

Asia-Pacific Rural Development and Food Security Forum

Battling Climate Change and Transforming Agri-food Systems

#RDFS2022



World Vegetable Center

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Vulnerabilities of Food Supply Chains



Disruptions due to COVID-19

- Weak logistics
- Migrant labor shortages
- Factory shutdowns
- Problems with working capital
- Wholesale markets closed



Food Supply Chains



Environmental and Health Consequences

- Agriculture uses 70% of water resources; 50% of habitable land; up to 80% of biodiversity loss
- Growing supply of unhealthy engineered food
- 61% of infectious diseases are zoonotic
- 14% of food is lost post-harvest
- Increasing non-communicable diseases due to unhealthy diets
- Food supply chains account for 29% of GHG emissions; 44% of methane

Food security becoming increasingly uncertain in DMCs

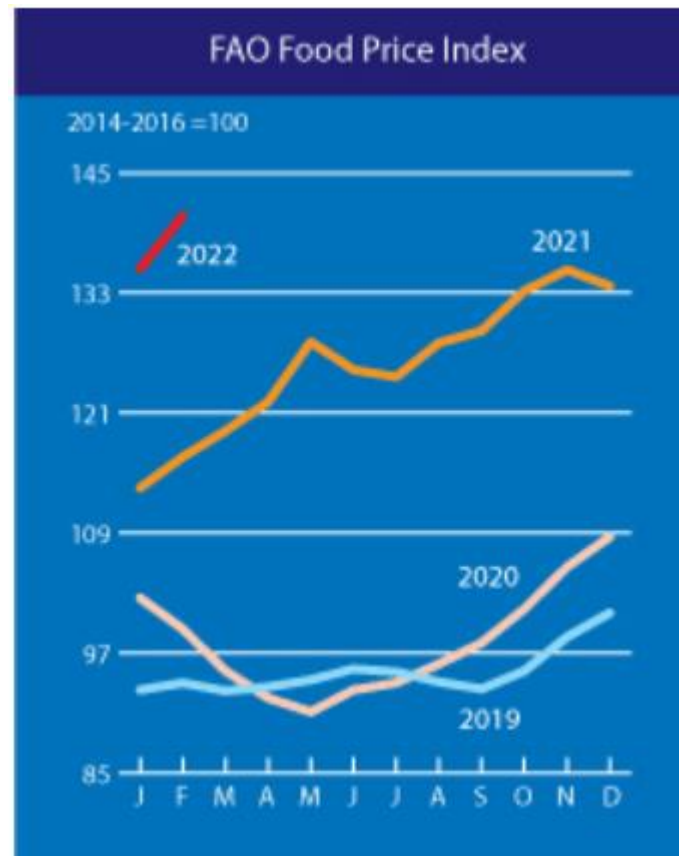
Three Drivers of Food Insecurity: Extreme weather and climate change, Economic Shocks and Political Crisis/ Conflict

DMCs with at least two drivers*



*WFP identifies countries with at least two food insecurity drivers at risk as cause for immediate concern

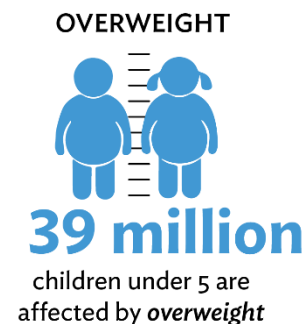
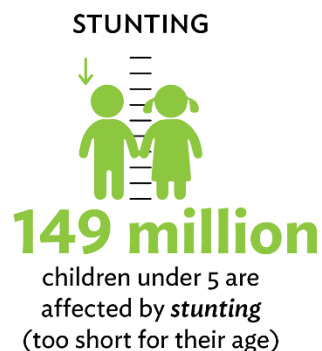
Source: WFP Assessment of Food Security (does not include PRC and Mongolia among others)



Source: FAO (release date 04/03/2022)
<https://www.fao.org/worldfoodsituation/foodpricesindex/en/>

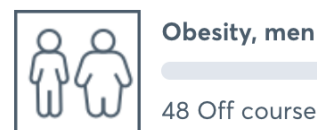
Meeting nutrition target in Asia at Bay

Three faces of Malnutrition, 2021

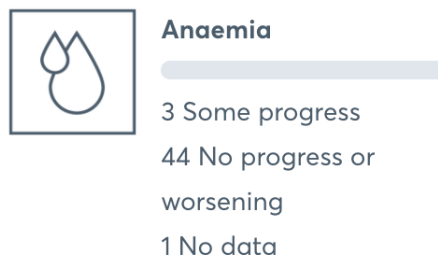


Source: UNICEF, WHO, World Bank Group, *Joint Child Malnutrition Estimates, 2021*

Progress towards the global nutrition targets in Asia



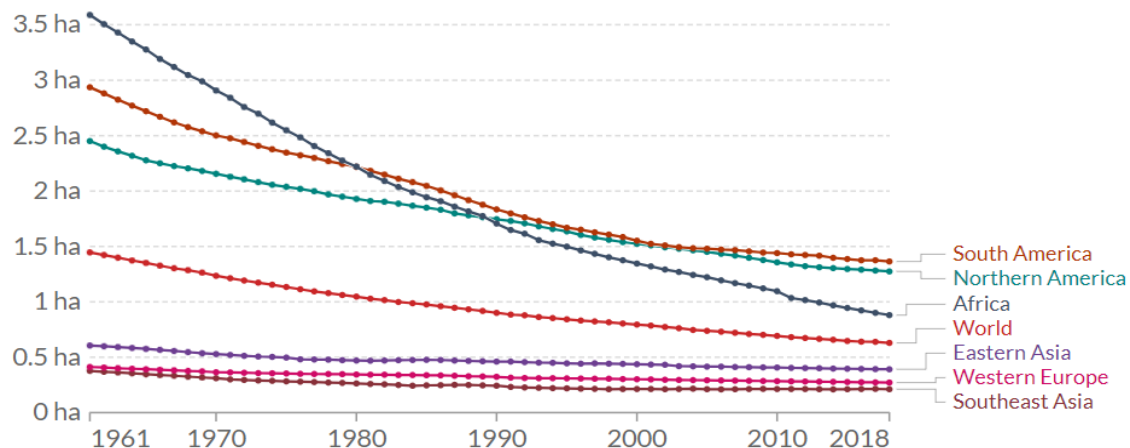
10.3% of women and 7.5% of men live with obesity



9.5% of women and 11.4% of men live with diabetes

Source: Global Nutrition Report

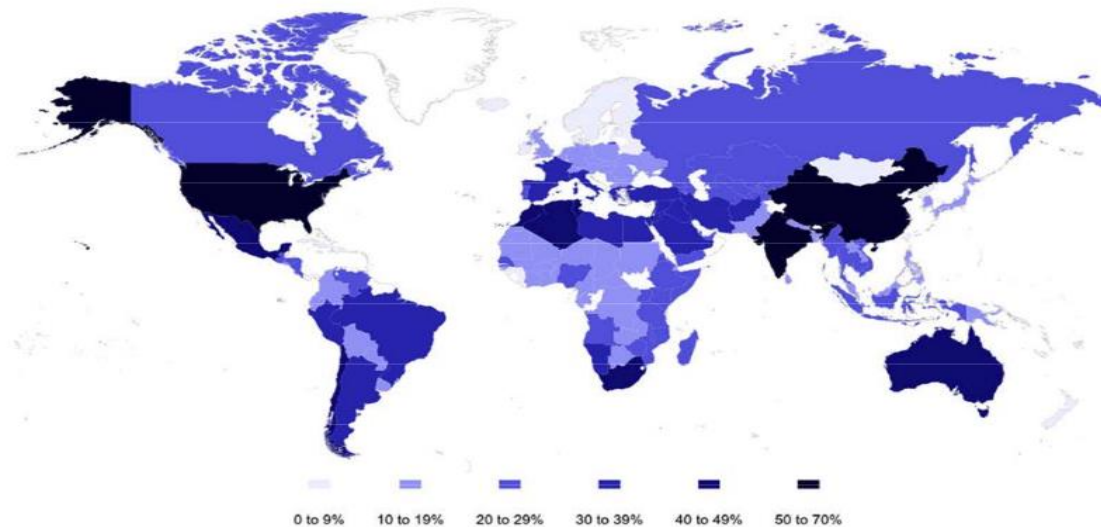
Agriculture resources on the decline



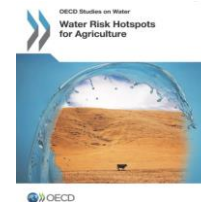
Source: Food and Agriculture Organization of the United Nations

OurWorldInData.org/land-use • CC BY

Frequency of observations, listing countries as subject to high or very high future water risks

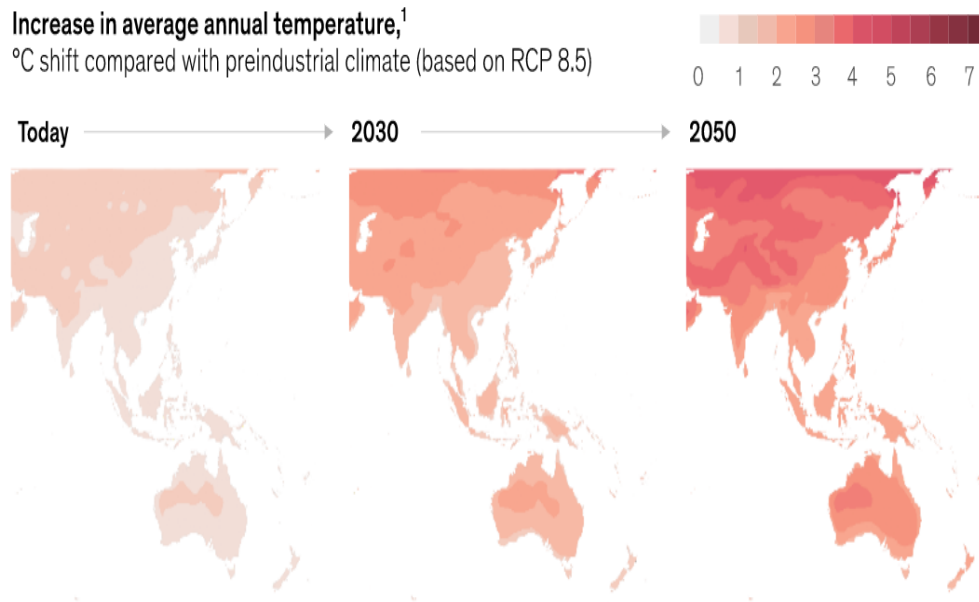


Source: Review of 64 publications, accounting for 142 countries.

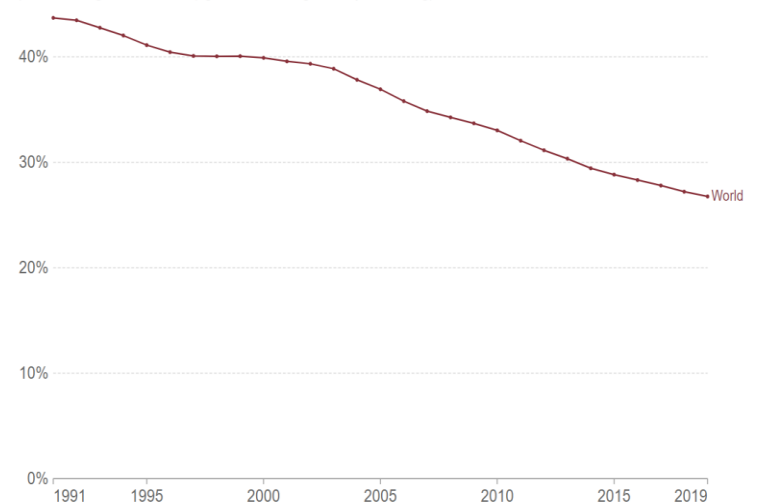


Future of agriculture in Asia faces climate change-related challenges

As the physical thresholds that severely affect agriculture production (heat, cold, rain, wind and humidity) are reached, agricultural sector in Asia would be hit the hardest.



Share of the labor force employed in agriculture
Share of people of working age who were engaged in any activity to produce goods or provide services for pay or profit in the agriculture sector (agriculture, hunting, forestry and fishing).



Source: Our World in Data based on International Labor Organization (via the World Bank) and historical sources
OurWorldinData.org/employment-in-agriculture • CC BY

Way Forward

Accelerating Food System Transformation through Diversified Investments and Knowledge Solutions

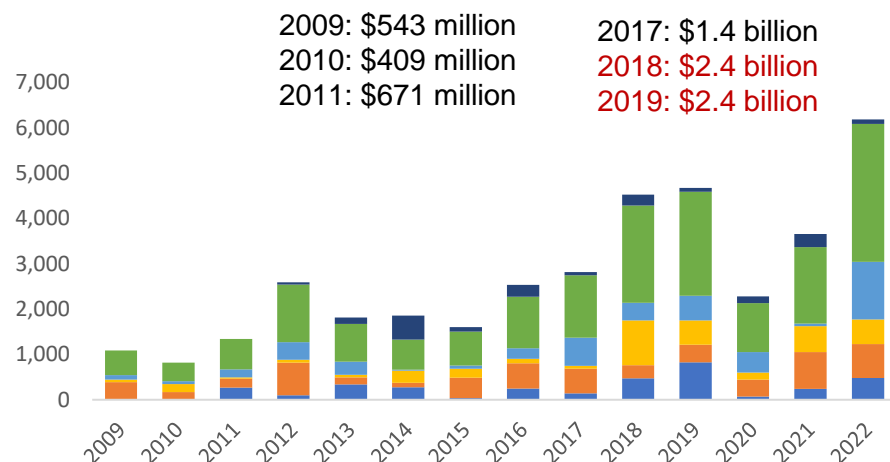
More diversified investment portfolio

- Increased investments by more than 4 times in 10 years
- More investments in agricultural policy, institutional and capacity development; water-based natural resources management; agro-industry, marketing, and trade; rural market infrastructure; and rural sanitation
- Increased green finance mechanism to support sustainable agriculture and eco-tourism

Knowledge solutions

- Sector research and diagnostics to provide innovative, pragmatic and context-aware knowledge solutions
- Partnerships with international and national knowledge partners
- Knowledge sharing, capacity development, policy dialogues
- Biennial Rural Development and Food Security Forum

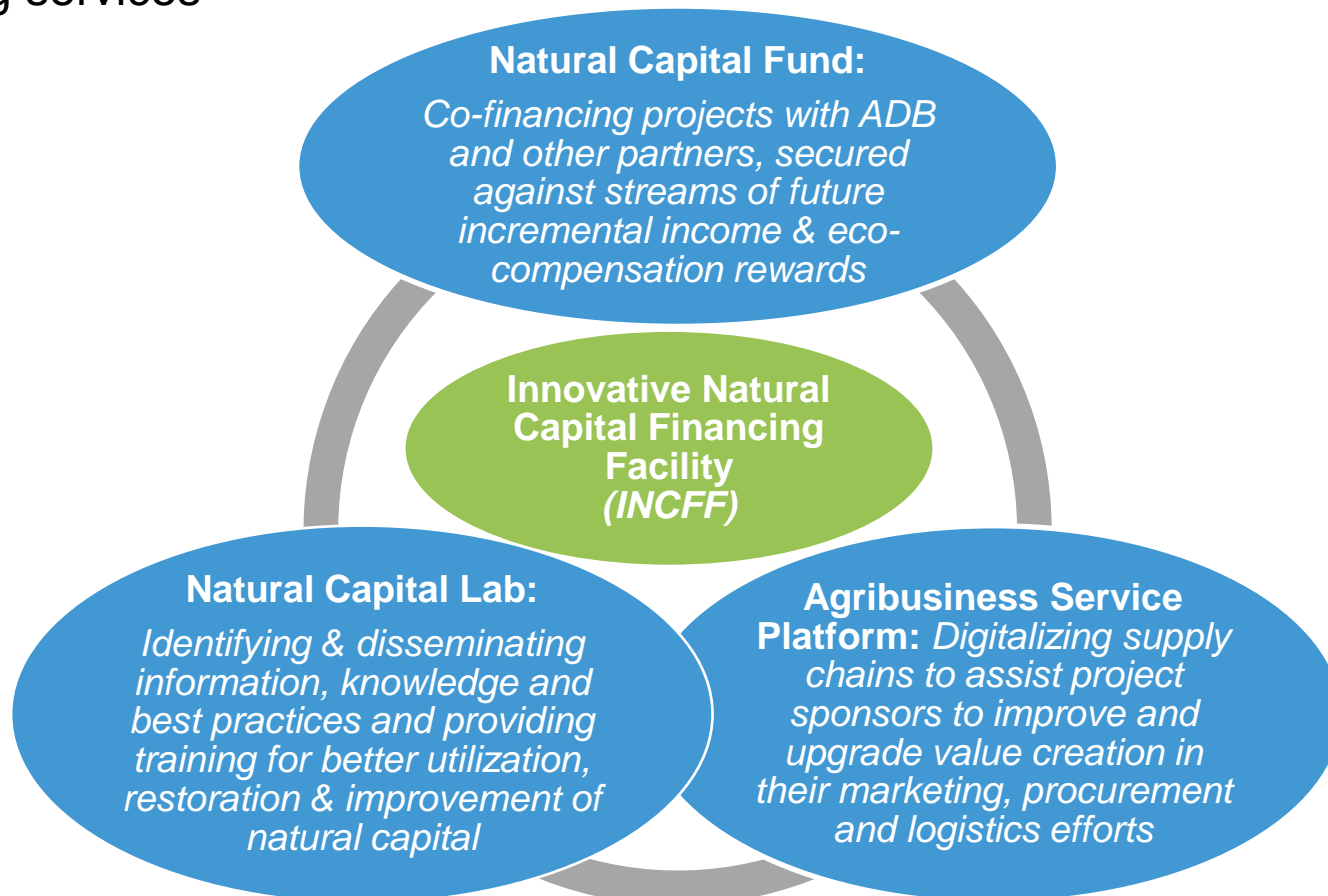
2009-2020 Agriculture, Natural Resources and Rural Development Investments and 2021 Lending Pipeline



Way Forward

Towards a novel, natural resource-conscious financing strategy

Three Pillars to Support Projects with significant “Natural Capital Components”: Which are underpinned by, and will augment, ADB’s core project financing services



ADB remains committed to collaborative works to build climate-smart agriculture across the entire agriculture and food value chains, including the blue economy.

Thank you!

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