INFLUENCERS

Inputs
Access to seeds, traditional varieties, fertilizers and extension services.

Post-harvest, processing and distribution
Aflatoxin control, fermentation, drying, fortification, product reformulation and storage and transport infrastructure (including cold chains)

Natural resources management
Soil quality, agricultural biodiversity, resilience to heat, drought, pests and diseases, water and energy use.

Agricultural research and development
Innovation, Entrepreneurship
Food policy paradigms: silver bullets versus systems

Productionist: “increasing yields will solve the problem”

Food systems (cf agroecology): a systems approach to address underlying structural problems and system dynamics that affect production, people, and the planet (i.e., “sustainability”)

California’s food system & sustainability problems

• California’s agriculture epitomizes the paradox of high productivity with food insecurity and environmental degradation, which are tightly interlinked through our current food systems.

• Challenges are accelerated by climate change.
Yes it is Complex!

Green: Indicators
Blue: Component
Red: Integrated
Food systems framing of food supply chains

Adapted from a figure by Michele Grant, World Food Systems Center, ETH Zurich
ASI strives for a base of diverse stakeholders in terms of race/ethnicity, gender, geographic region, urban/rural, socioeconomics, age, etc.
• Fundamental changes over the past generation – structural transformation, agrarian differentiation, urbanization, climate uncertainty, and others – make it necessary to broaden our perspective from fields and farms to encompass the food system.

• Participation for priority setting and partnership for innovation need to be inclusive, multi-stakeholder processes spanning scales rather than bilateral interactions.

• This can reveal new R&D opportunities and possible interventions, such as reduction of food loss and waste as well as opportunities for small scale entrepreneurs in converting waste into resources.

• Desired impacts – improved nutrition, increased resilience – emerge at scales far different from typical scales of R&D or project intervention.
Examples of interventions