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# Value chain analysis: providing an evidence base for agricultural development and policy interventions in Fiji

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# Background

#### Fiji's Food Industry is changing

- Consumers, food retailers and food systems are changing globally
  - This transformation is well documented across faster growing developing countries in Asia, Latin America and Africa (Pinstrup-Andersen, 2002; Reardon et al., 2000; Reardon et al., 2003)
- Key drivers include: (Godfray et al., 2010; Hazell and Wood 2008; Reardon et al., 2004; Pingali, 2007)
  - Urbanization and rising urban incomes Fiji has both (Narsey 2011)
  - Private sector investment Fiji doesn't have this which makes it unique

# Background

#### Fiji's Food Industry is changing

- Potential Impacts and Implications
  - 65% of population involved in agriculture (Fiji Ministry of Agriculture, 2009)
  - Smallholders can not always meet modern retailer requirements which can have implication on local agriculture, food security, govt policy and the private sector (Boselie et al., 2003; Farina and Reardon, 2000; Hughes and Lawrence, 2005; Reardon et al., 2009)
- Understanding these changes may lead to better policies and development outcomes
  - Very little detailed analysis of Fijian food retailer and consumer behaviour is available (Chandra 1979, Owen 1999; Thaman 1990)
  - This type of detailed analysis of an entire value chain has not been attempted in a small island developing state (SIDS)

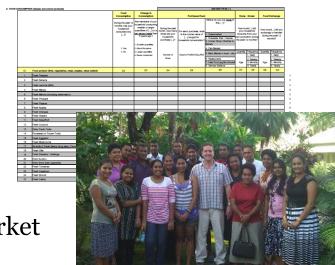
## Method

#### Value Chain Analysis (VCA) as a suitable framework

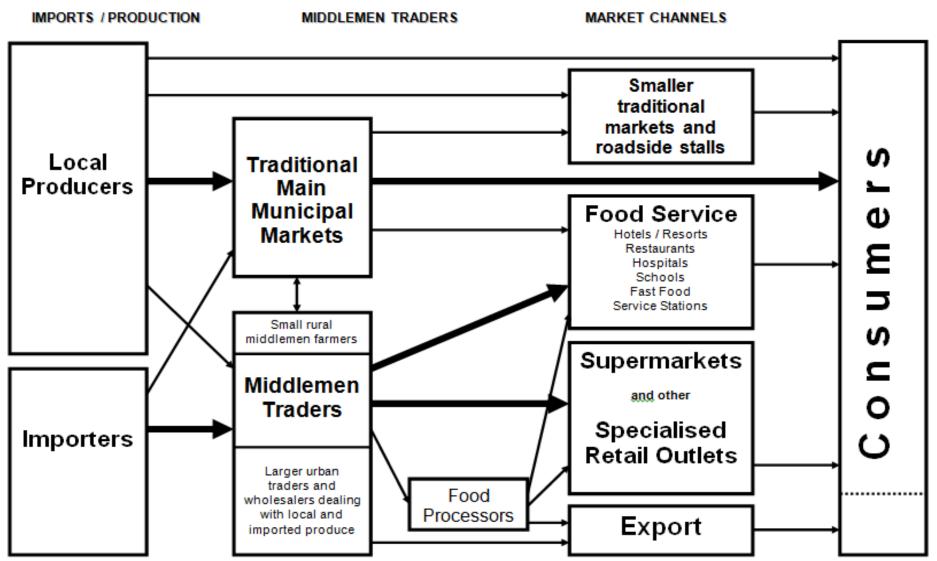
- VCA is used as a diagnostic tool for understanding and improving agribusiness chains (Francis et al., 2008; Simons et al., 2003; Taylor, 2005)
- Traditionally VCA's focused on single chains but have increasingly been used to understand industry networks (Braziotis et al., 2013; Peppard and Rylander, 2006) and provide policy insights (Cattaneo et al., 2010; Kaplinsky and Morris, 2001).
- VCA's focus on identifying consumer values and analysing activities along the chain to prioritise improvements or new opportunities (Bonney et al., 2007; Fearne, 2009)
- These insights can then be shared with private and public sector stakeholders, including relevant government and donor agencies (Cattaneo et al., 2010; Kaplinsky, 2000)

## **Activities**

- ACIAR funded with key partners including:
  - University of South Pacific (USP)
  - Secretariat of the Pacific Community (SPC)
  - Fiji Bureau of Statistics (FBOS)
  - UNWomen
  - Fiji Ministry of Agriculture.
- Activities
  - Interviewed all major Supermarkets, Resorts & Food Processors
  - A study of the Main Municipal Market
  - 1000 Urban household consumer surveys on food shopping behaviour
    - 79 different food categories / 8 retail outlet types
  - 1200 Producer surveys (600 female)
    - 89 different crops / shopping behaviour
    - BMI of all HH members
  - 85 Trader surveys to understand links to market



## Fiji Fresh Fruit and Vegetable Value Chain Map



## **Producers**

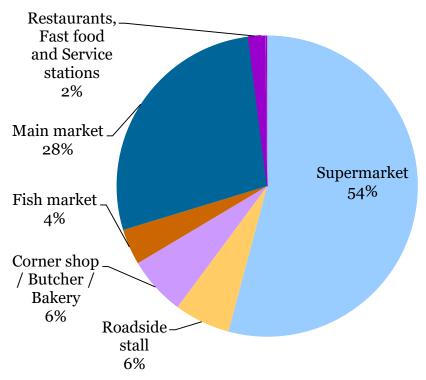
#### **Market Channels**

Modern Channel	% of farmers selling through this channel	Traditional Channel	% of farmers selling through this channel
Supermarkets	1.81%	Municipal Market	92.48%
Processors	1.75%	Roadside Stall	14.25%
Exporters	15.41%	Village Market	6.95%
Hotels	2.27%	Next door neighbour	12.37%

Source: Anna Finizio, unpublished

### **Urban Household Consumers**

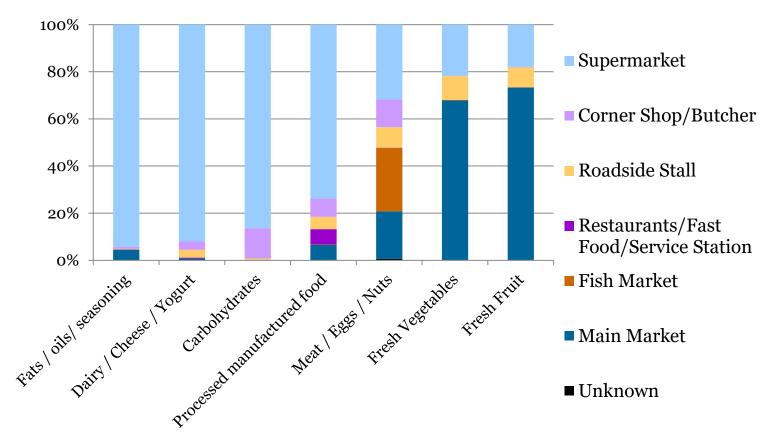
#### Share of urban food expenditure by type of retailer



- Supermarkets with 54% of food expenditure. Main market still with 28%
- Roadside stalls 6% and interestingly sell 75 of the 79 products surveyed
- Combined 1.8% for restaurants, service stations and fast food indicate they are more likely servicing tourists rather than locals

#### **Urban HH Consumers**

#### Share of spending on each food category by type of retailer



 Supermarkets dominate processed food categories while the main market is preferred for fresh produce

# **Key Insights**

- Supermarkets have taken significant market share
- Households patronize both modern supermarkets (100% surveyed) and traditional main markets (97%)
- Modern retailers tend to capture the processed food category first (Minten and Reardon, 2008) before seeking additional growth in the fresh produce category (Neven et al., 2006; Brown, 2005)
- Whether traditional outlets can hold onto their fresh produce market share is a topic of debate in the literature (Goldman et al., 2002; Neven et al., 2006)
- Important implications for food security, health and nutrition and opportunities for local producers
- Which is why these types of consumer and whole of value chain studies are so important for SIDS countries experiencing similar global pressures
- Future Research: more detailed economic analysis of existing data and repetition of the survey over time to monitor trends and implications

## References

- Beyer, R. (2012). Retail transformation study: A component of the consumer-centric study: the supply of local fresh fruit and vegetables to supermarkets.
- Bonney, L., Clark, R., Collins, R. and Fearne, A. (2007). 'From serendipity to sustainable competitive advantage: insights from Houston's Farm and their journey of co-innovation', *Supply Chain Management: An International Journal*, 12(6): 395-399.
- Boselie, D., Henson, S. and Weatherspoon, D. (2003). 'Supermarket procurement practices in developing countries: Redefining the roles of the public and private sectors', *American Journal of Agricultural Economics*, 85(5): 1155-1161.
- Braziotis, C., Bourlakis, M., Rogers, H. and Tannock, J. (2013). 'Supply chains and supply networks: distinctions and overlaps', *Supply Chain Management: An International Journal*, 18(6): 644-652.
- Brown, O. (2005). Supermarket buying power, global commodity chains and smallholder farmers in the developing world. Human Development Report Office (HDRO), United Nations Development Programme (UNDP).
- Cattaneo, O., Gereffi, G. and Staritz, C. (2010). *Global value chains in a postcrisis world: A development perspective*. World Bank Publications.
- Chandra, R. (1979). Food Buying behaviour in Suva. Masters, Suva: University of South Pacific.
- Farina, E. M. and Reardon, T. (2000). 'Agrifood grades and standards in the extended Mercosur: Their role in the changing agrifood system', *American Journal of Agricultural Economics*, 82(5): 1170-1176.
- Fearne, A. (2009). Sustainable food and wine value chains. Adelaide: Government of South Australia.
- Fiji Ministry of Agriculture (2009). National Agricultural Census Report. Fiji
- Francis, M., Simons, D. and Bourlakis, M. (2008). 'Value chain analysis in the UK beef foodservice sector', *Supply Chain Management: An International Journal*, 13(1): 83-91.
- Godfray, H. C. J., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., Nisbett, N., Pretty, J., Robinson, S., Toulmin, C. and Whiteley, R. (2010). 'The future of the global food system', *Philosophical Transactions of the Royal Society B*, 365(1554): 2769-2777.
- Goldman, A., Ramaswami, S. and Krider, R. E. (2002). 'Barriers to the advancement of modern food retail formats: theory and measurement', *Journal of Retailing*, 78(4): 281-295.
- Hazell, P. and Wood, S. (2008). 'Drivers of change in global agriculture', *Philosophical Transactions of the Royal Society B*, 363(1491): 495-515.
- Hughes, R. G. and Lawrence, M. (2005). 'Globalisation, food and health in Pacific Island countries', *Asia Pacific Journal of Clinical Nutrition*, 14(4): 298-305.

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## References

- Kaplinsky, R. (2000). 'Globalisation and unequalisation: What can be learned from value chain analysis?', *Journal of development studies*, 37(2): 117-146.
- Kaplinsky, R. and Morris, M. (2001). A handbook for value chain research. IDRC.
- Minten, B. and Reardon, T. (2008). 'Food prices, quality, and quality's pricing in supermarkets versus traditional markets in developing countries', *Applied Economic Perspectives and Policy*, 30(3): 480-490.
- Narsey, W. (2011). Report on the 2008-09 household income and expenditure Survey. Fiji: Fiji Bureau of Statistics.
- Neven, D., Reardon, T., Chege, J. and Wang, H. (2006). 'Supermarkets and consumers in Africa: The case of Nairobi, Kenya', *Journal of International Food & Agribusiness Marketing*, 18(1-2): 103-123.
- Owen, K. (1999). What do we know of consumers' preferences and food choices in the islands of the South Pacific. 43nd Annual Agricultural and Resource Economics Society Christchurch, New Zealand. 20-22 January 1999.
- Peppard, J. and Rylander, A. (2006). 'From value chain to value network:: Insights for mobile operators', *European Management Journal*, 24(2): 128-141.
- Pingali, P. (2007). 'Westernization of Asian diets and the transformation of food systems: implications for research and policy', *Food policy*, 32(3): 281-298.
- Pinstrup-Andersen, P. (2002). 'Food and agricultural policy for a globalizing world: preparing for the future', *American Journal of Agricultural Economics*, 84(5): 1201-1214.
- Reardon, T., Barrett, C., Berdegue, J. and Swinnen, J. (2000). 'Agroindustrialisation, globalisation, and international development: An overview of issues, patterns, and determinants', *Agricultural Economics*, 23(3): 195-205.
- Reardon, T., Barrett, C. B., Berdegué, J. A. and Swinnen, J. F. M. (2009). 'Agrifood industry transformation and small farmers in developing countries', *World Development*, 37(11): 1717-1727.
- Reardon, T., Timmer, C. P., Barrett, C. B. and Berdegué, J. (2003). 'The Rise of Supermarkets in Africa, Asia, and Latin America', *American Journal of Agricultural Economics*, 85(5): 1140-1146.
- Reardon, T., Timmer, P. and Berdegue, J. (2004). 'The rapid rise of supermarkets in developing countries: induced organizational, institutional, and technological change in agrifood systems', *Electronic Journal of Agricultural and Development Economics*, 1(2): 168-183.
- Simons, D., Francis, M., Bourlakis, M. and Fearne, A. (2003). 'Identifying the determinants of value in the UK red meat industry: a value chain analysis approach', *Journal on Chain and Network Science*, 3(2): 109-121.
- Taylor, D. H. (2005). 'Value chain analysis: an approach to supply chain improvement in agri-food chains', *International Journal of Physical Distribution & Logistics Management*, 35(10): 744-761.
- Thaman, R. R. (1990). 'The evolution of the Fiji food system', Food and Nutrition in Fiji: A Historical View, 1(1990): 23-108.

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