CHAPTER 1

Reshaping Food Systems The Imperative of Inclusion

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KEY FINDINGS

- Inclusive food systems can help break the intergenerational cycle of poverty, hunger, and malnutrition.
- Including marginalized people in food systems can help them secure well-paying jobs and make gains in other areas that impact long-term livelihoods, such as education.
- A value chain framework is key to designing inclusive food systems—from improving farmers' access to resources and information to creating off-farm jobs and enterprises in the midstream of the chain.
- Recent innovations such as mobile phone technologies offer opportunities for marginalized and excluded populations to access information and services, and to participate all along the food value chain.
- Education is a major driver of inclusion, increasing life-long income and improving nutrition, health, civic engagement, and gender equality.
- Marginalized people should be empowered to make strategic choices within food systems and have a voice in holding governments accountable for delivery of inclusive food systems.

RECOMMENDATIONS

- Address inclusion at the global policy level, using awareness of inequality to spur discussion of the need for large-scale investments in research and programming to build inclusive food systems.
- Take action at the national level so that the local context—including the status of specific populations, economic structure, and cultural norms—can be taken into account in shaping inclusive food systems and improving diets.
- Tailor food system policies so that they create opportunities for marginalized people while addressing key challenges such as unhealthy diets and climate change.
- Identify the needs of marginalized people early on, and give them a voice in research and policy- and program-design processes.
- Recognize the contributions that excluded people already make to food systems with their time and labor through policies that empower them to secure more equal benefits.

Our food systems are at a critical juncture. The challenges the world faces in feeding a growing population may seem familiar, but their scale and the pace of change taking place in global, regional, national, and local food systems are unprecedented. After making significant strides in reducing hunger during the past decades, our progress has slowed and, by some measures, has been reversed: in 2018, 820 million people were projected to be hungry—a figure that has climbed for three consecutive years—and a quarter of the global population faced moderate to extreme food insecurity.¹ Overweight and obesity are rising in almost every country, and progress on key nutrition indicators such as child stunting and exclusive breastfeeding has lagged, putting the Sustainable Development Goal (SDG) of zero hunger by 2030 seemingly out of reach. But just as critical, global inequality persists. Even as emerging economies and developing countries have continued to grow, albeit slowly, their citizens do not enjoy equal access to resources associated with economic development and a better quality of life. As a result, the world's poorest and most vulnerable are likely to bear the brunt of shocks, including the deadly global outbreak of the novel coronavirus in late 2019

and early 2020, that disrupt livelihoods and food systems. Hunger and malnutrition are likely to rise in 2020 as the pandemic impacts all aspects of our food systems. In the short term, targeted programs are needed to protect children, women, and other vulnerable population groups. To reduce the impact of such shocks in the long term, we must build more resilient and inclusive food systems. It is currently too difficult for the world's poorest and most vulnerable to enjoy these systems' outcomes, such as affordable, safe, and nutritious foods, or to share fairly in their economic benefits.

Food systems have also not yet addressed other looming challenges. Agriculture, for example, accounts for 24 percent of greenhouse gas emissions,² and while poor people are most vulnerable to the effects of climate change, they still have little power over the nature and speed of mitigation and adaptation actions. Urbanization is speeding up—most of the world already lives in urban areas, with many rural people, especially youth, migrating to small and midsized

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towns and larger cities. National and local food systems have done little to integrate these populations so that they can seize employment opportunities all along the food value chain. This leaves many of them trapped in low-productivity sectors.

But for all their flaws, food systems at all levels can also offer a much needed solution to these immediate challenges, especially when they integrate historically excluded people at all stages of the agrifood value chain and involve them in the decision-making processes that shape the programs, policies, and investments affecting their day-to-day lives. Inclusive food systems can help mitigate climate change impacts for the most vulnerable and also foster innovation to achieve climate-smart agriculture. They can create better economic opportunities for poor people, who are most often employed in agriculture and other food-related sectors, thereby reducing hunger and poverty. They can spark innovation, such as reorienting production and consumption toward healthy foods, thus improving nutrition for both producers and consumers and boosting the incomes of producers. Finally, and equally important, inclusive food systems can help build a sense of community and a personal stake in national success, possibly contributing to political stability.

Beyond the usefulness of inclusive food systems in addressing the world's most pressing challenges,

inclusiveness is a moral imperative. Most people want to live in a world free of poverty, hunger, and malnutrition, and the world has committed to this ambition through the SDGs. Achieving this vision requires that particularly downtrodden groups in society reap greater benefits from the food systems with which they interact. These groups are diverse and also overlap in identity. Smallholders cultivate the majority of farm units in many countries but produce only a third of the total value of the agricultural food supply,³ due to their lack of access to nonstaple seeds, land, and profitable markets (see Chapter 2). Similarly, despite their substantial contributions to agricultural production and household food and nutrition security, women face heavy workloads and have less decision-making power than men. They also control fewer resources within their households and communities (see Chapter 4).⁴ Youth are also marginalized in many countries, lacking sufficient employment opportunities, land if they choose to stay in agriculture, and financial capital if they attempt to enter the rural nonfarm economy. These issues are particularly acute in Africa, which will see 30 million youth entering the workforce annually by 2050 (see Chapter 3). Conflict-affected people and refugees, who may have fled their homes due to political, ethnic, or religious strife or climate-induced weather shocks, are mostly rural and dependent on agriculture.⁵ Refugees typically stay in their new

BOX 1 WHAT ARE FOOD SYSTEMS?

Food systems are the sum of actors and interactions along the food value chain—from input supply and production of crops, livestock, fish, and other agricultural commodities to transportation, processing, retailing, wholesaling, and preparation of foods to consumption and disposal. Food systems also include the enabling policy environments and cultural norms around food.

Food systems provide basic sustenance in terms of meeting populations' minimum caloric needs and affect nutrition, positively or negatively, through crop health, dietary diversity, and impacts on human health and the environment. Food systems also provide livelihoods for a sizable share of the global population, through agricultural labor and nonfarm jobs in other segments of the food value chain. The income garnered from these jobs can be used to purchase a wide array of healthy foods, send children to school, purchase health services and medications, and more. At the macro level, food systems power local and national economies, shaped in part by governance, trade, and investment at the global level.

Ideal food systems would be nutrition-, health-, and safety-driven, productive and efficient (and thus able to deliver affordable food), environmentally sustainable and climate-smart, and inclusive. But to realize this vision, continued investments must be made in agricultural research and development and technological innovations, paving the way for programs and policies that are based on sound evidence.

locations for long periods of time, posing serious challenges for the creation of livelihood opportunities and integration into local food systems (see Chapter 5). Other examples of excluded people in the world today include the elderly, lower castes, religious and ethnic minorities, and people with disabilities. Each of these groups faces a unique set of challenges.

The world is transforming at a breathtaking pace, and food systems must evolve quickly to meet growing and changing demand. Innovation is essential to transforming food systems so that they bring a wide range of benefits to all people. As we modernize food systems to make them climate smart, healthy, and sustainable, we must also strive to make them inclusive.

WHAT IS INCLUSION IN FOOD SYSTEMS?

Inclusive food systems reach, benefit, and empower all people, especially socially and economically disadvantaged individuals and groups in society.⁶ Inclusive food systems reach vulnerable people by way of reducing barriers that currently prevent them from participating in food system activities, for example, by enabling them to gain the skills needed to work within evolving food value chains. The benefits of inclusive food systems, such as access to affordable, safe, and nutritious foods, extend to all people, including poor consumers. Inclusive food systems also allow everyone to share fairly in their economic benefits—young people and women can find remunerative jobs and participate in activities that add value to foods, and smallholders have access to food and agricultural markets. Ultimately, this means a more participatory way of shaping food systems.

Inclusive food systems empower people to make strategic life choices, such as when they increase women's decision-making power within their households. They give marginalized people a voice in local food policies that affect their daily lives and open leadership opportunities at the local, national, and global levels. Inclusive, participatory decision-making can contribute to improved governance, and can yield legislation that is more relevant to the issues facing poor and underrepresented people and has more local buy-in. Creating climate-smart policies, for example, may be best

done by poor farmers who possess a deep understanding of the local context, from trade-offs between production and environmental health to assessment of risks.

Inclusion is an action-oriented concept that is closely tied to the social goals of equality (fair and equal treatment) and diversity (for example, an appreciation of different ethnicities, religions, genders, and disabilities). Promoting inclusion is a practical means for individuals, private firms, institutions, policymakers, and governments to ensure that vulnerable people have access to services and opportunities. The quality of these benefits is important too—for example, women provide much of the labor in food systems, yet often have limited land tenure rights. In this sense, inclusion builds upon the notion of equity—giving everyone what they need to live healthy and fulfilling lives.

WHAT ARE THE BENEFITS OF CREATING INCLUSIVE FOOD SYSTEMS?

Reshaping food systems to be inclusive of poor and vulnerable people is a moral imperative. But the policy world is complex, with policymakers constantly weighing short- and long-term costs, benefits, and risks, the interests of wide and disparate groups of people and institutions, and their own political survival. Against this backdrop, it is useful to identify the wide-ranging economic and human development benefits associated with inclusive food systems.

In low-income countries, the agrifood sector supports many people's livelihoods. In 2019, 63 percent of people in low-income countries were employed in agriculture.⁷ Better integrating marginalized people into national food systems, by linking subsistence-level farmers to markets or incentivizing farming households to move out of agriculture and into other areas of the food value chain, is perhaps the most effective way to achieve inclusive economic growth. By increasing household income, inclusion can help reduce absolute poverty and help poor households access other services and benefits closely associated with poverty reduction, such as education, nutrition, water and sanitation, and healthcare. Inclusive food systems can also break the intergenerational cycle of poverty, hunger, and malnutrition. This potential impact can be seen

most clearly in the latest literature on women's empowerment. When women have increased decision-making power over household income or more control over assets, agricultural productivity rises and household food security, diet quality, and maternal and child nutrition improve.⁸

Inclusion can also help reduce global and national-level inequalities. Global inequality has spiked since 1980. Its growth has not been steady, exhibiting a slight decline after 2000, but it remains at very high levels. National-level inequality has risen in nearly all global regions, albeit at different speeds, and has been notably high in the Middle East, Africa south of the Sahara, and Latin America.⁹ Including marginalized people in food systems can help them to not only secure well-paying jobs but also make gains in other areas, such as education, equalizing human development as well.¹⁰ A well-educated populace can better advocate for pro-poor policies, such as progressive taxation and open access to financial information, as well as reducing tax evasion and corruption, which are key drivers of inequality.

Inclusion also supports the proliferation of diverse ideas about how to improve processes and strategies not only within local food systems but also the global food system. Research on the relationship between inclusion and innovation in private sector entities has shown that diverse work teams develop more innovative ideas. Inclusion can also boost profits: a recent study of more than a thousand companies in 35 countries found that, when the national culture valued diversity, gender diversity was associated with more financially productive enterprises.¹¹

Inclusion may contribute to political stability. The Political Instability Task Force, a research partnership that forecasts political instability, focuses on four key factors that put countries at risk of instability: high infant mortality; unstable neighboring countries; weakly institutionalized democracy; and the exclusion of minority, ethnic, or religious groups. Thus social and economic polarization are key drivers of citizen dissent.¹² But when all citizens feel that they can obtain a good livelihood, access high-quality services regardless of their identity or geographic location, and have a voice in the way decisions are made, they also feel invested in their countries' and communities' future.

WHAT ARE THE INSTRUMENTS, MECHANISMS, AND POLICIES FOR INCLUSION?

As food systems evolve, many different types of mechanisms can be put into place to ensure that they reach, benefit, and empower vulnerable people. Many of these actions should ideally be implemented at the national level, so that the local context, including the status of specific populations, economic structure, and cultural norms, can be taken into account (see Chapter 6).

VALUE CHAINS

Some of the most relevant actions that can be taken to redesign food systems are those that use a value-chain framework. Such an approach can focus on the beginning of the chain, improving excluded people's access to natural resources such as land (through land tenure security, an especially salient issue for women and the landless), water, or seeds. Integrated agriculture and nutrition interventions such as biofortification show particular promise for bringing smallholders into "healthy" value chains that promote a nutritious diet, from seeds to consumption. For example, a recent evaluation of a HarvestPlus project that distributed biofortified orange sweet potato vines to households in Mozambique to grow for both own-consumption and selling found that vitamin A intake remained higher among children in participating households than nonparticipating households three years after the project ended.¹³

A value chain approach can also zoom in on the "hidden middle" of the food value chain, including processing, distribution, and services (see Chapter 2), where the potential for creating enterprises and jobs is greatest. As food value chains become longer and more complex in response to urban demand, there will be a critical need for ensuring food safety and quality through regulation, certification, and inspection as well as innovations for cold storage and transportation. Investing in the institutions and infrastructure needed to serve urban markets represents a win-win for job creation, consumer health, and developing countries' exports.¹⁴

SOCIAL PROTECTION

Social protection can safeguard food and nutrition security for marginalized people. In desperate situations,

food and cash transfers can fulfill basic caloric needs and prevent malnutrition. An example of the power of social protection amid crisis, cash transfers in war-torn Yemen prompted households to increase food purchases by 17 percent and spend the money on nutrient-rich vegetables, fruits, and animal-sourced foods such as milk and eggs.¹⁵ Social protection can also free up resources to use for healthcare, education, and other services, or to allow poor people to take up more profitable, non-farm entrepreneurial ventures within the food system. Ethiopia's Productive Safety Net Program, for example, which provides cash or food transfers in conjunction with public works and livelihood support programs, has increased participants' probability of engaging in non-farm activities by 5 to 7 percentage points.¹⁶

Conditional transfer programs can also promote improvements in nutrition, school attendance, or rural employment and improvements in agricultural production, such as homestead gardening. Some school feeding programs turn to smallholder farmers to supply locally grown, nutritious foods, thus creating a local, healthy food system that includes poor farmers. Economic transfers also have a host of other potential benefits for excluded groups. For example, cash transfer programs have been shown to decrease intimate partner violence in low- and middle-income countries, presumably by increasing economic security and emotional well-being.¹⁷

EDUCATION AND INFORMATION

Education is perhaps the greatest driver of inclusion. Not only does education increase lifelong income, breaking the cycle of poverty, but it also improves nutrition, health, civic engagement, and gender equality. Education in the form of vocational training can also create a well-trained labor force that can seize opportunities in higher-productivity food-related sectors, a prospect that is especially beneficial for youth.

Facilitating the transfer of knowledge and reducing information asymmetries between the rich and poor, urban and rural people, men and women, and so on, is another key driver of inclusion. New technological innovations, including mobile technologies, are creating numerous opportunities for poor and vulnerable people, who now have at their fingertips information on agriculture, markets, and nutrition. Up-to-date

information about prevailing market prices, for example, can help rural farmers get the best price for their crops, and information about the budget of a local government can help citizens press for accountability on spending. But for information to be useful, it must be easily understandable and relevant to citizens, and they must be able to act upon the information.¹⁸ Inclusive governance processes must be in place so that citizens can translate information into improved services.

GOVERNANCE AND LEADERSHIP

It is not just the outcomes of food systems that need to be inclusive—marginalized people should also be included in the process of designing food-system-related policies and programs, and have a voice in monitoring, evaluating, and holding institutions and people in power accountable for the delivery of high-quality jobs and services. Scorecards, for example, can help boost accountability by tracking the inclusiveness of food systems according to indicators related to nutrition, employment, climate change, and more. IFPRI and partners are currently conceptualizing a Global Food Systems Index, which would monitor and track progress toward a desired food system; inclusiveness could be one measure of success.

Leadership also matters. Women, for example, are severely underrepresented at senior levels within international organizations, donor agencies, national-level political leadership, education management, and large businesses. When marginalized people are in positions of power, they can integrate the interests of excluded populations into policy and program design and implementation. Indeed, private sector research has shown that diverse employees are more likely to have common experiences with their company's end users.

WHAT ARE THE NEXT STEPS FOR INCLUSIVE FOOD SYSTEMS?

Policymakers, researchers, and program designers can take concrete steps today to create inclusive food systems, with numerous benefits for both marginalized groups and the larger society of which they are a part.

INTEGRATE INCLUSION INTO THE GLOBAL AGENDA.

Inclusion needs to be addressed at the global policy level. Currently, the only international standards for

inclusion can be found within the Charter of the United Nations. Global policy forums can seize upon the increased awareness of inequality to discuss the need for inclusive food systems, making way for large-scale investments in research and programming.

SEIZE OPPORTUNITIES. As challenges mount, food system policies can be tailored to both address the hurdles and seize new opportunities. The hurdles associated with urbanization, such as longer food chains, higher consumption of processed foods, and underemployment, can be tackled by ensuring that marginalized people have the skills to participate in forward-looking innovations such as healthy value chains and the information and communications technology revolution. Territorial approaches, such as agro-industrial parks and incubators, can cost-efficiently provide rural areas with services and support development of the middle segments of the agrifood value chain.¹⁹ Addressing climate change in part through the development of renewable energy systems may also generate new employment opportunities. These are just a few examples of how inclusion can facilitate innovation.

IDENTIFY NEEDS EARLY ON. Researchers can identify marginalized people's needs and priorities in early stages of food systems research. Such an effort could yield important insights, such as whether some smallholders are well suited to move up in agriculture (from small to mid- or large-scale farming) or should move out of agriculture to other parts of the food value chain or other sectors. Inclusion in this process can be

achieved by using participatory research methods and even working to create research career paths for historically underrepresented people. Policymakers and program designers can similarly ensure that excluded people are represented in all stages of policy and intervention design, implementation, and evaluation, as well as in decision-making institutions.

RECOGNIZE EXISTING CONTRIBUTIONS. In almost all cases, excluded people already make immense contributions to food systems in terms of their time, workload, and the health risks taken on. Their participation should be recognized in policies that secure them more equal benefits. For example, fair contracts can enhance the negotiating power of small and often informal actors along the value chain and improvements in land tenure security can help the poor build assets.

Inclusion is not a panacea. It is one of a number of innovative remedies to food systems that have in many ways failed poor and marginalized people. We must reinvent these systems, and do so now. Challenges such as climate change, the double burden of malnutrition, and the coronavirus pandemic are already exacting a heavy toll, especially among the most disadvantaged populations. But if we build on innovations and continue to pioneer new ideas, we can design food systems that are inclusive, climate smart, and sustainable, and we can provide healthy diets for everyone. The future well-being of all the world's citizens depends on it.

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