Sustainable Agriculture, Resilient Food Systems, and Climate Action

Food System Diversification as a Key to Implement the COP 28 Emirates Declaration

At UNFCCC COP 28, more than 130 countries have endorsed the COP 28 UAE Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action. COP 28 has finally elevated the importance of food systems to a climate-resilient future for all. The Environmental Defense Fund and TMG Research gGmbH submit that food system diversification is key to achieve the objectives laid out in the Declaration.

We know that for food system diversification to succeed, several barriers must be overcome. This paper raises awareness on these various barriers and focuses on the path towards creating new alliances and increasing our ability to transition to more climate-resilient food systems. This paper also builds on a highly consultative process involving global representatives that began at the World Food Prize conference in October 2023. A full edition of this paper, including frontline voices case studies, analysis, and progress out of COP28 and other important convenings, is forthcoming in 2024.

Background

Most of the world's food supply hinge on a few crops. Wheat, maize, and rice alone provide around 50% of the global population's caloric intake. Approximately 90% of calories consumed worldwide come from only about 25 crops.

Limited diversity in global food systems heightens vulnerability to climate change impacts. Diversifying crops and production practices builds resilience against such impacts.

Food system diversification requires changes across the value chain, such as securing marginalized peoples' rights to natural resources, seed supply, accessible rural service systems, processing, and consumption.

Diverse production practices can support ecosystem services, reducing reliance on synthetic pesticides and fertilizers, which often involve fossil fuel consumption and impact soil health, water, and climate.

The Path Forward

Craft New Alliances for Change: Transforming food systems requires broader, more inclusive, and equitable alliances for change across environment, agriculture, and health sectors. Critically, new alliances must integrate Indigenous and contemporary science and knowledge systems, building synergies to inform food system diversification.

Targeted Advocacy: Prevailing policies undermine food system diversification, with negative implications for the environment, food security, and human health. In advocating for policy change, we must use our shared knowledge of these issues, and demonstrate the benefits of food system diversification in a solution-oriented way.

Develop Decision Support Tools for Data-limited Contexts that support a comprehensive understanding of the economic, nutritional, and environmental benefits of diversified food systems. These tools must expand beyond production and address processing, retail, and consumption.

Environmental Defense Fund

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Inequalities: A cross-cutting barrier to food system diversification

Inequities persist throughout the food system, from harvest, to market, to table. These disparities often stem from different histories of marginalization and colonization of certain countries, regions, and populations. They manifest as both new and systemic issues, including biased power dynamics where large conventional food corporations are favored, often to the detriment of smaller or less conventional food producers. This imbalance restricts the ability of smaller or less conventional actors to compete and engage with consumers. Addressing social inequities including unjust access to resources, land, and markets, as well as discrimination based on gender, indigeneity, race, ethnicity, and caste is critical to enable resilient, diverse food systems.

Economics and markets

Today's food systems can produce and distribute vast quantities of food globally. Trade practices, financial support mechanisms, market monopolies, and government policies have favored less diverse foods, farms, and fisheries. The true environmental and health costs of this system are not reflected in market prices, often crowding out market actors pursuing more diversified economic models. Diversification of food systems must therefore occur across entire value chains through, for example, improved local storage, food processing, and distribution infrastructure. Empowered producer organizations are key to enabling producers to benefit from regional and global markets.

Policy and governance

Global agricultural and food policies, while intended to provide widespread benefit, often inadvertently disadvantage small-scale and less conventional producers due to factors including prohibitive import policies and inaccessible regulatory standards. Additionally, gaps in national policies frequently hinder smaller and diversified producers from accessing the same level of tax breaks, land tenure, securities, and financial support that larger or more conventional agribusinesses benefit from. Therefore, repurposing or creating additional agricultural subsidies that cater to a greater diversity of actors and production systems is critical to enable food system diversification.

Cultural and societal factors

Social and cultural norms directly influence food choice, diets, and nutrition. Despite a great diversity of cultural food practices around the world, diets are increasingly homogenized. Many products are composed of the same few ingredients and processed extensively. Local and Indigenous food traditions can be more diverse and are connected to local food producers, communities, and ecosystems. Policies that value food traditions, e.g., through local sourcing, for public procurement can have a large-scale impact on supporting and sustaining diverse and healthy diets.

Knowledge sharing

Sharing knowledge about sustainable climate resilient production systems across regions is key to adapt to the impacts of climate change. Knowledge relevant to climate change adaption is often limited to specific geographies, siloing knowledge which has limited collaboration across Indigenous and contemporary science and information. Peer-to-peer exchanges in food-producing communities must be revitalized to facilitate critical knowledge co-production and exchange.

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