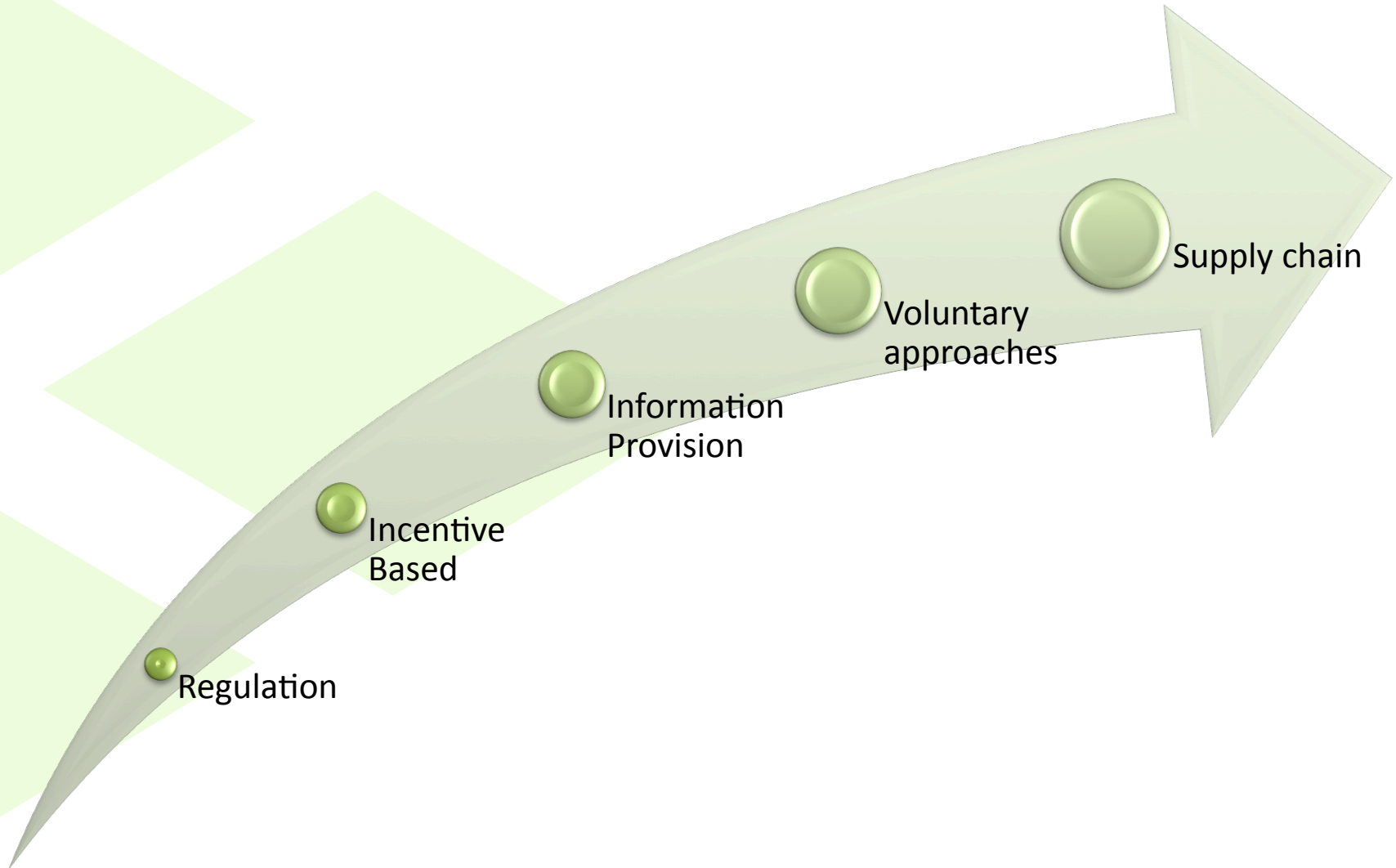


# What influences behaviour change in relation to food production: evidence of effective interventions

Andrew Barnes

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# Farmers experience mixtures of public and private interventions



Regulation

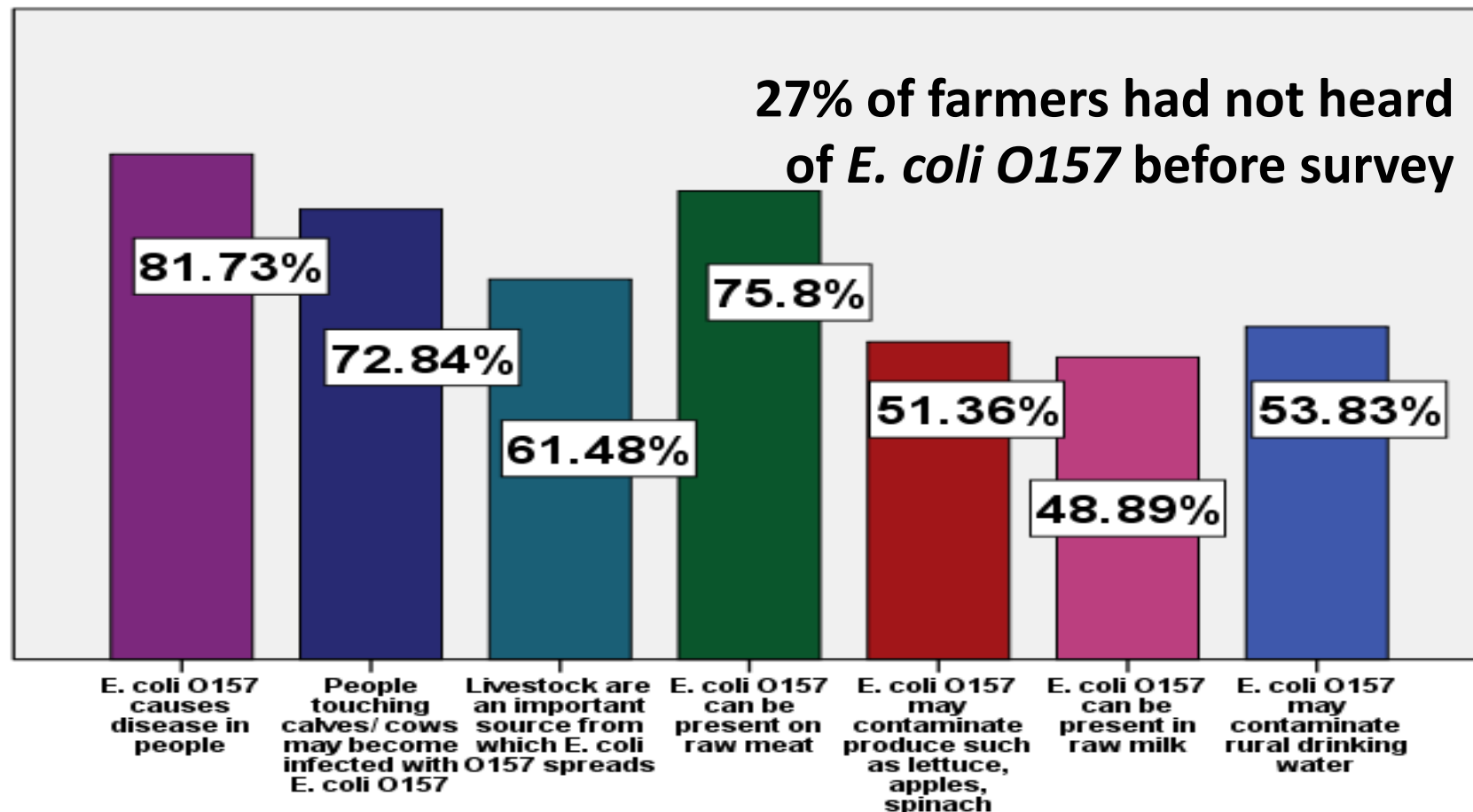
Incentive  
Based

Information  
Provision

Voluntary  
approaches

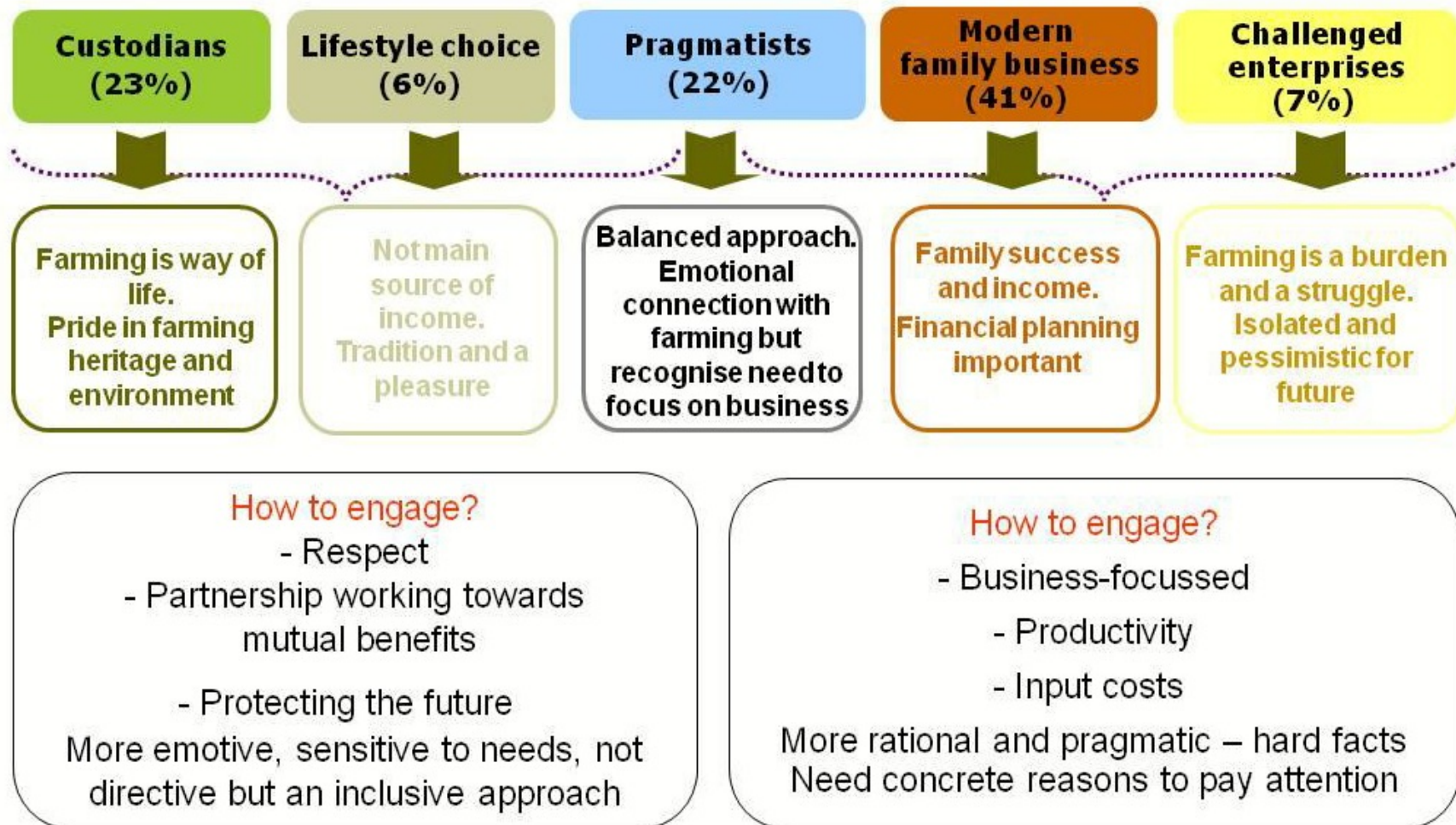
Supply chain

# Farmer knowledge varies



(% of respondents who agree/strongly agree with the respective statements)

# Fragmentation within the sector





# Symbols of 'good farming' influence behaviours



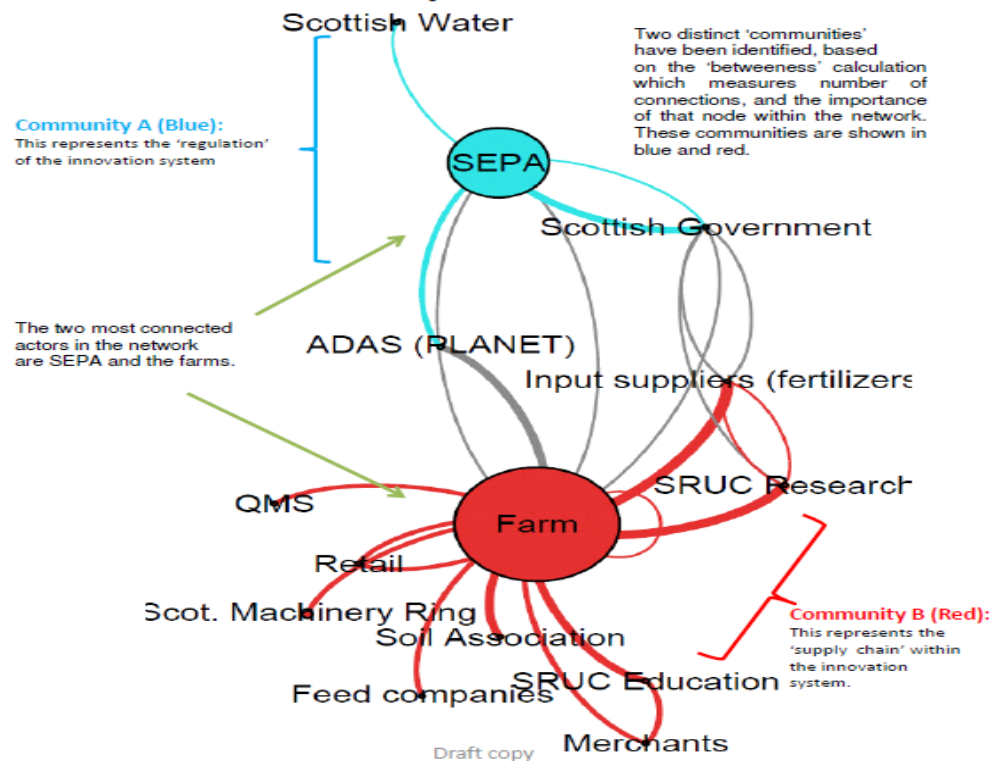
Burton, R.J.F., 2004. Seeing through the 'Good Farmer's' eyes: towards developing an understanding of the social symbolic value of 'Productivist'. *Behav. Soc. Ruralis* 44 (2), 195–215.

Moran, D., Lucas, A. and Barnes, A.P. (2013). Mitigation Win win. *Nature Climate Change*

# Innovation networks influence behavioural change

## Nitrogen Use Efficiency network diagram:

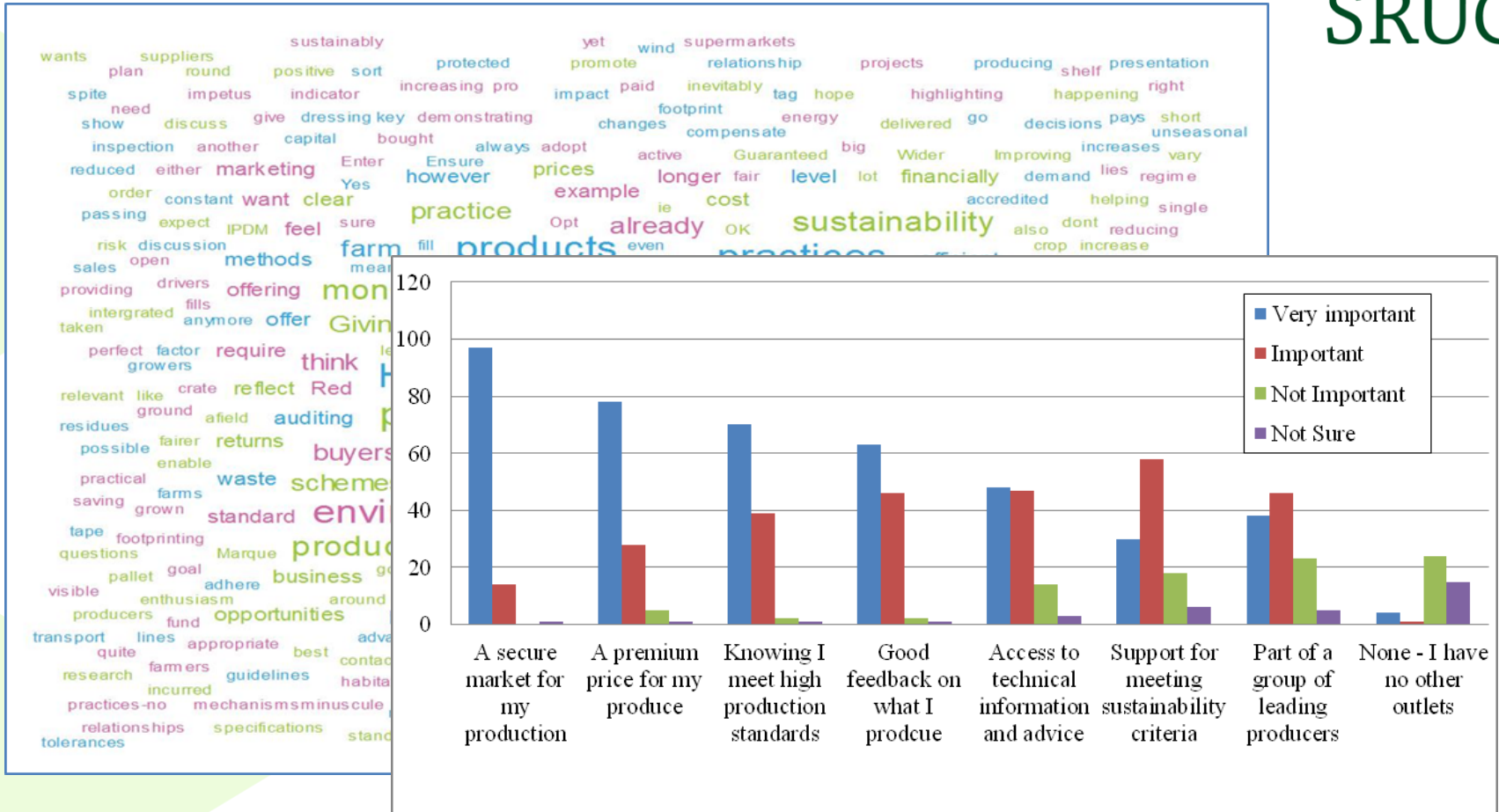
The diagram below shows the network analysis. The size of the 'node' in the diagram indicates how many other organisations it is connected to. The thickness of the connecting line indicates how many 'flows' pass between the nodes (see previous page). The colour indicates which community the organisation belongs to. The communities are calculated based on the position of an organisation within the network and its connection to other organisations.



Borthwick, F. (2014) Using the ISM tool to understand innovation in nitrogen use efficiency. SRUC Policy Brief

Oreszczyk, S., Lane, A. and Carr, S. (2010) The role of networks of practice and webs of influencers on farmers' engagement with and learning about agricultural innovations. *Journal of Rural Studies* 26:404-417

# Supply chain relationships will influence change



Barnes, A.P. (2014). Results of Survey of LEAF Farmers. Sustainable Intensification Platform: Project 3: The influence of external drivers and actors on the sustainability and productivity of farming (LM0303). Internal Report for Defra, August 2014.

# Discussion points

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- Farmers experience a range of interventions
  - Fragmented structure of farming leads to heterogeneity in responses
- **Agricultural production is inherently risky**
  - Can farmers manage quality and quantity?
  - Who owns (and who pays) for quality?
- **Promising interventions around utilising:**
  - networks of farmers and other supply chain actors
  - Prestige and conformity within the farming community
  - Co-innovation may increase uptake, relevance of technological solutions
- Spectrum of perceptions, values, attitudes, motivates
  - Engagement differs across farm types but could be marshalled by other supply chain actors
  - Farmers have low power of negotiation but engagement with buyers on quality is key driver