

THE FOOD-ENERGY NEXUS: OPPORTUNITIES FOR CROSS SECTOR COLLABORATION

September 7, 2023
SAFSF Webinar

CONTEXT

Philanthropic strategies focused on food systems, climate & energy are siloed

United Arab Emirates, a petrostate, is hosting the UN Climate Conference this year (COP28)

- Food and agriculture is a top priority
- So is renewable energy but not the phase out of fossil fuels

Two GA & Dalberg reports on the interconnectedness of food and energy systems, especially the role of fossil fuels

- Objectives: Elevate awareness amongst philanthropy and the climate & energy community; identify the tradeoffs, synergies, gaps, and opportunities for collaboration

Timeline of plans:

- Sept - Nov: Seek feedback on findings and assess interest in areas for further collaboration
- Late Oct - early Nov: Public webinar and media launch
- Dec: Further promotion and socialization during COP28
- Jan 2024 onwards: Facilitate partnerships for collaborative action

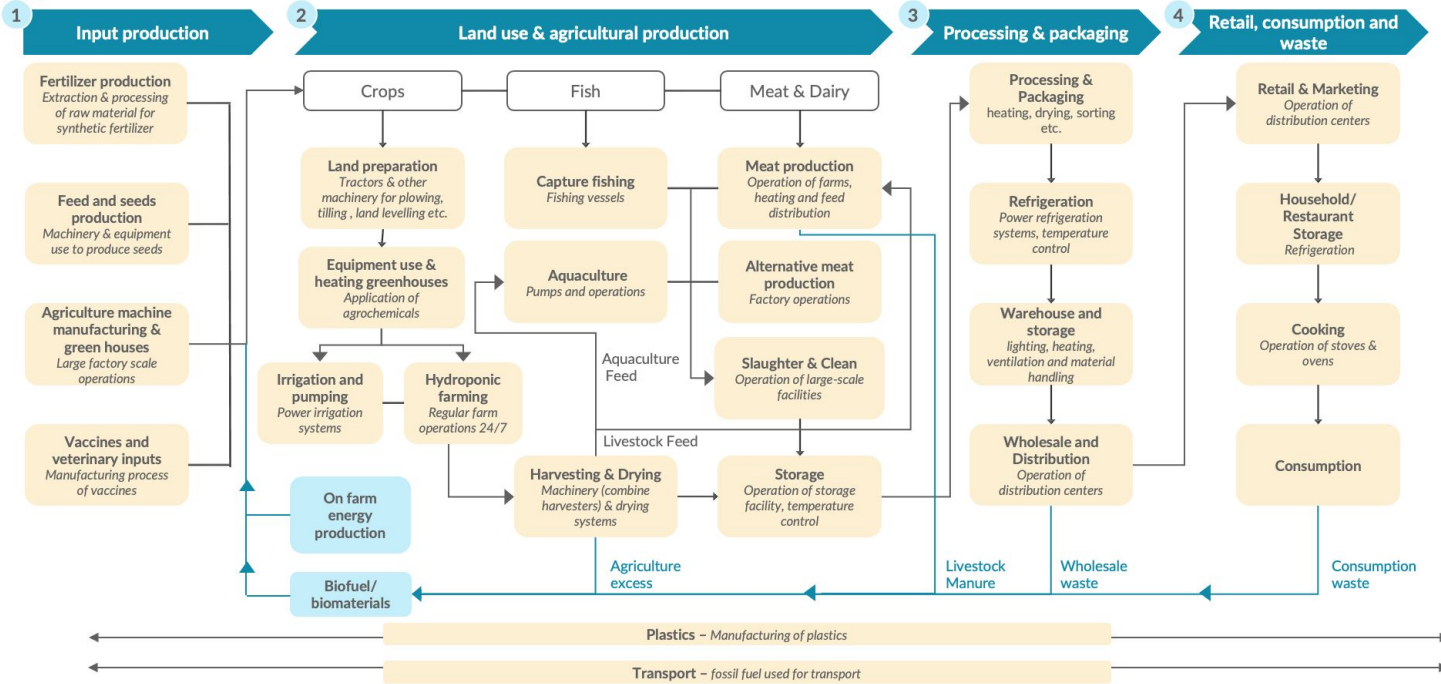
- Food and energy systems are fundamentally intertwined

We cannot transform food systems without addressing fossil fuel consumption

We won't be able to phase out fossil fuel use without changing food systems

- Food systems contributes 33% of GHG and consume a third of the world's energy
- Industrial food systems are highly energy intensive and dependent on fossil fuels
- Energy intensity in food systems is growing
- Fiscal incentives for biofuel production has impacted emissions, natural resources and food prices
- Fossil fuel industry is investing heavily in petrochemicals to lock in the dependence of food systems
- We must shift towards agroecology and regenerative approaches, sustainable plant-rich minimally processed diets, and more localized value chains

FOOD & ENERGY SYSTEMS ARE FUNDAMENTALLY INTERTWINED



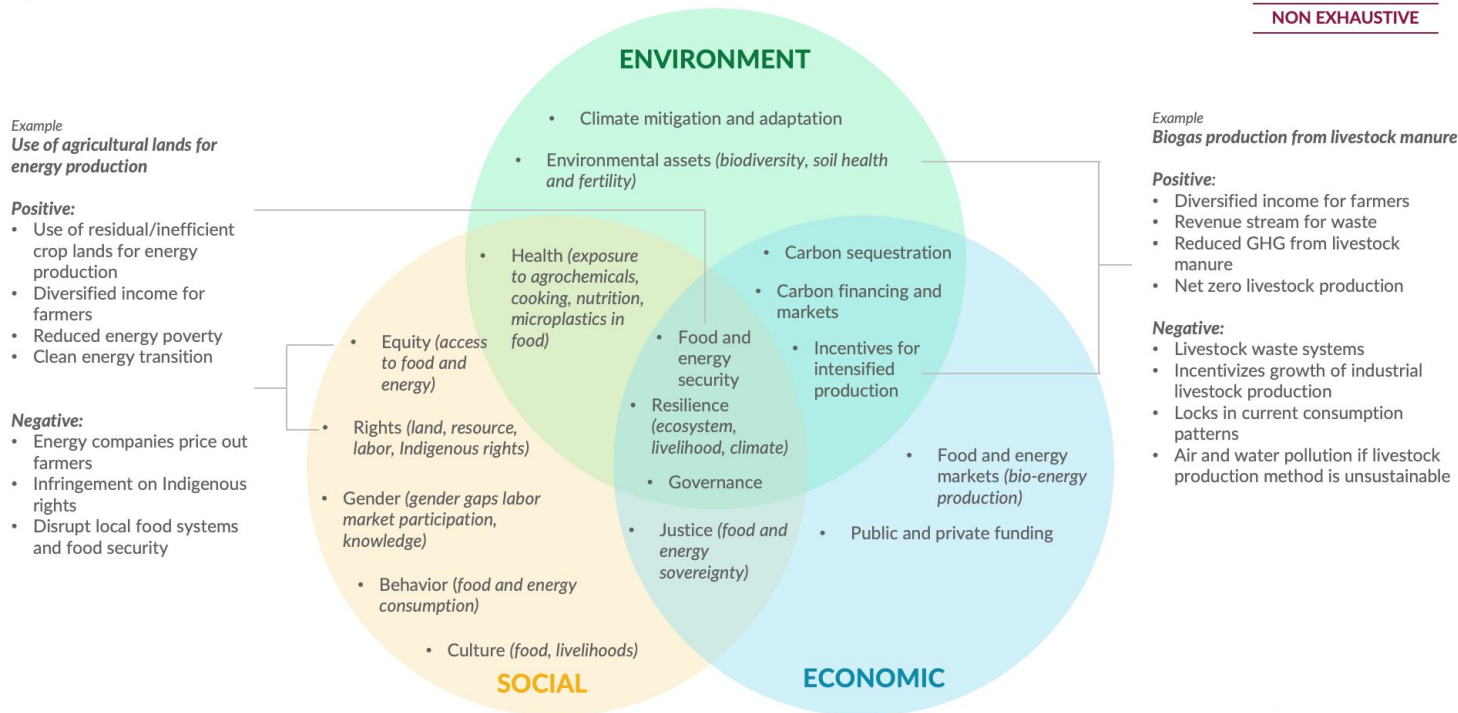
Note: Meat production includes cow-calf operations, stockers and backgrounding and feedlots

Legend Energy consumption Energy production **Text** Examples of fossil fuel/ energy use **Text** Biomaterial for energy production

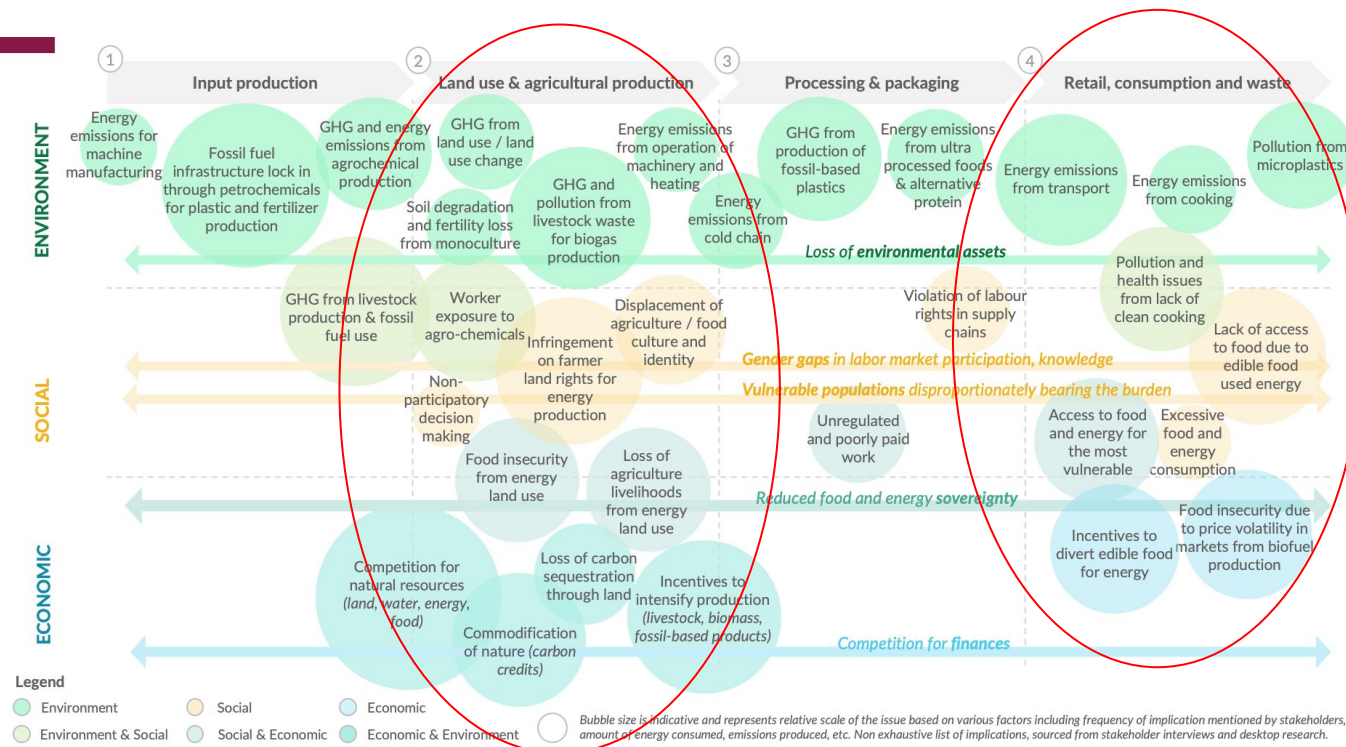
INDUSTRIAL FOOD SYSTEMS ARE HIGHLY ENERGY INTENSIVE AND DEPENDENT ON FOSSIL FUELS

- Energy intensity is growing
 - Increased mechanization
 - Growing use of fossil fuel based inputs
 - Globalized supply chains
 - Growing demand for meat and dairy
 - New food trends such as ultra processed foods and alternative meats
- Vested interests are barriers to fossil fuel phase out in food systems: i.e., petrochemicals for plastics and agrochemicals

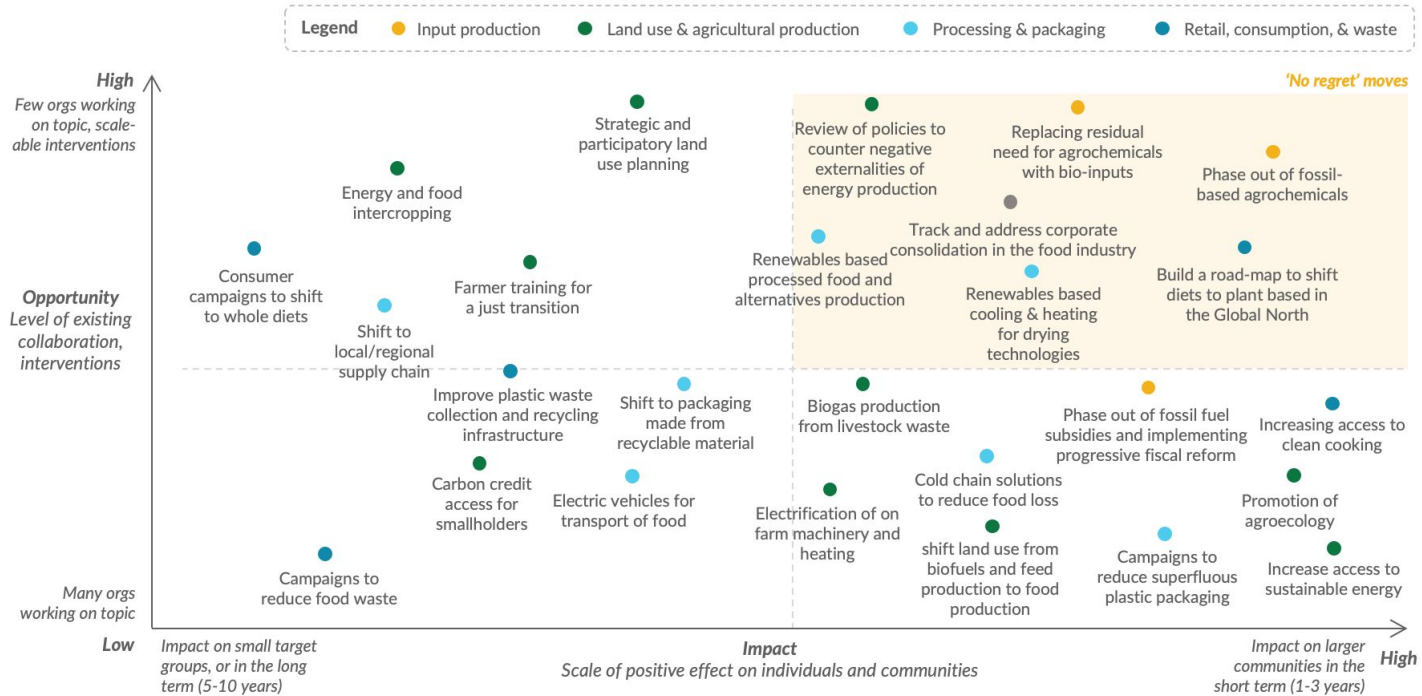
POSITIVE AND NEGATIVE INTERACTIONS WITH IMPLICATIONS ACROSS THE ECONOMY, ENVIRONMENT AND SOCIETY



ACTORS INVOLVED AT PRODUCTION AND CONSUMPTION STAGES MOST IMPACTED



UNLOCKING TRANSFORMATION: HIGH-IMPACT, NO REGRET OPPORTUNITIES FOR COLLABORATION



DRAFT RECOMMENDATIONS FOR 'NO REGRET' MOVES

- Phase out fossil-fuel based agrochemicals
- Achieve healthy, sustainable and just food environments that support plant rich diets and minimally processed foods
- Shift to renewables-based cooling and heating for drying agricultural products
- Review fiscal policies of biogas and biofuel production
- Shift to renewable energy for food processing and transport
- Track and address corporate consolidation in the agrochemical and food industry

CONCLUSION

Food and energy systems are fundamentally intertwined – with interactions across the food value chain, and broad social, economic, and environmental implications.

Therefore collaboration across actors within these two systems is crucial.

- Which insights resonate with you?
- What near-term opportunities do you see for further discussion and collaboration?
- Who needs to be engaged?
- How do we get started?