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Introduction to Item 15: Biennial Theme 2022-23
Agriculture Food Systems Transformation: From Strategy to Action

Our agri-food systems are failing. Not only are they not improving food security and nutrition to meet the Sustainable Development Goals (SDGs), they are also the single largest driver of climate change and the planet's unfolding environmental crisis, including biodiversity loss and deforestation. This trend is clear from the systemic drivers (population and economic growth, climate change, conflicts) to drivers that affect food access (poverty, inequality) and food production (innovation, public investment, consumption) to environmental systems (degradation of natural resources, epidemic and degradation of ecosystems).

To end global hunger and malnutrition and break the vicious feedback loops that are harmful to health and the planet, current agri-food systems must be transformed. Even before COVID-19, 690 million people suffered from hunger and millions more were micronutrient deficient. The number of overweight people was growing rapidly. The pandemic has added as many as 132 million people to the rolls of the undernourished. In the meantime, 14 percent of food produced is lost; another 17 percent goes to waste.

It is against this backdrop that FAO proposes a bold new vision to push for 'four betters': Better production, better nutrition, and a better environment to contribute to a better life. Focusing on technological and innovative solutions, FAO seeks to produce more with less, reduce food prices and the risks of epidemics, and increase transparency, create jobs, and boost social inclusion.

Agri-food systems and a 'systems-based' approach

To achieve food security and nutrition, it is important to approach the challenges in a systems-based way and adopt a holistic view. That means recognizing the interconnectedness of the economic, social and environmental impacts of the world's agri-food systems and looking for synergies and trade-offs in policy solutions.

Making agri-food systems more inclusive, sustainable and resilient is essential in ending hunger and malnutrition. They are the largest economic system, with the largest planetary impact. Globally, they employ four billion people. About 80 percent of the extreme poor live in rural areas, working in agri-food systems. Poverty and inequality are also endemic in agri-food systems.

The pay-off of taking a systems-based approach can be tremendous - including solutions to sustainable use of natural resources, while making healthy foods affordable for everyone and addressing inequality. A systems-based approach is also the best way to help policy-makers manage trade-offs.

Agri-food systems strategy for transformation

To push for 'four betters,' FAO will apply four cross-sectional accelerators in all of its programmatic interventions: technology, innovation, data, and complements. Complements consists of governance, human capital and institutions.

- Emerging technologies and digital tools - from e-commerce and blockchain transaction ledge to improved pest control and crop genetics using AI - can optimize natural resources and enhance food security.
- Innovations in society, policy, institutions, finances and technologies are key drivers affecting food and agricultural production and distribution processes.

- Bringing together data on food, agriculture, socio-economics and natural resources can help strengthen evidence-based decision-making in food and agriculture. FAO's geospatial platform and the big data lab exemplify this.
- Complements refer to governance, human capital and institutions that can ensure agri-food systems transformation is inclusive and equitable. It is critical that technology, innovations and data are inclusive and gender-sensitive, and are used to spur development. As technologies revolutionize, the risks of unequal access and exclusion also increase. Investments in human capital and policy and regulations are required to minimize such risks. Technologies must be affordable for everyone.

Agri-food systems from knowledge to action

The following showcases some transformative programme priority areas around the betters:

Improving access to markets

Improving access to markets and specially reducing barriers to trade to boost global and intra-regional trade is essential. This entails strengthening policy and technical capacities of intergovernmental as well as national institutions to implement trade facilitation practices and reduce procedural barriers to trade, particularly those related to the application of sanitary and phytosanitary (SPS) measures.

Digitalization

FAO is in the process of identifying 1 000 villages across the world to convert them into digital village hubs. This effort will be implemented in collaboration with "AI, Food for all" and other partners. This project will create digital linkages by introducing key capabilities, like e-commerce, to rural areas and facilitate farmers' access to markets. It will also reduce the gender digital divide. A digital village can be an entry point to rural development. Additionally, there are synergies between the Hand-in-Hand Initiative, the FAO Digital Services Portfolio, the e-Agriculture Strategy Guide and the International Platform for Digital Food and Agriculture.

Transformation through aquaculture

Fish is an excellent source of food to address micronutrient deficiencies, but it was not until 2014 that the world recognized the role fish can play in eliminating hunger and malnutrition. There is a gap between sustainable intensification of aquaculture (where food is needed most) and transformative fisheries management (where sustainability is under threat). FAO has projected future scenarios for capture fisheries and aquaculture and, through its 'Blue transformation', it can help fishermen achieve the highest productivity scenario, filling the gap by 2050.

Sustainable urban and rural development

FAO launched the Green Cities Initiative to ensure that health crises, such as the coronavirus pandemic, do not lead to food and environmental crises. The initiative builds on FAO's experience of integrating agriculture, forestry, fisheries and sustainable food systems in urban and peri-urban settings. The initiative is focused on improving the urban environment, strengthening urban-rural linkages and building resilience of urban systems and populations to shocks. The initiative will be implemented in 100 cities over the next three years. By 2030, 1 000 cities are expected to sign on.

Integrating actions through the Hand-in-Hand initiative

The Hand-in-Hand Initiative aims to eradicate poverty and hunger through integrated geospatial, bio-physical and socio-economic analysis to identify territories where agricultural and rural transformation can have maximum impact. It supports countries that have limited capacities, are undergoing serious food crises or have large pockets of poverty. Through the geospatial platform and data lab, and its systems-based approach to rural development, the initiative will support

aforementioned FAO efforts to translate its 75 years of knowledge into action and tangible results on the ground.

In summary, to transform the world through food and agriculture, FAO must lead the efforts to bring together and accelerate innovation, technology, data, governance and institutions. Doing so would help to i) reduce hunger, putting it back on a downward slope; ii) transform agri-food systems to nourish people, nurture the planet, and build resilient livelihoods and ecosystems; iii) increase investment in rural transformation and vulnerable populations to reduce inequality, leaving no country and no person behind.