so animal-source foods are a vital source of dietary nutrients. This means that a dietary shift away from animal-sourced foods is not applicable in settings where undernutrition and micronutrient deficiencies are prevalent. Some vulnerable populations, such as pastoralists, also rely on livestock for livelihoods as well as food.





ACTION AREA 1 | ADAPTATION

Protect children's diets, nutrition services and nutrition practices from climate change

Climate adaptation refers to actions taken to modify systems (policies, programmes and practices) to minimize harm from expected or actual climate change impacts. It is closely related to the concept of climate resilience, which is the ability of systems and communities to cope with, recover from and adapt to the effects of climate shocks and stresses.

UNICEF supports the adaptation of nutrition delivery systems to respond to the effects of climate change on child nutrition, and strengthens the resilience of systems to reach children with nutritious and safe diets, essential nutrition services and positive nutrition and care practices amidst the climate crisis at all times, including during and after shocks and stresses.

UNICEF's work in this action area focuses on the following key actions and priorities:

1.1 Promote the availability and consumption of nutritious, safe, affordable and sustainable foods for children through climate-resilient food systems

First foods: Incentivize the local production of nutritious, safe, affordable and sustainable complementary foods, food snacks, food ingredients and specialized foods for young children through climate-resilient food supply chains, and promote their consumption.

Fortified foods: Strengthen national systems to support the mandatory, large-scale food fortification of staple foods, using climate-resilient food supply chains, and promote the procurement and distribution of fortified foods within public programmes.

Family foods: Advocate for and promote climate-resilient food system strategies (crops, livestock and fisheries) that increase the availability and consumption of nutritious, safe, affordable, diverse and sustainable foods for children and families.

1.2 Strengthen the resilience of the health and education systems to deliver essential nutrition services and promote positive nutrition practices for children

Nutrition services and supplies: Strengthen the resilience of the health and education systems, including nutrition supply chains, to deliver nutrition services that reduce children's vulnerability to climate-induced malnutrition.

Nutrition workforce: Strengthen the capacity of the health, nutrition and education workforce, particularly at community level, to deliver quality nutrition services to children at all times, including mechanisms for rapid and flexible surge support during and after climate shocks and stresses.

Nutrition practices: Use social and behaviour change approaches to promote individual practices and social norms that improve children's nutrition and reduce vulnerability to climate change, such as promoting the consumption of climate-resilient, nutritious foods.

1.3 Strengthen the social protection system to reduce children's nutrition vulnerability and the nutrition impacts of climate shocks/stresses

Social transfers: Improve the coverage, adequacy and design of social transfer programmes (cash, vouchers, food) and establish linkages with nutrition services to reduce the vulnerability of children to climate-induced malnutrition, and strengthen the capacity of these programmes to respond to anticipated or actual climate shocks and stresses.

Social/health insurance: Advocate for the expansion of national health insurance systems, prioritizing the poor and vulnerable, with benefit packages that include essential nutrition services to protect children from climate-related increases in malnutrition.

Nutrition protection: Link nutritionally vulnerable families with children to other forms of social protection and livelihoods programming to address underlying vulnerabilities to climate-induced malnutrition.

Highlights of UNICEF's work in climate-resilient nutrition programmes

In Ethiopia, UNICEF is supporting Mobile Health Teams to reach families with essential health and nutrition services in areas affected by droughts, floods and other humanitarian crises, including displaced families. This initiative is aligned with the Ethiopia Health NAP and disaster risk reduction plan. The teams provide preventive services, such as vitamin A supplementation and vaccines, screen children for malnutrition and provide life-saving treatment to children with severe malnutrition.

In Kenya, the Nutrition Improvements through Cash and Health Education programme is being scaled up to 25 counties, including those most affected by drought. The programme provides regular

cash transfers alongside counselling on child nutrition and parenting, and is developing mechanisms to scale up anticipatory actions (cash top-ups and disaster preparedness information) in response to early warning indicators.

In Malawi, UNICEF is supporting the scale up of Care Groups through which 'lead' mothers provide regular counselling to group members on optimal breastfeeding and dietary practices for young children. In areas most affected by climate change, members of Care Groups also receive support from agricultural extension workers to help them produce climate-resilient and nutritious foods.

In the Philippines, UNICEF supported the Government to include

treatment for children with severe wasting in the outpatient benefit package of the national health insurance system (PhilHealth). This benefit package remains active at all times, including during and after climate shocks and stresses. It helps protect households against financial risk, lowers climate vulnerability and reduces the impact of climate shocks and stresses on children's nutrition.

In Uganda, UNICEF supports the local production of egg powder, including in the Karamoja region, which is severely affected by increases in the frequency and severity of floods. Egg powder is used as a nutrient supplement to prevent undernutrition in children aged 6–23 months living in households affected by food insecurity.

First Foods Africa and the climate crisis: Good for children, good for the planet

The climate crisis threatens to worsen child food poverty and is slowing – and at times reversing – global progress on ending child malnutrition. In sub-Saharan Africa, an additional 10 million children are projected to suffer from stunting by 2050 as a result of climate change. At the same time, unsustainable food systems are driving environmental degradation and climate change.

First Foods Africa is a signature initiative within UNICEF’s climate-nutrition agenda. It aims to shield children’s diets and nutrition from the impacts of climate change by improving access to and consumption of nutritious, safe, affordable and sustainable first foods for young children in Africa – both in anticipation of and in response to climate shocks and stresses.

First Foods Africa will prioritize and incentivize, where appropriate, the production of foods using ingredients that are climate-resilient and sustainably sourced. It will incentivize local production and provide sustainable alternatives to ultra-processed foods, which are linked to biodiversity loss, greenhouse gases and plastic pollution. For example, First Foods Africa will promote the formulation of small-quantity lipid-



based nutrient supplements for the prevention of undernutrition using locally-produced soy or chickpeas, which are climate-resilient local crops and good sources of protein.

These features make First Foods Africa an innovative and compelling bankable initiative under climate financing streams, which have minimally considered child food poverty and nutrition to date. With increasing strain on international nutrition budgets and growing calls for new financing mechanisms for nutrition, climate financing offers an opportunity to finance First Foods Africa.

Three pillars, six actions

Incentivizing local production	<ul style="list-style-type: none"> · Increase market availability and affordability of nutritious, safe and sustainable first foods specifically designed for young children. · Procure and effectively deliver nutritious, safe and sustainable first foods for vulnerable children in fragile and humanitarian settings in a timely manner.
Shaping policy environments	<ul style="list-style-type: none"> · Strengthen national and regional standards, laws and regulations for the formulation, promotion and distribution of first foods for young children. · Strengthen social protection systems to increase access to nutritious first foods for infants and young children from income-poor families.
Stimulating consumption	<ul style="list-style-type: none"> · Support social marketing actions to make locally-produced nutritious, safe and sustainable first foods desirable to families and communities. · Support social and behaviour change to create positive social norms and help families feed their young children locally-produced nutritious first foods.



ACTION AREA 2 | MITIGATION

Promote nutritious diets, nutrition services and practices that are beneficial for the planet

Climate mitigation refers to actions taken to reduce human impact on the climate, including strategies to reduce greenhouse gas emissions and enhance greenhouse gas sinks.

UNICEF assists governments, partners, communities and families to increase the availability, affordability and desirability of nutritious foods that have a low-carbon³⁵ footprint and are sustainably sourced, and to reduce emissions associated with children's diets, nutrition services and nutrition and care practices, according to context.

UNICEF's work in this action area focuses on the following key actions and priorities:

2.1 Increase the availability of nutritious and sustainable foods and reduce the carbon footprint of supplies for essential nutrition services

Food production and processing: Promote the availability of nutritious, safe, diverse and sustainable foods for children and their families, while promoting and supporting strategies and technologies to minimize greenhouse gas emissions during food production and processing.

Food standards and guidelines: Advocate for national standards for foods in public settings (e.g., school meals and food transfers) that are both appropriate to children's nutritional needs and sustainably produced, and support the development and implementation of food-based dietary guidelines that prioritize nutritious, safe and sustainable foods, appropriate to context.

Nutrition supplies: Engage with suppliers to reduce greenhouse gas emissions from the manufacture, packaging and transportation of nutrition supplies, including therapeutic foods, micronutrient supplements and nutrition equipment.

2.2 Build food environments for children that promote the consumption of nutritious, safe and sustainable diets

Food policies and fiscal measures: Advocate for and support the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions, food marketing restrictions, front-of-pack labelling, food subsidies and food taxes to promote nutritious, safe and sustainable diets and discourage the consumption of high-carbon ultra-processed foods.

School food environments: Support policies, standards and programmes to improve the availability and consumption of nutritious, safe and sustainable foods and restrict the availability and marketing of high-carbon ultra-processed foods and beverages in and around schools.

Palatable water: Advocate for and support policies and programmes that facilitate children's access to and consumption of free, palatable and unpackaged drinking water in households, schools and public spaces, as a low-carbon and healthy alternative to ultra-processed beverages.

2.3 Promote and support feeding and dietary practices that are beneficial for child nutrition and the planet, appropriate to context

Breastfeeding, feeding and dietary practices: Protect, promote and support breastfeeding to safeguard child survival and nutrition and reduce emissions associated with breastmilk substitutes; and implement large-scale social and behaviour change programmes to promote nutritious and sustainable diets and reduce demand for high-carbon, ultra-processed foods.

Food and nutrition education: Promote nutritious and sustainable diets among school children by integrating nutrition and climate education into school curricula, using school gardens to build knowledge and skills on the sustainable production of nutritious foods, and empowering youth to engage in climate and nutrition decisions that affect them.

Low-carbon cooking: Advocate for and promote access to climate-smart technologies for food preparation, such as clean-energy cooking stoves, which reduce carbon emissions, save women's time and can be used to promote the preparation of nutritious meals for children.

Highlights of UNICEF's work on mitigating greenhouse gas emissions through nutrition programming

In Burkina Faso, UNICEF is promoting the use of climate-friendly solar cookers to prepare meals for children in school canteens in the Plateau-Central region. Nutritious foods for these meals are sourced from school gardens and the local community. In addition, solar-powered autonomous water stations have been introduced in these schools.

In Kenya, UNICEF supported a local manufacturer to produce ready-to-use therapeutic food (RUTF). By reducing the reliance on imported RUTF, local production has lowered transportation costs, reduced the lead time for supply and helped achieve self-sufficiency in production. This has expanded the

value chain of RUTF to benefit the local economy, as well as reduced the carbon footprint of RUTF.

In Mexico, UNICEF supported the Government to develop the General Law on Adequate and Sustainable Food and to revise the National Food-based Dietary Guidelines, with a specific focus on the dietary needs of children from birth to adolescence, and on sustainable diets for planetary health. The Law and Guidelines encourage sustainable food production and sustainable diets with lower carbon footprints, benefiting both child nutrition and planetary health.

In Paraguay, UNICEF facilitated the establishment of school gardens in

rural schools to provide dynamic spaces for students to understand the value of land and water stewardship, develop green skills for sustainable vegetable and fruit cultivation, learn about nutritious and sustainable diets, and foster a deeper sense of environmental responsibility.

In Zimbabwe, UNICEF is supporting the use of fuel-efficient cookstoves to provide a cleaner and more environmentally-friendly method of cooking that reduces reliance on fossil fuels and wood. Caregivers in Care Groups (nutrition support groups) are trained to make and sell cookstoves to scale up the use of the technology and generate income.



ACTION AREA 3 | GOVERNANCE

Position child nutrition and climate action in evidence-based policies, plans and financing

Climate governance refers to purposeful mechanisms and measures for deciding, financing, managing, implementing and monitoring policies and measures at national and global levels that are aimed at preventing, adapting to or mitigating the risks posed by climate change.

UNICEF works to position the food and nutrition rights of children and women within climate action, integrate climate-smart nutrition considerations into policies and plans, and unlock financial resources.

UNICEF's work in this action area focuses on the following key actions and priorities:

3.1 Position the food and nutrition rights of children at the heart of climate action agendas at national, subnational and community levels

National leadership: Equip policymakers with the evidence they need to prioritize investments to protect children's nutrition from the impacts of climate change, and to reduce greenhouse gas emissions associated with diets, nutrition services and nutrition practices.

Partnerships and coordination: Build strategic partnerships and coalitions and strengthen multi-stakeholder and multisector coordination at national and subnational levels to influence policies, strategies, plans and budgets to protect and promote child nutrition and climate action.

Youth engagement: Engage with children and youth to strengthen their capacities to advocate for nutrition justice as a part of climate justice, support their efforts to build public support, including through social movements, and facilitate their access to decision-makers to influence public policy.

3.2 Integrate evidence-based climate-smart nutrition considerations into policies, strategies and plans

Data: Integrate indicators on child nutrition, climate and climate-related impacts into relevant national information systems and strengthen the capacity to analyse data to assess child vulnerability to climate-induced malnutrition and inform policies and programmes.

Studies and research: Generate evidence to inform the design of policies, strategies and plans, including studies to determine the benefits and trade-offs of climate adaptation and mitigation actions for child nutrition; and how to increase the capacity of systems to increase nutrition resilience to climate change and reduce emissions.

Policies, strategies and plans: Support governments to integrate evidence-based climate-smart nutrition actions into relevant sectoral and multisectoral policies, strategies and plans, including nutrition, climate, food safety and security, health, water and sanitation, education, social protection, emergency preparedness and response, and disaster risk reduction.

3.3 Unlock financial resources to support climate-smart nutrition actions, prioritizing the most vulnerable children

Investment cases: Develop 'bankable' investment cases with strategies and actions that strengthen nutrition resilience to climate change among children and adolescents, mitigate against food and nutrition-induced greenhouse gas emissions, and are scalable and financially viable.

International financing: Leverage international financing to support climate-smart nutrition actions, including climate financing mechanisms, such as the Green Climate Fund.

Domestic financing: Support governments at national and subnational level to increase the volume and efficiency of financing for climate-smart nutrition actions across nutrition-relevant sectors and ministries, including dedicated contingency funds to enable nutrition-focused anticipatory actions and rapid response to climate shocks and stresses.

Highlights of UNICEF's work on governance for child nutrition and climate action

In Ethiopia, UNICEF collaborated with the Government to conduct a Climate Landscape Analysis for Children to examine the ways in which children are vulnerable to climate change impacts, including malnutrition, and the extent to which existing laws, policies, systems and services protect children from the impacts of climate change. The analysis also identified opportunities for enhancing climate resilience and adaptive capacity in the country.

In Lao People's Democratic Republic, UNICEF and the Government conducted a synthesis of climate risk assessments for social service sectors, including health; nutrition; education; water, sanitation and hygiene; and child protection. This synthesis provided the evidence base to inform the mainstreaming of climate

adaptation/resilience and disaster risk reduction in programming, and to support the mobilization of climate financing for social service sectors.

In Mongolia, the UNICEF 'Fix My Food' movement engages and unites young people to counter the growing threat of unhealthy food environments. The movement recognizes young people as catalysts for change in raising awareness about the dangers that ultra-processed foods pose to nutrition and the planet, and campaigning for improved school meals and policy reform to protect food environments.

In South Sudan, UNICEF, the World Food Programme and partners are working to strengthen the nutrition information system across all components of the data

value chain. By incorporating indicators on nutrition outcomes and the multisystem determinants of nutrition – covering climate, food, health, education, water and sanitation and social protection – the system strengthens the capacity to monitor and respond to the threats of climate shocks and stresses on child nutrition.

In Zimbabwe, UNICEF provided technical support to strengthen the focus on children in the National Environmental Action Plan, the NAP and the NDC Implementation Plan. As a result, the NAP prioritizes nutrition and health services and water sanitation and hygiene, which are essential to children's nutrition, and the NDC Implementation Plan includes child markers in its monitoring framework.





PROGRAMMING PRINCIPLES

UNICEF's programming to position child nutrition within climate action at the global, regional, national and subnational levels is guided by seven principles: rights-based, equity-focused, gender equality, youth-inclusive, context-specific, evidence-informed and systems-centred.

Rights-based: UNICEF's approach is guided by the Convention on the Rights of the Child, including General Comment No. 26 on Children's Rights and the Environment with a Special Focus on Climate Change, which recognize children's right to survival, growth and development and to a clean, safe and sustainable environment. UNICEF supports governments, civil society, academia, the private sector and other duty-bearers –

including parents, caregivers and service providers – in respecting, protecting and fulfilling these rights and supporting a fair and inclusive transition to a sustainable, low-carbon world.

Equity-focused: UNICEF programming is guided by the conviction that reducing inequities is right in both principle and practice. The climate crisis disproportionately impacts children who are already most vulnerable to malnutrition, including those living in poverty with poor access to health and social services, and those affected by harmful social, cultural and gender norms. Policies and programmes that focus on reducing these disparities can improve both equity and impact.

General equality: UNICEF champions gender equality, striving to empower girls and boys, women and men within households and societies. Discrimination against girls and women heightens their vulnerability to malnutrition and the climate crisis by restricting access to essential resources – such as nutritious foods, income, land, social networks and essential nutrition services – while amplifying domestic burdens and limiting autonomy in decision-making. UNICEF collaborates with governments and partners to advance equitable laws, policies, systems, and services that confront and reduce gender inequalities.

Youth-inclusive: Climate action must be youth-inclusive to ensure that young people's voices, needs and solutions are at the forefront of addressing both child malnutrition and the climate crisis. Their involvement is crucial in bringing fresh perspectives, innovative ideas and a sense of urgency to climate efforts. Empowering youth to engage with decision-makers and participate in policy development nurtures a generation of environmentally conscious leaders and strengthens global and national initiatives to create a sustainable and resilient future for all.

Context-specific: UNICEF adapts its country programming to the context in which children and their families live, and the need and potential for climate adaptation, climate mitigation and positive child nutrition

outcomes. In particular, climate mitigation actions are appropriate in contexts where a reduction in the production, processing and consumption of high-carbon foods can be achieved without negatively impacting on the rights of vulnerable children and women, including their food and nutrition rights.

Evidence-informed: UNICEF uses the best scientific and programmatic evidence and guidance to advocate for and support evidence-informed policies, strategies, programmes and partnerships to minimize the impact of the climate crisis on child nutrition and vice versa. In addition, UNICEF supports the generation of data and knowledge to inform the design of new policies, programmes and innovative approaches and to study and evaluate the impact on climate adaptation and mitigation related to child nutrition.

Systems-centred: UNICEF's approach to climate and nutrition action is guided by the conviction that strong, resilient systems are needed to uphold children's right to survival, growth and development, and that these systems must use resources in a way that protects planetary health. UNICEF works to strengthen the capacity of five systems – food, health, water and sanitation, education and social protection – that have the greatest potential to improve nutrition resilience to climate change and to mitigate the impacts of nutrition policies and programmes on the climate.

FIVE REASONS FOR UNICEF'S LEADERSHIP AGENDA ON CHILD NUTRITION AND CLIMATE ACTION

- 1 The climate crisis is a nutrition crisis.**

Nutritious diets, sustainable food and health systems, and nutrition and caring practices have the potential to nourish children and nurture child and planetary well-being. Yet, in many parts of the world, poor diets and unsustainable food systems are driving malnutrition, climate change and environmental degradation. At the same time, the climate crisis threatens children's access to nutritious diets, essential nutrition services and nutrition and care practices.
- 2 Children's rights are an imperative.**

All children, everywhere, have a right to good nutrition and a sustainable planet. Children are growing up in a world that is increasingly unsustainable and made far more uncertain and dangerous by climate change. These threats compromise the realization of children's food and nutrition rights as enshrined in the Convention on the Rights of the Child and have the potential to reverse the progress on reducing child malnutrition in recent decades.
- 3 Children have unique vulnerabilities.**

Children are uniquely vulnerable to the climate crisis because they require access to diverse foods with high nutrient density, essential nutrition services, and nutrition and care practices to survive, grow and develop, all of which are impacted by climate change. In addition, exposure to climate shocks and stresses during pregnancy increases the risk of low birthweight infants. Actions that make children's diets, nutrition services and practices resilient to climate shocks and stresses must be central to climate action.
- 4 Unacceptable cost of inaction.**

Left unchecked, climate change will result in an additional 40 million children under 5 years of age affected by stunting and 28 million suffering from wasting by 2050. Combined with the anticipated rise in child overweight and obesity, as families turn to low-cost and energy-rich foods, and the impact of current food systems on the climate and environmental crisis, inaction will result in unacceptable costs to children, families, societies and the planet.
- 5 Children and adolescents are agents of transformation.**

Children and adolescents are not passive victims of the climate crisis; they are crucial stakeholders who are prepared to drive environmental action by raising awareness, advocating for policy change and holding decision-makers accountable. They must be empowered with education and skills to understand the crucial role of food systems for human and planetary health, and they must be given opportunities to engage with decision-makers at local and global levels to influence public policy.

UNICEF'S WORKFORCE: LEADING CHILD NUTRITION AND CLIMATE ACTION

UNICEF holds a unique role in addressing child nutrition and climate change. With its dedicated focus on children's rights, the organization is constantly navigating the intersection of child malnutrition and climate change effects, striving to ensure children have access to nutritious, safe, affordable and sustainable diets and essential nutrition services and benefit from positive nutrition practices.

UNICEF supports national governments and partners in more than 130 countries across seven regions to uphold children's right to food and nutrition and to a clean and sustainable environment, working to put these rights at the centre of the response to the climate crisis.

UNICEF has the largest nutrition workforce globally – more than 750 staff and 1500 resource persons in 2025 – including in settings that are most impacted by climate change, and a growing team committed to climate, environment, energy and disaster risk reduction. Together with UNICEF's multisectoral teams, comprising experts in health, water, sanitation and hygiene, education, child protection and social protection, this workforce facilitates programming across relevant systems to strengthen climate adaptation while

mitigating climate change. This includes tracking the status of child nutrition and the coverage of essential nutrition services for children and women.

UNICEF is a trusted adviser to national governments, an authoritative voice among institutions and people with power, and a respected broker among partners. It uses its advocacy capability to mobilize and influence decision-makers at global, regional, national and subnational levels to take evidence-based policy and programme actions to protect, promote and fulfil children's right to nutrition amidst the climate crisis. Aided by its mandate, UNICEF also works to engage and equip children, adolescents and young people to become nutrition and climate champions and to ensure their voices are heard at the highest levels.

As the designated Cluster/Sector Lead Agency for Nutrition, UNICEF works closely with governments and partners to prepare for, respond to and recover from climate shocks and stresses. When climate shocks or stresses occur, UNICEF's considerable in-country presence and organizational mechanisms to rapidly deploy staff, nutrition supplies and funds help ensure an effective and swift response for children.

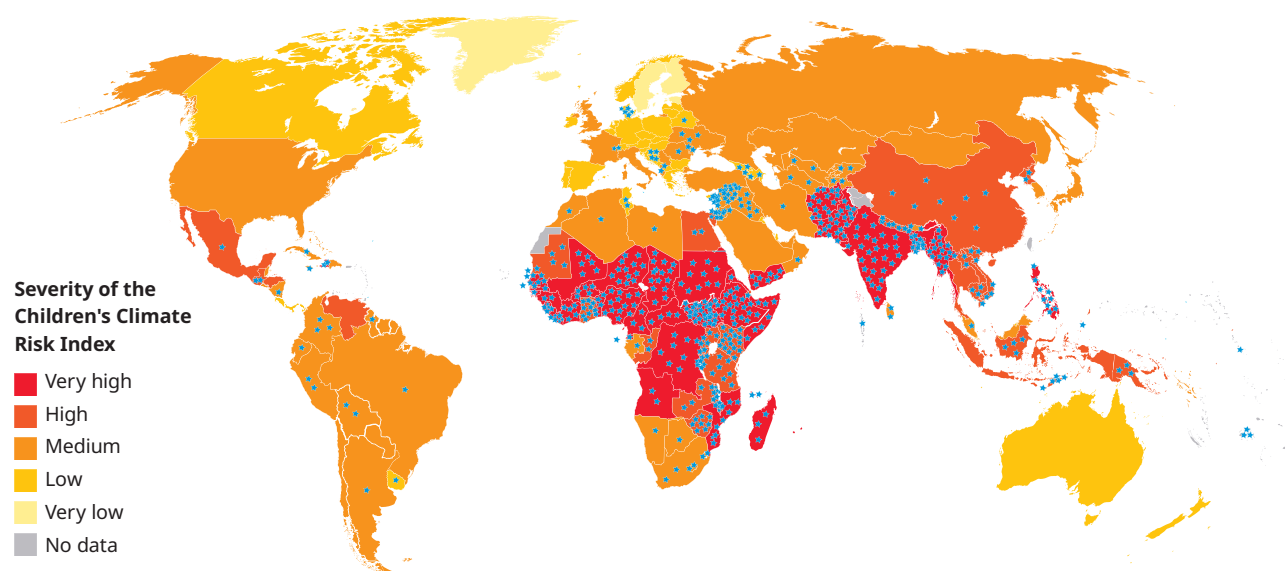


FIGURE 2: UNICEF's global nutrition workforce, 2025

Please note: This map does not reflect a position by UNICEF on the legal status of any country or territory or delimitation of any frontier.

GLOSSARY

Biodiversity	The variability among living organisms from all sources (e.g., land, marine and aquatic ecosystems), including diversity within species, between species and of ecosystems.
Carbon footprint	The total amount of greenhouse gas emissions caused by an individual, organization, service or product.
Carbon sink	A process or activity that removes greenhouse gases from the atmosphere by storing them in a different form. Examples include forests, soils, grasslands and peat bogs.
Climate adaptation	Actions taken to modify systems or practices to minimize harm from expected or actual climate change impacts.
Climate change	A change in climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.
Climate extreme	An occurrence of a weather or climate variable above (or below) a threshold value near the upper (or lower) ends of the range of observed values of the variable.
Climate governance	Purposeful mechanisms and measures for deciding, financing, managing, implementing and monitoring policies and measures at national and global levels that are aimed at preventing, adapting to or mitigating the risks posed by climate change.
Climate financing	Local, national or transnational financing – drawn from public, private and alternative sources of financing – that seeks to support mitigation and adaptation actions that will address climate change.
Climate justice	Justice that links development and human rights to achieve a human-centred approach to addressing climate change, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly.
Climate mitigation	Actions taken to reduce the human impact on climate, including strategies to reduce greenhouse gas sources and emissions and enhance greenhouse gas sinks.
Climate resilience	The ability of systems and communities to cope with, recover from and adapt to the effects of climate shocks and stresses.
Climate shocks	Sudden, unexpected or unpredictable acute climate events, such as extreme heat, floods, drought, windstorms and wildfires.
Climate-smart	Actions that aim to reduce greenhouse gas emissions and enhance resilience to climate change.
Climate stresses	Longer-term or chronic conditions, such as persistent droughts or gradual increases in extreme heat events.
Climate variability	Variations in the mean state and other statistics of the climate across all spatial and temporal scales beyond that of individual weather events.
Climate vulnerability	The degree to which a system, community or individual is susceptible to, or unable to cope with, the adverse effects of climate change, including climate variability and extremes.
Greenhouse gases	Atmospheric gases responsible for causing global warming and climate change, including carbon dioxide, methane, ozone and nitrous oxide.
Low-carbon diet	A low-carbon diet has lower greenhouse gas emissions associated with its production, processing, packaging and shipment. Low-carbon diets tend to be plant-based and contain no or minimal animal-source foods.

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