Mainstreaming GHG reductions measures into large scale livestock investments

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The context

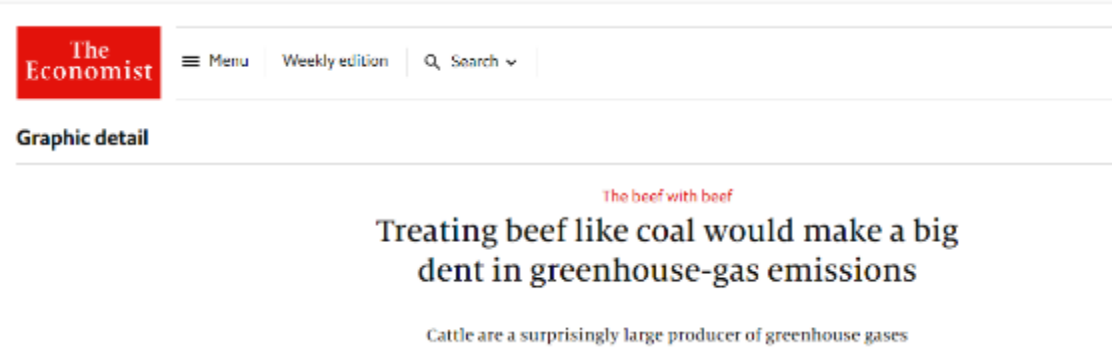
- IPCC: AR6 Climate Change 2021- The Physical Science Basis
- UNFCCC: NDC Synthesis Report
- UN Food System Summit
- G20 agricultural Ministerial

- WBG Climate Change Action Plan
- WBG Country Climate and Development Report

- Ongoing public debate on the livestock; its place in the food systems and its contribution to climate mitigation and adaptation goals.

UNFCCC

UNITED NATIONS FOOD SYSTEMS SUMMIT 2021



WBG approach to livestock in sustainable food systems

A future where livestock make greater contribution to:

healthy people,

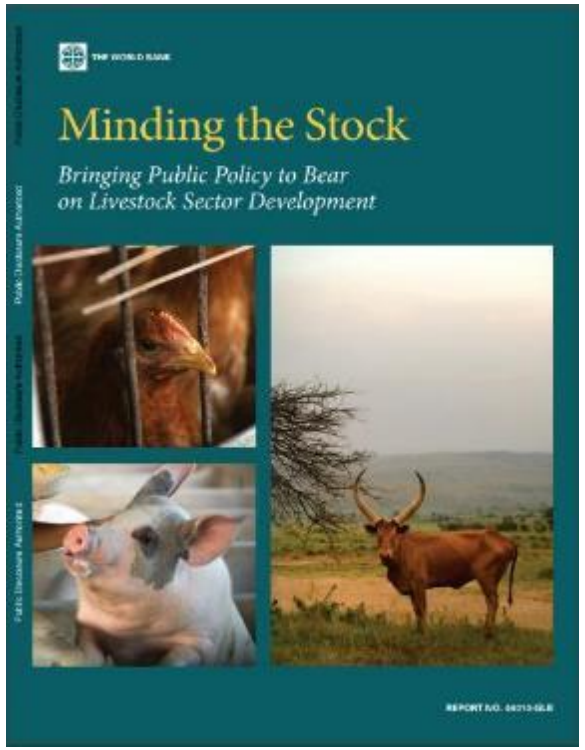
- Diets, food security and nutrition
- Improved food safety
- Preventing zoonoses and curbing antimicrobial resistance

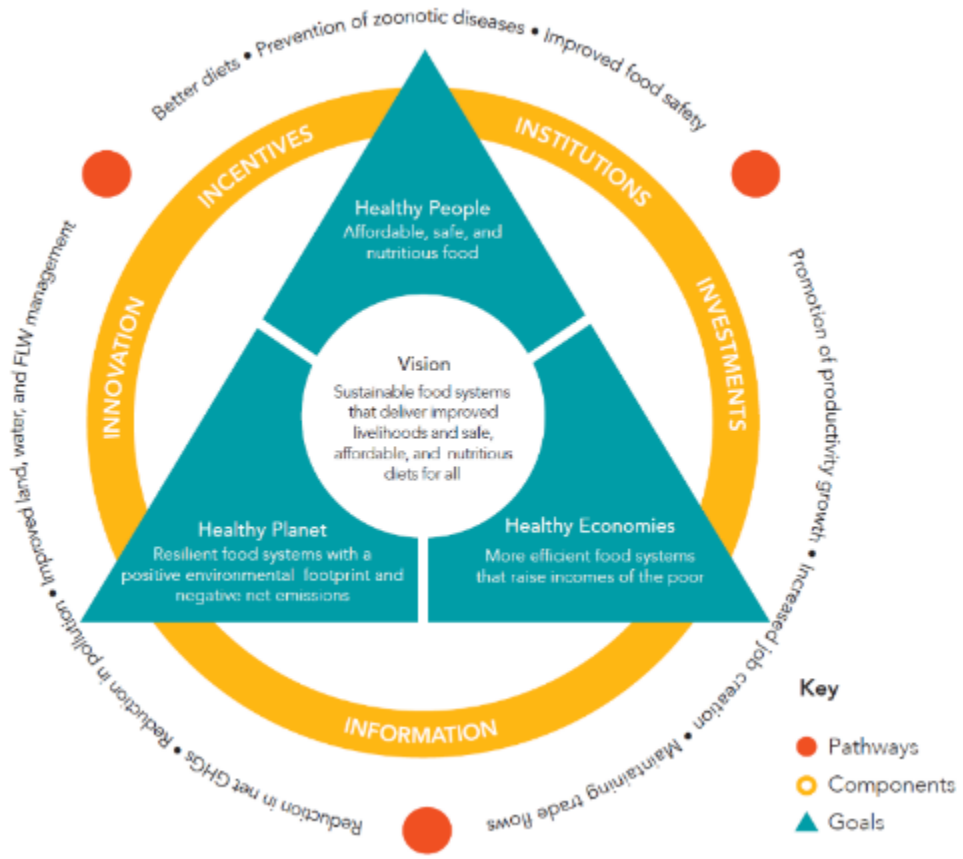
healthy planet,

- Climate change mitigation
- Sustainable land management
- Pollution control

… and healthy economies

- Asset for the poor
- Shared prosperity
- Gender equality





FoodSystems2030's Theory of Change

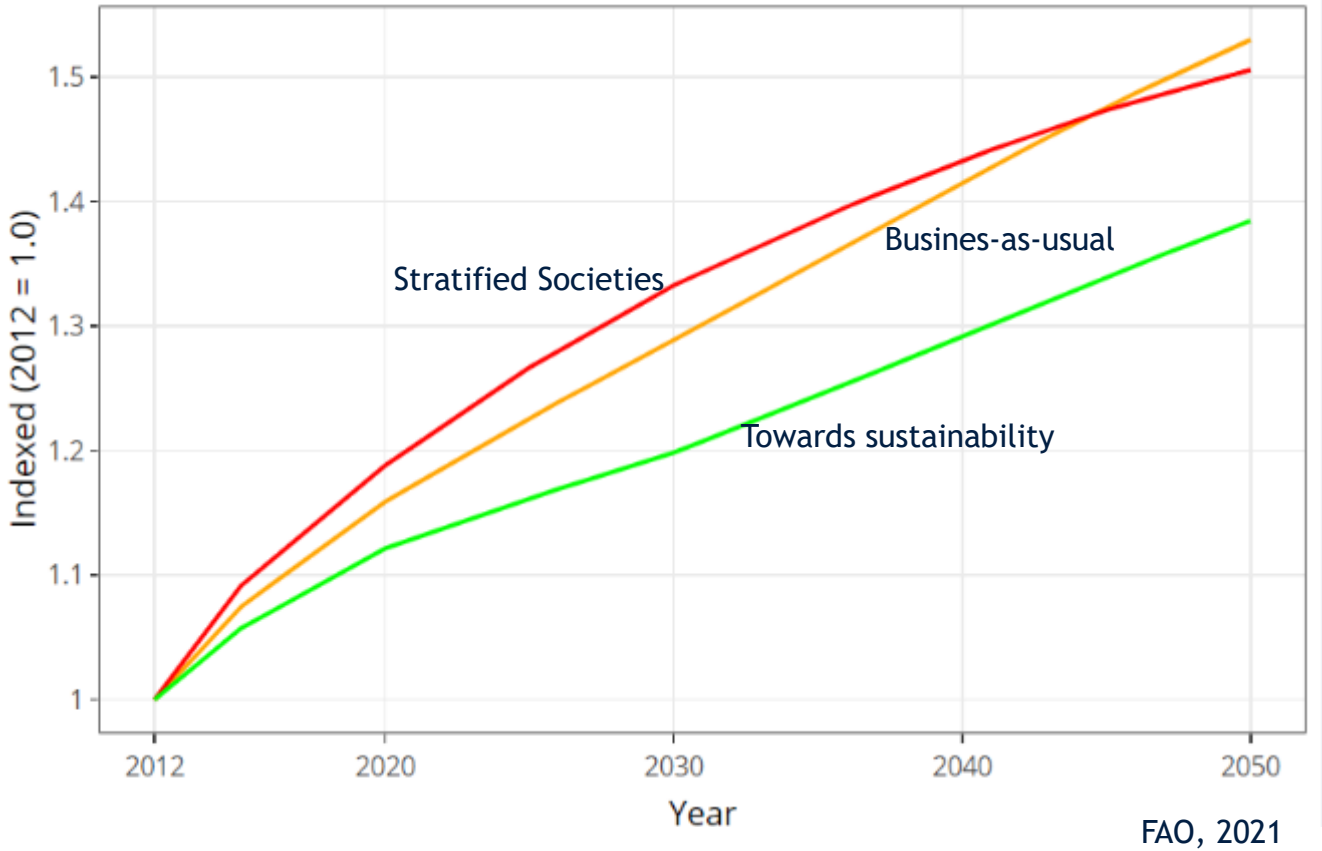
2009 Minding the Stock

Growth of the livestock sector

Despite stagnation observed for limited number of commodities and countries, **the sector continues to grow, overall**, steered by low- and middle-income countries.

Growth represents an opportunity to drive the sector on a more sustainable path.

Projected global herd size



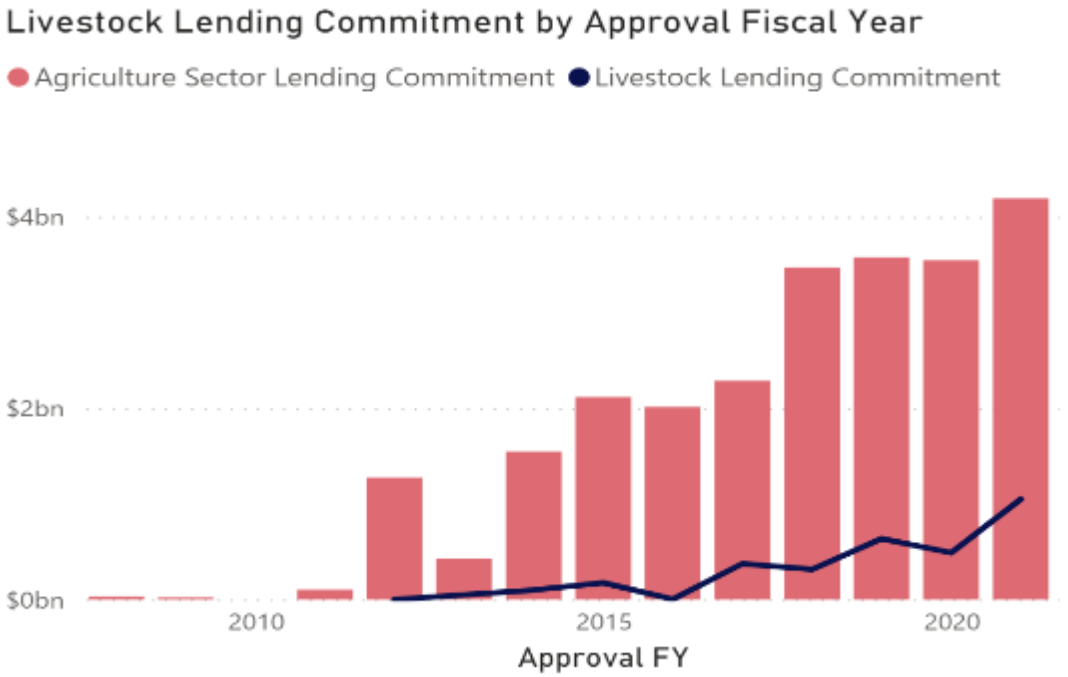
FAO, 2021

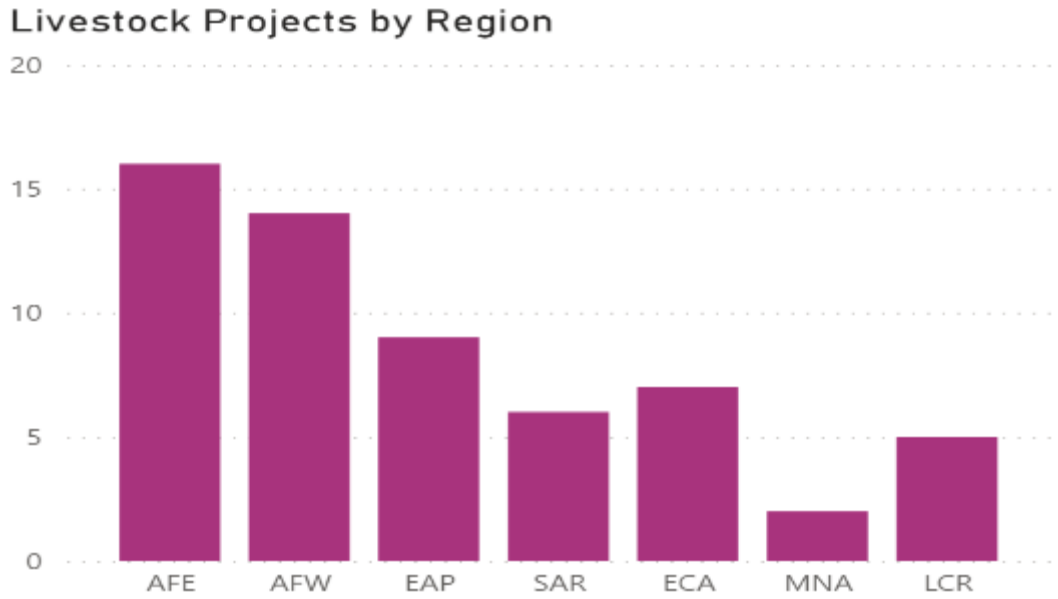
Operational commitments underpinning CSA mainstreaming: setting goals and measuring progress

We require all projects to complete five Climate Change related processes:

Climate & Disaster Risk Screening	GHG Accounting	Shadow Price of Carbon	Climate Finance Tracking (Co-Benefits)	Climate Indicators
Identify projects' exposure to climate and disaster risks	Ex-Ante determination of gross and net GHG emissions using the Ex-Act tool and other tools developed by FAO	Accounting for carbon externalities in economic and financial analysis	Determine projects' share of climate finance by identifying adaptation and mitigation Co-Benefits	Monitor and track the progress of climate results; measuring outputs or outcomes of mitigation and/or adaptation interventions
RISKS	EMISSIONS	VALUATION	FINANCE	MONITORING

Growing active livestock portfolio





Raising from an average of **US$150 million of new engagement per annum in 2010** to about **US$700 million per annum in the last three years**.

The average **Climate co-benefits generated by the livestock portfolio in the last 2 and a half years is 61%,** with 22% for adaptation and 39% for mitigation:

- higher than for the Agriculture portfolio (57%);
- an improvement over the average for the three previous fiscal years (55%).

Moving towards low net GHG emissions livestock value chains

Three entry points for net GHG emission reduction in the livestock sector

- Increased **efficiency** and decreased GHG emission intensity through improved livestock management practices (e.g. feed management, genetics and animal health improvements, animal health, offtake and fattening strategies);
- increased **soil carbon sequestration** through improved grazing management practices (e.g. adaptative grazing; restoration of degraded lands); and
- adoption of **energy-efficient equipment** (e.g. cooling) and production of **renewable energy** (e.g. solar and wind) to reduce and displace fossil fuel energy consumption.

Where investing in adaptation and mitigation makes economic sense

Four major livestock operations in Asia approved during the last 3 fiscal years

Country	Project development objective	Project financing (USD million)	Financial Internal Rate of Return	Economic Internal Rate of Return	Climate Co-Benefits (A-M)
Bangladesh	Improve productivity, market access, and resilience of small-holder farmers and agro-entrepreneurs operating in selected livestock value chains in target areas.	500	17-47%	23.50%	60% (25%-35%)
Mongolia	Improve livestock health, productivity, and commercialization of targeted value chains in project locations and provide immediate and effective response in the event of an eligible crisis or emergency.	30	19-27%	23-33%	55% (44%-11%)
China	Promote integrated environmentally sustainable and climate-smart agriculture, and agri-food quality and safety, in targeted value chains and landscapes in Hubei Province.	150	12.6-19.48%	27.4%-51%	53% (12%-41%)
Kazakhstan	Support the development of an environmentally sustainable, inclusive, and competitive beef production in Kazakhstan.	500	25%	42%	64% (21%-43%)

Investing in Sustainable Livestock --The Guide

A practical tool and an information resource for building sustainable livestock production systems

To **enable** systematic consideration of environmental, health and equity objectives, and related activities, in the design and implementation of livestock projects

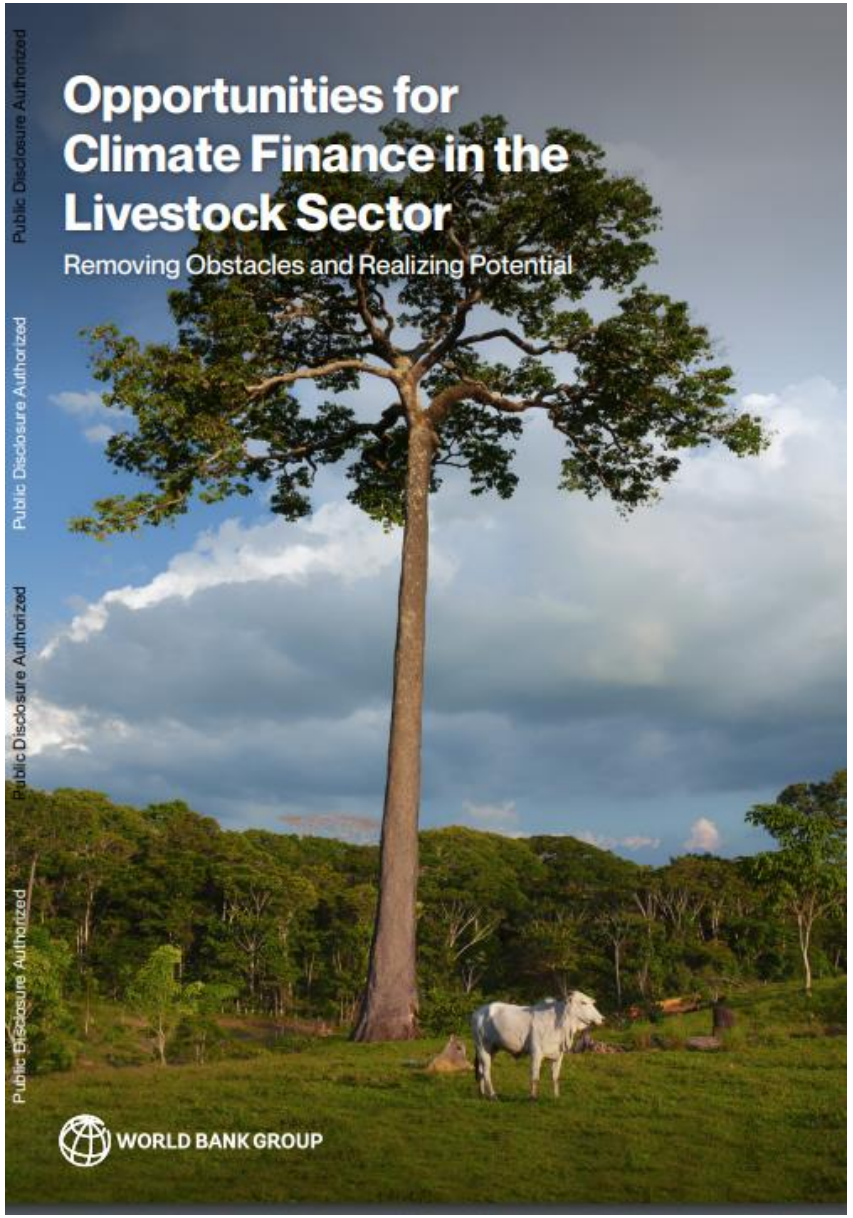
Compatible and connected with other tools and guidance: the portal for addressing environmental, health and equity sustainability in livestock operations

The addition compared to existing tools is to decomplexify sustainability issues, address tradeoffs, and streamline available guidance

SCAN ME

sustainablelivestockguide.org

Opportunities for Climate Finance in the Livestock Sector



https://openknowledge.worldbank.org/handle/10986/35495

LESSONS LEARNED IN MAINSTREAMING MITIGATION IN THE LIVESTOCK PORTFOLIO

- Help Client turn **existing high-level commitments to sustainability and climate change mitigation and adaptation into practical action**. Build confidence, analyze and propose options, provide technical assistance.
- **Align interventions**. Build synergies between the various triggers of change: incentives, extension, conditionality of public support, access to land.
- Importance of the **monitoring and measurement of the results**. Build evidence for extension and advisory services, adjustment of public expenditure, impact finance.
- **Take advantage of the diversity of species, breeds, feed sources and management practices.** Livestock production is demanding on natural resources. Build on comparative advantages of production systems and complementarities with other sectors (e.g. crop, food processing, forestry, conservation).