

# Improving physical and economic access to healthy and sustainable foods

## Overview

Nearly 10% of the world's population is affected by hunger. Approximately 735 million people live with food insecurity, hunger and malnutrition due to inadequate food access, and more than 3 billion people cannot afford a healthy diet. Of all continents, Africa bears the heaviest burden of food insecurity with 1 in 5 people facing hunger in 2021. Meanwhile, more than 2 billion people worldwide are overweight or obese.

One major component of food security – a complex, multifaceted concept – is physical and economic accessibility (i.e., proximity and affordability) to healthy and nutritious foods. Overall, food security and adequate nutrition is “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” Physical access refers to the availability and proximity of diverse food options in specific locations. Policies that address physical access to healthy foods typically aim to improve access to healthy food choices and prevent food deserts or food swamps. Economic access refers to the affordability of the foods that are available for purchase and consumption, and related policies aim to improve the prices of available foods – particularly healthy, nutritious and sustainable choices.

# Concrete measures to implement

Promoting and optimising physical and economic access to healthy and sustainable foods can boost local economies, improve environmental sustainability and support small-scale producers. Specific attention should be paid to implementing policies that support and protect smallholders, family farms, peasants, Indigenous Peoples, local communities, women, and youth. National and local policy actions for building and strengthening sustainable and healthy food options include the following measures:

- Food trade and supply chains:
  - Design trade policies at national and sub-national levels to prioritise the supply of sustainable, nutritious, safe, and diverse foods while considering the context-dependent benefits of local and international supply chains, the protection of smallholder farmers and fishers and food price stability.
  - Upgrade and maintain markets that provide nutritious and sustainable foods to all communities, especially low-income and historically marginalised communities. Ensure these communities have the infrastructure needed for food safety, including clean water, public toilets and waste removal services.
  - Implement high quality waste management practices and markets through a circular economy approach. See also *Building circular food systems in cities*.
  - Improve connectivity between rural, peri-urban, and urban supply and demand centres through infrastructure and market linkages (e.g., improved roads, public transit routes), markets (e.g., urban centres) and technologies (e.g., e-commerce options) to provide consumers a greater diversity of nutritious foods and support local economies. Particular attention should be paid to improving connectivity in areas where multidimensional poverty is widespread. See also *Developing and improving agriculture in urban and peri-urban areas and enhancing local food markets*.
  - Promote environmentally friendly kitchen gardens in urban and peri-urban settings.
- Community and city planning:

- Enact laws and regulations that mandate the integration of food accessibility into community design processes (e.g., land-use planning, zoning and the design of new community developments). Communities should be designed to include fresh produce grocery stores, healthy corner stores, community, school and worksite gardens, food marts and farmers' markets.
  - Use zoning laws to regulate the location and density of fast-food restaurants in neighbourhoods and near schools, and to eliminate barriers to sustainable and healthy food vendors, community gardens and farmers' markets; and eliminate barriers for farmers and fishers for selling or providing whole uncut fruits or vegetables.
  - Consider food accessibility in other policy domains including (but not limited to) rural and urban tourism, transportation, infrastructure building and waste management.
  - Proactively plan for food environments where urbanisation and rapid demographic growth occurs to ensure that all populations – and in particular, populations most at risk of malnutrition and food insecurity (e.g., children) – have equitable access to adequate, sufficient, culturally appropriate, affordable, nutritious and safe foods for healthy diets.
- Public procurement:
  - Implement local and national food procurement policies that discourage the consumption of unhealthy, unsustainable foods. Simultaneously increase healthy vending options and include healthy, sustainable and climate-positive eating guidelines. See *Integrating healthy and sustainable diets in public procurement*.
- Dietary guidelines:
  - Mandate that local health departments implement policies supporting access to fresh fruits and vegetables (e.g., farmers markets). Engage community partners to identify community champions, entrepreneurs, environmental organisations and other stakeholders in local food markets. See *Introducing food systems-based dietary guidelines*.
- Public finance:

- Repurpose subsidies for agricultural and fisheries practices that are harmful to the environment, climate and public health towards promoting environmentally friendly inputs, practices and products.
- Use financing and tax incentives to increase equitable access to healthy and sustainable food through small loans and grants to corner stores to purchase refrigeration for fresh food produce (e.g., fruits, vegetables and dairy) and financing for start-up costs for grocery stores in food deserts to make food prices affordable.
- Leverage fiscal space through measures (e.g., progressive taxation), as appropriate, to prioritise public services and equitably distribute available resources for supporting the communities most impacted by malnutrition and food insecurity, while also addressing the roots of inequality.
- Increase funding to develop quality-controls for food markets.
- Increase sustainable, responsible investment in skills development, vocational programs, apprenticeships, job pairing, programming for mentorship, entrepreneur coaching services, business incubation services, business education and programs on management consulting. Investment should focus on improving connections between markets and the populations facing inequalities, including Indigenous Peoples, local communities, women and youth.
- Invest in scaling up decent rural farm employment, non-farm employment and livelihood opportunities, especially focused on women and youth. Specific action could be to enhance investments in entrepreneurship, enterprise, smallholders and family farms to ensure equitable, inclusive, and decent opportunities exist to earn income, both inside and outside of agricultural sectors.
- Build partnerships with foundations, nonprofit organisations and businesses to invest in infrastructure development for urban gardens to promote equitable access to healthy and sustainable foods in the communities.
- Establish or increase funding for outreach, education and transportation to improve access to farmers' markets and farm stands by residents of lower-income neighbourhoods.
- Offer incentives (e.g., public recognition or endorsements) for restaurants that promote healthier options in several ways (e.g., by

offering healthier and sustainable foods, serving age-appropriate portion sizes or making healthier menu options the default).

- Establish, promote and invest in universal access to social protection programmes – including cash transfers, food vouchers and food delivery – to increase the availability, affordability and appeal of nutritious and sustainable foods, while providing direct support to bolster nutrition and food security. For instance, implement incentive programs such as vouchers redeemable for specific quantities of fruits and vegetables, or programmes that match funds for families to acquire additional food produce. It is important that programmes be designed based on analysis to understand and address the particular barriers for communities to access social protection systems. Programs should also encourage community-based organisations and stakeholders to participate in designing, implementing and monitoring the social protection policies or programs.



View of an over crowded market, Wan Chai, Hong Kong, China 2007

## Enabling governance measures

Effective implementation of policy measures to build and maintain equitable accessible and affordable food environments at the local and national level

requires policy enabling conditions and actions, including:

- Promote and support the creation of farmer cooperative to enable co-investment and sharing of the costs for farm inputs and the marketing of their products. Cooperatives can strengthen farmers' and fishers' positions in the supply chains and create a platform for sharing know-how with each other.
- Enhance stakeholder collaboration by building and maintaining platforms for engaging farmers and fishers, food suppliers, retailers, consumers and others at the local level, to ensure effective policy design and implementation.
- Promote the use of digital technologies such as smartphones and social media platforms to improve cooperation and horizontal coordination between farmers and fishers, retailers and consumers.
- Encourage networking and relationship building, for example by supporting local food marketplaces, can connect urban and rural communities and strengthen relationships between market actors. Local food markets also offer opportunities to showcase local food traditions.

## Tools and MRV systems to monitor progress

### Calculators and trackers

#### The Net Food Miles indicator

Calculates the Net Transportation Distance in kilometers to transport 1 kilogram of purchased food.

Link: <https://www.foodmiles.com/>

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### Guides and handbooks

#### Life Cycle Assessment (LCA)

A methodology related to industrial products and processes, covering transportation, the environmental performance of buildings through their life stages and farm-level assessments of production systems.

Link: <https://www.sciencedirect.com/topics/earth-and-planetary-sciences/life-cycle-assessment>

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## Farm Sustainable Data Network

Network of collected data on farms in the European Union that includes data on their environmental and social practices, serving as a benchmark for farm performance and giving farmers advice and guidance.

Link: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12951-Conversion-to-a-Farm-Sustainability-Data-Network-FSDN-\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12951-Conversion-to-a-Farm-Sustainability-Data-Network-FSDN-_en)

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## Mitigation benefits

Enhancing physical and economic access by shortening supply chains produces climate change mitigation benefits in several ways. Minimising the distance food travels reduces greenhouse gas emissions from transportation. Additionally, physical proximity creates a more responsive and agile supply system, thereby reducing food waste and its associated emissions, while also reducing car use by consumers for food purchase. Economic accessibility promotes sustainable consumption by making local, sustainably produced foods affordable and readily available, potentially decreasing demand for imported, high-emissions foods. Furthermore, equitable policies that improve local food access help to bolster local economies and, as a result, reduce communities' vulnerabilities to global market shocks, which themselves can lead to inefficient resource allocations and wasteful emissions.

## Other environmental benefits

- Local food production tends to use eco-friendly practices, minimising the use of harmful pesticides, synthetic fertilisers and excess water and energy. Using fewer or no pesticides preserves vital resources like soil, water and air.
- Local food production often promotes land use that accommodates diverse ecosystems, supporting wildlife and plant species.





## Adaptation benefits

- Diversified foods through Indigenous or traditional farming practices and systems can cope with stresses such as drought, heat, flooding, salinity and shorter growing seasons, as well as pests associated with climate change.

## Other sustainable development benefits

- SDGs 1 & 8 (No poverty & Decent work and economic growth): Shortened and nutrition-sensitive supply chains strengthen local economies by increasing farm profitability, reducing intermediary costs and generating local jobs, thereby reducing poverty.
- SDGs 2 & 3 (Zero hunger & Good health & well-being): Direct access to local foods enhances affordability, improving food security and nutrition, while offering fresher, nutrient-rich products for better health.



- SDGs 2 & 12 (Zero Hunger & Responsible consumption and production): Reduced transportation and storage from localised food systems can minimise food waste, promoting sustainable agriculture and responsible consumption.
- SDG 4 (Quality education): Improved and equitable access to food with high dietary quality supports the improved cognitive development of mothers, children and future generations.
- SDG 5: (Gender equality): Local food systems often empower women in communities, supporting gender equality.
- SDG 10 (Reduced inequalities): Enhancing equitable food access in marginalised areas tackles distribution inequalities.
- SDG 11 (Sustainable cities and communities): Short and nutrition-sensitive supply chains in urban areas reduce emissions and connect urban-rural communities.
- SDG 13 (Climate action): Less transportation in localised markets means a reduced carbon footprint.
- SDG 15 (Life on land): Localised agriculture conserves biodiversity and ensures sustainable land use.

## **Main implementation challenges and potential negative externalities and trade-offs**

- Infrastructure limitations: Substantial upfront investment is required for establishing and maintaining infrastructure for local food markets and shortening nutrition-sensitive supply chains.
- Steep competition from larger producers: Larger, longer supply chains often benefit from economies of scale, which often make their products cheaper than those produced within smaller, local systems. Local systems might struggle to compete with these prices.
- Logistical challenges: Efficiently organising direct deliveries or on-farm sales require careful logistical planning.
- Vulnerability to external shocks: Localised, nutrition-sensitive supply chains can be particularly vulnerable to external shocks such as severe weather events and diseases.
- Unfair trading practices: The concentration of power, specifically with large-scale retailers controlling significant portions of the food market,

often result in practices that undermine the livelihoods of smaller producers, which can range from delayed payments to unreasonable demands on quality without price adjustments.

- **Administrative burdens:** Engaging in direct sales might come with additional paperwork and costs linked to complying with food hygiene legislations and safety standards.
- **Higher costs:** Higher production, processing and transportation costs related to food access policies may prove challenging.
- **Adverse environmental consequences:** An over-reliance on local farming could lead to a loss of essential ecosystem services due to land-use changes that reduce local natural habitats. An increase in local production might disturb local ecosystems, wildlife habitats and carbon sinks.

## Measures to minimize challenges and potential negative externalities and trade-offs

- Bargaining power imbalances can be addressed through collective bargaining, encouraging small producers to form cooperatives or associations to enhance their bargaining power with larger buyers.
- Implement legislative protections that prevent large buyers from exploiting smaller producers. Develop labor protection policies, programs, and strategies for supporting workers in food systems and strengthen social protections.
- Reduce market access limitations through promoting and developing local farmers markets and dedicated spaces for direct sales, and support online platforms tailored to small producers.
- Offer grants for small-scale producers to invest in necessary infrastructure and develop shared distribution and logistics platforms.
- Create oversight regulations that define and penalise unfair trading practices and provide a platform where unfair practices can be reported to foster transparency in the supply chain.
- Enhance efficiency and sustainable practices by encouraging local producers to adopt sustainable agricultural practices, such as permaculture, agroforestry and regenerative agriculture, that can help reduce the costs of production and processing.
- Establish conservation agreements through working with farmers to set aside portions of land for conservation, avoiding a total loss of natural

habitat and ecosystem services.

- Promote agroecological landscapes through a mix of agriculture and natural lands to preserve ecosystems and wildlife habitats.
- Establish community-supported agriculture by encouraging local communities to invest in and support local farms, ensuring a consistent demand for produce and reducing the need for frequent transportation to multiple markets.
- Invest in climate-resilient infrastructure that can withstand climate extremes.
- Conduct climate risk assessments and regularly evaluate the vulnerability of the local food system to climate risks, adapting strategies accordingly.
- Promote sustainable transportation and encourage the use of electric or biofuel-powered delivery vehicles to reduce the carbon footprint of deliveries.
- Create partnerships and collaborations of food distribution by forming inclusive alliances with other local producers, cooperatives and distributors to pool resources and streamline distribution efforts, reducing individual transportation needs and costs.
- Establish inclusive organisations for producers of healthy, sustainable foods.

## Implementation costs

- **Farmers Market**: operating costs include permits, site rental, staffing and marketing that, depending on size and location of the market, can vary from USD 3,000 – 5,000 for smaller markets to USD 20,000 – 30,000 for larger markets.
- **Community-Supported Agriculture**: costs can range from USD 1,000 to over USD 50,000.

## Interventions in practice

**The Food Acquisition Programme (PAA)** in Brazil was launched in 2003 and has been a successful example of public policy to increase access to healthy and affordable food. The programme aims to guarantee food and nutritional security for the Brazilian population and, at the same time, to strengthen food

production by family farmers. Through the programme, the government directly and exclusively purchases produce from family farmers and delivers to communities that are in need, as identified by local welfare services including entities in the social assistance network, community kitchens, day care centers and public and philanthropic health, education and justice networks. The produce purchased under the Programme have been mainly fruits and vegetables and other minimally processed foods, such as seasonings, beef meat, cassava flour and pasteurised milk. The produce contributes to food security and nutrition for its direct beneficiaries and the promotion of a more sustainable food system by paying higher prices for sustainably produced foods.

New York City has implemented initiatives like Green Carts, the Healthy Bodega Initiative and the Food Retail Expansion to Support Health (FRESH) to improve fruit and vegetable consumption among its lower-income residents. The Green Carts programme, which provides licenses to vendors for selling fresh produce in low-income areas, has been successful in reaching its target demographic and has led to an increase in fruit and vegetable consumption. The Healthy Bodega Initiative has similarly improved the availability and sales of healthier food options like low-fat milk and fresh produce in local bodegas, while FRESH offers zoning and financial incentives for grocery stores in underserved neighborhoods, resulting in 80.4% of shoppers reporting increased purchases of fruits and vegetables.

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