



WORLD
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FORUM

Innovation with a Purpose

Opportunities for Transforming Food Systems

A Project of the World Economic Forum's System Initiative
on Shaping the Future of Food Security and Agriculture

Today's food systems are in need of fundamental transformation



Over 2 billion people suffer from micronutrient deficiencies; meanwhile, over 2 billion adults are overweight or obese



800 million people in agriculture live below the poverty line



The agrifood sector represents 30% of global greenhouse gas emissions; inversely, climate change threatens food systems



The food sector accounts for 70% of water withdrawal



Some 500 million smallholder farms worldwide produce over 80% of the food consumed in the developing world



Technologies and innovation can help address specific challenges in food systems

How might **CRISPR-Cas** gene editing support sustainable, nutritious food systems, and what ethical issues does it raise?

Inputs

How might **big data and machine learning** support climate-smart practices?

Production

How might **food fortification** affect public health, and what are the regulatory challenges?

Processing

How might **sensors** help reduce food waste in transportation?

Distribution

How might connecting farmers to consumers through **e-commerce** increase access to high quality foods?

Retailing

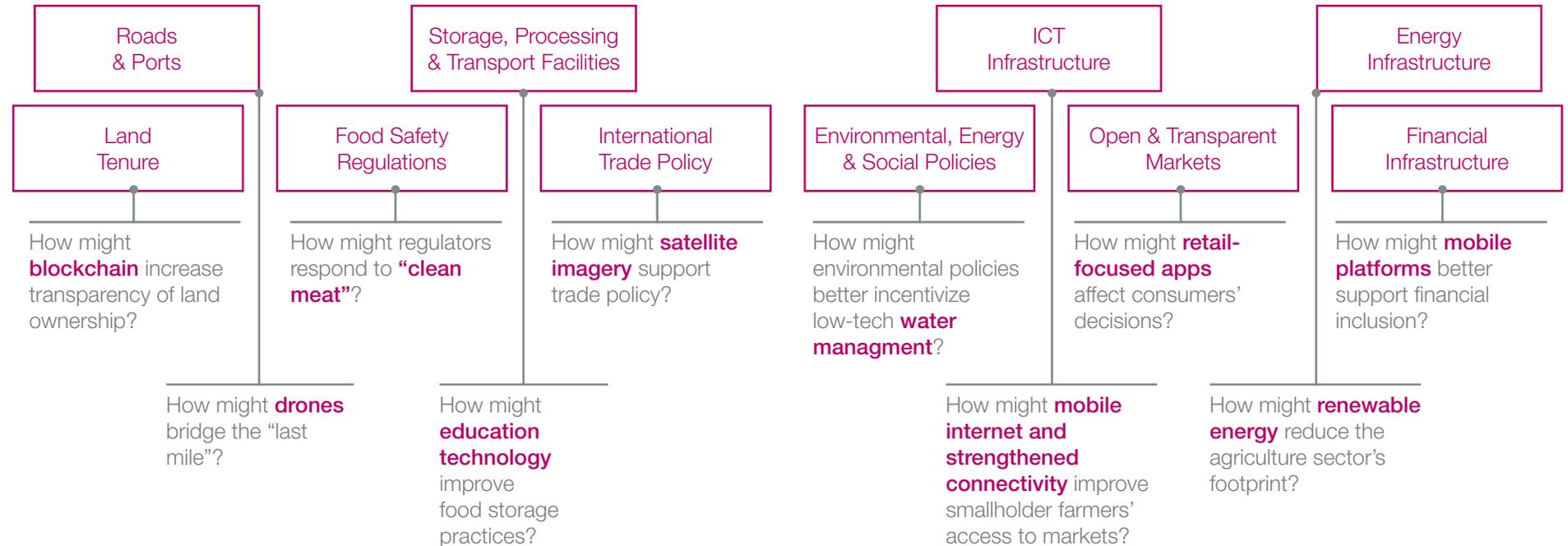
How might consumer behaviour evolve with transparency into food quality and origin (e.g., **temperature or nutrient indicators**)?

Consumption

Core activities



Enabling infrastructure



Questions and technologies are illustrative.

Can technology and innovation help create food systems that are...





What if we could harness technology and innovation to nourish the world without harming the planet?



The World Economic Forum has created a new **Innovation with a Purpose** project with the goal of directing the power of technology and innovation towards transforming food systems. In line with the Sustainable Development Goals, this collaborative project seeks to focus global attention on high-impact innovations and to empower a vibrant network of local innovators, linked to a global community, to accelerate social, environmental and inclusive growth solutions.

Innovation with a Purpose will build on the Forum's network of over 600 organizations and partnerships in 21 countries, catalyzed by the New Vision for Agriculture

The partnerships use a core set of 5 guiding principles:

Locally-owned



Multi-stakeholder



Market-driven



Globally supported



Holistic



NVA Latin America



Grow Africa

GROWAFRICA

NVA India

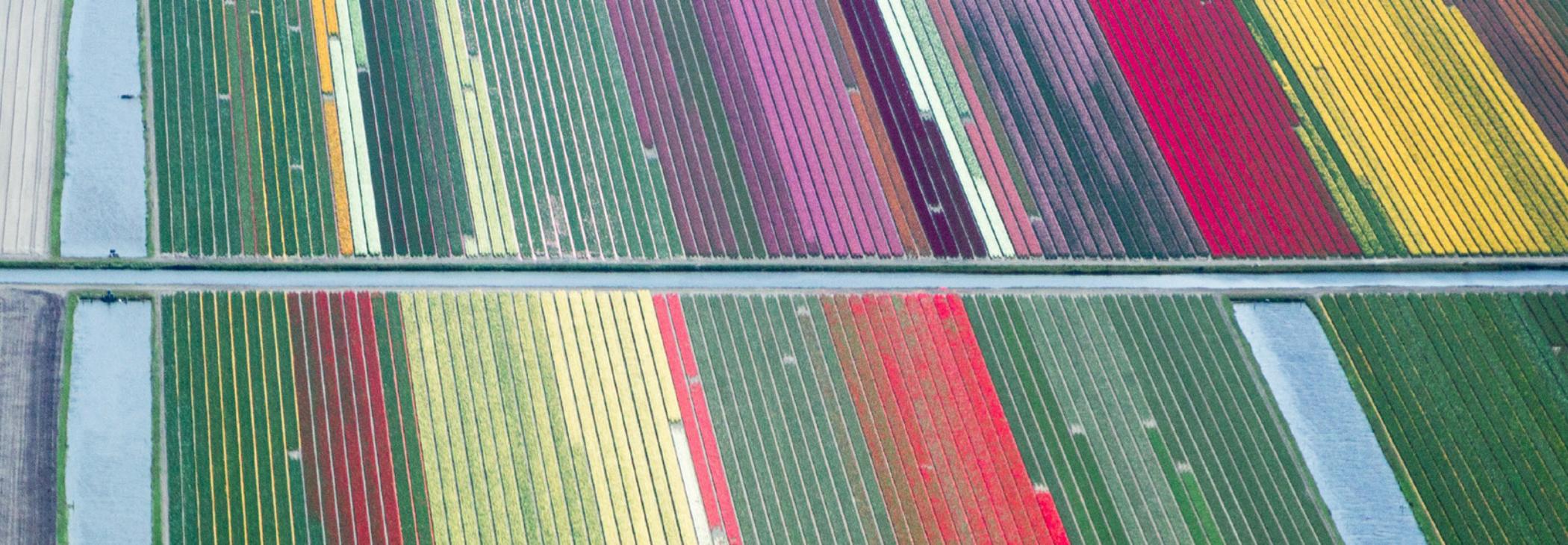


PPP-IAD
Public-Private Partnership
For Integrated Agriculture
Development

Grow Asia



GrowAsia



The Innovation with a Purpose project will have two phases:

Phase	Objective
1 Identify transformative innovations in food systems...	Provide actionable insights to global leaders to direct proactive policy, investment, and entrepreneurship to leverage innovation at scale for food systems change
2 ...and partner to apply and scale them	Accelerate innovation among grassroots entrepreneurs around the world to research, develop, deploy and scale transformative approaches

Output

Develop an insights resource, shared as a dynamic mapping of transformative innovations to be presented to leaders at the World Economic Forum in Davos

Catalyze partnerships through existing and new networks connecting innovators, investors, policy-makers, farmers and others

How can **YOU**

take part in this transformation?



We welcome your input to:

- **Identify** technologies and innovation that strengthen inclusivity, environmental sustainability, efficiency and nutrition in food systems
- **Understand** the benefits and potential risks of new innovations
- **Define** the roles that business, government and civil society actors can play to develop, adopt and scale such innovation towards society's needs
- **Catalyze** support for locally-led innovation - such as in Africa, Asia and Latin America - supported by a global network

For more information, please contact:
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Or visit: www.wef.ch/agriculture