

Sustainable and Resilient Food Systems as an instrument to address ADB's operational priorities



Poverty



Climate Resilience and



Environment



Livable Cities



Food Security and Rural Development



Governance



Regional cooperation

Food System

Employment

Ecosystem services

Water pollution

GHG emissions

Nutrition and health

Food safety

Trade

Food Supply Chain

Food production & input supply

Processing and packaging

Retail and marketing

Consumers

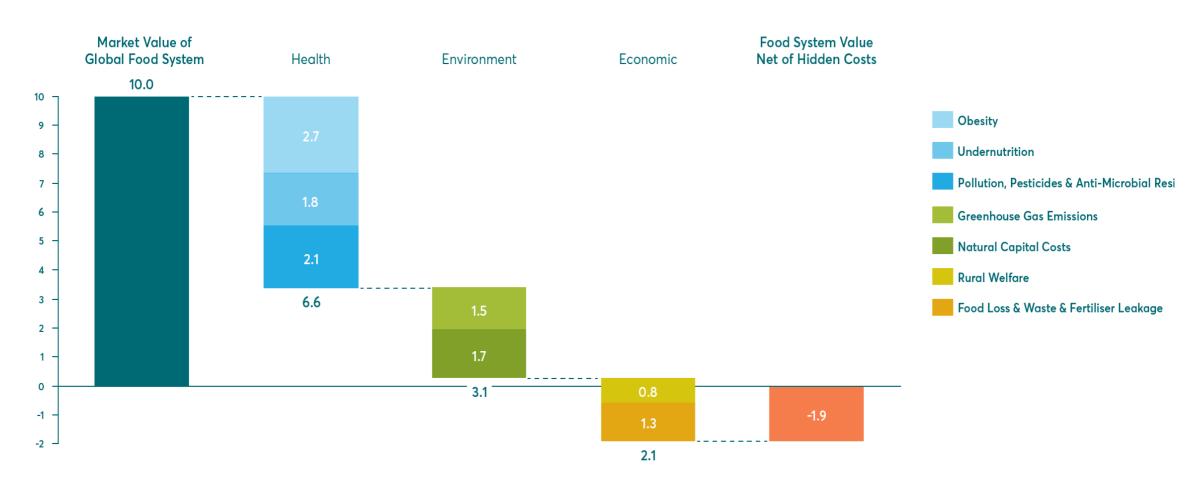
Sustainable and Resilient **Transformation**

- Sustainable production practice
- Regenerative Farming
- Integration of smallholders with value chains
- Use of renewable biological resource
- Sustainable protein solution
- Resilient logistic and food reserve system
- Strengthening biosecurity to prevent zoonotic disease
- Access to healthy and nutritious diet
- Consumption choice based on environmental and climate footprint

Requires whole supply chain approach

Hidden cost in global food systems

Trillons USD, 2018 prices



Source: The Food and Land Use Coalition (FOLU), Growing Better: Ten Critical Transitions to Transform Food and Land Use, 2019.

Food system transformation requires public and private finance, but barriers exist

Annual investment requirement for transformation of food and land use systems is between \$300 billion to \$350 billion by 2030 (Blended Finance Task force)

Little incentive for farmers

Budgetary pressure

Maturity mismatch

Barriers to scaling up financing for food system transformation

Lack of valuation system and environmental footprint

High transaction costs of SMEs

High investment risk but lack risk mitigation measure

Publication provide a guidance to operationalize sustainable and resilient food system transformation in

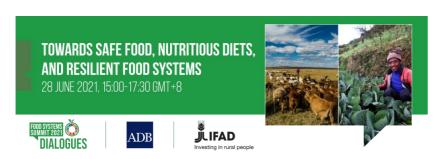
Asia and the Pacific

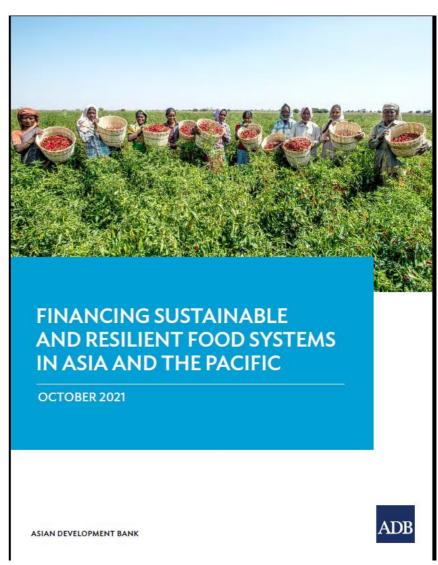
 Publication was developed through dialogue between diverse stakeholders through ADB Sustainable Food Webinar Series in 2021





 Designed to provide inputs to the milestone events: UN Food Systems Summit 2021 and Tokyo Nutrition for Growth Summit 2021





Action 1: Provide innovative financial instruments to unlock private investment

Blended finance

- Public capital can take more risk to catalyze investments faster.
 - \$5.30 of private financing for every \$1 of public or donor capital invested in Global Agriculture and Food Security Program

Structuring financial instruments to connect different pools of capital

- Use of financing tools & special public funds to support SMEs that suffer from lack of access to long term financing
 - Innovative a dual pooled fund arrangement for SMEs in ADB's Anhui Huangshan Project

Transitional finance

- Use of loans wherein repayment terms are pushed back to accommodate multiyear return gaps.
 - Three-year operating loans to farmers transitioning to organic production, with market off-take support and repayment over 8 to 10 years through a 10-50% revenue share.

Channeling green finance

- Financial flow from the public, private and not-for-profit sectors to sustainable development priorities
 - Valuation of natural capital and simpler and standardized products

Action 2: Leverage digital technologies

Digital technologies are offering new financial models to support food system transformation

- Climate change mitigation and adaptation.
 Sensor technologies, big data analytics.
 automated early warning systems for crop or livestock health, precision agriculture technologies.
- Sustainable use of natural resources.
 Labeling and traceability system reflecting implicit value, IT-based, farm- or estate-level natural capital accounts showing farming externalities.
- Reduce food loss and waste. E-extension for farmers/Al and machine learning to motivate consumers to buy near expiry foods.

Digital technologies can improve the productivity of entire food supply chains

- At the production stage, big data analytics, Internet of Things (IoT), and sensors help farmers' decision-making through accurate, timely, and location-specific price, weather, and agronomic data and information.
- At the distribution stage, digital technologies can reduce the transaction costs including wholesalers and intermediaries for commodities, equipment, and processed goods, and improve product traceability and integrity.

Action 3: Support DMC governments to reorient public finance and policy institutions

Of the USD 536 billion provided annually in public support to farmers:

 about two-thirds is provided through measures that distort farm business decisions.

Reallocating the distortive form of support to sustainability policy objective:

 EU policy reforms: 30% of payments to farmers conditional upon additional conservation measures.

- Environmental taxes for forestry, fisheries, and water that provide incentives for more sustainable extraction and effective tax collection.
- Payments for environmental services such as PRC's eco-compensation experiments.
- Tradable permits for regulating. environmental externalities such as carbon credit trading.
- Traceability and eco-labelling for market prices to integrate the true costs of producing and distributing food.

Report proposes ADB to play a catalytic role in supporting food system transformation.

Policy and Institutional Support

- Payments for ecosystem services
- Reforms in farm subsidy
- Environmental markets
- Eco-labelling and certification

Financial instruments

- Project preparation and financial structuring facility (Innovative Natural Capital Financing Facility)
- Valuation of natural capital and ecosystem services
- · Support financial disclosure

Digital technologies

- Traceability system
- Monitoring and evaluation of sustainability performance
- Digital infrastructure and skill development

Platform of collaboration

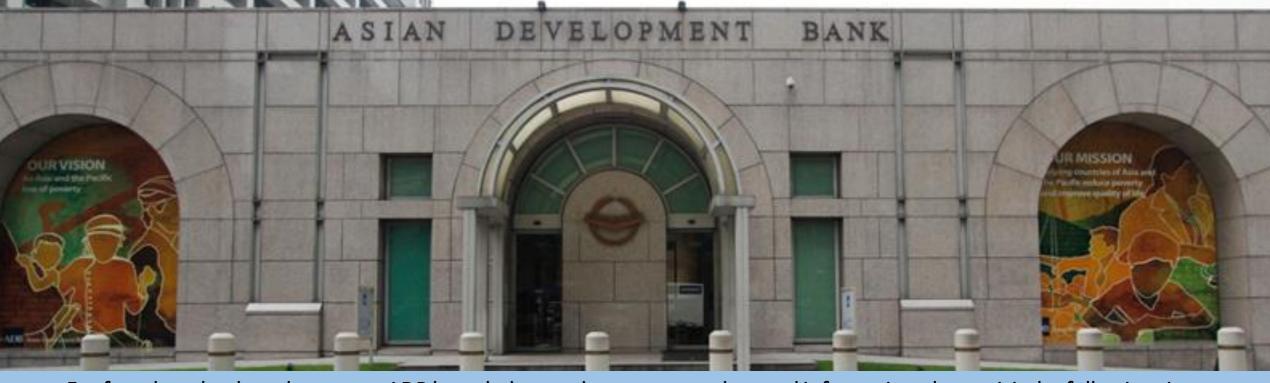
Governments, international organizations, universities

International financial institutions, private banks, institutional investors

Agri-tech companies, e-commerce platforms

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