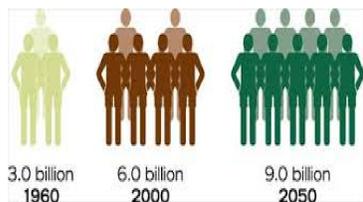


# An Overview of Resilience Factors in Food Supply Chains

## 1. Background/Rationale

It is commonly reported that supply chains in all forms face increasing volatility across a range of business parameters from rising energy cost, to raw materials availability, and fluctuating currency exchange rates. Food supply chains are particularly susceptible as, unlike other supply chains, ability to prepare for disruption is often limited by short product shelf lives. Clearly, these modern challenges highlight a need for considering a variety of strategies to improve the resilience of food supply chains to deal with future volatility in global market.



## 2. Research Aims

- To examine what constitutes a contemporary food supply chain
- To categorise key components of resilience in food supply chains
- To generate a framework to aid understanding of balanced resilience by food manufacturers.

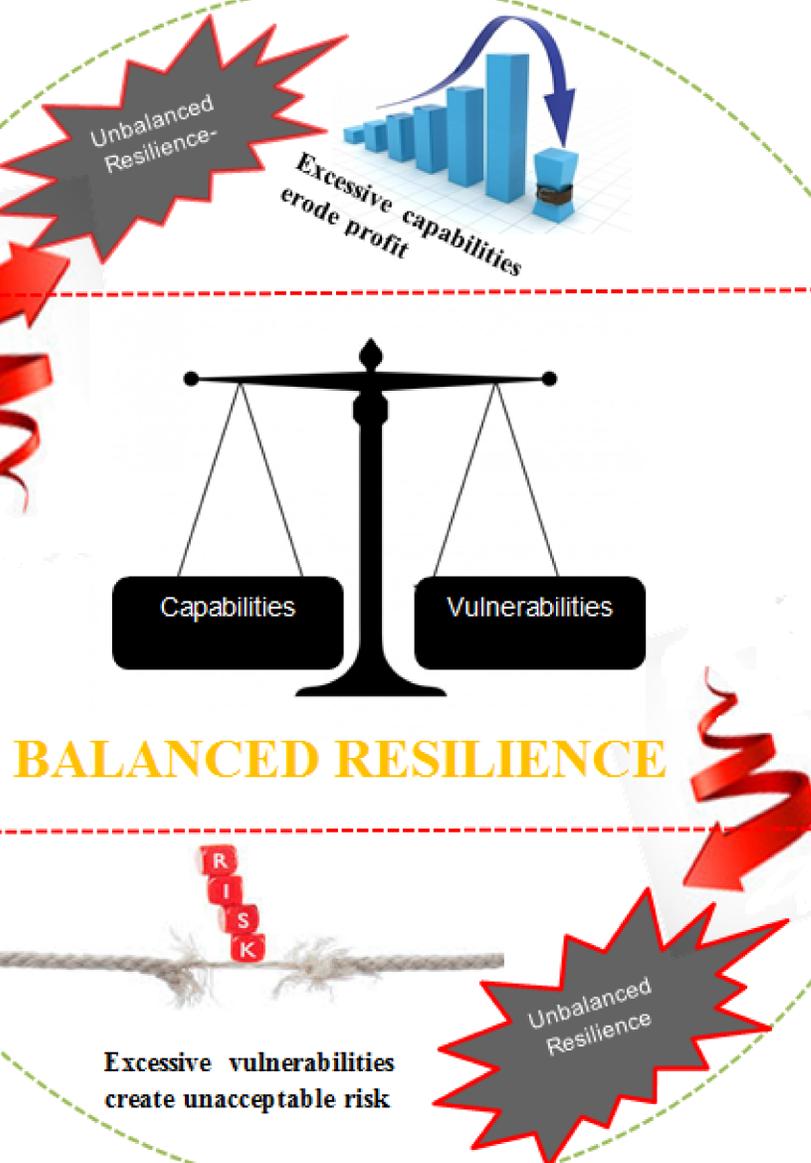
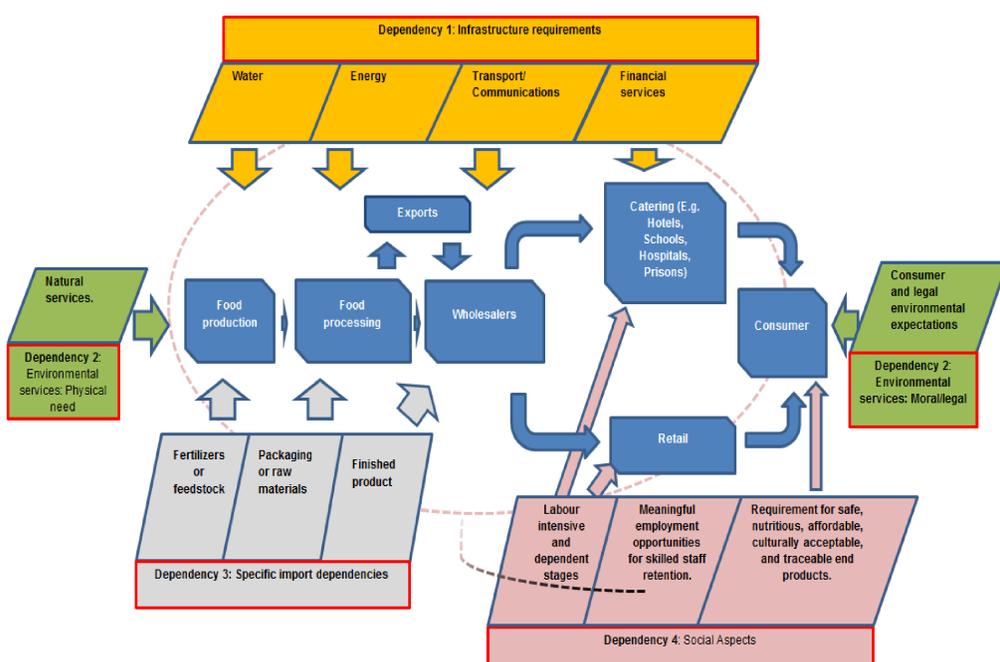
### 2.1 Methodology

- Literature review
- Grounded theory approach

Material Type	Number Reviewed
Journals	104
Conference Papers	35
Website	11
Workshop Proceedings	4
Government Committee Proceedings	6
Policy Reports	10
Industry events/meetings attended	12
Industry Reports	7

## 3. Findings

- Food Supply Chains are still widely perceived as linear value adding chains and this cloaks true dependencies and thus **risk**.
- Unlike other supply chains, food supply chains face a number of unique vulnerabilities in the form of:
  - Variable raw material quality and quantity
  - Deteriorating raw material quality from the moment of harvest.
- Existing attempts to define resilience are ambiguous and few take into account food specific vulnerabilities.
  - There is need for a food specific taxonomy of counteracting vulnerabilities and capabilities that can be used to generate a state of enhanced resilience.



## 4. Framework

A framework has been produced which allows an organisation within the food manufacturing sector to better understand their supply chain and dependencies beyond the economic sense.

1. It enables an actor to categorise and address specific components of resilience in the form of **capabilities and vulnerabilities**.
2. Excessive vulnerabilities lead to a high state of risk. However, it is important to note that excessive capabilities can have an equally negative effect through erosion of profits - both need to be balanced to reach a state of **resilience**.
3. As these capabilities and vulnerabilities span across the three pillars of sustainability (Environmental, Social and Economic), the associated mitigation strategies should not only tackle immediate resilience issues, but also boost long term **sustainability**.

