



Food and Agriculture
Organization of the
United Nations



CLIMATE ACTION AND NUTRITION PATHWAYS TO IMPACT [IN BRIEF]

1. KEY MESSAGES

- ▶ Climate change and malnutrition are two of the greatest challenges facing humanity today.
- ▶ A common set of risks and vulnerabilities across people and societies means that climate change is disproportionately impacting those who are already most vulnerable to malnutrition, including adolescent girls and women.
- ▶ Responding to climate change and malnutrition reveals a range of areas where the two interact and where addressing one can have positive impacts on the other.
- ▶ For example, within agrifood systems, the interplay of climate and malnutrition goes beyond solely considering climate's impact on food quantity, revealing several additional influences of climate change (such as reduced nutrient levels in foods).
- ▶ Thus, identifying such areas of interplay between climate change and malnutrition highlights important opportunities for integrated action (e.g. promoting healthy diets also helps protect biodiversity).
- ▶ Evidence shows that looking closely at systems that impact nutrition can provide important guidance for responding jointly to climate change and malnutrition, in ways that go beyond only looking at impacts on agrifood systems.
- ▶ Four key systems linking climate and nutrition are: agrifood, water, social protection, and health.
- ▶ Across all systems, there are many options for jointly addressing both climate and nutrition. Efforts should focus on scaling these responses, while generating more evidence to identify ways to achieve maximum impact.
- ▶ Responding to climate change and malnutrition with integrated action provides one solution to two of our biggest barriers to sustainable development.



Taking action across these four systems to address climate- and nutrition-related challenges will help reduce overall gender inequities, improve livelihoods and access to water and sanitation for women, and boost social protection and health services for women.



2. TACKLING CLIMATE CHANGE AND MALNUTRITION THROUGH AGRIFOOD SYSTEMS

Agrifood systems

Agrifood systems are the range of actors and interlinked activities related to the production, aggregation, processing, distribution, consumption and disposal of food and non-food products that originate from agriculture, forestry, or fisheries.

Agrifood systems and nutrition

Agrifood systems are the source of all food for human consumption and thus are the starting point for healthy diets and good nutrition. However, currently, agrifood systems are not enabling healthy diets for all. Globally, more than 3 billion people have poor diets, which has a high influence on disease and mortality rates worldwide.

Agrifood systems and climate change

Climate change both influences and is influenced by agrifood systems. Managing global agrifood sustainably has tremendous potential for mitigating the impacts of climate change, as doing so will reduce greenhouse gas emissions, deforestation, and freshwater use, and will help protect biodiversity. Currently, climate change threatens the ability to produce enough safe food for today's global population and is impacting the nutrients in foods as well as diversity and affordability of diets. So, joint nutrition/ climate responses across agrifood systems have clear and far-reaching benefits.

Integrated actions for positive impact on climate and nutrition:

- ▶ Diversifying crop, animal and aquatic production while protecting genetic resources.
- ▶ Managing soils sustainably.
- ▶ Reducing food loss and waste.
- ▶ Promoting consumer awareness and behaviour change actions.
- ▶ Enabling sustainable local food markets.
- ▶ Practicing sustainable public food procurement.
- ▶ Aligning policies and programmes across the agrifood systems for biodiversity-climate-water-nutrition benefits.
- ▶ Implementing food-based dietary guidelines that consider sustainability.



Reducing gender inequalities in livelihoods, access to resources, and resilience in agrifood systems.



3. TACKLING CLIMATE CHANGE AND MALNUTRITION THROUGH WATER SYSTEMS

Water systems

Water systems include streams, wetlands and other surface water and groundwater interactions with the terrestrial environments, from the rain clouds to the oceans.

Water systems and nutrition

Water systems provide clean drinking water, which is a key part of healthy diets. Water systems also provide the water needed for primary food production, safe food processing, storage and handling, and the water needed for sanitation and hygiene. In addition, adequate water, sanitation and hygiene (WASH) is an underlying driver of good nutrition. Adequate WASH decreases the risk of diseases such as diarrhea, cholera, malaria, respiratory infections, and neglected tropical diseases, which are drivers of undernutrition.

Water systems and climate change

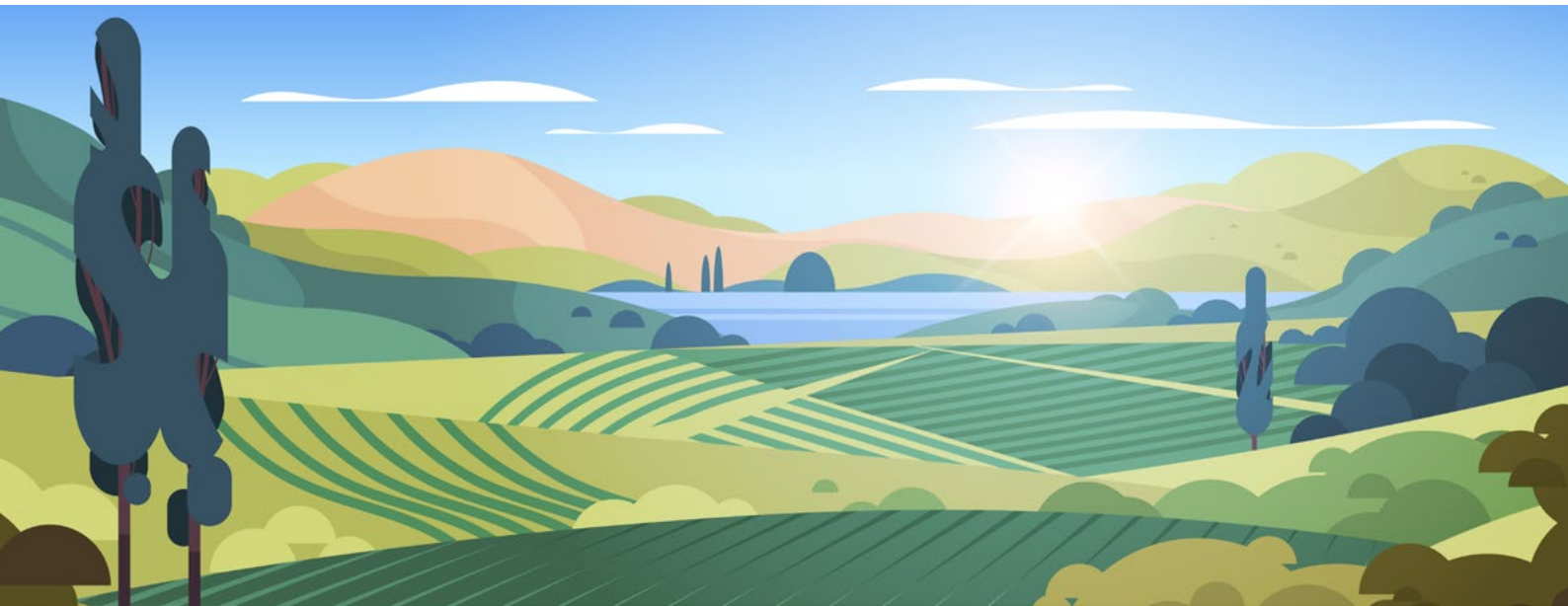
Better management of water systems can help people and communities reduce and prepare for the impacts of climate change. For example, improved infrastructure for sewage and drainage can reduce the impacts of flooding and prevent the spread of many water-borne diseases. Good water governance can also prevent water shortages resulting from climate impacts.

Integrated actions for positive impact on climate and nutrition:

- ▶ Promoting better holistic water governance that considers all water needs, including sanitation and hygiene.
- ▶ Improving water management through broad stakeholder engagement and scaling impact for interventions such as hydroelectric power.
- ▶ Integrating innovative technologies in water governance, management and action.
- ▶ Reducing potable water consumption by determining if it can be sourced, used and reused in different sectors.
- ▶ Updating WASH policies and plans to address climate change and build climate resilience.
- ▶ Including appropriate WASH financing as part of climate action.



Enabling gender-responsive WASH.



4. TACKLING CLIMATE CHANGE AND MALNUTRITION THROUGH SOCIAL PROTECTION SYSTEMS

Social protection systems

Social protection systems are a set of policies and programmes that address economic, environmental and social vulnerabilities to food insecurity and poverty by protecting and promoting livelihoods.

Social protection systems and nutrition

Social protection systems can provide access to nutritious foods, promote sustainable agrifood systems, healthy eating and childcare practices, and remove economic barriers to accessing health services, childcare, and sanitation services.

Social protection systems and climate change.

Strong social protection systems can hugely build resilience in the face of climate change, particularly for poor and marginalized households and communities. For example, mechanisms that protect and promote livelihoods, and support people's ability to save money will make communities less vulnerable to natural hazards and other shocks stemming from climate change.

Integrated actions for positive impact on climate and nutrition:

- ▶ Informing and designing social protection systems.
- ▶ Supporting relevant technologies and livelihood opportunities.
- ▶ Being inclusive in climate adaptation solutions, to ensure no one is left behind.
- ▶ Ensuring that disaster and climate change strategies factor in immediate food needs.
- ▶ Enabling livelihoods, especially for women.
- ▶ Helping workers, including female workers, engage with new technologies.



Using a gender transformative approach to address the vulnerability of women and girls.



5. TACKLING CLIMATE CHANGE AND MALNUTRITION THROUGH HEALTH SYSTEMS

Health systems

Health systems include efforts and individuals engaged in a wide range of activities from individual care support to legislation and policy development.

Health systems and nutrition

Strong health systems provide a platform for curative care in the face of malnutrition and nutrition-related diseases. They are also a platform for critical preventative care such as breastfeeding support, growth monitoring of children, nutritional risk assessment of adolescents, and life-cycle specific food and nutrition promotion.

Health systems and climate change

Strong health systems and facilities are resilient to climate change, with infrastructure that can withstand climate impacts, and the human and financial resources to manage disruptions such as outbreaks of unexpected and novel illnesses. Sustainable management of health systems and facilities can also lessen the negative effects of climate change on nutrition.

Integrated actions for positive impact on climate and nutrition:

- ▶ Increasing availability, timeliness and use of data identifying health risks from climate change.
- ▶ Fully integrating essential nutrition actions into services at primary, secondary and tertiary health service levels.
- ▶ Reducing the environmental impact of health systems.
- ▶ Practicing nutrition-sensitive, climate-smart food procurement in healthcare workplaces;
- ▶ Fully employing a One Health approach, i.e. considering health problems holistically across species and sectors.
- ▶ Strengthening early warning systems and related measures to include appropriate food safety and nutrition indicators;



Mainstreaming gender in health systems' climate change response activities.

WAY FORWARD

Agrifood, water, social protection, and health systems all contribute to improved nutritional outcomes. Moreover, all four core systems have a complex relationship with climate change, where they are affected by climate impacts but, when managed sustainably, can also significantly reduce the impacts of climate change, through lower greenhouse gas emissions, protection of natural resources and biodiversity, greater resilience for communities, and other benefits. Managing these four systems in climate-adaptative ways, therefore, can help to address climate change as well as serious nutritional challenges. However, programmes and projects specifically designed to tackle climate and nutrition jointly are still limited. The potential to address these two major challenges in an integrated way is enormous and there are many options for action across the four systems that, based on evidence, could result in positive outcomes for both climate and nutrition.

The Food and Agriculture Organization of the United Nations, together with partners, is taking the lead in generating and sharing evidence to fill some of the existing knowledge gaps. Addressing multiple national and global priorities simultaneously and generating benefits across the Sustainable Development Goals requires integrated policy and action. Climate action and nutrition provide multiple entry points to achieve these goals.