GROWING AND PROTECTING
NEW ZEALAND

Barriers and Enablers for Land Use Shifts for High-value Horticulture Options

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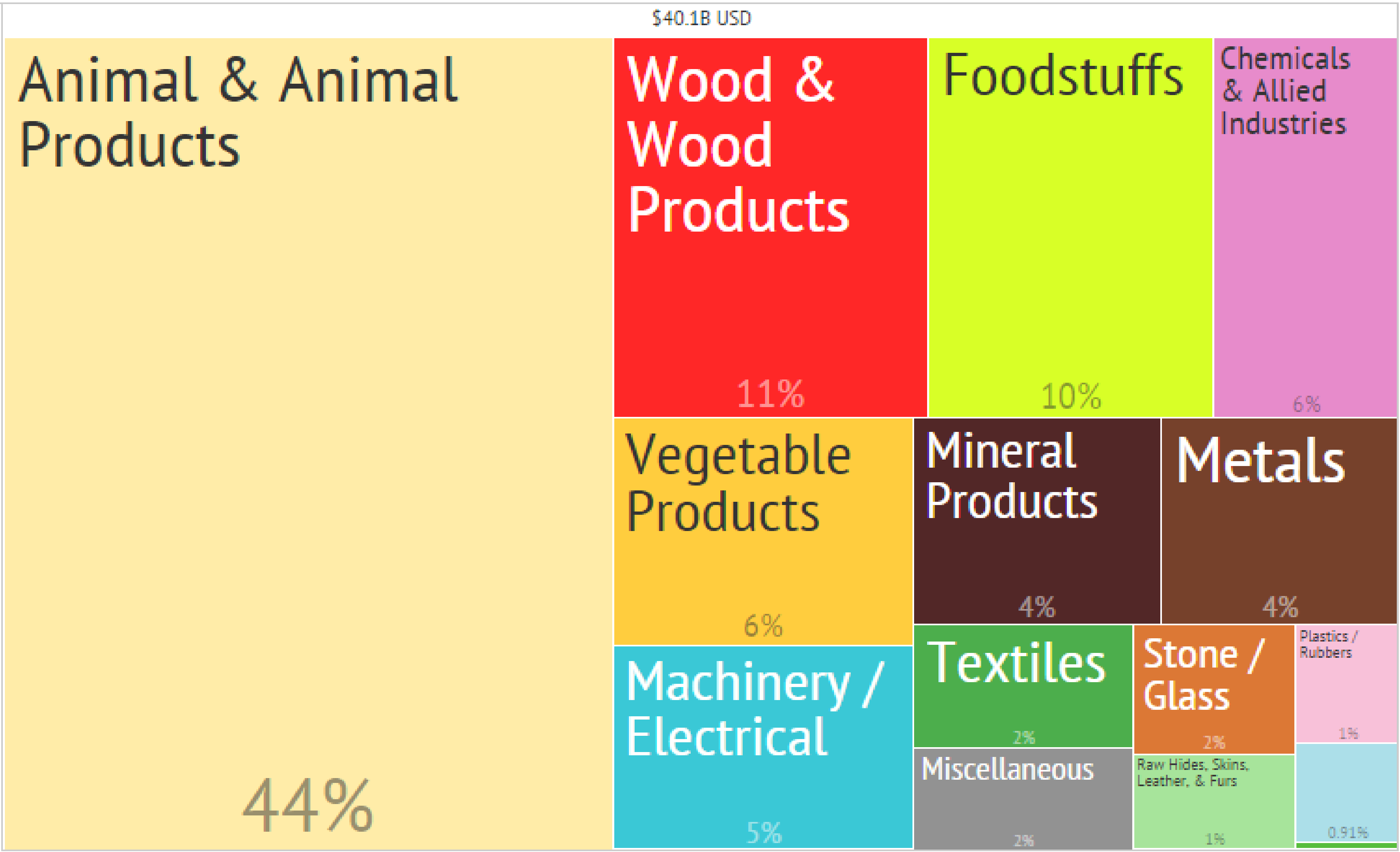
Ministry for Primary Industries
Manatū Ahu Matua

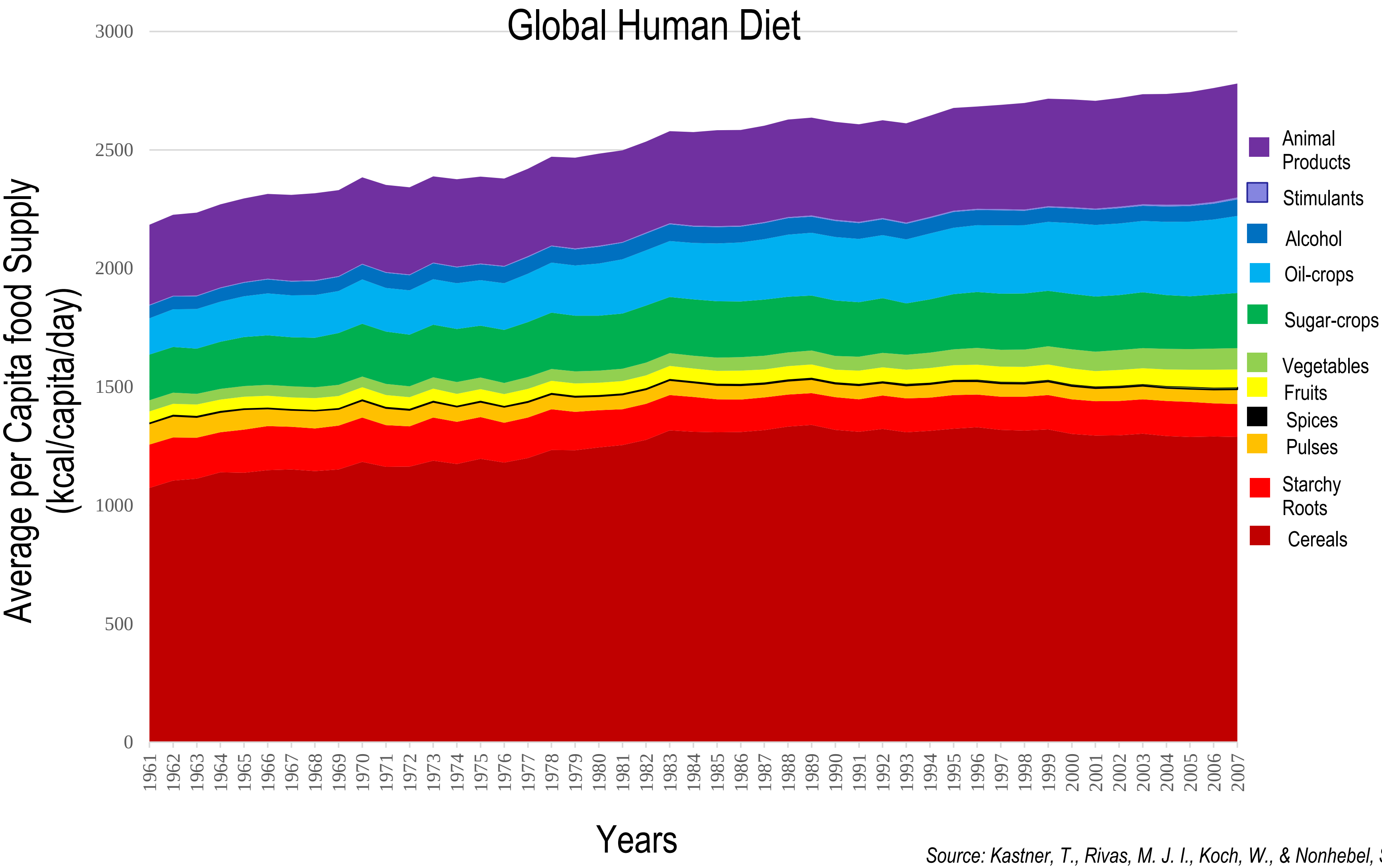
Contents

72% of New Zealand's export value in 2013 was based on plant and animal products



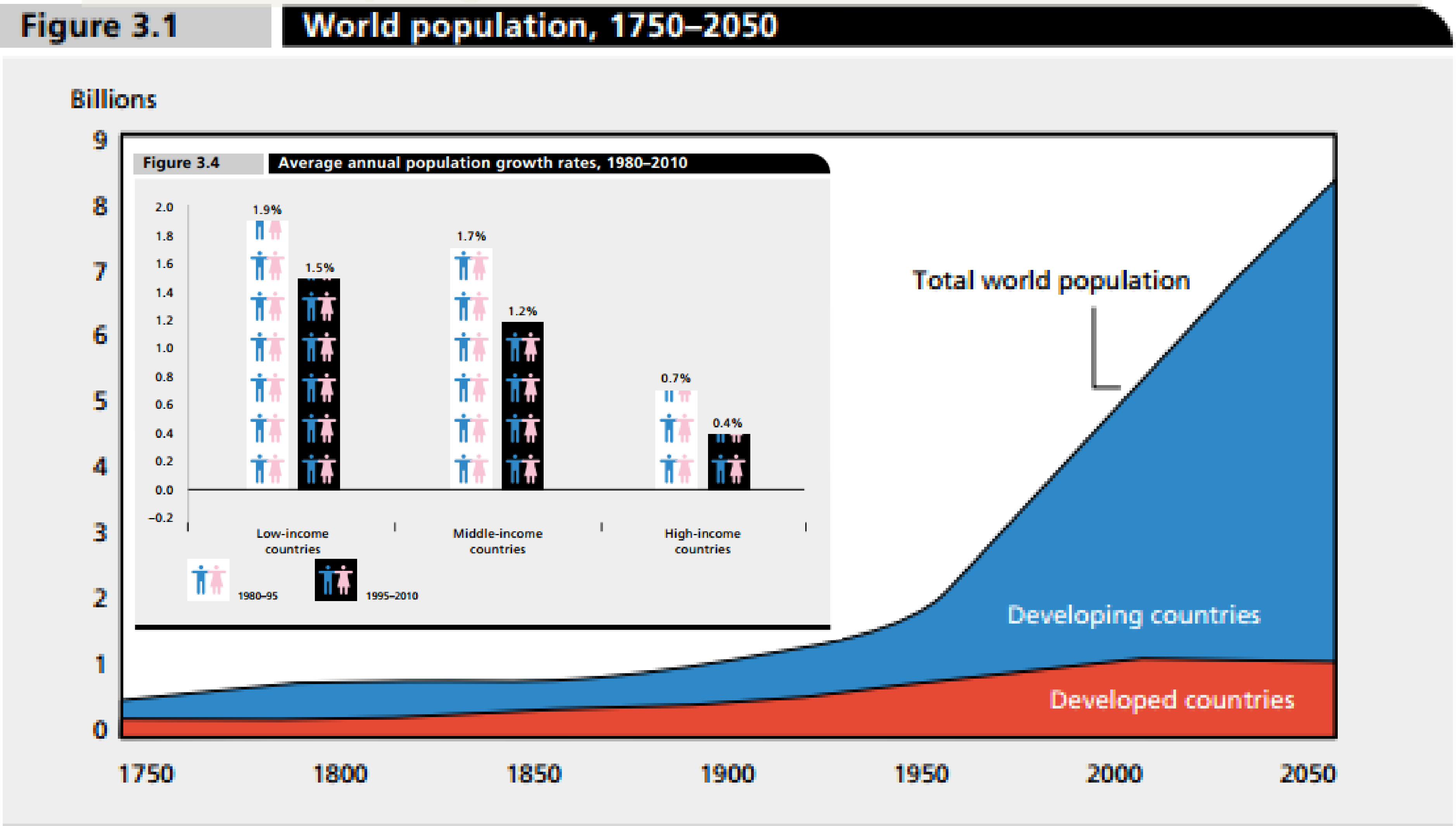
Source: http://atlas.cid.harvard.edu/

Plant-based food and beverage play a significant role in the human diet and global trade



Source: Kastner, T., Rivas, M. J. I., Koch, W., & Nonhebel, S. (2012)

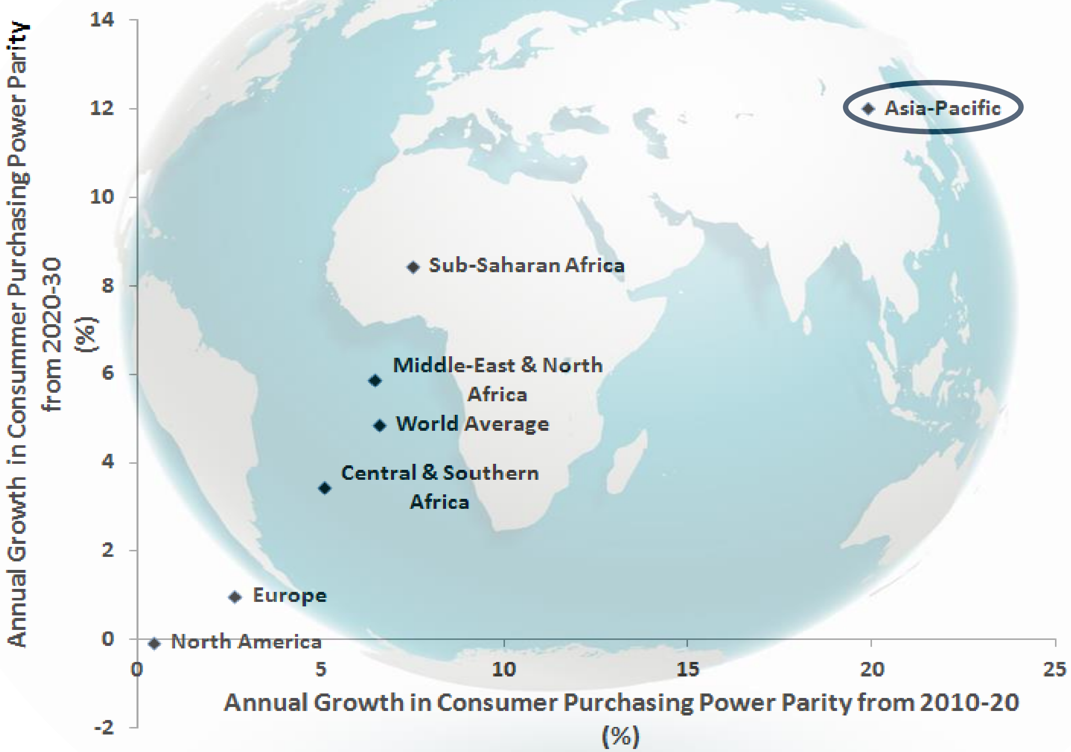
The greatest population growth is occurring in developing countries



Source: World Bank (2000)

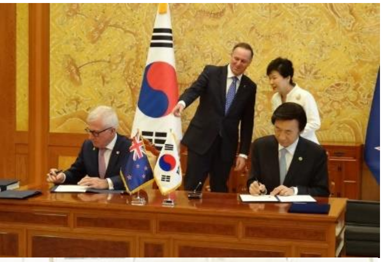
Population growth, urbanisation and rising incomes are driving Asia-Pacific demand

Purchasing power of the middle class in the Asia-Pacific region will grow strongly

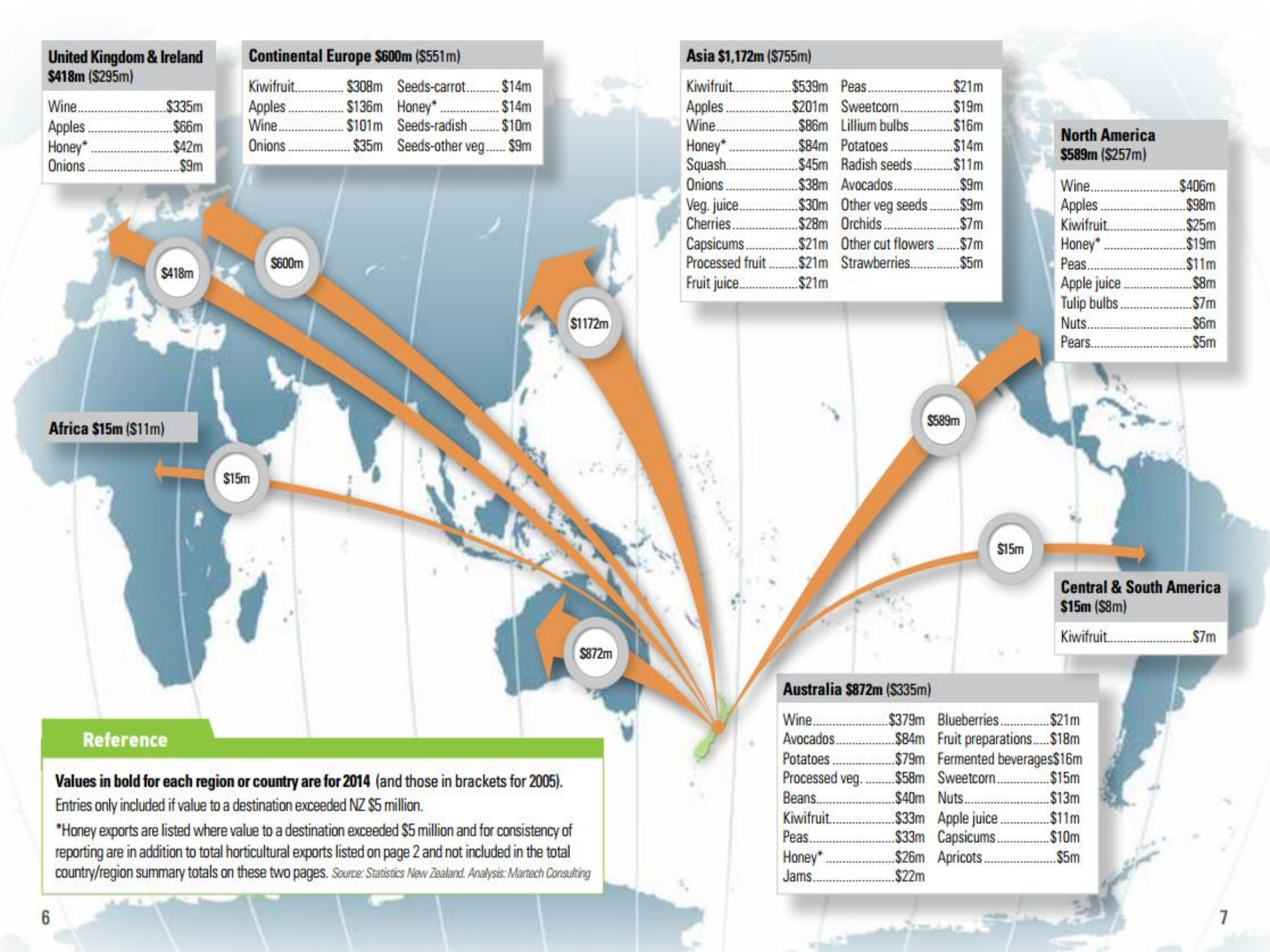


(OECD, 2010)

Free trade agreements are improving access to consumers in the Asia-Pacific region



- New Zealand-Korea Free Trade Agreement - 2015
- New Zealand-Taiwan Economic Cooperation - 2013
- New Zealand-Hong Kong, China Closer Economic Partnership - 2011
- New Zealand-Malaysia Free Trade Agreement - 2010
- ASEAN-Australia-New Zealand Free Trade Agreement - 2010
- New Zealand-China Free Trade Agreement - 2008
- Trans-Pacific Strategic Economic Partnership (Brunei, Chile, Sing.) - 2005
- New Zealand-Thailand Closer Economic Partnership - 2005
- New Zealand-Singapore Closer Economic Partnership - 2001
- Australia-New Zealand Closer Economic Relationship - 1983



United Kingdom & Ireland
$418m ($295m)

Wine	$335m
Apples	$66m
Honey*	$42m
Onions	$9m

Continental Europe $600m ($551m)

Kiwifruit	$308m	Seeds-carrot	$14m
Apples	$136m	Honey*	$14m
Wine	$101m	Seeds-radish	$10m
Onions	$35m	Seeds-other veg	$9m

Asia $1,172m ($755m)

Kiwifruit	$539m	Peas	$21m
Apples	$201m	Sweetcorn	$19m
Wine	$86m	Lillium bulbs	$16m
Honey*	$84m	Potatoes	$14m
Squash	$45m	Radish seeds	$11m
Onions	$38m	Avocados	$9m
Veg. juice	$30m	Other veg seeds	$9m
Cherries	$28m	Orchids	$7m
Capsicums	$21m	Other cut flowers	$7m
Processed fruit	$21m	Strawberries	$5m
Fruit juice	$21m		

North America
$589m ($257m)

Wine	$406m
Apples	$98m
Kiwifruit	$25m
Honey*	$19m
Peas	$11m
Apple juice	$8m
Tulip bulbs	$7m
Nuts	$6m
Pears	$5m

Africa $15m ($11m)

Central & South America
$15m ($8m)

Kiwifruit	$7m

Australia $872m ($335m)

Wine	$379m	Blueberries	$21m
Avocados	$84m	Fruit preparations	$18m
Potatoes	$79m	Fermented beverages	$16m
Processed veg.	$58m	Sweetcorn	$15m
Beans	$40m	Nuts	$13m
Kiwifruit	$33m	Apple juice	$11m
Peas	$33m	Capsicums	$10m
Honey*	$26m	Apricots	$5m
Jams	$22m		

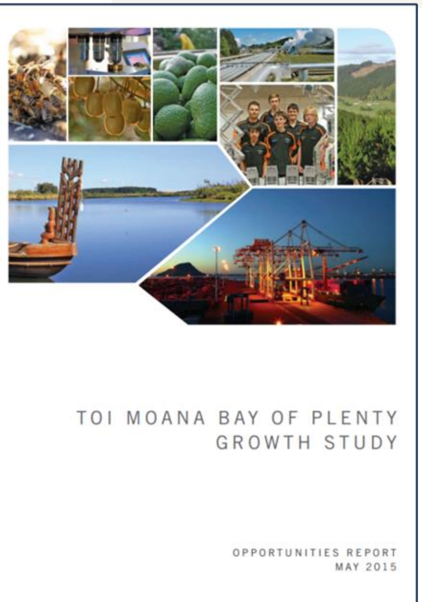
Reference

Values in bold for each region or country are for 2014 (and those in brackets for 2005).

Entries only included if value to a destination exceeded NZ $5 million.

*Honey exports are listed where value to a destination exceeded $5 million and for consistency of reporting are in addition to total horticultural exports listed on page 2 and not included in the total country/region summary totals on these two pages. *Source: Statistics New Zealand. Analysis: Martech Consulting*

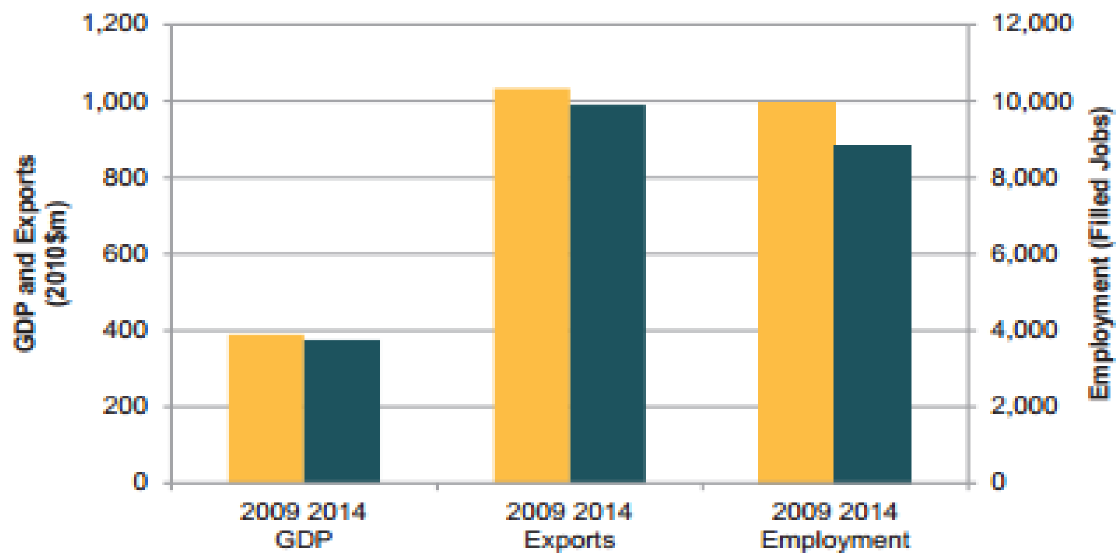
Growing demand for food and beverage is creating economic opportunities for the region



Horticultural is well established in the BOP

- Kiwifruit produces about 65% of the GDP output for horticulture in the region
- Avocado and apiculture are also key sectors for the region.

Figure 15 Horticulture GDP, exports and employment, Bay of Plenty, 2009–2014



Source: Infometrics Regional Database

Zespri® Kiwifruit

COMVITA®

New Zealand Avocado Industry Council Limited

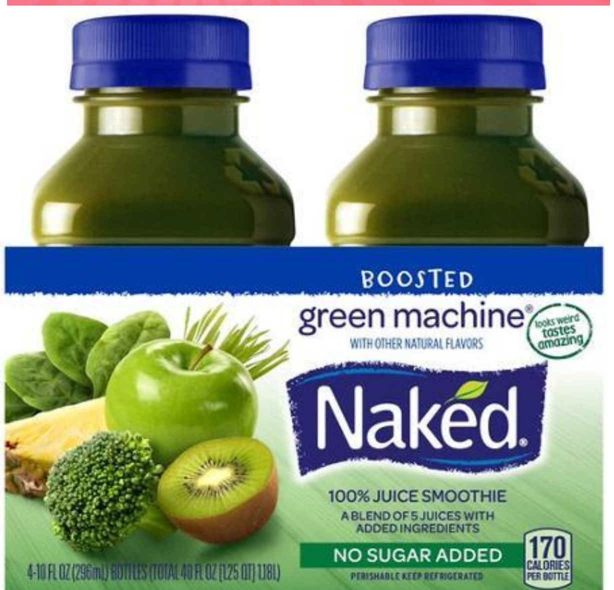
A range of factors have limited past expansion of horticulture within the Rotorua district

Potential constraints:

- Biophysical
  - Climatic suitability
  - Vulnerability to extreme events
  - Soil type suitability
- Suitable enabling environment
  - Local infrastructure
  - Market access systems and protocols
  - Finance and investment
  - Management and service support
  - Education & research
- Capability building
  - Horticulture is very knowledge intensive
  - Local knowledge important

Horticultural entrepreneurship has capitalised on natural advantages in the Rotorua district

NZ participation in global value chains is an important enabler for export growth in horticulture



Participation in global value chains gives:

- Access to consumers
- Consumer insights and feedback
- Sharing of information between chain participants
- More equitable sharing of risk and reward
- Access to investment and technology

Access to proprietary plant genetics, production, processing and branding are vital for value chains

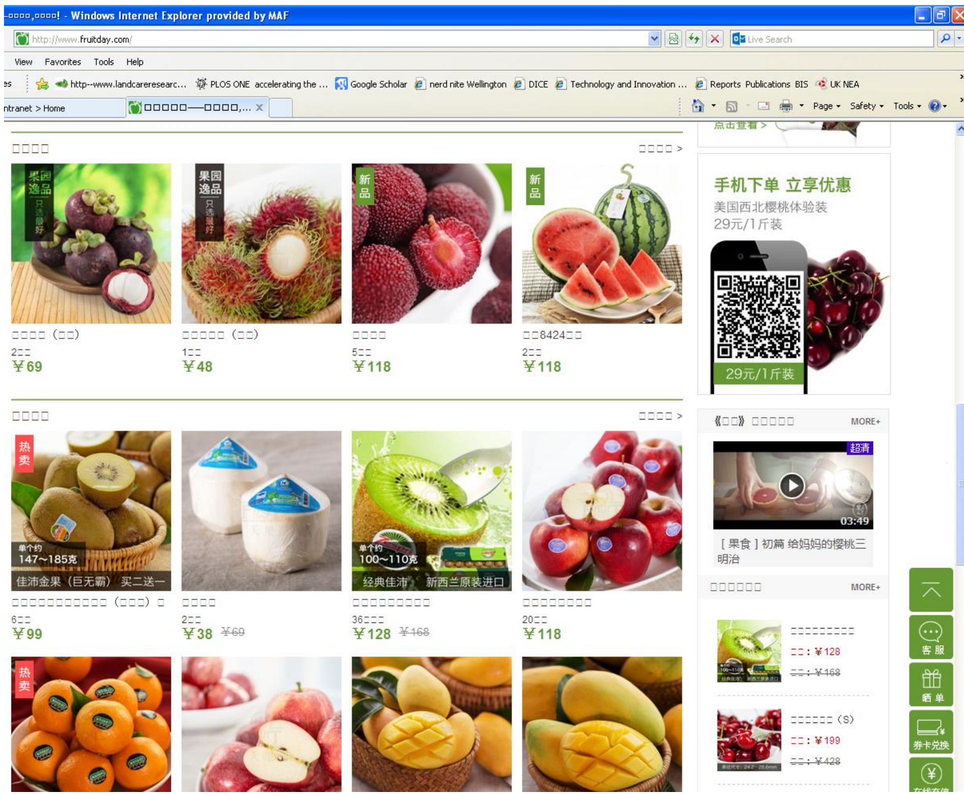
In New Zealand, producers are working with:

- Crown Research Institutes and universities
- Angel investment and venture capital
- Intellectual property lawyers and owners
- Technology companies
- Branding and design specialists

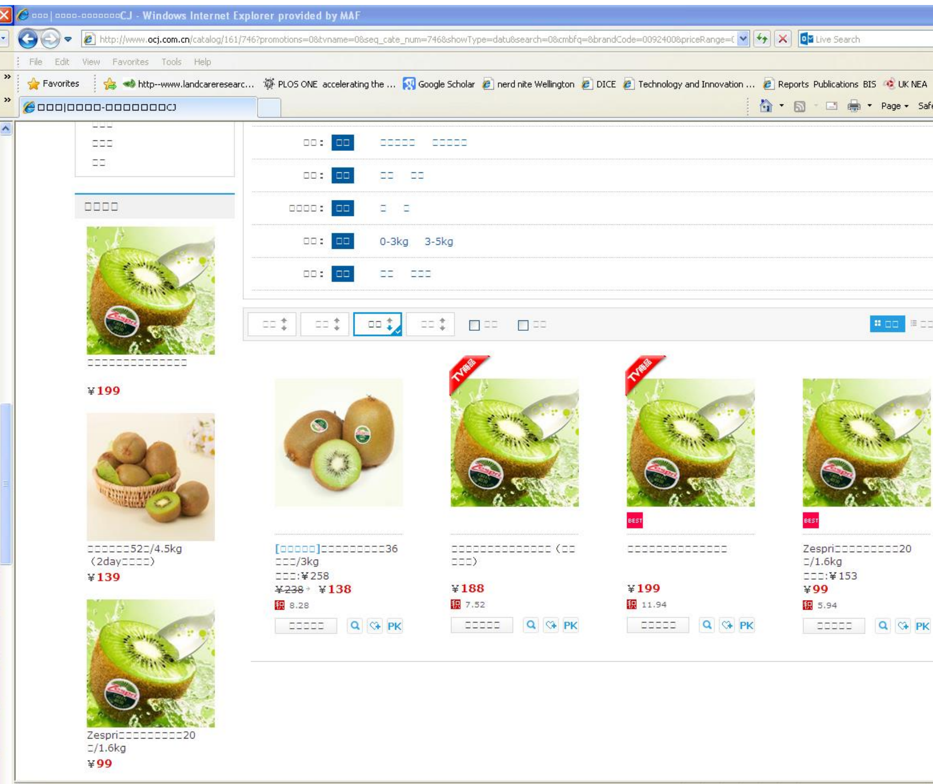
Transparency on who, how and where a crop is grown is also essential

New Zealand producers are capitalising on new platforms to reach consumers in Asia

Chinese Imported Fruit E-tail site
http://www.fruitday.com/



Chinese TV Home Shopping Site
http://www.ocj.com.cn



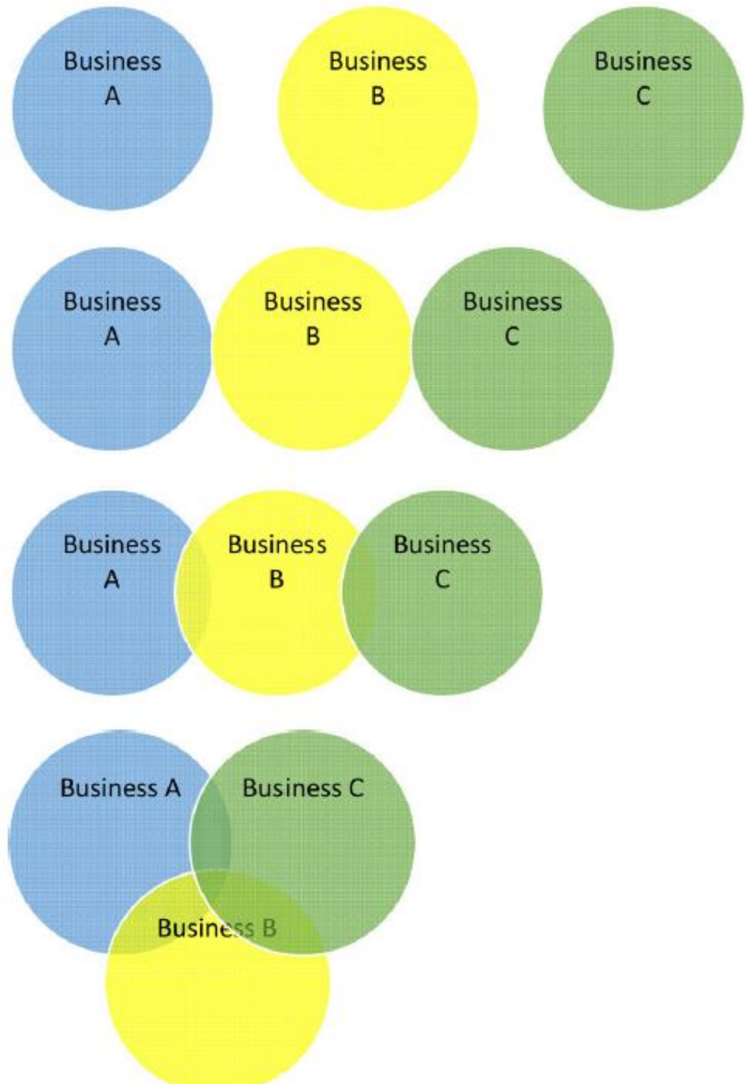
The type of value chain can influence the success of new horticultural ventures

Fragmented Value Chain
(Transactional)

Cooperative Value Chain
(Operational Support)

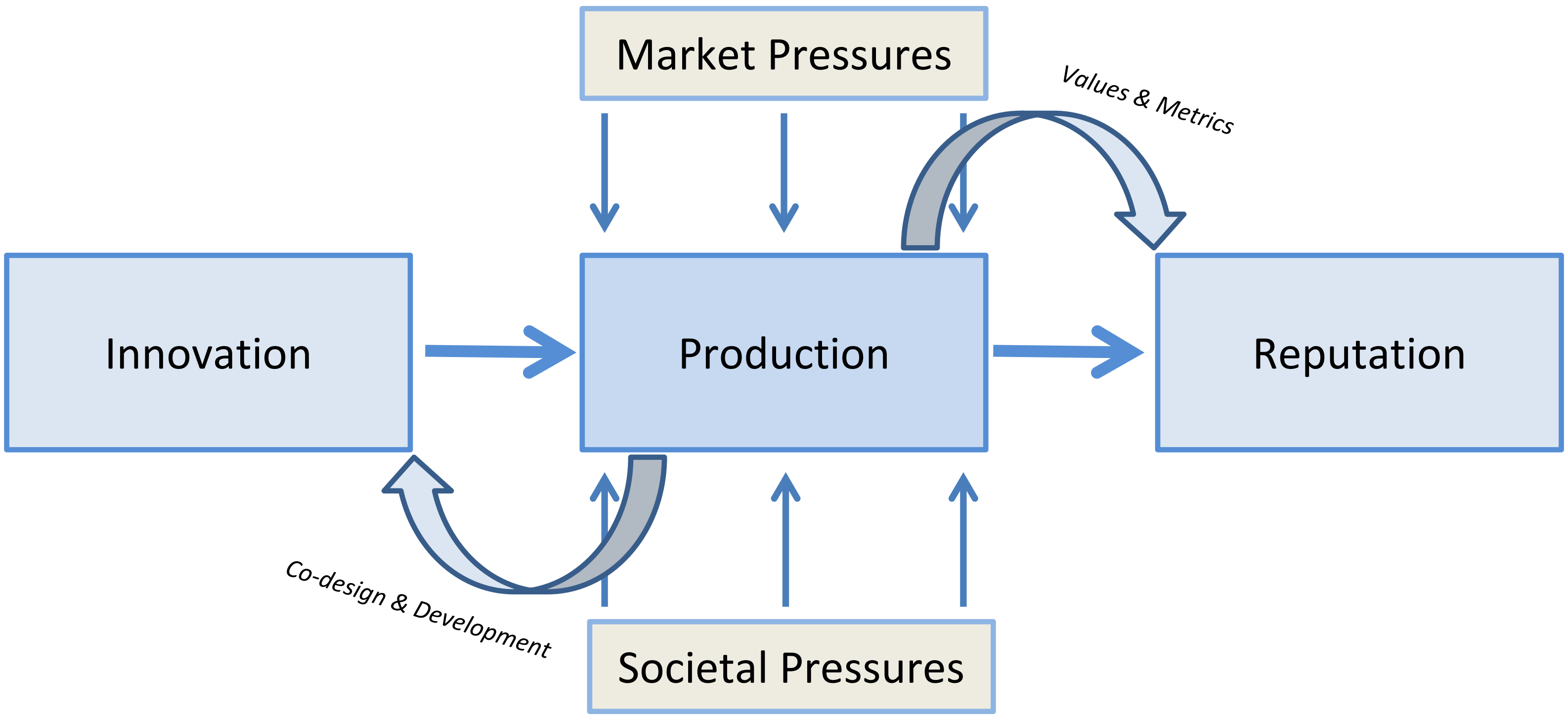
Coordinated Value Chain
(Complimentary Objectives)

Collaborative Value Chain
(Shared Resources)



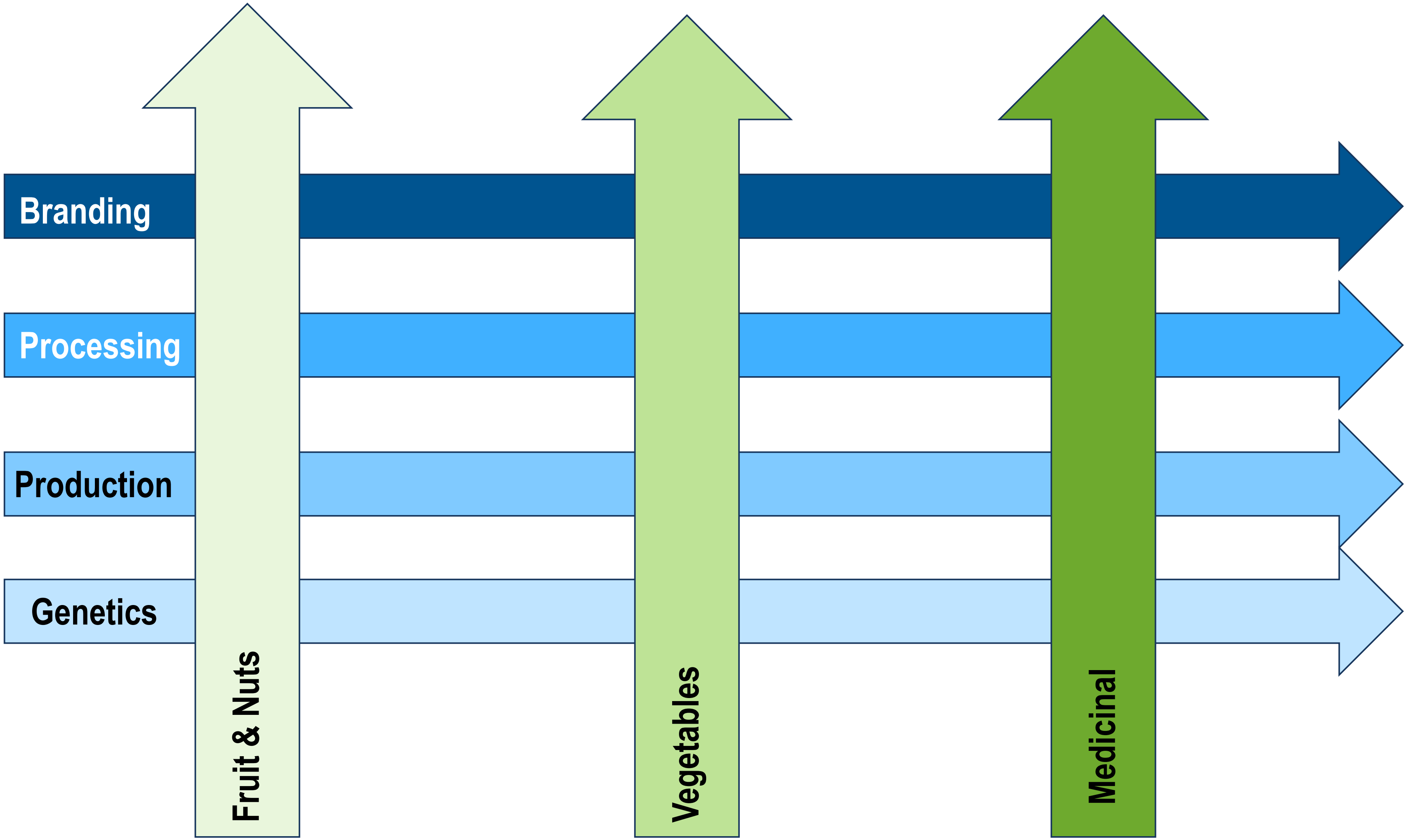
Adapted from Sterling, B., Gooch, M., Dent, B., Marenick, N., Miller, A., & Sylvia, G. (2015).

Societal and market pressures can be used to transform production systems through innovation



Adapted from Kaplinsky, 2010

Opportunity for new partnerships to be created and used to develop new land use options



Suitable crops for land use shifts need to be selected on a combination of factors

Questions