

Designing Climate Finance Solutions for a Successful Protein Transition

Nicole Rocque,
German Chancellor Fellow 2023-24

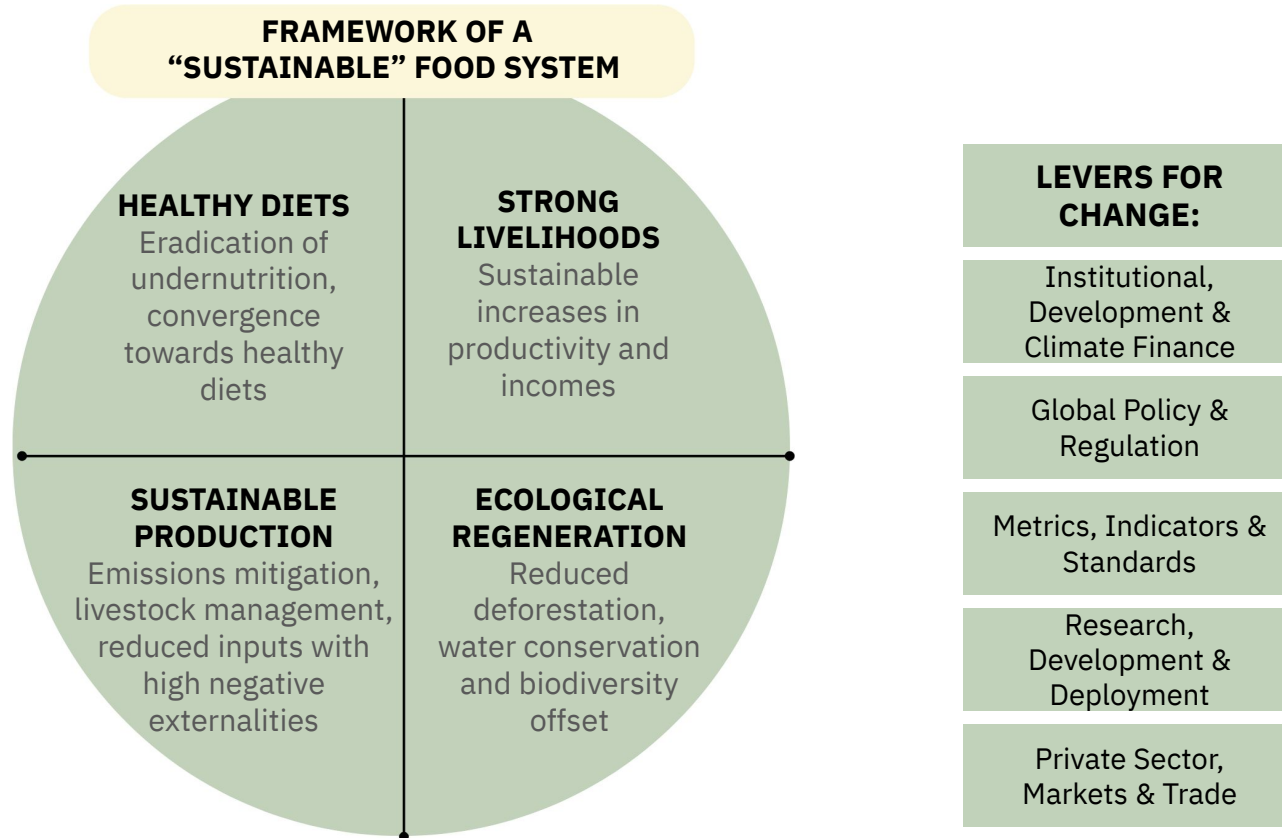


Alexander von
HUMBOLDT
STIFTUNG

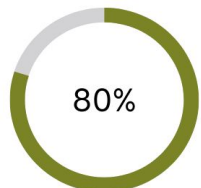
Hosted by:



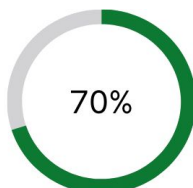
A call to action: Financing a food systems transformation



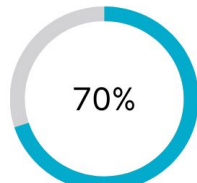
Global Environmental Impacts of Agri-Food Systems



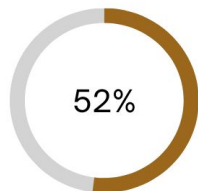
GLOBAL
DEFORESTATION



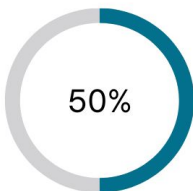
TERRESTRIAL
BIODIVERSITY
LOSS



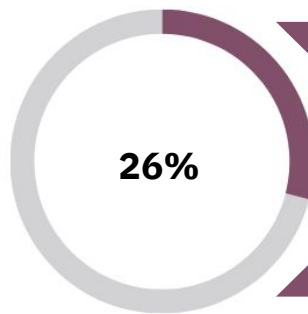
FRESH
WATER USE



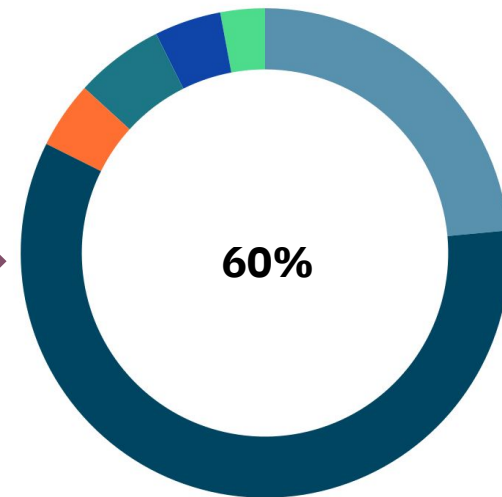
DEGRADED
AGRICULTURAL
LAND



FRESH WATER
BIODIVERSITY
LOSS



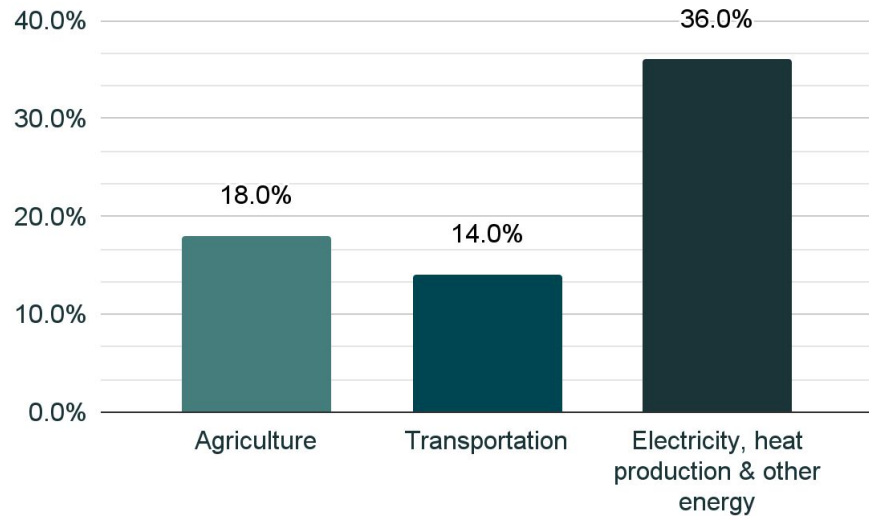
GLOBAL
GHGS



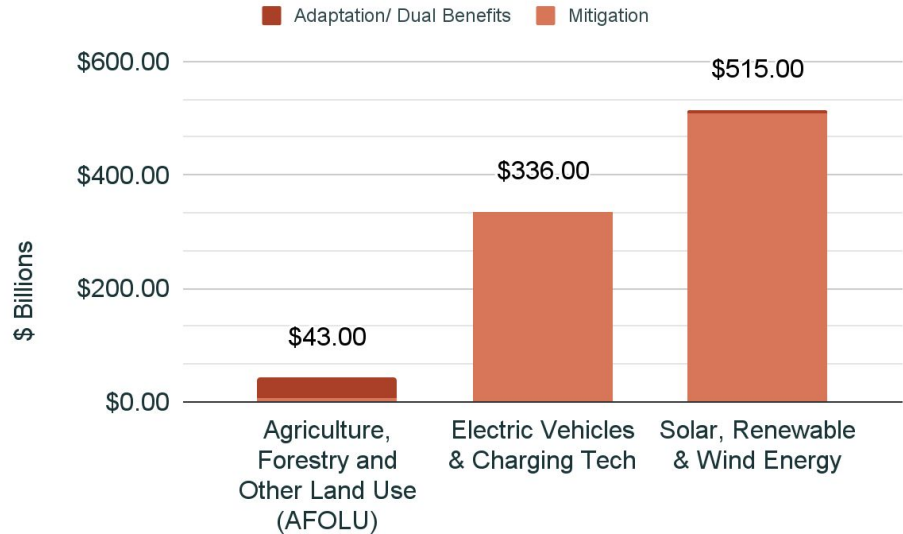
AGRICULTURAL
PRODUCTION²

Despite its mitigation potential agriculture remains severely under invested as a climate solution, representing just 4.3% of total climate finance

Percent of global GHG emissions¹



Climate finance flows²



¹Source: Emissions Gap Report 2023 (United Nations Environment Programme)

²Source: Global Landscape of Climate Finance 2023 (Climate Policy Institute)

Food and agriculture systems can generate \$4.5 trillion in new market opportunities each year: Barriers for investing into Agriculture, Forestry and Other Land Use (AFOLU)

Deal flow & bankable projects

- **Outside investment mandates:** Does not fit within risk/asset class/timeframe/return mandates (i.e. early-stage risks too high, volatile, long development lead times, etc.)
- **Deal sizes too small:** Ticket sizes are below commercial-investor interest thresholds
- **Lack of deal flow:** Not enough deals to attract new and diversified mainstream institutional investors
- **Liquidity risk:** Limited investment-grade assets with exit/liquidity features

Lack of information

- **Lack of primary data:** Both at the farm level and throughout the supply chain hindering the ability to create bankable projects
- **Lack of standardised investment frameworks:** Lack of ESG/impact/ performance data, indices, benchmarks, investment-grade research, and standards
- **Lack of sector experience:** Limited experience, expertise, network, prior models, & procedures for private sector investment

Transaction costs

- **High early-stage risk:** Lack of data makes it difficult to assess investment risks (both real and perceived) and execute risk-mitigation strategies
- **Low appetite outside of business-as-usual AFOLU investments:** Uncertain financial/environmental upside, particularly within the smallholder farmer context
- **Mature ESG sectors more attractive:** Other ESG sectors are more attractive investments, including high-impact industries like renewable energy

Transforming food systems could cost up to \$500 billion per year: Food system stakeholders have difficulty accessing appropriate financing solutions that are fit-for-purpose

- **Costs are front-end loaded:** Many food value chain stakeholders (e.g. farmers, input providers, processors, manufacturers) lack liquid working capital and de-risking solutions required to implement sustainable capital-intensive tools, projects and processes (e.g. equipment to implement low-emission agricultural methods, a new workstream that upcycles agricultural waste)
- **Agricultural enterprises across the supply chain are too small for most commercial and debt lenders:** Significant under financing of the ‘missing middle’ with financing needs of between roughly \$50,000 and \$1-2 million
- **Equity financing is not well suited for scaling nascent technologies:** Typically equity investments seek high returns in short time frames, it is usually poorly suited for investments in infrastructure which typically have higher upfront capital expenditure (CapEx) costs, lower appreciation upside potential, and generate steady returns over a long time period of 10–20 years.

We need to bridge the supply of capital with demand by creating appropriate instruments, vehicles, and intermediaries

Commercial Financial Investors
Corporations
Development Finance Institutions
Multilateral Climate Funds
Governments
Public Funds
Households/ Individuals



Supply chain finance	Access to capital	Discounted, short-term working capital promoting climate-resilient agriculture practices
	Deal flow across the value chain	Engage and coordinate with on-the-ground stakeholders building trust across the value chain
Offtake/ Volume Guarantees	Strategic partnerships	Strategic partnerships across the value chain to support manufacturing scale-up
	Cost efficiency	Minimum volumes guarantee with potential to drive cost efficiency across the value chain
Technology Risk Insurance	Infrastructure development	Scaling new innovative technologies, and building first-of-its-kind facilities
	Standardization and risk mitigation	Guaranteed technology performance removes technology risk
Debt Guarantees	Scale and technology transfer	Makes counterfactual loan financing available, at lower cost, with more attractive terms
	Deal size and bankability	Aggregation of SM enterprises and/or cooperatives enables deal size, risk mitigation, etc
Grants & Blended Finance	Implementation support	Data collection, implementation of climate-friendly practices, frameworks for ESG investing
	Data and impact assessment	Development of pilot projects, expertise, network, prior models, & procedures for investment

Case Study: Supporting indigenous crops and production infrastructure for alternative protein

STRENGTHS TO BUILD ON:

High Value
Agriculture

Processing
Infrastructure

Enterprise
Development

Gender Justice & Participation

Technical Advisory

Inclusive Business Models

OPPORTUNITIES TO GROW IMPACT:



**Regenerative Business
Practices**



**Local Food Systems
Transformation**



**Job Creation and Economic
Empowerment**

Thank you!

