



Farming, Food and Health. **First**

*Te Aka Whenua, Te Kaitiaki Take Kōwhiri, Te Kaitiaki*

## Ecological Approach to Community Development

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## Viable and Vibrant Communities

For New Zealand to develop sustainably, it will require a modern cohesive society with viable and vibrant communities at its core from which will emerge innovative solutions to key challenges and opportunities they face in the future



## Resource Dependant Communities

- Strong interconnectedness of New Zealand society and agriculture
- Interdependency between natural capital, the service it provides and human well being
  - Economic performance (45% of export earnings, 17% GDP)
  - Sense of place
  - Aesthetics
  - Employment
  - Water quality, flood protection, Biodiversity



## Forces exerted on resource dependant communities

- International forces impacting on product price:
  - Purchases from supermarkets
  - Commodity markets
  - Exchange rate
- National and regional
  - Changing land use
  - Urban pressure
  - Regulation
- Local
  - Dynamics of population mix

**Why do some communities have the ability to meet and respond to these forces and others succumb?**



## Properties shaping future responses of ecological systems

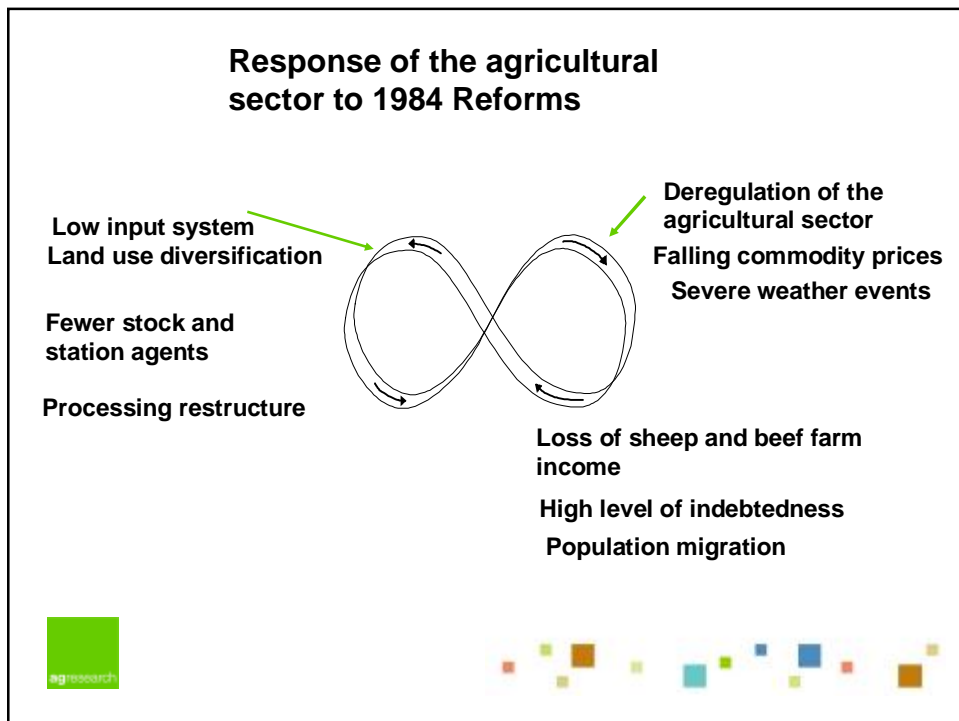
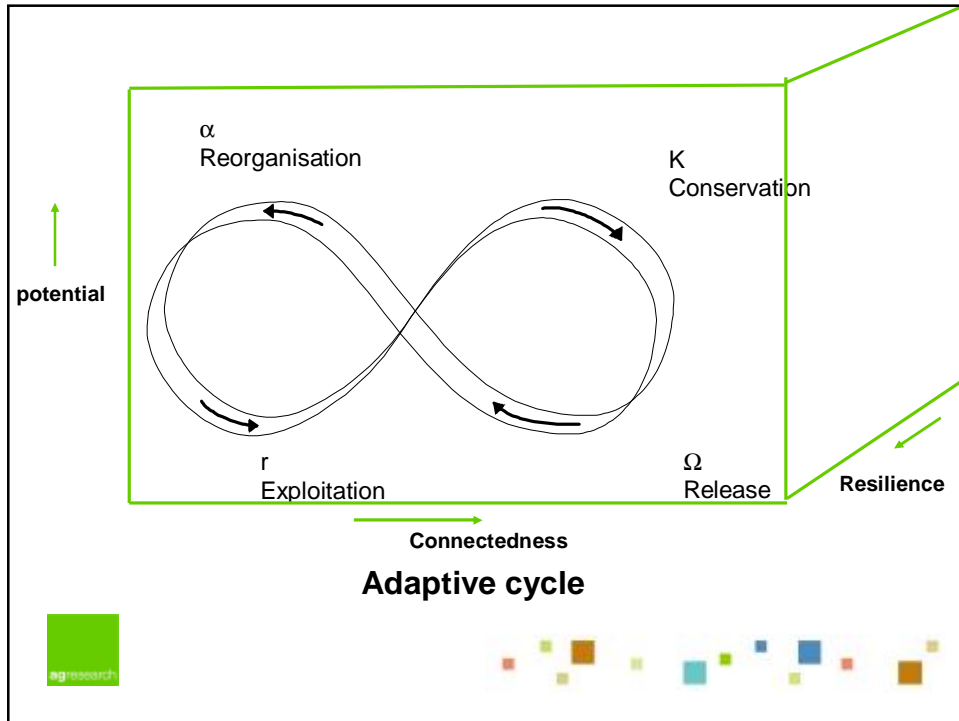
Properties	Ecological System
<b>Potential</b>	Biomass Accumulated nutrients
<b>Connectedness</b>	Feed back loops Biogeochemical cycles
<b>Resilience</b>	Vulnerability of the systems to shocks that can break the internal control



## Ecological properties applied to social systems

Properties	
<b>Potential</b>	Character of human relationships: trust, friendship, capacity
<b>Connectedness</b>	Behaviours and institutions that control human activity
<b>Resilience</b>	Vulnerability of the systems to shocks that can break the internal control





## Adaptive Capacity

- Freezing on expenditure
- Farm family structure built in resilience
- Uncoupling with traditional agriculture and recoupling with landscape for tourism
- Adaptation to Market forces
  - Land use diversification
  - Sub division
- Motivation for remaining on the land



**Why do some communities have the ability to meet and respond to these forces and others succumb?**



## Characteristics of Community resilience

<b>People</b>	<b>Organisations</b>	<b>Community Process</b>	<b>Resources</b>
Leadership	Diversity of economic development	Plan guiding process	Diversified employment
Optimism	Partnerships and collaborations	Community involved plan	Local owned employers
Spirit of cooperation		Development is inclusive	Seeks outside expertise when required
Sense of attachment			



## Indicators of Characteristics

- Breakdown of formal and informal leadership as representative of the community diversity
- Public input into decisions has been proactively encouraged
- Number of organisations
- Number and quality of relationships
- Percentage of top 5 private sector employers that are locally owned
- The degree to which people perceive that the community plans address the needs of marginalised people in the community



## Building Adaptive Capacity

- Know your community
- Understand what forces are operating on it now and in the future
- Be prepared for the unexpected
- Identify a range of plausible futures
- Work on what you need to place you in the space that you want to be



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*Te Ahuwhenua, Te Kai me te Whai Ora. **Tuatahi***