

Where is there room for improvement in models and decision support?

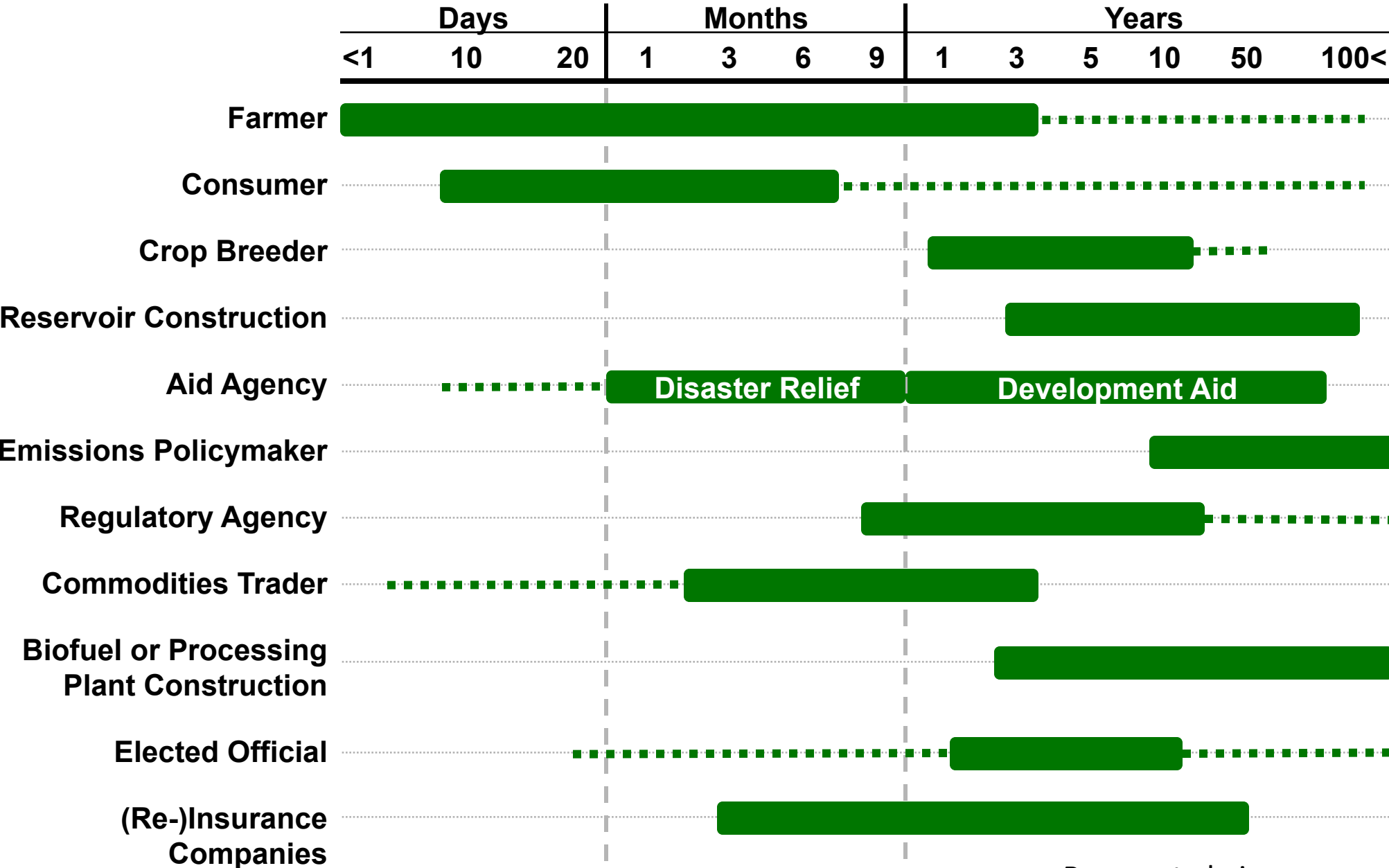
[What are we currently missing?]

- *Equilibrium analysis missing transitory impacts/risk from shocks*
- *$\Delta\$$ and Δyield are not sufficient indicators for risk*
- *Food system structure and actors can exacerbate or ameliorate the shock cascade*
- *Events in one place/time can have impacts on distant place/time*
- *Interventions need to be aimed at resilience, not just response*
- *Information and decision support must be timely and targeted*
- *Hard to determine the wider effects of a single intervention context*

Note focus on transitory shocks

•Build resilience toward what is anticipated with flexibility to respond to unanticipated

DRAFT-Temporal Scale of Agricultural Sector Stakeholder Interest



Case study typologies:

Already in White Paper (Section 9):

- **Pilots examining different time horizons**
 - Historical analysis of a recent prominent, observed food shock
 - Forecasting upcoming food shock
 - Understanding changing risk profile for food shocks in future decades
- **Pilots examining fundamental interactions**
 - Capturing complex systemic behaviors
 - Capturing dynamics between global and regional actors
 - Identifying households and populations most at risk (e.g., within-country income distributions, age, gender, farm system).
- **Pilots examining structural behaviors and balance**
 - Externally-driven (non-food system focused) structural changes where we hope food system risk will not be elevated (e.g., large-scale demand for bioenergy)
 - Balancing near-term needs with long-term sustainability / triple-bottom line
- **Pilots around next-generation model design**
 - Proposing new output metrics needed
 - Identifying priority observational products needed
 - Characterizing more useful communications/tool interfaces needed

Raised yesterday: Venezuela, Arab Spring, Libya, Zimbabwe (food focus)