

UNIVERSITY
OF SOUTHERN
QUEENSLAND



Exporting vegetables – managing the supply chain



AAC

AUSTRALIA-ASEAN COUNCIL
BRINGING TOGETHER THE PEOPLES OF
AUSTRALIA & SOUTH-EAST ASIA

Prof Alice Woodhead

Email: Alice.Woodhead@usq.edu.au



Agricultural value chains @ USQ

Enabling innovative solutions for value added exports

Adding value = value chains

Transporting products = supply chains

1. Products by country
2. Critical infrastructure
3. Decision support tools

- 
- Trends and supply chains issues
 - Optimising supply chains by managing risk
 - Steps to consider when exporting

The Australian export overview

Problem – limited growth opportunities in Australian agricultural markets

Issues:

- Current exports are focused on commodities
- High labour and logistics costs in Australia
- Inadequate infrastructure
- Disruptions in Asian food distribution

Concepts detailed in **‘Integrating Australian agriculture with global value chains’**.

Published in Outbound Investment, CEDA 2017

Prof Alice Woodhead, Greg Earl and Dr Shane Zhang



Asian food trends



Food safety
Traceability
Origin status
Social media

Busy people
Growing urban
middle class
populations



Western diets
Protein
Chilled & fresh
packaged food



Super
markets
E-Commerce



Road
congestion
Waste
management

The business of value chains:

Rural

Global

Regional

Selling premium products to global markets necessitates a deeper understanding of the logistics, production and destination systems, technology and employee expertise to reduce disruptions and control quality.



Export destination example: Thailand & ASEAN

- Advanced logistics
- Population 67 Million
- Strong presence Australian companies - Aus Cham 300 members
- 80 Ha undercover market in Bangkok distributing to Myanmar, Lao, Cambodia & Vietnam

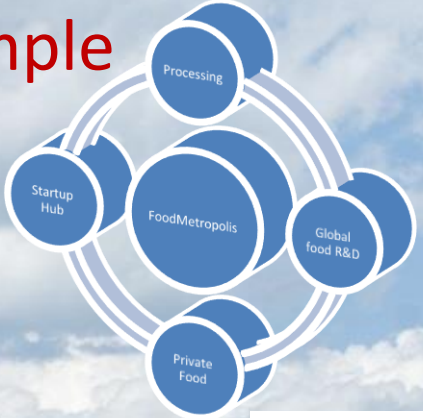


Queensland example

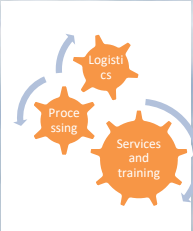
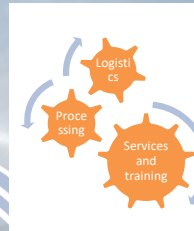
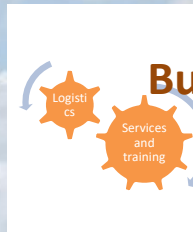
The supply chain: Cost, business models, cost, quality

Starting fresh food by airfreight opens
markets, but products have to be
premium value add' to cover freight
. How do you optimise costs and
value to your vegetables?

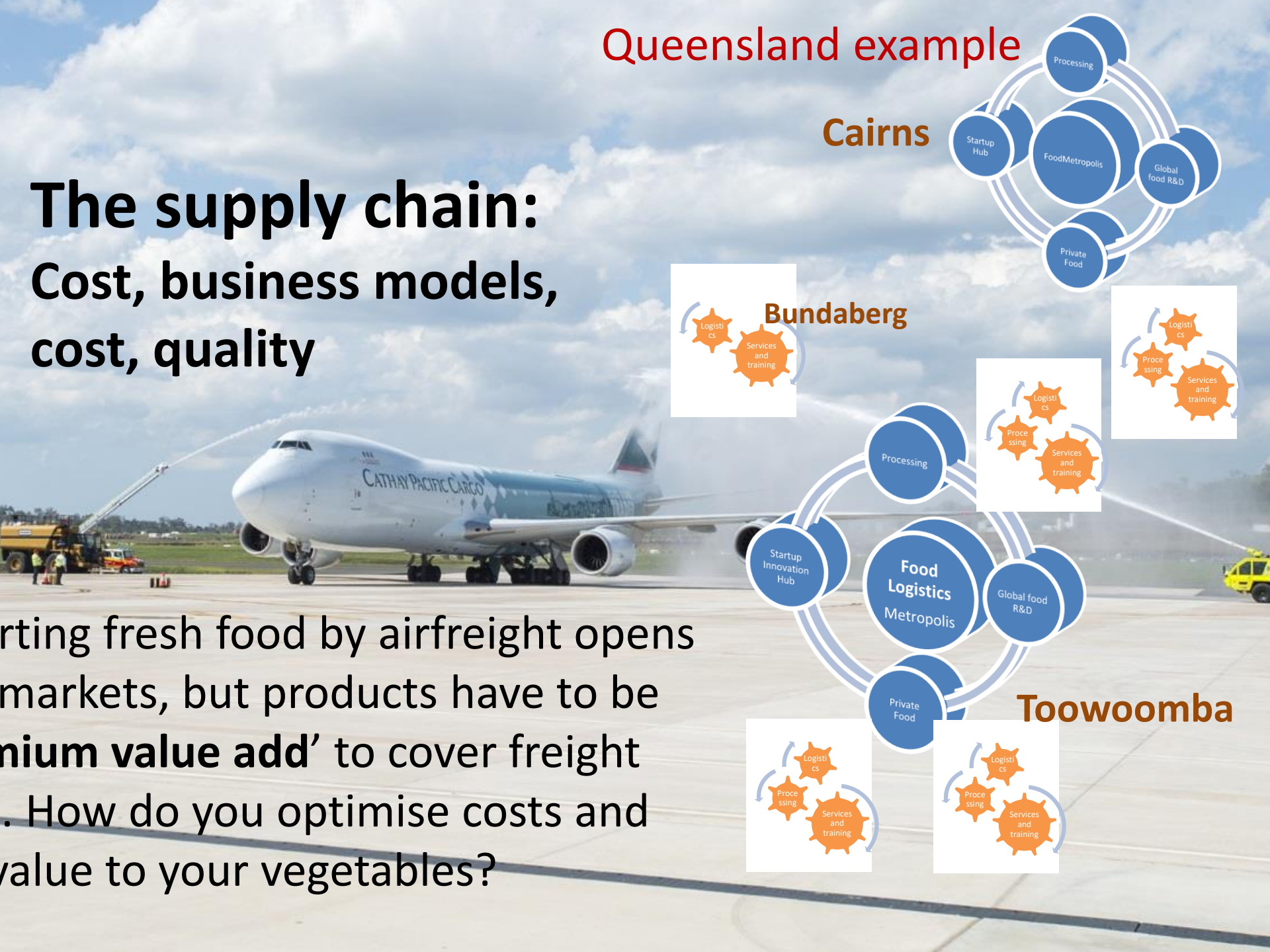
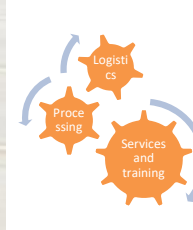
Cairns



Bundaberg



Toowoomba



Business models, two options:

1. Commodity to agent

(no control over quality of end product)

1. Packaged and/or branded product

(manage product / supply chain, connect with customer and consumers)

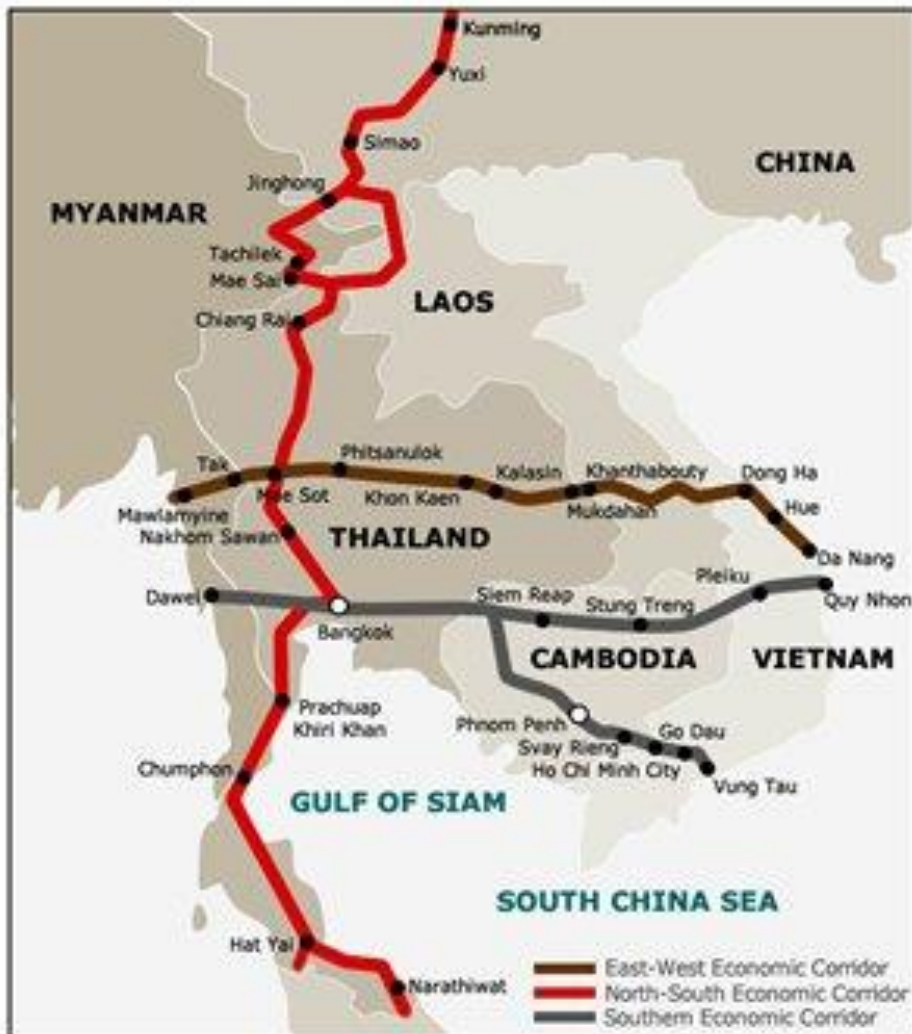
- I. Asian food distributor / importer / Retail outlets
- II. Set up partnership / co-investment with Asian based distribution/retail or other services business
- III. Partner with other producers in Australia – export co-operatives



Quality: ASEAN Regional food distribution

Disruptions across regional value chains

- Variable infrastructure, roads, rail
- Numerous logistics providers
- Variable quality control at market and retail
- High counterfeiting, adulteration and waste



Quality - Optimal temperature and refrigerated shelf life of perishable foods

Product	Refrigerated shelf life (days)	Optimal temperature `C
Bell peppers	21-35	7
Cabbage	14-20	1
Onions	30-180	1
Lettuce	12-14	.6
Potatoes	30-50	10
Tomatoes	7-14	12

Adapted from Poonawalla (2012)

Quality –
Optimal
packaging



- Thermal insulation material
- Temperature sensors

Steps to consider when exporting:

- Register your brand in export destination countries.
- Invest time in understanding food distribution in destination country –
 - Choose packaging suitable for vegetable export and monitor quality in trial runs
 - Identify logistics providers and retailers that have quality control systems (including sub-contractors)
 - Monitor the quality of your products at the retail outlets
- Focus on building co-investment with the Asian based businesses not just selling products to them.



Opportunity:
Fresh and
chilled
packaged and
branded
vegetables



Consumers want

- **regular, quality vegetables, all year round**
- **to connect with growers using social media – ‘feel good’ & guarantee of Australian quality.**

Then they will pay a premium and for your vegetables