POLICY BRIEF

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Designing Food and Agricultural Policies for Improved Nutrition

Just Rural Transition

Overview

Providing healthy and nutritious food for a growing global population, while protecting the natural systems that sustain life, is one of the critical challenges of this decade. The United Nations Sustainable Development Goals 2022 Report alerts that **1 in 10 people worldwide are suffering from hunger** and nearly 1 in 3 – a staggering 2.3 billion people – lack regular access to adequate food (United Nations 2022). **Global food security has further weakened in 2022** as the war in Ukraine has severely restricted the country's considerable agricultural exports, leading to international spikes in the price of cereals, vegetable oil and meat, as well as the raw materials for fertilizers (Welsh 2022). The Just Rural Transition (JRT) initiative brings together food producers, governments, businesses, investors, civil society and rural and indigenous peoples to champion equitable solutions to these food systems challenges. In order to decisively act upon these issues and achieve the global goal of **Zero Hunger and Improved Nutrition** by 2030, government officials must be at the forefront of these efforts.

This brief outlines practical steps governments can take through policy action to strengthen food and nutrition security.

Our key recommendations include:

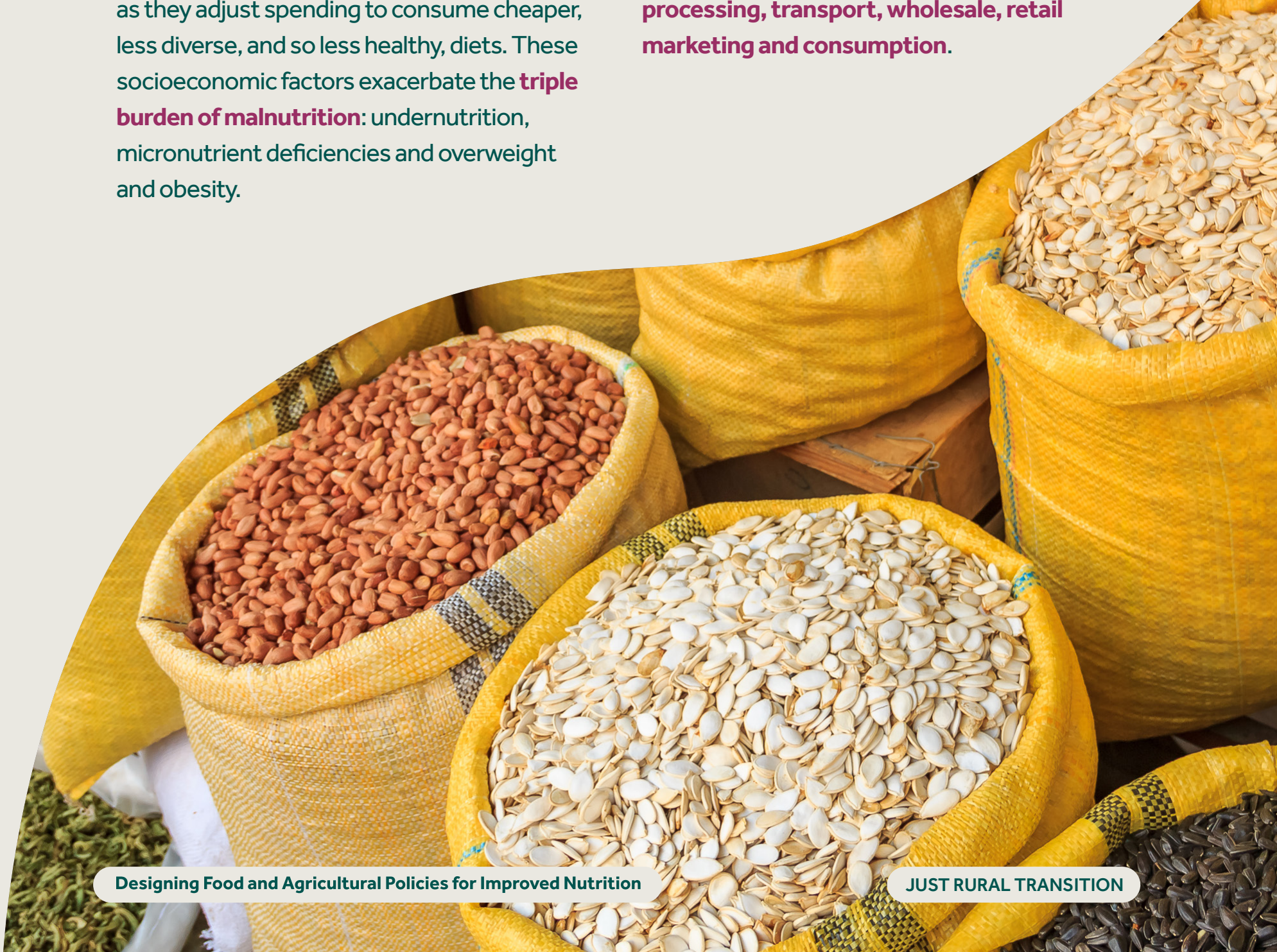
- **Promote diversity in production and consumption** of crops, livestock and fisheries, while ensuring access and affordability.
- **Bring stakeholders together** in an inclusive, empowered, evidence-driven process of developing joint actions throughout the whole food production and consumption chain.
- **Understand the important role of consumers** in agrifood systems by analysing current consumption patterns, nutrition information and how individuals and households access food.
- **Consider the use of financial incentives and disincentives** such as subsidies and taxes to encourage nutritious, healthy and affordable diets.
- **Design holistic policies and programmes** to reflect the fact that livelihoods, agrifood systems and causes of malnutrition cut across geographies and sectors.

The challenge: food insecurity and malnutrition

Global food security has deteriorated in recent years, with the number of people going hungry rising from 690 million in 2019 to **828 million** in 2021 (Statistics Division, Department of Economic and Social Affairs, United Nations 2022). The pandemic's adverse impacts on employment and income, paired with global food system challenges linked to Russia's invasion of Ukraine, have worsened the situation for many households, as they adjust spending to consume cheaper, less diverse, and so less healthy, diets. These socioeconomic factors exacerbate the **triple burden of malnutrition**: undernutrition, micronutrient deficiencies and overweight and obesity.

The solution: food and agriculture policies to improve nutrition

In recent decades, agricultural policies have focused on increasing production of staple crops, with less attention to the impacts of such approaches on human health or the environment (both terrestrial ecosystems and climates). **The following recommendations illustrate how decision makers can centre improved nutrition in their policies, programmes and investments across the entire food system: production, storage, processing, transport, wholesale, retail marketing and consumption**.



Domain	Policy	Example
Agricultural production	**Public research**	Increasing R&D funding for nutrient-rich crops (increasing productivity, nutrient density, drought tolerance, biofortification etc.).
	Input subsidies	Incentives (like seed vouchers) to reduce farm-level transaction costs of adopting nutrient-dense crops.
	Agricultural extension	Promotion of crop diversification that ties into established extension aims, such as integrated pest management.
Nutrition transformation	**Nutrition education**	Media campaigns and labelling laws that inform consumers of healthy and unhealthy food choices. Programmes to improve school-age children's diets and generate a greater informed demand for healthy foods.
	Food quality and safety standards	Regulations and standards, based on robust data analytics and scientific research, that prevent the emergence of food-borne toxins.
	Safety nets and social protection	Cash transfers or voucher schemes and social programmes to encourage the purchase and consumption of healthy foods for vulnerable households.
Market and trade systems	**Agricultural trade**	Taxes and non-tariff barriers to trade can raise the prices of unhealthy, low-nutrient foods, while other policies can incentivize the importation of healthier, nutrient-rich and environmentally friendly foods.
	Infrastructure	Policies that influence the movement, storage and marketing of food affect its regional and seasonal availability, storage time (e.g., presence or lack of cold storage), costs and the population groups that demand it.
	Agribusiness and food prices	Incentives that nurture the emergence of a robust SME sector can pay dividends to consumers in the form of low food prices and high food quality. Taxes can disincentivize the consumption of unhealthy foods, while price ceilings can ensure the price of staple foods is predictable.

Table adapted from Global Panel on Agriculture and Food Systems for Nutrition (2014).

Agricultural production

One of the most important opportunities for improving nutrition is ensuring that agricultural production is geared toward providing **diverse, safe, nutritious foods that are accessible and affordable** – whether from the general market, farmers' own production or social programmes. Understanding how agriculture can affect nutrition gives an insight into how policies and programmes can contribute to achieving healthy diets, whether by increasing the quantity or quality of food.

By repurposing public support, governments can incentivize the production of more nutrient-rich foods. **Effective research and programmes should focus on indigenous and local knowledge to identify nutritious crops** that are well-adapted to local environmental conditions, climate-smart, resilient to pests or produced countercyclically to the lean season, buffering any declines in income. Decisions on these mechanisms should take full account of the social, financial and economic costs and benefits, considering the extent of their efficiency in addressing any market distortions or externalities they may create, and the distributional effects of such interventions.

Moreover, **governments need to assess synergies and trade-offs when repurposing policies and support to promote nutrient-enriched crops**. For example, in Nigeria and Tanzania, the promotion of iron-fortified beans, orange-fleshed sweet potatoes, vitamin-A cassava and maize and high-zinc beans increased productivity and incomes and addressed micronutrient deficiencies in the local population (Friesen et al. 2022) – all examples of synergies. By contrast, promotion of nutritious crops that do not suit local agronomic conditions or in places where there is insufficient demand can negatively affect employment and livelihoods. Policies that intensify production of staple crops through chemical fertilizers and pesticides can boost productivity or urban food security in the short run. However, these gains come at the cost of environmental sustainability and resource relocation from efforts to increase local capacities or change systems that would be more economically and socially sustainable in the long run.

Nutrition transformation

Improving nutrition also depends on consumer demand. The food system is geared toward what consumers want to eat, which is influenced by the broader food environment, including the affordability, availability and desirability of certain types of food.

Governments play a key role in setting nutrition-related goals and the strategies needed to meet them. **Through investment in comprehensive data analytics and research regarding current diets, policymakers can identify gaps in the broader food environment and create opportunities to improve nutrition**. The State of Food Security and Nutrition in the World 2020 illustrates the necessity of a whole range of policies tailored to raise awareness and influence consumer behaviour in favour of healthy diets, possibly with important synergies for environmental sustainability (FAO et al. 2020).

Opportunities to improve the food environment can emerge from **taking a closer look at how and where consumers obtain their food**. Companies may see opportunities for new markets, including

the promotion of healthier foods. Public procurement programmes, including income support, vouchers, school nutritious food initiatives and informational workshops, can also increase demand for nutritious foods and educate participants about healthy diets. Additionally, some countries have implemented food labelling and nutrition education to help consumers navigate nutritious, sustainable and locally produced foods and their alternatives more successfully (Global Panel on Agriculture and Food Systems for Nutrition 2017a, 2017b).

Governments and civil society may come together with the private sector to identify ways to produce and deliver healthier foods, or make fresh, local, seasonal foods more accessible, such as through the promotion of farmers' markets. They can **establish regulations on food and product advertising, especially to children, or design appropriate price interventions to incentivize healthier choices**. Even though it can be challenging to change food habits, and messages should be well-designed to fit the particular food context, food labelling and nutrition education can help consumers navigate the food environment successfully.

Market and trade systems

Policymakers can also look for opportunities to promote nutrition through programmes that improve food storage, processing, distribution and transport and incentivize business and investment innovation. Such opportunities emerge from technological advancements, knowledge-sharing and public investment.

There are several **technological innovations that can improve the nutrition quality of food**. The use of products like the biocontrol agent Aflasafe can prevent the contamination of crops with aflatoxin. Purdue Improved Crop Storage bags hermetically seal bags of dry grain and reduce insect damage, improving product safety and quality and reducing loss. These practices increase usable yield, reducing per unit costs and potentially reducing price (CGIAR 2019).

Governments can implement **subsidies to agrifood sectors that concentrate efforts on producing sustainable and nutritious goods**. Besides safety and quality trainings for small- and medium-sized enterprise producers, government investment in public infrastructure such as transportation, roads and storage facilities allows for a greater variety of products to reach consumers at lower prices and opens the door for collaboration with the private sector. These public–private partnerships are a potential solution for dietary and nutrition challenges (Fanzo et al. 2020). Such is the case of the Egg Farmers of Canada partnership with the Canadian government and McGill University to involve investment, research and implementation synergies to maximize eco-friendly production, deliver high-quality raw and elaborated produce and invest surplus by empowering vulnerable communities through philanthropic support (Egg Farmers of Canada 2018).

By diversifying supply chains in terms of products and channels, governments, private entities and communities can cooperate to address food insecurity and malnutrition with special attention to the most vulnerable. This could be achieved by, for example, directly linking producers and consumers in local markets. Renewed attention to supply chain costs and efficiencies can help guarantee that these foods are affordable and acquired by consumers of all income classes. Producers could be connected to distributors who better reach fresh markets or community kiosks and small stores frequented by the peri-urban and urban poor. Such diversification can also improve supply chain resilience, benefiting both producers and consumers.

References

CGIAR. 2019. *Alfasafe: Safeguarding health and livelihoods with biocontrol technology in Africa*. Annual Report, Rome: CGIAR. Accessed 05/10/2022. https://www.cgiar.org/annual-report/performance-report-2019/aflasafe

Egg Farmers of Canada. 2018. "Incredible Innovation is Happening in the Egg Sector." Article, Ontario: Egg Farmers of Canada. Accessed 05/10/2022. https://www.eggfarmers.ca/category/innovation

FAO, IFAD, UNICEF, WFP and WHO. 2020. *The State of Food Security and Nutrition in the World*. Report, Rome: FAO.

Friesen, V., Mudyahoto, B., Birol, E., Nyangaresi, A.M., Reyes, B. and Mbuya, M.N.N. 2022. *GAIN Working Paper Series 29 - Using a programme impact pathway to design, monitor and evaluate interventions to commercialise biofortified crops*. Working Paper 29, Geneva: The Global Alliance for Improved Nutrition (GAIN).

Global Panel on Agriculture and Food Systems for Nutrition. 2014. *How can agriculture and food systems policies improve nutrition?* Technical Brief, London: Global Panel on Agriculture and Food Systems for Nutrition.

Global Panel on Agriculture and Food Systems for Nutrition. 2017a. *Improving Nutrition through Enhanced Food Environments*. Policy Brief No.7, London: Global Panel on Agriculture and Food Systems for Nutrition.

Global Panel on Agriculture and Food Systems for Nutrition. 2017b. *Policy actions to support enhanced consumer behaviour for high-quality diets*. Policy Brief No 8, London: Global Panel on Agriculture and Food Systems for Nutrition.

Statistics Division, Department of Economic and Social Affairs, United Nations. 2022. *Sustainable Development Goals Progress Chart 2022*. New York: United Nations.

United Nations. 2022. *The Sustainable Development Goals Report 2022*. New York: United Nations.

Welsh, C. 2022. *The Russia-Ukraine War and Global Food Security: A Seven-Week Assessment, and the Way Forward for Policymakers*. Article, Washington DC: Center for Strategic anf International Studies. Accessed 05/07/2022. https://www.csis.org/analysis/russia-ukraine-war-and-global-food-security-seven-week-assessment-and-way-forward

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