

Understanding Our Asian Customers

A report for the New Zealand Nuffield Farming Scholarship Trust



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2011 New Zealand Nuffield Scholar

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Executive Summary

In the last decade New Zealand (NZ) agricultural exports to Asia have increased 71% to NZ\$6 billion, and China is now the largest of these Asian markets. This growth is set to continue as the Asian economies continue to outpace those of the US or Europe. An increasing proportion of Asia's large population will develop internationally competitive purchasing power, and consumers will be more able to afford the safe, high quality and innovative foods that NZ agriculture is capable of producing. In order to sustain the highest possible returns, NZ agriculture must understand how to delight these customers so they continue to demand NZ products.

This report details two Asian markets; China and India which were chosen as large, diverse and complex markets with growing economic influence. Importantly they are commonly considered by New Zealanders as representing *emerging* future market opportunities. Japan was visited as part of the study but is a *mature* Asian market with which NZ has long-standing trade relationships. As such it has not been detailed in this report. Through analysis and review of relevant literature, market reports, in-market interviews, visits to relevant successful NZ agribusinesses, and a small-scale consumer survey, this report outlines key market advantages, challenges and high level solutions for engaging in China and India to create sustainable and profitable future markets for NZ agriculture.

China is described as NZ agricultures number one market for the next century due to its on-going economic strength, population dynamics and Government policy direction. The NZ China Free Trade Agreement (FTA) and NZ's reputation for high standards of food safety represent key market advantages for NZ agriculture in China. However, the market challenges in understanding and engaging with Chinese customers include language and cultural barriers, low purchasing power parity (PPP), the existence of many complex, dynamic and diverse submarkets, rapidly changing demographics and consumer preferences, competition, NZ's lack of capital and scale, and Chinese Government processes.

This report proposes four key solutions to the challenges identified for China:

- Get closer to the customer with product support strategies and understand NZ's value proposition
- Build relationships, commit and take a long term view on China
- Consider a 'One World' or international approach to extend the value chain
- Get clear on strategy and focus attentions on this key market

India represents a significant potential market for NZ agriculture worthy of development and investment; however it is currently a much smaller market than China. Market advantages identified for NZ agriculture include consumer preference for dairy products and sheep meat, an impending NZ India FTA, and an existing 'brand NZ' presence through international cricket. Market challenges outlined include significant agricultural tariffs, low PPP, diverse culture and taste preferences, low beef consumption, lack of significant cold chain and modern retail infrastructure, bureaucracy and consumer demographics.

For India, the four key solutions suggested are:

- Encourage the signing of a NZ India bilateral FTA
- Understand the consumer and adapt products to suit their preferences
- Extend the value chain with a 'One World Approach'
- Develop a clear strategy and take a long term view.

Foreword

In July 2010 I read a newspaper article quoting Prime Minister John Key as saying that the Asian continent was where New Zealand's economic future lay. He had just concluded a ten day trip through South Korea, China and Vietnam. "At the moment, we see this as the really big opportunity to grow our exports," he said. "We see a young population, an increasingly wealthy population and one that wants to buy New Zealand goods in a part of the world which is quite accessible for New Zealand exporters." In the same month my employer Synlait Ltd., the dairy farming, processing and marketing company announced that Bright Dairy & Food Ltd., China's third largest dairy company, had purchased a 51% stake in Synlait Milk Ltd.

Over several years I had become acutely aware that Asia, particularly China, was becoming increasingly important to the dairy industry, to New Zealand's export driven economy, and therefore to me. However, as I had not visited Asia before, I had limited first-hand knowledge of Asia and certainly no way of fully understanding what opportunities might lie within its markets. I was also sure that if I felt this way, many others in the agricultural industry might too.

2011 marked a major turning point for me with the award of a Nuffield Scholarship providing the perfect opportunity to explore large parts of Asia. I experienced the culture, met some amazing people, followed New Zealand products to market, and gained a much better understanding of who our Asian customers are and what will keep them interested in buying our agricultural products and services in the future. This report will allow the reader to gain insights into aspects I have been lucky enough to experience and I hope that the recommendations made inspire others in our industry to engage with increased vigor in the exciting opportunities that I believe exist in both China and India.

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¹ Stuff.co.nz, 13 July 2010 - "Key ends trip on positive trade note".

Acknowledgements

I would like to thank the Trustees of the Nuffield New Zealand Farming Scholarship Trust, Chairman Stuart Wright, CEO Richard Green, Secretariat Barbie Barton and my fellow 2011 Scholar Nicola Waugh for the belief, support and encouragement I received during my wonderful journey.

I am incredibly grateful for the generous support of the Trust and it's sponsors DairyNZ, AGMART, Beef+Lamb NZ, Foundation for Arable Research, Landcorp Farming Ltd., Horticulture NZ, Federated Farmers and the Mackenzie Charitable Foundation. Through their support of Nuffield New Zealand these organizations are investing in education, global perspective and building strong leadership capability which are all essential for New Zealand agriculture to have a sustainable and profitable future.

Thanks also to Jim Geltch and Nuffield Australia for the opportunity to participate in the Global Focus Tour where I was fortunate to travel with some remarkable individuals.

As a small country dependent on our trade with our overseas customers New Zealand must punch well above its weight with the limited in-market resources it has. I consider myself incredibly fortunate to have accessed New Zealand's Trade Commissioners and NZTE staff in both India and China. I was proud to see the initiatives, facilities and key relationships that these strategically focused teams continue to nurture. Special thanks to Cliff Fuller and Sudha Palit, Jeff Shepherd and Alan Young.

When you are on your own, in a large and unfamiliar country attempting to communicate in a foreign language - trying to get to the right people and the right place at the right time is a challenge! During my travels through Asia I was incredibly fortunate to have been assisted, introduced, guided, entertained, sheltered, fed, watered, driven and befriended by so many generous and caring individuals. It was a truly humbling experience and to those individuals and organizations that assisted me I will be forever grateful. I would especially like to recognise the following:

In India; Dr Tushar Kohanty and Dr Shir Prasad Kimothi from NDRI, Pratichi Kapoor from Technopak, Dr Harsev Singh from Reliance Dairy, Uday Chugh from Vriddhi Specialty Foods, Sudhir Suri from Suri Agro Fresh, Jayesh Desai, Armit Vyas and Dr HK Patel from SUMUL Dairy Cooperative, and Hitesh Patel, Mayur Patel and family of Surat.

In China; Lila Chan and Vidi Hu from Biolife, Scott Brown from Redfern Associates, David Mahon from Mahon China, Dr Cao Zhijun, Yuguang Ying and students from China Agricultural University, Sui Lin Shim from Beef+Lamb, Garth Smith from Biovittoria, Chen Xibin, Chen Jiao Jiao, and Bai (Maggie) Xue from Grand Farm, Paul Stevens from Gold Kiwi Asia, Dr Guo Benheng, Li Ki, Yang Sihang, Zhu Jian Yi, Fred Zhang, Zheng (David) Dazheng, Yun (Grace) Gu and Wu (August) Jie from Bright Dairy & Food, Yaoming Yuan from Shanghai Bright Holstan, Song (Vivian) Liang Yun, Dr Wang Yongsheng, Li Ping and Lei Ming Shen from Pfizer Animal Health China, Karen McBride from Wondermilk, Jade Gray and John O'Loghlen from Gung Ho! Pizza, Su (James) Hao from East Rock, Sander Hulsebos from Pacific Dairy Ingredients, Prof. Dinghuan Hu from Wageningen University of Research China, Qi Dong from Bashang Consulting and Ryan Higgs from Cornell University.

In Japan: Masahiro and Yuki Suzuki, Junya Masuda and team from Mitsui & Co Ltd., Makoto Kinjo from ANZCO Japan and Mark & Tomoko Britten.

Before setting off on my Nuffield adventure many individuals assisted me with arranging contacts and sharing their knowledge about Asia. Thank you to Barry Brooke, Sir Graeme Harrison from ANZCO Foods, Greg Jopson from Five Star Beef, Craig Carr from Winslow Ltd., Trish Pearce and Neil McLeod from NZFSA, John Morris from Alflex, Nick Beeby from Beef+Lamb, Alistair Mowat from Zespri, Phil Rolston from AgResearch, Susan Kilsby from Agrifax, Hayley Monehan from Rabobank, Howard Moore from Bio Pacific Ventures, Uday Joshi and Hogan Chen from Synlait Milk, Ai Li Kueh, and James Li.

I am fortunate to have been coached, mentored, vouched for and sorted out along the way by Corene Walker, Jon and Kathy Smith, Peter Fennessy, Rt. Hon. Ruth Richardson, Andrew Wright, Ben Dingle, John Howie and Prof. Colin Holmes. Thank you.

Thank you to those at work who picked up what I dropped on their laps, especially Ruwan Wijayasena, Niranjala Gamlath, Brett Walter, Terry Hughes, Lucy Bowker and Athol New. And thank you to John Penno, Juliet Maclean and Tony McKenna for the sponsorship and support from Synlait.

I am extremely grateful for the leadership, guidance, friendship and support I have received from Juliet Maclean over the years. Juliet suggested I apply for a Nuffield Scholarship. Thank you for your belief in me and for enlightening me to what truly great leadership is all about.

I would like to acknowledge my parents Wallace and Anna for always encouraging and supporting me to focus on continuing education.

Finally, thank you to my wife Sue. I could not have completed a Nuffield Scholarship without your enduring and unconditional support for which I will always be incredibly grateful.

Study Objectives

- 1. To visit China, India and Japan as key existing and potential markets for New Zealand derived agricultural products.
- 2. To gain a deeper understanding of New Zealand agricultures customers in these markets.
- 3. To understand the value to these customers of what New Zealand offers.
- 4. To identify and visit examples of successful New Zealand agribusinesses operating within China, India and Japan.
- 5. To offer clear recommendations for effective future engagement with Asian markets to generate sustainable and profitable returns from New Zealand agriculture.

Our Asian Future

Commentators often remark that if economic prosperity and sustainability is the main objective, the future of New Zealand (NZ) agriculture lies in feeding the World's growing population. NZ will *never* be able to do this with its agricultural land area or asset base. Nor should it, because the majority of that population will not be willing to pay enough for the safe, high quality and innovative foods NZ is capable of producing. What NZ *can* and *must* do however, is feed the wealthiest consumers within that global population. It is likely that in the near future many of these consumers *will* be Asian. Thus, the key to realising the highest possible returns in Asia is to develop a long-term strategy to target its wealthiest customers and to understand the competitive advantages NZ agriculture can leverage off to deliver products that will delight them!

In order to understand the importance of Asia to the future of NZ agricultural trade, it is worth considering historic and recent trade trends along with key future macro economic and population trends.

In 2010 agriculture accounted for approximately 60% of NZ's total export revenue by value², making it a significant driver of the NZ economy. This dominance in agricultural trade revenues has been constant throughout the last century. There has however been a steady shift in where NZ's export revenue is earned, moving away from the 'traditional' European markets towards the 'new'



² NZ Trade data Statistics New Zealand (www.stats.govt.nz)

markets of Asia. These now account for over 30% of NZ's total export revenue³.

This shift has been particularly dominant over the last decade for *agricultural* export revenue derived from trade with Asia (Table 1). Over that time agricultural exports by value to Asia have increased by 71% to NZ\$6 billion while those to Europe and America grew at only 17% to NZ\$5.7 billion. Just a decade earlier Asian agricultural revenues lagged Europe and America by over NZ\$1 billion.

	2001	2010	10 Year
	\$ millions	\$ millions	Growth
EU	2,842	3,450	21%
China	446	2,055	361%
USA	1,793	1,928	8%
Australia	888	1,670	88%
Japan	1,088	1,062	-2%
Taiwan	393	575	46%
Indonesia	267	545	104%
Malaysia	437	510	17%
Philippines	275	449	63%
Saudi Arabia	230	410	78%
Korea	345	409	19%
Canada	253	370	46%
India	110	152	38%

Table 1. Selected Total Agricultural Exports for Overseas Merchandise Trade (fob NZ\$): Country of Destination.

Source: Statistics NZ.

As the US and Euro Zone economies have contracted in the after-math of the 2008 'Global Financial Crisis' (GFC), Asian economies have continued to grow and NZ's economy has benefited from increased trade with Asia, in particular with the Peoples Republic of China (China). Although increased trade with Asia became more apparent post-GFC, it merely highlights a trend that is rooted in much deeper and long term global change. This trend is the steady and significant shift in economic wealth from West to East. Over the next half century experts predict Asia will continue to rise as a new world axis of economic and political power, and its populations will become significant shapers of global culture, policy, investment, consumption and trade.⁴

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³ NZ Trade data Statistics New Zealand (www.stats.govt.nz)

⁴ The World Bank 2011. Multipolarity: The New Global Economy.

To understand this further, it is useful to consider Gross Domestic Product (GDP) projections for selected major economies of the world over the next decade (Figure 1).

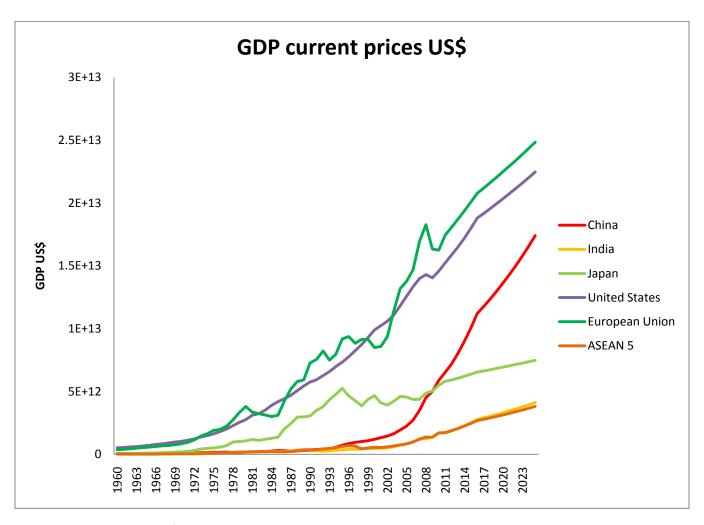


Figure: 1. GDP projections for major economies. Source: The World Bank & International Monetary Fund.

By 2023 it is predicted that the economies of China, Japan, India and the Association of South East Asian Nations (ASEAN 5) countries (Indonesia, Thailand, Philippines, Malaysia and Singapore) combined will exceed those of either the US or the European Union. China alone, by that time set to have an economy twice the size of Japan's, will account for most of this economic might and therefore presents a fascinating economy to consider in more depth.

The Chinese economy as measured by GDP has been growing at over 10% per annum for the last decade. If this rate of growth continues unchecked, China is likely to overtake the US to become the world's largest economy in just over a decade. If the Chinese Government succeeds in slowing the rate of growth to between 6-8% as it has stated in its 12th Five Year Plan⁵, and the US economy grows as widely predicted at a more modest 3% the crossover date is within the next 30 years (Figure 2).

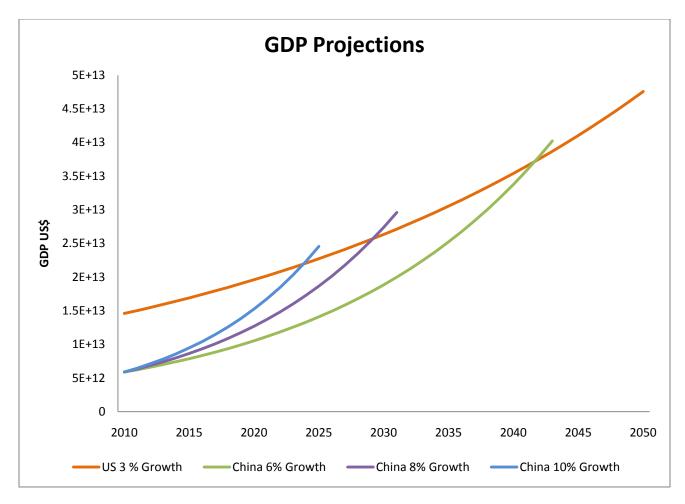


Figure 2. China GDP Projections. Based on personal modelling.

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⁵ China Watch Spring 2011 David Mahon.

However, total economic size only forms part of the picture when considering future opportunities for agricultural export markets. It is essential to consider current and future population size for these major Asian economies alongside GDP (Figure 3), because the wealth within any economy is shared by its total population. And in the case of both China and India that population is very large and, for now at least, is still growing.

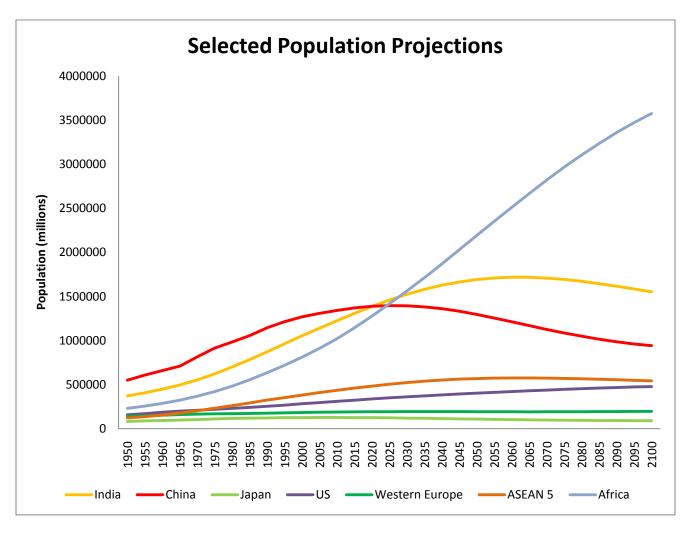


Figure 3. Selected population projections. Source: United Nations.

The combined impact of economic and population size is best represented with the concept of Gross National Income (GNI) and Purchasing Power Parity (PPP). Put simply, GNI per capita based on PPP allows comparison between countries when considering what an individual within any country could purchase if all transactions were conducted in a relative 'international dollar' (Figure 4).

⁶PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Source: The World Bank.

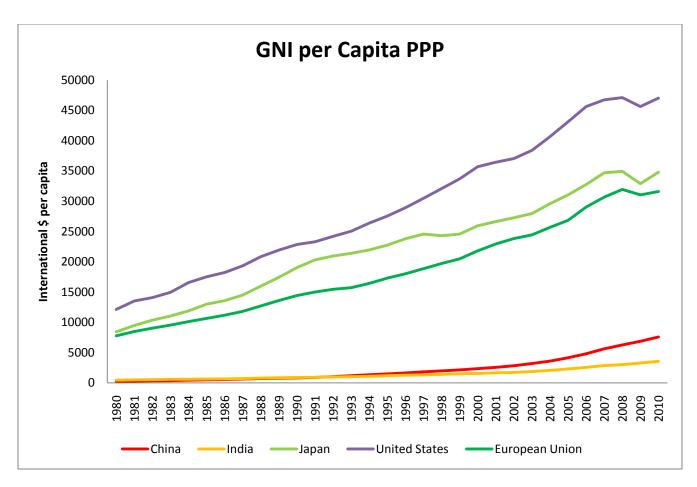


Figure 4. Gross National Income per Capita Purchasing Power Parity. Source: The World Bank.

When considered together the trends of significance from the data sets presented here, with reference to the objectives of this report are:

- China's population is projected to peak within 20-30 years, with an economy projected to grow rapidly; this will result in a rapidly increasing PPP. However this will still be relatively low when compared with other countries due to the 'averaging' effect of the large population. The uneven distribution of wealth within the population will result in segments that will be incredibly wealthy by international standards. However, the impact of socialist Government intervention to correct this imbalance of wealth must be considered⁷.
- India's population is not projected to peak for another 50-60 years, while its economy is expected to grow more modestly than China's. Thus the PPP gap between India and China will increase over the next half century. Extreme imbalances in the distribution of wealth will continue to exist in India for both social and political reasons.
- Japan's much smaller population than either China or India's, has peaked and is in a decline phase with an increasingly aging population. The economy is likely to continue to experience low to moderate growth. However, it is a mature market with a high and stable PPP which will remain a valuable market

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⁷ What Chinas five-year plan means for business. McKinsey Quarterly. July 2011. Guangyu Li, Jonathan Woetzal.

for NZ agricultural products. The distribution of wealth within Japan's population is much tighter and less extreme than that of either China or India.

It is also worth considering that:

- Although the US economy is much weaker than historically, it is likely to continue to grow at a low to
 moderate rate, along with its population. Although the US does not boast the largest national PPP in the
 world, it out-ranks all other nations when this is considered along with its population size (over 300
 million) as a wealthy consumer market and therefore a desirable trading partner.
- When considered collectively, the GDP of the ASEAN 5 nations will continue to rival India's, but with a
 much smaller population, the PPP is significantly higher and should continue to grow rapidly. With 100
 million more people than the US, the ASEAN 5 nations represent an increasingly large and wealthy
 population with close proximity to NZ's agricultural exporters.

Study Approach

This report details two Asian markets; China and India which were chosen as large, diverse and complex markets with growing economic influence. Importantly they are commonly considered by New Zealanders as representing *emerging* future market opportunities. Japan is a *mature* Asian market with which NZ has long-standing trade relationships. As such it has not been detailed in this report. Japan was visited as part of the study for contrast purposes and it is important to note it will remain a *significant* and affluent market for NZ agriculture in the future.

For each country a scan of relevant literature and market reports was completed. In addition a series of inmarket interviews was conducted with consumers, retailers, wholesalers, distributers, marketers, analysts, traders, consultants, academics, industry representatives, Government and trade officials, producers, processors and individuals with expertise relevant to the study. A small-scale consumer survey was also conducted in China. Both countries are discussed separately with the identification of relevant market issues and barriers to success. Possible solutions as to how to overcome these are offered.



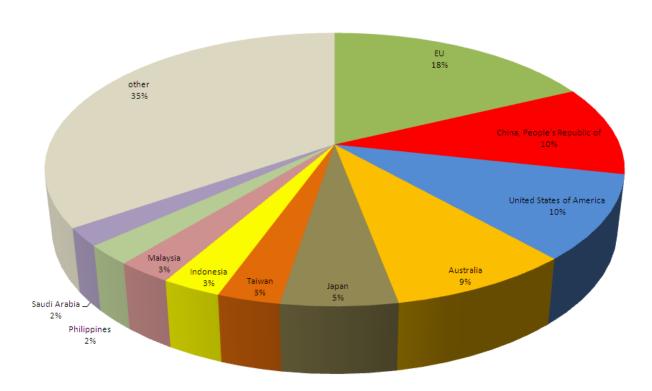
China

"You can do something you never say. You can say something you never do!"

'The Chinese Way', (James) Su Ho, June 2011

Background

China arguably represents the most significant opportunity for NZ's economy both now and in coming decades. This is due to population size, projected growth in purchasing power parity, advantages provided by the NZ China Free Trade Agreement (FTA), and current high regard for food products of NZ origin. NZ agriculture is well positioned to participate in this opportunity, and has already benefited significantly from increased trade with China. In fact, China is now NZ's largest individual country export destination for agricultural products as shown in Figure 5⁸.



NZ Top 10 Agricultural Export Destinations 2010

Figure 5. Export Country of Destination for Agricultural Overseas Merchandise Trade (fob NZ\$). Statistics NZ.

The increase in NZ dairy product exports to China over the last five years is a dramatic illustration of the significance of China to NZ agriculture (Table 2). In 2010 China accounted for 31% of total NZ exports of whole milk powder (WMP), and the total growth in exported volumes to China between 2005 and 2010 was 480%. Further average growth of around 50% in volumes across all dairy products exported to China is predicted over the next five years to 2015⁹.

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⁸ Statistics NZ.

⁹ Agrifax China Dairy Report

	Whole Milk Powder	Skim Milk Powder	Cheese	Butter	Anhydrous Milk Fat
Five Year Annual Trade Volume Growth (2005-2010)	480%	218%	343%	278%	232%
NZ Market Share of Product Category (2010)	88%	55%	52%	75%	97%
Five Year NZ Market Share Growth (2005-2010)	-5%	5%	8%	37%	48%

Table 2. Summary of selected dairy product trade volumes NZ to China. Source: Global Trade Information Services, Agrifax

Similar opportunities exist in the red meat sector. NZ exports to China of beef, lamb, mutton, and offal combined, increased 270% by volume between 2000 and 2009¹⁰. NZ is currently China's largest external supplier of sheep meat¹¹ and China is NZ's second largest sheep meat market by volume¹². NZ kiwifruit sales to China have increased from NZ\$10 million in 2005 to over NZ\$100 million annually in 2011 with Zespri predicting it could become NZ's second largest market within a decade¹³.

Market Advantages for New Zealand

This rapid growth in trade with China is driven by many factors, most of which are also recognised and taken advantage of by NZ's competitors. These include China's rate of economic growth and economic liberalization along with increasing domestic consumption and urbanisation within a large population and increasing openness by the Chinese Government¹⁴. There are however, two factors that have created unique opportunities for NZ agriculture in the past and that continue to represent excellent future potential – the NZ China FTA and NZ's food safety record.

1. NZ China FTA

The FTA between NZ and China was signed in April 2008 and was the first such agreement to be signed with an OECD country by China. The agreement allows for mutually beneficial concessions in the area of trade of goods, services and investment¹⁵ and represents a significant milestone in NZ's history of championing trade liberalization. For agricultural exporters the phased tariff rate reductions (through to 2019), preferential border clearance provisions and reduction of technical barriers to trade present on-going significant benefits over competing countries. In addition, the importance of the Chinese Government committing to such a trade relationship with NZ is highly significant given the influence of Government in China. This signalled the 'official sanction' of a long-term favourable relationship.

2. Food Safety

Food safety scares, particularly in relation to the addition of potentially harmful residues or additives have regularly been reported in the Chinese and international media for pork, eggs, noodles, vegetables, cooking oil,

¹⁰ Feeding the Dragon - Opportunities for NZ Meat in China. Rabobank Industry Note 248-2010.

¹¹ The China Meat Market. Sector Overview 2010. Redfern Associates. April 2010.

¹² www.beeflambnz.com.

¹³ Stuff.co.nz. Zespri China sales Boom. 25 Oct 2010.

¹⁴ The China Strategy, Edward Tse

¹⁵ http://chinafta.govt.nz/1-The-agreement/index.php

seafood, green tea powder, and most famously dairy products¹⁶. In March 2008, China's Ministry of Commerce released results of a survey that found 97% of urban residents ranked food safety as of major concern. Even among rural residents, with lower incomes and fewer sources of information, 86% responded that they put food safety among their major concerns when shopping¹⁷.

In September 2008 the world's media began to report on the contamination of Chinese manufactured infant formula with melamine, a chemical commonly used in the manufacture of melamine-formaldehyde resins for bench tops and work surfaces¹⁸. The contamination was eventually revealed to have caused illness in nearly 300,000 Chinese infants and the death of six through severe renal disease¹⁹. Investigations later revealed a wide-spread issue with melamine being added to raw milk in order to elevate the nitrogen test (a measure of milk protein content) which resulted in increased payments for milk to Chinese farmers and milk collection station owners. While many Chinese milk processing companies were linked to the production of contaminated milk powders, Sanlu Group (43% owned by NZ's Fonterra Cooperative) eventually emerged as the company with the most significant levels of contamination in its products and demonstrated significant unethical behavior in attempting to cover up the scandal.

In the aftermath of the melamine scandal several key trends emerged²⁰:

- Chinese demand for all dairy product categories stagnated
- Chinese demand for foreign produced infant formula increased significantly (currently to 65% market share), and a significant retail premium (nearly 40% on average) for foreign infant formula developed over domestically produced infant formula
- Chinese domestic milk production slumped by 14% in one year
- Imports of dairy products into China grew by around 300% over the following three years

Paradoxically, despite the NZ association with Sanlu, Chinese consumers and dairy product importers demonstrated an increasingly strong preference to purchase and consume dairy products of NZ or Oceania origin. In June 2011 there was a premium being paid by Chinese traders of US\$200 per metric tonne for full cream whole milk powder of NZ origin²¹. At a Chinese Government level, significant goodwill was developed towards both Fonterra and the NZ Government for the way in which the melamine scandal was dealt with both professionally and diplomatically. Before the scandal became public knowledge NZ officials, under the direction of then Prime Minister Helen Clark, urged the Chinese Government to take immediate industry wide action over the contamination. At that time the Chinese dairy industry was attempting to cover it up to 'save face' and to minimize the financial impacts²². Having an external 'whistle blower' gave the Chinese Government an

¹⁶ The China Report, Frank Rocco & Associates, June and July 2011

¹⁷ Food Safety In China - A Briefing for Responsible Investors. Qin Zhang, Lucy Carmody. Responsible Research. June 2009.

¹⁸ Baby milk powder suspected in new China health scare. Reuters 10 September 2008.

¹⁹ Chinese figures show fivefold rise in babies sick from contaminated milk. Tania Branigan. The Guardian. December 2008.

²⁰ China Dairy Report, Agrifax.2011.

²¹ Sander Hulsebos pers. Comm. June 2011.

²² http://www.danwei.org/quality_control/new_zealand_pm_says_milk_scand.php

opportunity to break through the wall of silence and reform the domestic dairy industry in order to improve the overall safety and quality of milk supply²³.

It is important for all NZ agricultural producers, exporters and agribusinesses seeking expansion in China to understand the advantages that both the FTA and NZ's good standing with regards to food safety represent.

Market Challenges for New Zealand

The following challenges were identified for NZ agriculture in understanding Chinese customers and in engaging with them to create sustainable future markets. They are broad challenges and are not intended to be exhaustive. These challenges are subsequently discussed together with potential solutions or opportunities that can be created from them.

1. The Language Barrier

The official spoken language of China is Putonghua (Standard Chinese, 普通话) however there is a large range of regional dialects and languages. English is spoken by only a very small proportion of the total population. Despite this, increasing



numbers of Chinese are learning English, which is taught from primary school age and is a requirement for university study.²⁴ NZ Census figures from 2006 put the number of people able to "speak Northern Chinese (Mandarin)" at 1% of the total population²⁵. Therefore a fundamental mismatch exists when considering direct dialogue with customers. This language barrier also exemplifies a much greater barrier for understanding Chinese customers due to the significant cultural and socio-political differences.

2. Purchasing Power Parity is low

China's growing middle classes are often referred to in relation to the future opportunities the Chinese market presents. While there will continue to be significant expansion of the Chinese middle class (Table 3.), the average income of Chinese customers remains low by international standards. In 2010 the Chinese PPP was US\$7,570.

	Middle Income			Upper Income			
	Annual household income RMB 40,000-120000 (US\$5k-15k)			Annual household income > RMB 120000 (US\$15k+)			
year	Middle Income Households	Total Households	% of total Households	Upper Income Households	Total Households	% of Total Households	
1995	3,000	279,994	1.07%	7	105,521	0.01%	
2000	7,038	340,577	2.07%	153	154,187	0.10%	
2005	35,234	374,199	9.42%	1,835	183,989	1.00%	
2010	65,500	408,564	16.03%	4,199	213,017	1.97%	
2015f	95,132	449,662	21.16%	7,197	242,681	2.97%	

Table 3. Middle and Upper Income Households in China. Source: Access Asia 2010.

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²³ David Mahon. Pers comm. June 2011.

²⁴ http://yaleglobal.yale.edu/content/english-craze-hits-chinese-language-standards

²⁵ Statistics New Zealand

3. China is Urbanising

It is estimated that more than 1 billion people will be living in cities in China by 2030²⁶. This compares with approximately 600 million in 2010²⁷. It is in these cities that the growing middle class will continue to concentrate. The effect that urbanization will have on the eating and spending habits of the Chinese population needs to be well understood by NZ agriculture.

4. China is not one market

China is many large and diverse markets. With a population of over 1.3 billion and a large land area, there are significant regional variations in culture, cuisine, languages, wealth, environment, retail formats, buying preference and even in regulations. In relation to PPP great variation exists across China with extremes of both wealth and poverty. In the cities of Macau, Hong Kong, Shanghai and Beijing there is a significant combined population with average PPPs much higher than the national average (Figure 5). However, trying to find buyers within the remaining majority of China's population for NZ agricultural products at internationally competitive prices is a challenge. Market strategies must be targeted at the wealthy or at wealthy cities, and therefore must cater to their requirements.

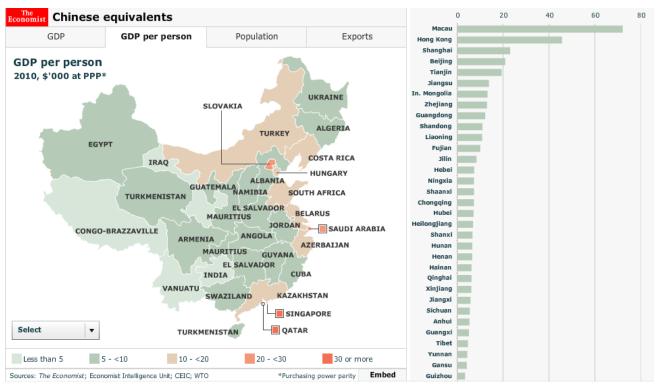


Figure 5. Variation in Chinese GDP per person mapped by province compared with international equivalents. Source: The Economist.

5. Trust and relationships are very important in China

In many of the interviews conducted as part of this study the subject of the requirement to build trust and longterm relationships was raised. The impact of consumer trust has been vividly described with the melamine example. This example also illustrated the impact of building relationships at a business and Government level

²⁶ Tetra Pak Dairy Index - An annual news and information source about the dairy industry. Emerging Middle Class. Issue 4 – July 2011

²⁷ Agrifax China Dairy Report

which will have ongoing positive impacts for NZ in its dealings with 'official' China. Interviewees stressed that it can take great patience and persistence to build business relationships in China. One interviewee described building a business relationship for many years before a favourable joint venture was eventually contemplated and negotiated. On several occasions when interviewing Chinese contacts it was on a second or subsequent meeting that in-depth information really started to be revealed.



The concept of *guanxi* is central to relationship building in China. *Guanxi* is a Chinese word that describes connections, relationships or a social network. At its most basic, *guanxi* describes a personal connection between two people in which each is able to prevail upon the other to perform a favour or service. It can also describe an

individual's network of contacts which can be called upon when something needs to be done, and through which he or she can exert influence on behalf of another. These concepts are easily understood by Nuffield Scholars.

6. China's population is aging

The influence of China's well known 'One Child Policy', along with a decreasing mortality rate has created an aging population in China (Figure 6). Males will continue to be over-represented in this population. For China, some challenge exists given that the income of its future working population will be required to fund the disproportionately large, non-working, elderly population. NZ agriculture should identify significant opportunity in this trend providing that the market niche created by this trend is thoroughly understood.

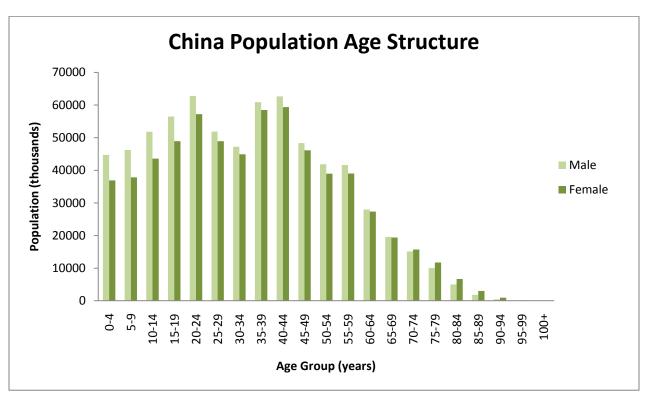


Figure 6. China population age structure 2011. Source: United Nations.

7. The quality and safety of food in China is variable

Aspects of food safety in China have previously been described and the consequences for consumer behaviour discussed. The main reasons for China's poor food safety record include adulteration for pecuniary gain, poor regulatory agency coordination, inadequate certification and standards, inadequate inspection, excessive use of pesticides to boost crop yields, industrial pollution and the widespread use of antibiotics to control disease in seafood and livestock²⁸. The lack of an effective chilled chain in many parts of China is also a major barrier in the provision of high quality foods to the consumer.

8. Chinese consumers love fresh food

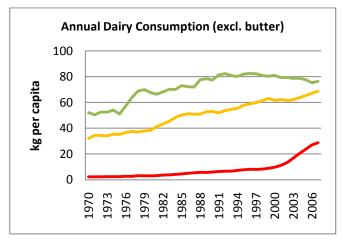
Chinese consumers demonstrate a preference for freshly prepared food. The traditional market format for food retailing allows consumers to see, smell and touch displayed foods (Figure 7). This is particularly apparent for meat and seafood products. Often live animals are displayed at restaurants to allow the consumer to select a fresh specimen for preparation. Modern retailing formats emulate this type of food display although there is an increasing trend towards 'ready to eat', highly processed and packaged convenience foods.

NZ agriculture's production systems and current competitive advantage focus on seasonal production and bulk storage (e.g. meat, dairy, horticulture). Innovative supply chain strategies and incorporation of special technologies must be further developed in order to participate in the 'fresh food' segment of the Chinese market.



Figure 7. A Chinese shopper selecting fresh pork.

9. The Chinese diet is changing



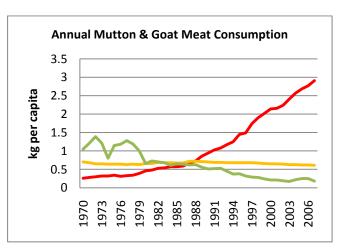


Figure 8. Annual dairy and mutton consumption for China (red), India (yellow) and Japan (green). Source: FAO Stat.

The Chinese diet is changing rapidly. The traditional diet centred on rice, vegetables, pork, poultry and seafood is now supplemented with increasing amounts of dairy, red meat and breads. International companies such as

²⁸ Food Safety In China - A Briefing for Responsible Investors. Qin Zhang, Lucy Carmody. Responsible Research. June 2009.

McDonalds, KFC, Starbucks and Subway have experienced rapid market penetration, and Kiwi entrepreneurs Jade Gray and John O'Loghlen are successfully marketing and selling Gung Ho! Pizza in Beijing. Grape wine consumption per capita has tripled in the last decade²⁹. As the population urbanizes and increases in affluence the popularity of convenience food in ready to eat formats will continue to grow. Understanding how the diet is changing and ensuring NZ's agricultural products can be adapted to suit where necessary is critical. The development of Zespri Gold, which was specifically selected for its appeal to Asian palates³⁰ provides an excellent example of such adaptation.

10. Consumers select on safety, brand (trust), quality, taste and price

In many respects this is a standard observation for any consumer in any market. The preference for safety and trust has previously been discussed for China. In a global consumer survey on the importance of brand in purchasing decisions, Chinese consumers were ranked a close third in *only* buying trusted brands (Figure 9). Price is an interesting factor to consider in that when there is a question of food safety, the Chinese consumer has demonstrated a willingness to pay a premium to ensure food is safe, for example with infant formula. To ensure the on-going success of any food product in China, a focus on safety, branding, quality, taste and careful consideration of pricing is required.

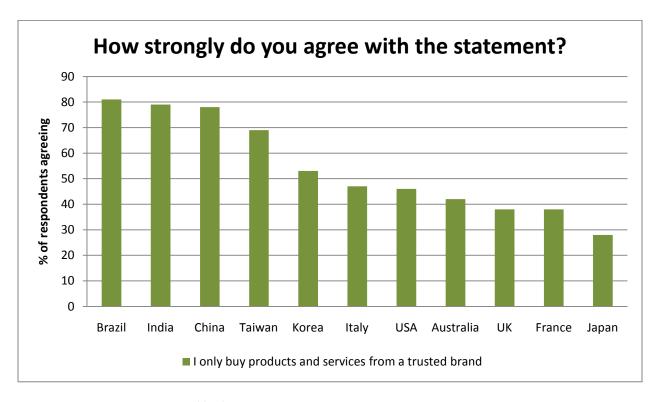


Figure 9. Source: Roper Reports Worldwide 2010.

²⁹ The Wine Market in China Sector Overview 2010. Redfern Associates. May 2010.

³⁰ Martech Consulting Group. Growing Futures #1. Zespri Gold. 2005.

11. Chinese consumers want to be educated and listened to - not just sold to

As the Chinese diet changes and consumers are faced with an ever expanding array of new products and food experiences, product information and education will be required to assist their purchasing and consuming decisions. In store taste tests or incentivized salespeople are commonly used as part of a strategy in consumer education. Food producers must understand how to reach through the value chain to connect with the Chinese customer to receive feedback, to identify opportunities and to assist with improving their product knowledge.

12. There's lots of competition – everyone wants a piece of China!

It seems obvious to state that NZ is not the only country in the world wanting to engage with and sell to China. However, it is important that NZ agriculture is not too insular or arrogant in its belief that a low cost of production and a 'clean green' image will always be enough to maintain market advantage in China. For all the reasons highlighted in this report, all other agricultural producers around the world are aggressively competing with NZ for market position in China. New Zealand agriculture must take an aggressive, active and long term approach to competing in China.

13. It's too big, it's too hard and it's too complex!

A common observation of those interviewed in China, when discussing market entry and business and product development for NZ companies, was that many opted out at an early stage due to the difficulty faced in understanding the Chinese trading environment or being able to accept 'the way things are done' in China. Indeed anyone visiting China in an attempt to better understand it as a market will likely never fully 'understand' it. There are many contradictory and confusing factors that will be encountered. China is a large, difficult and complex place to do business.

"You can do something you never say. You can say something you never do!"

'The Chinese Way', (James) Su Ho, June 2011

Reasons sighted by NZ companies for retrenching after investigations into greater Chinese market engagement included:

- "Significant amounts of capital investment were required initially to establish the opportunities however it would have taken seven years before the investment became cash flow positive."
- "It took one year of meetings and negotiations and payments to multiple parties before we were able to secure the land we required."
- "The volumes are currently too low for us to consider entry with all the associated hassle. We are better
 off to focus on existing markets."
- "We would have to cooperate with multiple other exporters to get enough scale to supply the volumes required, and we just don't want to work with our 'competitors'."
- "There is a different set of rules for doing business in China."
- "It's often hard to get paid in China."

- "We couldn't rely on the existing distribution networks to get our product to where it needed to be –
 the wastage would have been too high and it would have reduced the quality we were offering
 customers."
- "We had an opportunity to work with a Chinese business partner but we didn't feel we would have enough control we walked away."
- "We are too small and can't commit the personnel required to be in China."

China *is* different to NZ. The barriers associated with the scale, difficulty and complexity of China can be overcome with innovative solutions, vision and patience. While the returns may take time, there are great potential rewards for those who are willing to adapt and engage.

14. NZ is small and under-capitalized

New Zealand's largest company Fonterra has been active in China for many years. It has a significant Chinese ingredients and consumer business with brands including Anlene, Anmum and Anchor. In 2005 Fonterra invested \$200 million in a 43% stake of Sanlu, which was completely written off following the melamine scandal in 2008. In 2007 Fonterra developed its first Chinese dairy farming operation and is now developing its third farm. Total investment in farming operations is now over \$200 million.

Source: http://www.fonterra.com/wps/wcm/connect/fonterracom/fonterra.com/our+business/news/media+releases

Fonterra's example highlights that the investment required to engage with scale in China is immense and the risks are significant. It has been possible for Fonterra to make such strategic and large investments in China only because of its scale, long term view and access to capital. The majority of NZ agribusinesses will be unable to achieve capital investment and engagement in China at this level without innovative approaches to capital structure, strategic alliances (Chinese partners for example) and a clear long term vision.

15. China changes quickly - what's true today may not be true tomorrow

It is important to consider that any country with the mix of scale, culture, coordinated desire for change, and rampant capitalism that exist in China has the ability for rapid and significant change. To engage fully with China requires constant market presence and surveillance. It requires an ability to change and adapt quickly in response to new trends or market conditions. And it requires a commitment to understanding the factors that contribute to this rapid change.

16. China is developing in ways the world has never seen

It is a mistake to think that China is *westernising*. That is simply not the case. China is *internationalising*. It is adopting what suits from the rest of the world and applying it in ways that work for the Chinese. This is best illustrated with examples.

Poor sales of washing machines in a rural Chinese town in south-west Szechuan province led the electronic maker Haier to make an unusual discovery. Farmers in the province were using washing machines to wash sweet potatoes, and found the Haier appliances did not perform as well as competitors machines in that task. The response of local agents was to educate the farmers that washing machines were for clothes, not vegetables. However Haier decided this may represent a new market opportunity and set about adapting its technology to create machines that could wash sweet potatoes and other tubers which ultimately improved sales of its appliances in the region.

On an occasion where I decided on a 'break' from Chinese fare in a McDonalds restaurant in Beijing, a Chinese teenager dining at the next table was observed scooping ice cream from a cone with French fries and consuming both ice cream and fry in the same mouthful.

At another (more traditional) banquet type dining occasion with several Chinese business people, the host proceeded to put ice cubes into every guests glass of white wine, which in light of a daytime temperature in excess of 35 degrees Celsius was not an unpleasant adaptation!

Neither McDonalds nor the winemaker should be concerned with trying to change the eating habits observed in these examples. They should however be watching, learning and adapting in light of this customer 'feedback'.

17. The Government has an important and occasionally unpredictable presence in China

China is a communist nation. Westerners are often suspicious of communism. It is important for anyone engaging with China to gain a deeper understanding of its political system. The impact of the 'Cultural Revolution' on the Chinese people should be understood, and a basic understanding of political processes, structure and policy should be gained. A deeper understanding is likely to reveal that although the Chinese political regime has been responsible for significant injustices and rampant bureaucracy, it has overseen one of the most spectacular transformations of a global economy in modern times with the agenda of improving the lives of the world's largest population.

In order to gain insight into future policy direction, China's Five-Year Plans provide a good source of information. In October 2010, the Communist Party of China's Central Committee approved the guiding principles of China's 12th Five-Year Plan for National Economic and Social Development (2011-2015). The plan's guiding principles promote the government's focus on "inclusive growth" which means ensuring the benefits of economic growth are spread to a greater proportion of Chinese citizens. The plan's key themes are rebalancing the economy, ameliorating social inequality and protecting the environment. Some of the initiatives that support the strategy focus on a stated GDP growth rate target of 7 percent, promoting consumption over investments and exports, closing the income gap through minimum wage hikes and increased social safety nets, and a range of energy efficiency targets³¹.

For NZ agriculture this planned steady economic growth and commitment to focus on domestic consumption presents significant opportunity. There should be confidence from those trading with China that stable and

³¹ China's 12th Five-Year Plan - How it actually works and what's in store for the next five years. APCO Worldwide. 2010.

growing returns will be achievable, and that the Chinese Government is focusing on policies that will improve social stability at a time where many other counties around the world are seeing growing social unrest. This tends to destabilize markets and create volatility in returns.



Figure 10. Communist Party 90th celebrations.

18. Too many New Zealanders misunderstand China and its potential

China and in particular Chinese investment in NZ is too commonly maligned by the NZ media and, sadly, the NZ public. The motivations behind claims of IP theft, unfair competition with cheap labour, purchasing farm land at discount prices, unethical business behaviour or "selling out to the Chinese" should be carefully examined and those proclaiming such statements must be challenged on fact and logic. Although Chinese investment in NZ requires the same due diligence and careful management as any other investment, it must be seen as an opportunity and not a perceived threat. In addition, China is not a place for NZ businesses to make a 'quick buck' by riding the wave of a growing economy. It is a place to make long-term investment of time, resources and both human and financial capital. China is the most significant and real opportunity for NZ agriculture on the horizon and any level of xenophobia, misinformation and unsubstantiated anecdote must not be tolerated.

Solutions for New Zealand Agriculture in China

A number of key challenges have been presented. All can be grouped and addressed under four solution categories that will assist in either overcoming them or leveraging opportunities for NZ agriculture (Figure 11). Each solution can be adapted to suit any NZ farming enterprise, agribusiness, processor, exporter or industry body.

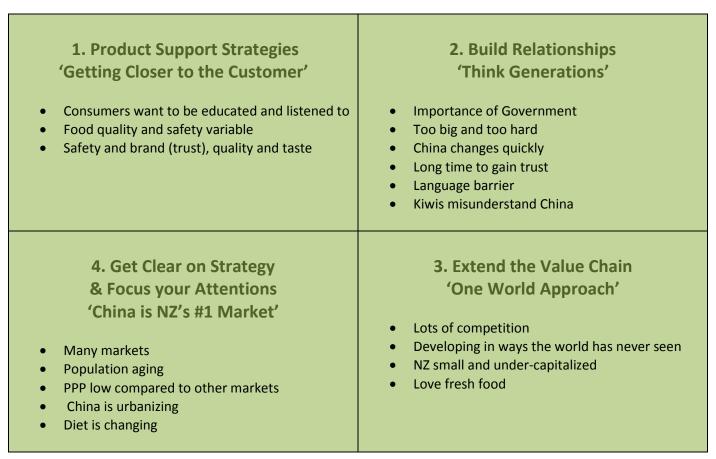


Figure 11. Solutions to overcome challenges in China for NZ Agriculture.

1. Product Support Strategies – 'Getting Closer to the Customer'

NZ has long been a commodity producer of agricultural products. In general this means that farmers disengage with their product as it leaves the farm gate, and that processors disengage at the port. This behaviour creates a large barrier in understanding how value can be added for the end consumer of the product. The end consumer is ultimately the only person responsible for setting the price of the product as it is they who must decide how much it is worth to them. When a product delights the end consumer they will be prepared to pay a premium for it. If a producer is able to understand what would delight the end consumer when purchasing or consuming their product, then that producer will truly be able to understand how to add value to what they are producing. For a farmer, adding value that a consumer is willing to pay for *before* it leaves the farm gate will achieve a return over a commodity approach, providing the cost of adding that value is not marginally greater than the cost of not adding the value. The same approach is true for processors.

NZ agricultural producers and exporters must find ways to get closer to their Asian customers to fully understand what they want to pay for. Given the challenges highlighted for China in relation to language, culture, market diversity, complexity, scale and rate of change; this is not an easy task. However, it must be

achieved. To engage fully with these customers opportunities must be found for them to visit NZ farms, processing facilities and the surrounding environment. They must be delighted by professional, friendly and culturally sensitive people who manufacture their safe, high quality products. They must also be able to see for themselves that their food is being produced in an environment that is pristine compared to their own. When they visit they must taste the best, and experience hospitality that they themselves would extend to visitors in their own country.

Additionally, those who produce and process the food for our Asian customers must go and visit them in their



Figure 12. The author hosting Chinese customers on farm in NZ.

country and understand their needs and desires. They must see how their products are being presented to customers, and how they are retailed, marketed, stored and distributed. They must understand what gives one product a point of difference from another. They must experience what its like to live in a city of millions of people in an atmosphere that is thick with pollution, noise, smells and people, but that is also so much more modern than any city in NZ. They must visit the homes of their customers and see how food products are prepared, consumed and enjoyed. And then they will start to see how real value can be added – for the consumer.

The following example illustrates the power of product support of a NZ agricultural product in China:

In a Lotus supermarket in the 'Big Brands Hypermall' in the Pudong district of Shanghai I was approached by a sales assistant. Amongst the hundreds of bottles of competing labels from around the world, she was able to guide me to three NZ wine labels, and knew why they were priced at a premium to many of the other bottles on display from Chile, Australia, France and the US. She was able to tell me more about the Central Otago wine growing area than I knew about it. She had had personal wine appreciation lessons from the maker of one of the NZ bottles who had visited the Lotus sales team in China. She was incentivised to sell some labels over others (however not in this case the NZ wines), which she admitted certainly impacted her recommendations to shoppers. She was able to educate Chinese shoppers, many of whom have not traditionally been grape wine drinkers, on how to enjoy wine and what quality meant in a wine. She told me that the owner of the Lotus supermarket owned a vineyard in NZ and was proud (and clearly had a vested interest) to have his team promote NZ wine!





Getting closer to customers can be achieved through innovative methods of product support at the point of sale. Numerous methods of product support are used in marketing to Chinese consumers. In addition to the standard forms of advertising, product labels often guide consumers to website information, incentivised sales assistants regularly swoop on customers in supermarkets and in-store tastings and promotions are common.



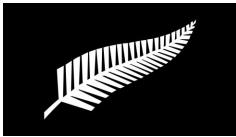


Figure 13. Strong, clear branding is required.

In a number of supermarkets and other retail formats, food products are sold and differentiated by country of origin. This is another form of product support, but one that relies on the 'brand' or image of an entire country not just the company producing the specific product. The NZ flag was observed in several cases to form part of the country of origin identification. To many Asian customers NZ's flag is indistinguishable from Australia's. Many NZ companies selling abroad have chosen to use the silver fern as a branding tool to reflect the NZ origin of their products. NZ's sports teams are great ambassadors when competing in Asia with a silver fern proudly brandished on some part of their uniform. The silver fern symbol also tends to engender a greater sense of pride in New Zealanders compared with the current flag. As a small exporting nation, NZ would do well to change its flag to the silver fern to allow clear differentiation from Australia, to give symbolism that strengthens NZ's brand, and to leverage some branding scale that small under-capitalised exporting businesses could really benefit from.

In addition to the branding symbols it is critically important that NZ agriculture supports its image with simple, clear messages that are incontestable and represent a point of difference from competitors and a value proposition to customers:

- What images and impressions does NZ agriculture want it's emerging Asian consumers to hold for its products?
- Do Asian customers really value 'clean and green?
- Is NZ as 'clean and green' as many claim?
- If it is, how can this be demonstrated without challenge?
- Does 'clean and green' provide a clear point of difference compared with competing nations?

NZ is nuclear free, BSE free and has a moratorium on 'genetically modified organisms'. It has the natural advantage of being an island nation and is therefore well positioned to protect its borders from many of the exotic diseases currently absent from its livestock, crops and bees. Its livestock are farmed outside in large open green spaces, and from 2012 they will be 'traced' with a national electronic tag identification scheme which is not the case for many competing producer nations. NZ is relatively under-populated which gives foreign visitors a feeling of space and freedom and has contributed to lowering the environmental impacts a larger population can bring over time. Food of NZ origin currently has a good reputation for quality and safety, which is particularly recognised in China. These factors all contribute to the 'brand appeal' for NZ origin food products,

but all need protecting domestically to ensure they remain as competitive advantages, and internationally to ensure competitors are not able to attack the integrity of the brand.

2. Build Relationships – Think in Generations

In China the importance of building solid long term relationships is constantly highlighted by those succeeding in market. In each of the China case studies presented (see 'Applied Solutions' pages 38-44) clear examples are given of how building relationships with mutual trust, contributions and benefits can lead to such success. Any relationship takes time to develop and requires constant nurturing. Building relationships in China is no different and can take considerable time. However, once mutual trust is established and the relationship develops, it is likely to reward both parties with long term benefits.

New Zealand businesses look out as far as the end of their current financial year.

The Chinese are looking out to their next generation!

Jade Gray, NZ entrepreneur in China

For NZ agribusinesses who build the right relationships the rewards can include access to capital, scale, an instant pathway to market, local knowledge and expertise and importantly access to the Chinese partner's networks. These networks may enable access to:

- new markets
- officials and regulators
- established sales and distribution channels
- real time market analysis of a constantly changing market
- R&D
- · established brand recognition

At the same time NZ agribusinesses should not underestimate what they bring to the relationship that a Chinese partner may want to access. This may include:

- high quality, innovative products at a competitive price
- new technologies
- management or technical expertise
- exposure to the 'NZ Brand'
- safe food
- intellectual property rights
- credibility
- profitable business investment opportunities



It is important that clear mechanisms are agreed to protect both parties individual 'assets' and that the benefits for both parties are clearly understood. If developed correctly there is an excellent opportunity to harness the synergistic power of the relationship.

For NZ producers who may not have existing contacts in China there are a number of ways to seek to build and initiate relationships. Good places to start are through working with their processing or marketing company, through industry bodies such as DairyNZ or Beef+Lamb, or NZ Trade and Enterprise.

Lastly, it is important to note that doing business in China is very different to doing business in NZ. There will be many contradictions and confusing messages. Processes may occur in a way that lack logic to a New Zealander observing or participating in them. Attempting to circumvent or alter such process may cause offence, confuse others or challenge aspects of a business arrangement. New Zealanders must approach China with an open mind and utilise the skills of their Chinese partner to assist them to remain comfortable with the 'Chinese Way'.

"While in China – play table tennis"

Su Ho, Chinese entrepreneur

3. Extend the Value Chain – One World Approach

NZ agriculture is small, under-capitalised and dependent on export trade with the rest of the world in a competitive environment. However it is internationally recognised as an innovative, low cost producer of high quality, safe foods, with expertise in pastoral based, temperate climate production. Maintaining a competitive advantage is critical for NZ agriculture to continue to thrive. As domestic costs of production rise in line with increased input costs, agricultural businesses must constantly innovate to remain competitive. This will challenge the historical 'farm as much of it here as we can, as cheaply as possible to suit our seasons and ship it to the highest payer on the day' approaches. Understanding where value can be captured through the supply chain is essential. It is also important to understand which expertise or advantages NZ agriculture can apply for maximal advantage along that chain. China must be seen as much more than a customer – it may represent the best location to produce the product or to cost effectively add value to it before the point of sale as one part of an international supply chain.

Much controversy has been stirred in NZ in relation to Chinese purchases of NZ assets, particularly farm land. China is demonstrating, as it engages with the world at an increasing pace, an understanding that value lies in taking a 'one world' or 'global' approach to supply chains. Each country within the supply chain should work to its relative strengths to maximise value. The dairy industry supply chain in relation to China is a useful example:

NZ dairy industry strengths in relation to China:

- Low cost pastoral production systems
- Farm systems expertise with ability to adapt
- Reputation for quality and safety
- Innovative farm and processing level dairy technologies
- Manufacturing expertise
- International trade and distribution knowledge
- Specific disease free status for national dairy herd
- FTA

China dairy industry and market strengths in relation to NZ:

- Growing and large demand for dairy products
- Large amounts of capital for both domestic and international dairy infrastructure investment
- Government support and desire for domestic industry growth
- Willingness to think big and engage external expertise
- Low relative manufacturing cost
- Pathway to market
- Market specific new product development expertise
- Growing market specific R&D capabilities
- FTA

In exploring these relative strengths, clear synergy can be seen for NZ and China to participate in a supply chain with cross border reach that provides mutually beneficial outcomes. In the NZ dairy industry Fonterra and Synlait Milk both provide excellent examples of unique and different approaches to extending the dairy value chain with China. These are described on pages 27 and 42 of this report.

Other agricultural industries offer similar opportunities to explore supply chain synergies including kiwifruit, lamb production and processing, wool production and processing and viticulture. The Biovittoria case study (page 40) provides another excellent example of a synergistic supply chain linkage involving China.

Linking supply chains with China in an innovative manner not only allows cost competitive production and manufacture, it also gives NZ agriculture some level of protection against other competitors who may not have engaged in the same synergistic and linked manner. As competition for the Chinese consumer's renminbi³² is strong, any long lasting competitive advantage achieved will be beneficial.

4. Get Clear on Strategy and Focus your Attentions 'China is NZ's #1 Market'

Challenges presented by the large and diverse markets of China can be overcome by adopting a clear strategy of targeting the right customers for NZ agricultural products. This becomes much more than just a marketing strategy when considered alongside the other solutions of 'Product Support', 'Building Relationships' and 'Extending the Value Chain'. It becomes an overall business strategy to maximize the level of engagement and returns from China.

A critical element of any strategy is to ensure that product specifications and required returns are matched with the correct segment of the Chinese consumer markets. Specific opportunities have been identified for NZ agricultural products in China including targeting quality, flavour, safety, freshness, infant nutrition, elderly nutrition or specific health claims. Each of the case studies presented illustrates a clearly defined and focused strategy to target a specific segment of the Chinese market (infant formula, health and nutrition, 'hot pot' dining). Within a targeted segment further segmentation will be required due to the size of the market and a

 $^{^{32}}$ The 'renminbi' is the official Chinese currency and translated means "the people's currency".

desire for NZ agriculture to seek maximum returns. A clear strategy in this respect is to target the wealthy segments of the population who are willing to pay a premium for NZ origin products as previously described.

It is critically important that NZ agribusinesses seek the most appropriate assistance when developing a strategy for market engagement in China. Implicit in this statement is that if a China strategy is sought, the most appropriate person to assist in its development may be Chinese, or have extensive China experience. NZ Trade and Enterprise has an extensive network in China which provides an excellent resource in this respect.

The benefits of building relationships in China have been covered previously and should also be considered in the context of strategy development and market focus. Where appropriate a Chinese partner may offer excellent prospects for inclusion at a governance level, and certainly the China based team for any fully engaged NZ agribusiness should incorporate the most qualified personnel to succeed whether they are from NZ, China or elsewhere.

"Don't put your best NZ manager in to manage the Chinese business just because they're a Kiwi.

Recruit from an international pool, including NZ, for the best manager you can find

because you need the best to succeed in business in China."

Scott Brown, China based consultant

Applied Solutions for NZ Agriculture China

In order to address Objective 3 (to understand what, if anything, these customers value about what NZ offers) and Objective 4 (to identify and describe examples of successful NZ agribusinesses operating within China, India and Japan) of this study both a small scale consumer survey and multiple visits to agribusinesses operating in market were conducted. The survey results and case study examples are presented here in order to support the recommended solutions presented in this report. The case studies represent dairy, red meat, horticulture and biotechnology segments of the agriculture industry and illustrate unique approaches to engaging with China through innovation, adding value, supply chain extension and integration, building relationships, unique capital structures, and creating opportunities to get closer to the end customer. There are a number of other very successful agricultural and non-agricultural NZ companies that could equally have been profiled in relation to engaging and succeeding in China.

Chinese Consumer Survey

In July 2011 a small scale 'pilot' survey was conducted in an attempt to understand Chinese consumer attitudes in relation to dairy product purchasing decisions, and to gain preliminary data that could assist with the design of a full scale survey. A total of 75 Chinese shoppers in two locations were approached to complete a two page survey. The survey was designed in English, translated into Standard Chinese by a Chinese university student, and independently verified by a second Chinese national who was requested to translate it back into English.

Shoppers were selected as they exited the supermarkets (a local supermarket in Shanghai and Carrefour in Beijing) with preference given to shoppers with dairy products in their trolley or basket.

A Chinese student was employed to be present for the Beijing survey, but it was discovered shoppers were more inclined to respond to requests to complete the survey when they were asked by the author. Both the English and Chinese survey forms are appended for reference (Appendix 1).

The main weaknesses of surveys include³³:

- Questions must be standardized across all respondents (as opposed to individually tailored in an interview type situation). As a result additional context or insight surrounding the response may be lost.
- To allow for accurate statistical comparison and analysis survey questionnaires must remain unchanged throughout the data collection.
- Appropriate sampling must occur to eliminate bias.
- A large number of responses are required to allow statistical power.
- It may be hard for participants to recall information or to tell the truth about a controversial question.

It is acknowledged that this survey had limited scale due to the feasibility, complexity and costs associated with expanding the sample size. In addition, the survey design was not reviewed by a professional to eliminate bias. The information presented here should be regarded only as a guide as no analysis of statistical power has been completed. The results were only intended to identify possible trends in consumer attitudes that could warrant further investigation, and to provide the author with information from which to conduct further interviews and investigations. They are presented in the context of being read only in conjunction with the rest of the information provided within this Nuffield report.



Figure 14. Surveying shoppers in Beijing.

In this survey, there were two questions that requested the participant indicate a preference in relation to milk produced in China. Discussion with the Chinese student indicated the possibility of bias in the answers to those particular questions given both a sense of national pride and unwillingness to publically state distrust in locally produced dairy products. It is important to note that as several questions related to country of origin respondents were given no introduction on the surveyor's nationality. After exclusions for non completeness, illegible responses or in one case obvious bias, the responses of 62 consumers were used in the analysis.

Male	21%	Shanghai	23%	Average Monthly Salary
Female	79%	Beijing	77%	5000-7500RMB

Table 4. Survey respondent demographic summary.

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 $^{^{\}rm 33}$ http://writing.colostate.edu/guides/research/survey/com2d1.cfm

Question	Aver Sca Respo	le
The dairy product is free from harmful residue and is safe to drink	8.44	ıt
The dairy product is good for my health	8.13	rtan
There is a seal of quality that I recognize on the packet	8.08	odu
The dairy product has a health benefit claim proven by scientific studies	8.03	ly Ir
The cow that produces the milk is healthy	7.66	me
The cow that produces the milk lives in a pollution free environment	7.63	Extremely Important
The dairy product tastes good when I drink it	7.59	ш
The cow that produces the milk is happy and comfortable	6.69	
The cow that produces the milk lives outside on green pasture	6.64	
The farmer that farms the cow is fairly paid	6.60	
A website address on the package gives me information on where the milk is produced	6.52	
The brand of the dairy product is famous in China	6.47	
The package the milk is in is recyclable	6.46	
The brand of the dairy product is famous around the world	6.18	
The cow that produces the milk lives a long and productive life	5.98	
I prefer if the milk is produced in an overseas country I can trust	5.87	
I know which farm the dairy product comes from	5.79	nce
I prefer if the milk is produced locally in China	5.79	orta
The farmer that farms the cow is happy	5.77	mp
I know which country the dairy product comes from	5.73	Average Importance
I would use a website to find out more information about the dairy product	5.43	verā
The product is new and exciting	5.25	Α

Table 5. Summary of responses in relation to how important each statement is when deciding to buy a milk/dairy product For the consumers surveyed the three clearest preferences when considering the purchase of a dairy product were:

- The dairy product is free from harmful residue and is safe to drink.
- The dairy product is good for my health.
- There is a seal of quality that I recognize on the packet.

From these results it is also notable that country of origin was considered less important than the knowledge that the cow was healthy and living in a pollution free environment or that she is grazing outside on pasture. Despite this, when questioned further on which country respondents considered most famous for producing good quality dairy products there was strong recognition for NZ, and more broadly Oceania (Figure 15). This could suggest that the consumer does in fact associate the quality, production, environmental and safety aspects that they value in their dairy product with a country of origin. These preliminary results tended to support the reality of the in-market premium being paid for NZ origin milk powder as previously described in this report.

Which of the following countries do you consider is most famous for producing good quality milk/dairy products?

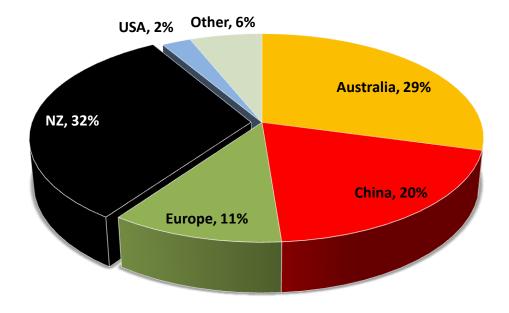


Figure 15. Country of origin result from Chinese Consumer Survey.

In relation to achieving a retail premium, when presented with a potential product that could *prove* at the point of sale that a NZ origin dairy product was *safe*, from *un-housed*, *happy*, *healthy* cows farmed in a *clean environment*. Eighty percent of respondents were willing to pay a premium of greater than 1 renimbi for such a product in this survey.

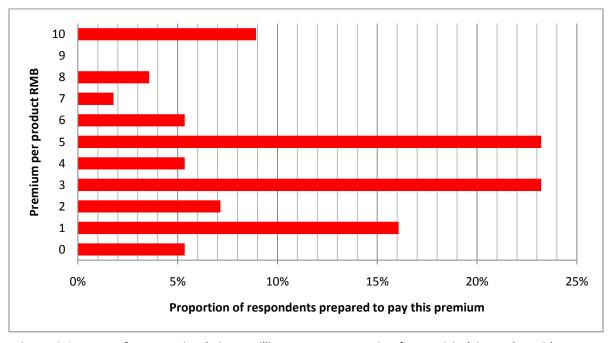


Figure 16. Summary of responses in relation to willingness to pay a premium for NZ origin dairy product with particular product characteristics.

China Case Study 1: BioVittoria

BioVittoria is a product development and marketing company focused on commercializing plant-derived functional ingredients for food and beverage and dietary supplement industries. Its corporate headquarters are based in Hamilton, NZ and it has offices in China and USA. BioVittoria was co-founded in 2004 by New Zealander Garth Smith and Chinese national Lan Fusheng. Both had extensive horticultural research experience primarily in the kiwifruit industry. BioVittoria is the world's largest producer and processor of monk fruit (Chinese 'luo han guo'), and has created a vertically integrated value chain which includes seedling cultivation, harvesting, processing and product formulation. The



Figure 17. New Zealander Garth Smith.

luo han fruit which contains the sweet natural compound mogroside, is processed into a product patented as 'Fruit-Sweetness' which is marketed as being 100% natural from pure fruit and offering calorie-free sweetness as a unique alternative to sugar or other artificial sweeteners.



Figure 18. A luo han or monk fruit

The Chinese component of the operation is structured as a joint venture (called Bio-GFS) between BioVittoria and Lan and is based in Guilin, Guangxi Province, China, where Smith has lived for the past seven years. Bio-GFS owns the plant variety rights of the only commercially available monk fruit plants specifically selected for their high fruit yields and mogroside content. The joint venture contracts local Chinese growers and provides them with new plants annually (ensuring protection from competitive operations developing), transfer of technical information, and a guaranteed purchase of all fruit produced at an agreed price. It also conducts on-going research on environmental, nutrient, and pest and disease

challenges that influence fruit yields and mogroside concentration so that genetic selection and management enhancements can be adopted. The fruit is processed through a purpose built facility that was built for the equivalent of NZ\$8 million, approximately one third of the cost if the facility had been build in NZ. An attempt was made to source the capital for this facility through a NZ public listing; however there was insufficient NZ investor support and the capital was subsequently raised in the US.

In 2010 the US Food and Drug Administration (FDA) approved Fruit-Sweetness branded monk fruit concentrate as GRAS (Generally Recognized As Safe). This allowed export to and registration of Fruit-Sweetness in the US and other countries that recognize USFDA approval. The company now has supply agreements with some of the largest food and beverage manufacturers in the world.



Figure 19. Tissue culture of luo han plants.

The Biovittoria example illustrates:

Product Support Strategies:

- obtaining internationally recognised regulatory approval
- supporting the product with solid science and trial data

Building Long-Term Relationships:

- partnering with an established Chinese partner with excellent local connections
- demonstrating commitment by having senior
 NZ management live in China
- basing a significant part of the operation in China

Getting Clear on Strategy and Focusing Attention:

- understanding the best place to grow and manufacture luo han fruit was China and the most profitable place to sell the end product was the US
- by focusing on constant innovation and applied science to differentiate and capture a niche market
- by ensuring key components of intellectual property were protected

Extending the Value Chain

- identifying an opportunity to add value to the product in China at a fraction of the equivalent capital and further processing costs compared with NZ
- understanding China can be a useful and valuable component of an international supply chain.

China Case Study 2: Synlait Milk

Synlait Milk is a Canterbury, corporate owned, dairy processing company specialising in providing dairy-based health and nutritional products internationally, with particular focus on Asian markets. Initially a dairy farming company founded in 2001 by New Zealanders Ben Dingle, Juliet Maclean and John Penno, Synlait Milk began processing in 2008 from a supply base of its own farms and independent suppliers. Capital was sourced from both NZ and Japanese investors (Mitsui & Co.) to construct the initial processing facilities for commodity-based milk powders and milk fat products. In 2010 a further capital investment was sought to allow construction of a second milk processing dryer specifically designed to produce infant and 'growing up' milk formulas in line with market demand for infant formula of NZ origin (particularly in China). After an unsuccessful appeal to NZ investors the required capital was raised when China based Bright Dairy and Food Ltd., the third largest dairy company in China, invested NZ\$82 million and took a majority shareholding of 51% in Synlait Milk. Although relinquishing a majority stake, for existing NZ shareholders a smaller stake in a larger, growing and strategically partnered company was more attractive than missing the opportunity to engage with China.



In late 2011 Synlait Milk began processing infant formula with the intention of supplying multiple customers who will market each individual product under their own brands to end consumers. Although a shareholder of Synlait Milk, Bright Dairy acts as an arms-length customer of Synlait Milk and was the first customer to launch a brand ('Pure Canterbury') incorporating infant formula produced by Synlait Milk. This infant formula is exported to China in a retail ready can with labelling that clearly states the product is of NZ origin, incorporates imagery from the Canterbury region and plays on NZ's 'pure' reputation. The product is targeted at the high end Chinese infant formula market, and is currently retailing for the equivalent of NZ\$90 per 900g can in Shanghai and Beijing.

Figure 20. 'Pure Canterbury' Infant Formula

The Synlait Milk example illustrates several key aspects relevant to the findings of this study.

Synlait Milk had:

- a vision to supply infant formula to the Chinese market
- a proven track record and expertise in producing high quality dairy products of NZ origin

- a desire to move from commodity product to value added product leaving NZ shores in order to decrease pricing volatility and capture increased value
- limited capital to achieve the vision
- limited in-market expertise in achieving a pathway to market for infant formula in China
- a desire to partner with an investor who bought complimentary skills to the relationship

Bright Dairy had:

- a desire to source NZ or Australian origin infant formula product
- a gap at the top end of their existing Chinese infant formula product offering
- a mandate from their significant shareholder (Chinese Government) to seek international investment growth opportunities
- large amounts of available capital to invest
- significant distribution, retailing and marketing expertise for dairy products in China
- large and growing markets for its products

The Synlait Milk example illustrates:

Product Support Strategies:

- communicating brand messages to the end consumer about quality and product origin
- ensuring the product reaches the end consumer in the same state it leaves NZ
- using the expertise of its key partner to market the product to consumers.

Building Long-Term Relationships:

 partnering with an established and large Chinese partner with clear pathway to market and excellent Government connections

Getting Clear on Strategy and Focusing Attention:

- understanding the value proposition of Synlait Milk's products
- focusing on what would delight the high end Chinese consumer and provide good returns that are well above commodity prices

Extending the Value Chain

- willingness to accept Chinese capital
- understanding of where value could be captured through the supply chain by producing the product in NZ

China Case Study 3: Grand Farm

Grand Farm Group Ltd. is based in Harbin in the North Eastern province of Heilongjiang, China. Founded by Mr Chen Xibin in 1982 its core businesses include sheep, beef and deer farming, meat processing, meat import, export, wholesale and retail, and agri-tourism. Grand Farm International Fine Food Company Ltd. is a joint venture between Grand Farm Group and a Singapore registered company owned by New Zealander Paul Stephens: Goldkiwi Asia Marketing Pte Ltd. The joint venture was established between Stephens and Chen to strengthen and add value to an existing trading relationship in NZ lamb and mutton products that Stephens facilitated between Alliance Group in NZ and Grand Farm Group in China. Grand Farm Group is reported as being the largest importer of lamb and mutton products into China, with the majority of trade being in frozen, bone-in, lamb flaps (Figure 21).

Lamb flaps have historically been a low value cut in NZ as they have not been sought by European customers. However in China, particularly in the Northern provinces, lamb and mutton flaps are a favourite for 'hot pot' style dining, where the finely sliced meat is cooked by diners at the table in a boiling stock. Despite the presence in China (particularly Inner Mongolia) of possibly the largest sheep flock in the world, there is currently a shortage of lamb or mutton of sufficient quality and quantity to supply this segment of the Chinese market. Grand Farm currently only supplies the Tier 1 cities of Beijing, Shanghai, Harbin and Guangzhou with lamb and there is not sufficient New Zealand origin lamb available to expand this market beyond those cities (currently there are a further 10 Chinese cities classified as Tier 1).

Grand Farm has a large slaughter and processing facility in Harbin. Chinese reared sheep, deer and cattle are slaughtered in the facility, and imported NZ lamb flaps undergo further processing at the facility. The flaps are thawed, boned, rolled, refrozen, finely sliced and packaged (Figures 22 and 23). This value added processing is labour intensive, but available labour is abundant for this type of work even though by New Zealand



Figure 21. Frozen lamb flaps.



Figure 22. Slicing and packing rolled lamb flaps in China.



Figure 23. Chinese meat skewer processing line.

standards the remuneration would be considered low. The slaughter facility is impressive, well appointed and well run. A layperson would struggle to differentiate it from an equivalent NZ facility. Alliance employees spent several weeks assisting with the design and commissioning of the facility, however do not currently have an ongoing presence at the facility.

Grand Farm differentiates its lamb products by marketing them as NZ origin from a pure environment and from a country with high food safety standards. Mr Chen and his daughter Ms Jiao Jiao Chen regularly visit NZ and clearly enjoy the NZ association of their products. Jiao Jiao is Grand Farms marketing manager and obtained her degree in Marketing after studying in NZ at Lincoln University. Both Stephens and Chen actively cultivate their business relationship, and Stephens commented that it took a number of years of doing business with each other before Chen finally agreed to enter into the joint venture. Chen is well connected politically in China and holds a high level local position within the communist party. Chen and Stephens have hosted NZ officials and politicians regularly in China and Chen is clearly proud of those connections.

The Grand Farm example illustrates:

Product Support Strategies:

- clearly branding product of NZ origin
- through Alliance providing expertise and training to Chinese manufacturing facility staff to ensure product quality and safety standards were established

Getting Clear on Strategy and Focusing Attention:

 understanding the best way to achieve sustainable and mutually profitable returns was to form a joint venture and to work to each parties own strengths

Building Long-Term Relationships:

- partnering with an established Chinese partner with a clear pathway to market and excellent Government connections
- encouraging ongoing engagement between NZ and China at many levels

Extending the Value Chain

 identifying an opportunity to add value to the product in China at a fraction of the cost of further processing in NZ due to a difference in labour and facility costs while maintaining the reputation of the product for safety and quality

China Case Study 4: Biolife NZ

Biolife New Zealand Limited is a NZ based company focused on supplying dairy based health foods into the Chinese market. Founded in 1999 Biolife is headquartered in Auckland, with a sales office in Guangzhou, China. Biolife imports, markets and distributes a range of colostrum powders and tablets as well as infant and growing up milk formulas under its own 'Natrapure' brand.

Over the last decade China has grown to become the largest market for colostrum products in the world³⁴. Colostrum powder is manufactured from cows milk collected from up to 4 milkings after calving. Colostrum contains naturally high levels of immunoglobulins (particularly IgG) and other nutrients. In China colostrum products are marketed as benefiting immune system modulation, gastrointestinal function, growth stimulation, and anti-aging effects. Children are the main target customer for colostrum in China.



Figure 24. Biolife colostrum products.

Biolife distributes its' NZ sourced products through four different distribution companies in China and has a strategic shareholding in each company. Across those companies there is a sales force of around 2,000 staff. The colostrum products sell in major department stores, supermarkets, mother and childrens stores, pharmacies, franchised stores, and via telemarketing and internet sales.

As the colostrum market becomes more competitive in China, Biolife realises that maintaining a point of difference for its products will be increasingly important. To date, NZ origin has created a significant point of difference for Biolife. As NZ dairy producers now sell to an increasing number of traders and marketers this competitive advantage appears to be eroding. Biolife is therefore actively investigating opportunities such as specific label claims or new formulations to maintain a market edge. One strategy Biolife is employing is working closer with fewer suppliers to develop these concepts.

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³⁴ Colostrum a strategic review of opportunities and applications. Dairymark.com, 2007.

The Biolife example illustrates:

 Product Support Strategies: marketing of NZ origin product seeking to work closely with key product suppliers 	Building Long-Term Relationships: establishing a sales office in China employing only Chinese nationals
 Getting Clear on Strategy and Focusing Attention: focusing on a specific segment of the health food market with a high quality product understanding what would delight the target customers and how to reach them 	Extending the Value Chain investing capital in distribution assets to ensure ongoing pathway to market

China Summary

In order to understand its Chinese customers and to engage with them to create sustainable and profitable future markets, NZ agriculture needs to:

- 1. Change New Zealander's currently narrow view on China and truly embrace it as **our number one** market for the next century!
- 2. Be smarter with product support, understand the value proposition, and **get closer to the customer**.
- 3. **Take a long term view**, commit and invest in the market. Investment can be financial but also in **building and maintaining relationships.**
- 4. Evaluate and adopt innovative and unique approaches to **extending the** *value chain*.
- 5. Adopt a clear 'China strategy' and focus on what can be achieved, not what can't.



India

"Anything is possible in India, Sir"

Background

India currently represents approximately 2% (NZ\$917 million) of New Zealand's total export trade with agricultural products steadily growing over the last decade to over 20% of that value (Table 6). New Zealand does not currently have a bilateral trade agreement with India however the Ministry of Trade and Foreign Affairs (MFAT) has been negotiating conditions for several years with a signalled conclusion date of 2012. MFAT estimates the potential benefits of a FTA with India would amount to around NZ\$2.3 billion, more than three times the current estimated value of New Zealand's total exports to India³⁵.

	Value of exports (NZ\$ million)	Proportion of Total
Total Exports	\$917.3	
Dairy products	\$136.9	14.90%
Wool	\$44.1	4.80%
Hides and skins	\$29.2	3.20%
Fruit and nuts	\$11.4	1.20%

Table 6. Value of NZ exports to India for year ended March 2011. Source: Statistics NZ.

While India's current PPP is less than half of China's, its population is still growing and is predicted to exceed that of China in the next decade. Just like China, India has a growing middle class population with increasing wealth that will become ever more discerning about the food they consume. Some significant differences exist in consumer behavior in relation to food due to historical, cultural or societal differences compared with China. In addition, India has a large agricultural production base, excellent growing environments and a desire to maintain a degree of self sufficiency in relation to food. Opportunity exists for agricultural exporters to supplement Indian production with high quality safe products that wealthy consumers can afford.

Market Advantages for New Zealand

The following specific Indian market advantages exist for NZ in relation to agriculture:

1. Indian's eat mutton and they love dairy products!

For the 70% of the Indian population that are not vegetarian, mutton (sheep or goat meat) is the preferred red meat for consumption. There is significant opportunity to grow consumption from the relatively low current consumption of approximately 600grams per capita³⁶ given that recent retail price margins are growing in India on apparent short supply³⁷. As a significant producer of



Figure 25. Goat Legs in SPAR supermarket, Delhi.

mutton NZ should consider India as a significant future market, provided internationally competitive prices can be achieved which will require NZ origin product to achieve a retail premium over current Indian origin mutton.

 $^{^{35}\} www.mfat.govt.nz/Trade-and-Economic-Relations/2-Trade-Relationships-and-Agreements/India/index.php$

³⁶ The Hindu-CNN-IBN State of the Nation Survey, 2007.

³⁷ India Research for Beef + Lamb NZ, India HorizoNZ. 2010.

The Indian population are traditional dairy consumers (compared with China), and there are a wide range of products available including liquid milk, dahi (yoghurt), paneer, butter, cheese, flavoured milks, ghee, confectionary and ice cream. Per capita dairy consumption is high and growing with most dairy product categories demonstrating growth of between 10-25% per annum³⁸. Despite a large national dairy cattle herd, domestic milk production in recent years is reported to have lagged demand by around 2% per annum³⁹ which has lead to the Indian Government temporarily reducing trade barriers to allow seasonal importation to satisfy demand. Of total domestic dairy production, approximately 65% is consumed via the 'unorganized' segment of the market. This unorganized segment describes mostly unpasteurized milk and its derived products either consumed directly by a family or village from their own cattle, or distributed by small scale local milk vendors, wholesalers and retailers. The remaining production in the 'organized' segment describes processed milk sold through large scale retailers (e.g. Big Bazaar, Metro, Reliance, SPAR) or dairy companies (Figure 26). For the NZ dairy industry there is a significant opportunity to participate in meeting the shortfall in demand particularly at the high end of the market through aligning with the organized segment of the retail industry to provide safe, high quality products.

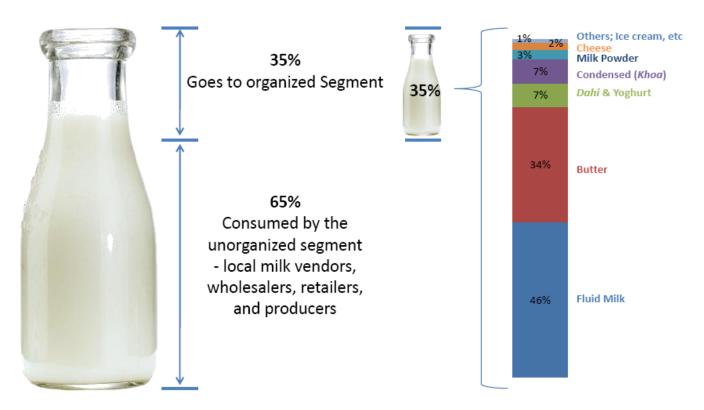


Figure 26. Indian dairy product market distribution. Source: Technopak 2011.

Due to the fragmentation, disorganisation and small scale of farming, for both sheep and dairy production, a further opportunity exisits for NZ agriculture in transfering farming, processing and cold chain technology into India in order to participate in the domestic production channel. This could be achieved by providing completely

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³⁸ Rabobank Report for NZTE. Food supply chain for the dairy sector. June 2010

³⁹ Technopak. 2011.

integrated supply chains within India from farm through to retail level through adaptation of NZ developed technologies and know-how.

To illustrate this, the average dairy herd in India is 4 cows and average per cow production approximately 1% of NZ's. Feed production and feeding management is highly variable with cows routinely offered crop residuals after removal of higher quality grains for human consumption. Strategic management of genetics and breeding is limited and animal health is challenged by the availability of suitable veterinary expertise and the extreme climate. At a farm level there is general lack of automated milking and milk storage plant and most cows are still hand milked. The majority of milk is unpasteurized and there is a lack of integrity in many parts of the organized



Figure 27. Typical milking shed, near Surat.

segment of the industry also. Adulteration of milk is reportedly common with water, salt, sugar, wheat flour, ground rice, blotting paper, baking soda, caustic soda, urea, hydrogen peroxide or formalin commonly added to improve test results and therefore payment to the producer. A disintegrated supply chain also leads to issues with chilling, antibiotic residue and subsequent limitations on the ability to produce certain products (such as fermented yoghurts) that require high quality milk.

2. NZ India FTA

Although not signed, there appears to be a strong possibility that a bilateral FTA agreement could be reached between the two countries. If accomplished this would offer a clear market advantage for NZ compared with other competitors. As such, the current tariffs and trade barriers are discussed further as key challenges in this report.

3. Cricket and the Black Caps

Cricket is a national obsession in India. Indian cricket players are admired and celebrated as national heroes. While Australia are close competitors for NZ agriculture both geographically and for type of product produced, they are arguably much more competitive in the game of cricket. Despite this, Black Cap cricketers serve as NZ's highest



profile and widely recognized ambassadors in India through both international competition and involvement in the Indian Super League Cricket competition. When playing for NZ these players wear NZ's silver fern emblem. Opportunities for building recognition of brand NZ should not be overlooked in relation to this in India, just as they have similarly been discussed for China.

4. Non-Specific Advantages

In addition to NZ specific advantages there are further features of the Indian market that offer potential to be exploited by both NZ agriculture and its competitors. Firstly, India has a large and growing population. In contrast to China, India's population is becoming increasingly younger (Figure 28). When coupled with growing

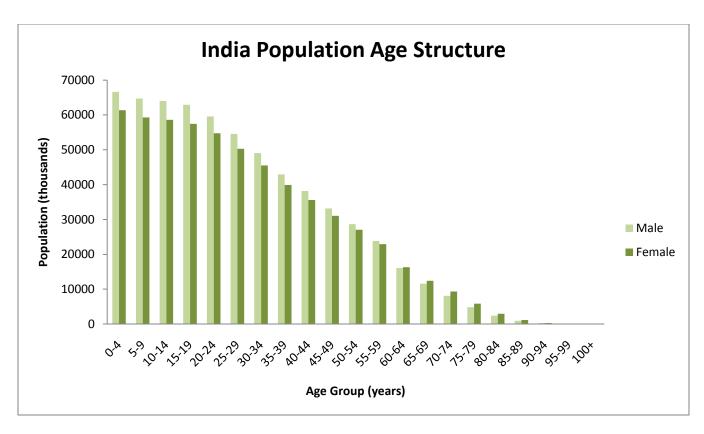


Figure 28. India population age structure 2011. Source: United Nations.

PPP, as these young individuals reach working age in a relatively strong and growing economy, this will lead to rising consumption.

Secondly, this strong domestic consumption will fuel the growth of modern retail in India. The retail market is comparably underdeveloped by global standards with approximately 5% of retail classed as 'organized', compared with China at 20% and the US at 85%⁴⁰. However this situation is changing rapidly as increasingly large amounts of capital are invested in large format retail and distribution, with further investment of approximately US\$50 billion anticipated over next 10 years (Figure 29). Organized retail revenues in India are growing at more than

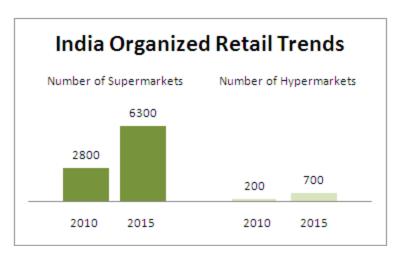


Figure 29. Trends in 'Organized' Indian Retail segment. Source: Technopak.

25% per annum and are projected to be worth approximately US\$65 billion by 2015⁴¹.

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⁴⁰ Ernst & Young. The Flavours of Incredible India Opportunities in the food industry. 2009.

⁴¹ Technopak Research. 2011.

Finally, the language barrier that exists for English speakers engaging with China is largely absent in India as English is commonly spoken along with Hindi and is recognized as an 'official' language.

Market Challenges for New Zealand

1. Tariffs and Trade Barriers

India's average tariff rate is around 12% but tariffs differ markedly across sectors, with considerably higher tariffs on agricultural products. The average tariff rate on dairy products is 34%, for animal products 33% percent and for fruit and vegetables 30%⁴². While a FTA would possibly reduce or remove these tariffs there is considerable resistance from Indian agricultural producers to such moves. For example the Indian Dairy Association has signaled its intention to influence the shape of the FTA, saying free trade would jeopardize India's domestic dairy industry⁴³ which represents 15% of the world's dairy cattle⁴⁴. Without tariff reductions and the removal of other trade barriers such as phyto-sanitary restrictions, NZ agricultural products will require a significant price premium to be paid by consumers when compared with similar Indian produced products to enable solid and competitive returns for NZ producers.

2. Low PPP

India's PPP is low by international standards. Imported agricultural products must be price competitive as the Indian consumer is very price sensitive. In the long term a wealthy segment of the market will continue to develop and this must be targeted for NZ products. Extension of the supply chain by NZ agribusiness investment into Indian production provides and alternative approach to overcome this issue.

3. Many Markets

India is a large and diverse country with local cultures and tastes that differ from North to South and West to East. A one size fits all approach will not succeed in targeting the India consumer.

4. Hindus don't eat beef

Approximately 80% of the Indian population is Hindu for whom the cow is considered sacred, ⁴⁵ therefore they do not consume beef. This has obvious limitations for NZ beef producers finding a market in India.

5. Retail and cold chain is largely undeveloped

The lack of modern or organized retail when compared with many of NZ's traditional trading partners has been discussed previously. In addition significant investment is required in cold chain distribution particularly given the hot Indian climate and perishable nature of many agriculturally derived products.

6. Bureaucracy

India is notorious for bureaucracy (which many Indians claim was inherited from the English). This can apply at any level from Government to business dealings to booking a train ticket to setting up a Nuffield interview with an 'important' contact. In relation to NZ agricultural products entering and being distributed in India this might apply anywhere from the point of entry inspection, through to complex distribution networks with many middle

⁴² ANZ Market Focus; A Closer Look at India. July 2011.

⁴³ India looks to tap NZ dairy know-how in trade deal, NZ Herald, 2 July 2011.

⁴⁴ Rabobank Report for NZTE. Food supply chain for the dairy sector. June 2010.

⁴⁵ India Research for Beef + Lamb NZ, India HorizoNZ. 2010.

men before the end consumer is reached. The likely effect on a product exported to India is that extra cost will be built into the price the final consumer must pay, margin for the producer is squeezed, or both. For agribusinesses attempting to engage at the production or processing end of the supply chain in India it is likely that bureaucracy could also contribute to increased production costs or frustrations. Despite that (and like many other countries around the world), there are ways to get things done in India!

7. Consumers love fresh food

Consumers are familiar with fresh food and will continue to expect it particularly for dairy, meat and fruit products. NZ producers need to continue to explore possibilities to extend the supply chain for local production or to ensure packaging and distribution options provide for this demand.

The 'unorganized' segment of the Indian dairy product market is largely based on unpasteurized milk or products derived from it. While this might concern many Western consumers particularly given the often unsanitary conditions milk in India is produced in, to the Indian consumer unpasteurised milk is preferred. Pasteurised milk is commonly considered not to be 'fresh'. Most Indians boil their liquid milk on a stove top before consuming it. As the milk boils it develops a 'caramelised' flavour and the coagulation of some milk proteins changes the 'feel' of the milk in the mouth. A 'boil over' is considered to bring good luck!

8. The Indian consumer has particular taste preferences

Indian cuisine is known throughout the 'western' world for being 'spicy'. An Indian consumer eating many western foods considers them rather 'bland'.



Figure 30. Local 'wet' market butcher, Delhi.



Figure 31. Water buffalo, Karnal.

Similarly, Indian consumers consider mutton to be either sheep or goat meat and show preference for strong flavoured meat, while a NZ consumer would be likely to seek out the more subtle flavour of lamb. And with 55% of world's buffalo population present in India it is not surprising that Indian consumers show a preference for buffalo milk which has a much higher fat content than cows milk at 6-9%. Buffalo milk also suits the large amount of butter and ghee consumed in the Indian diet. These examples illustrate that to fully engage and delight Indian consumers NZ agricultural products must suit their taste and usage preferences.

9. Women predominantly make food purchasing decisions

Females traditionally make household purchasing decisions and are largely responsible for food preparation. Therefore the female Indian consumer is a powerful decision maker in relation to food purchases and therefore a key target demographic for food products. Products that provide healthy and nutritious options for the entire family are likely to appeal. In addition, it is estimated there will be 45-50 million working women in the age group of 20-40 in urban India by 2020⁴⁶. With the dual responsibility of family nutrition and income earning, there is likely to be a surge in spending on "on the go" and convenience foods. This offers a real opportunity for innovative food suppliers.

Solutions for New Zealand Agriculture in India

While similar solutions to the challenges faced in China can be applied, there are several other recommended solutions for India.



Figure 32. Solutions to overcome challenges in India for NZ Agriculture.

1. Encourage the Signing of a NZ India Bilateral FTA

An FTA is possibly the most critical and urgent solution for the continued development of agricultural markets in India. Given the currently high tariffs on agricultural products compared to all other imports to India, NZ agriculture stands to be the largest winner if favourable tariff reductions can be achieved. This indicates that it should be a high priority for NZ agriculture to support, encourage and lobby the NZ Government to continue with negotiations. If MFAT succeeds in achieving a signed FTA and providing access to lower tariffs and bureaucratic barriers, then it will be the responsibility of all NZ agricultural producers, processors, industry groups and agribusinesses to act swiftly and with confidence to engage in this large and potentially lucrative future market.

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⁴⁶ Technopak. 2011.

2. Understand the Consumer & Adapt Products to Suit Them

Some taste preferences and consumer behaviours particular to India have been outlined. NZ agriculture must understand these differences as a prerequisite to developing new markets targeting India. Production, processing and marketing processes must then be adapted to deliver on these specific customer requirements.

McDonalds, KFC, Starbucks and other multinational fast food chains have been successful in adapting their traditionally highly standardised, western style menus to suit local formats in Asia, while at the same time preserving the essence of their brands⁴⁷. For McDonalds in India it has meant entirely removing the beef component from their menu, incorporating a much larger vegetarian offering and substituting with local food types and flavours (Figure 33).

Examples of specific opportunities identified for adaptation of NZ agricultural products in India include:



Figure 33. McSpicy advertisement, Delhi.

- high fat dairy products (Jersey milk or targeted genetic selection for fat component, premium positioned buffalo milk)
- stronger tasting sheep meat (supply of older animal classes, breed differentiation or goat meat supply)
- different cuts to suit Indian cuisine and 'retail ready' packaging for fresh meat
- functional foods or bioactives targeting female health, pregnancy, convenience or the youth market
- development of Indian style dairy-based confectionary products
- crispier apples (see 'India Case Study')
- innovations in packaging to allow longer shelf life at high ambient temperatures
- juice concentrates (apple, kiwifruit)
- infant formulas
- exploitation of 'caramelised' flavour for Indian palate in dairy ingredients

As for China, NZ producers and processors must seek to experience the flavours, culture, climate, constraints and consumer desires first hand to gain a full understanding of India and the opportunities it presents. The reader is invited to try the following recipe for a regional taste of India:

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⁴⁷ The China Strategy. Edward Tse. Basic Books. 2010.

Elaichi ki Chai (Cardamon Tea from the Gujarat region)

Ingredients

3 tablespoons tea leaves
150g/3/4 cup sugar
6 green cardamom pods, crushed
1 cinnamon stick
2 cloves finely ground
500mL/2 cups unpasteurized full cream milk



Method

Put all the ingredients in a large, heavy based pan, pour in 3 cups water and bring to the boil for about 5 minutes. Strain through a fine sieve into a heatproof jug and serve hot in tea cups with saucers.

Tastes best when poured from cup to saucer and slurped loudly from saucer!

Adapted from India Cookbook, by Pushpest Pant, Phaidon Press, 2010.

3. Extend the Value Chain 'One World Approach'

The opportunities in understanding the value in extending the supply chain have been discussed in relation to China, but apply equally to India. With cool chain, distribution networks and retail formats much less developed than China, but with consumers having a similar preference for fresh foods there is a clear opportunity for NZ agribusinesses to engage in this way in India. The strengths NZ possesses particularly in relation to both dairy and sheep farming and processing offer strong synergy with the lack of productivity and efficiency that has been described in these sectors in India. Investment in these areas by NZ agribusinesses is likely to offer returns through meeting customer demand for fresh, locally produced, high quality products, developing a deeper understanding of customer desires through closer engagement and through participating in future growth in these industries.

4. Develop a Clear Strategy & Take a Long Term View

India has been described as a large, emerging and developing market with significant long term potential. It is also a diverse market that will reward careful and targeted product placement and a deep understanding of specific customer requirements. NZ agriculture must be prepared to take a long term view on India and continue to build presence in the market in the same way as those investing in modern retail infrastructure. Sustainable returns will develop over time for the patient, strategic and careful. Those unprepared to take this long term approach should prepare to see their international competitors succeed at their expense in time.

India Case Study: Suri Agro Fresh

Suri Agro Fresh is a large fruit distribution business based in New Delhi with an India-wide network. Managing Director Mr Sudhir Suri is the second generation of the Suri family to run the business. The business prides itself in being a truly national distributor providing customers with the freshest, high quality fruit available.

Mr Suri is a big fan of NZ grown apples and kiwifruit. He believes NZ apples, especially South Island grown apples are the crispiest apples available. He believes this crisp characteristic is developed due to the cooler climatic conditions and possibly the differing photo period of the South Island. He can describe the soil types



Figure 34. Trays of Kiwifruit on display in a retail outlet in New Delhi. Chilean grown (top), NZ grown (below).

throughout NZ and how he believes they contribute to the characteristics of apples grown in different regions. He also believes 'Kiwis' are excellent hosts.

Mr Suri knows so much about the products he buys from NZ and the people who grow them because he has been to NZ, multiple times. He was the guest of Zespri NZ when he first came to NZ, and was educated on their product so he understands a lot about kiwifruit and how they are produced. Mr Suri is now a loyal importer of NZ grown fruit. But this was not always the case.



Figure 35. Crisp NZ apples in market in India.

Ten years ago Suri Agro Fresh bought a large proportion of apples from Australia, especially Tasmania. As the Australian dollar appreciated compared with both the NZ dollar and the Indian rupee the company began to explore NZ as a viable option for apple supply. Because Indian consumers are very price sensitive, Suri Agro Fresh must be too.

Mr Suri imports approximately 50 containers of apples per month from NZ to India. He would like to develop a single grower relationship with a NZ, preferably South Island based apple grower so that he can purchase apples consistently to his crisp specification, but at the right price of course!

India Summary

In order to understand its Indian customers and to engage with them to create sustainable and profitable future markets, NZ agriculture needs to:

- 1. **Encourage the signing of a bilateral Free Trade Agreement** with India and move quickly and strategically to take advantage of the possible benefits for agriculture.
- 2. Have its producers visit and experience India and encourage Indian customers to visit NZ.
- 3. Adapt production, processing and marketing methods to suit Indian customer preferences.
- 4. Evaluate and adopt innovative and unique approaches to extending the value chain.
- 5. **Take a long term view**, commit and invest in the market.

Appendix 1: Chinese Consumer Survey (English Version) Dairy Product Survey for student study

(Please circle one answer that applies for each question)

Gender: Male Female

Age: <20 years 20-29 years 30-39 years 40-49 years 50-59 years 60 years+

Education: primary school middle school secondary school university

Your Monthly income:

<5000RMB	5000-7500RMB	7500-10000RMB	10000-15000RMB	150000-20000RMB	>20000RMB

For the following statements, please indicate by circling the appropriate number from 1 to 9 how important each one is to you when you are deciding to buy a milk/dairy product:

	Not Importa	int			Avero	-			ctremely nportant
I know which farm the dairy product comes from	1	2	3	4	5	6	7	8	9
I know which country the dairy product comes from	1	2	3	4	5	6	7	8	9
The cow that produces the milk lives outside on green pasture	1	2	3	4	5	6	7	8	9
The cow that produces the milk is healthy	1	2	3	4	5	6	7	8	9
The cow that produces the milk is happy and comfortable	1	2	3	4	5	6	7	8	9
The cow that produces the milk lives in a pollution free environment	1	2	3	4	5	6	7	8	9
The cow that produces the milk lives a long and productive life	1	2	3	4	5	6	7	8	9
The farmer that farms the cow is happy	1	2	3	4	5	6	7	8	9
The farmer that farms the cow is fairly paid	1	2	3	4	5	6	7	8	9
The dairy product is free from harmful residue and is safe to drink	1	2	3	4	5	6	7	8	9
The dairy product is good for my health	1	2	3	4	5	6	7	8	9
The dairy product has a health benefit claim proven by scientific studies	1	2	3	4	5	6	7	8	9
The dairy product tastes good when I drink it	1	2	3	4	5	6	7	8	9
The brand of the dairy product is famous in China	1	2	3	4	5	6	7	8	9
The brand of the dairy product is famous around the world	1	2	3	4	5	6	7	8	9
I prefer if the milk is produced locally in China	1	2	3	4	5	6	7	8	9
I prefer if the milk is produced in an overseas country I can trust	1	2	3	4	5	6	7	8	9
The product is new and exciting	1	2	3	4	5	6	7	8	9
The package the milk is in is recyclable	1	2	3	4	5	6	7	8	9
There is a website address on the package that gives me information on where the milk is produced	1	2	3	4	5	6	7	8	9
There is a seal of quality that I recognise on the packet	1	2	3	4	5	6	7	8	9
I would use a website to find out more information about the dairy product	1	2	3	4	5	6	7	8	9

Which one of the following countries do you consider is most famous for producing good quality milk/dairy products?									
Australia	Brazil	Canada	China	Europe	New Zealand	USA	(other?		

For a dairy product from New Zealand that can <u>prove</u> to me on a website or Iphone application that it is <u>safe</u>, from <u>happy healthy cows</u> grazing <u>green pastures</u> and living <u>outside</u> in a <u>clean environment</u>, I would be prepared to pay and extra: (please circle one)

1RMB 2RMB 3RMB 4RMB 5RMB 6RMB 7RMB 8RMB 9RMB 10RMB

Thank you for your time.

Appendix 2: Chinese Consumer Survey (Standard Chinese Version)

奶制品调查

(请圈出您选择的答案)

年龄: 20 岁以下 20-29 岁 30-39 岁 40-49 岁 50-59 岁 60 岁以

上

您的月收入:

	—				
<5000 元	5000-7500 元	7500-10000 元	10000-15000 元	150000-20000 元	>20000 元
~3000 /L	3000 /300 /4	7500 10000 76	10000 13000 /6	130000 20000 /L	720000 14

什么是决定您购买一种奶制品的重要因素呢?请按不同重要的程度圈出下表中 1-9 的数字。

	不重要	Î		_	般重要			非	常重要
我知道这个产品来自于哪个农场	1	2	3	4	5	6	7	8	9
我知道这个产品来自于哪个国家	1	2	3	4	5	6	7	8	9
产奶牛生活在碧绿的大草原上	1	2	3	4	5	6	7	8	9
产奶牛非常健康	1	2	3	4	5	6	7	8	9
产奶牛生活得非常舒适,身心愉悦	1	2	3	4	5	6	7	8	9
产奶牛生活在干净无污染的环境中	1	2	3	4	5	6	7	8	9
产奶牛高产而长寿	1	2	3	4	5	6	7	8	9
奶农也生活得非常快乐	1	2	3	4	5	6	7	8	9
奶农得到了公平的报酬	1	2	3	4	5	6	7	8	9
该奶制品中不含有有害残留物,可放心饮用	1	2	3	4	5	6	7	8	9
该奶制品对您的身体非常有好处	1	2	3	4	5	6	7	8	9
经科学研究验证,该奶制品有益于您的身体健康	1	2	3	4	5	6	7	8	9
该奶制品的口感非常好	1	2	3	4	5	6	7	8	9
该奶制品是著名的中国品牌	1	2	3	4	5	6	7	8	9
该奶制品是著名的国际品牌	1	2	3	4	5	6	7	8	9
我更喜欢中国本地产的牛奶	1	2	3	4	5	6	7	8	9
我更喜欢我信任的国外奶源地产的奶	1	2	3	4	5	6	7	8	9
我喜欢新的、有意思的产品	1	2	3	4	5	6	7	8	9
该奶制品的外包装环保、可回收	1	2	3	4	5	6	7	8	9
该奶制品的外包装上有网址,我可以通过这个网址找到牛奶的产地	1	2	3	4	5	6	7	8	9
该奶制品的外包装上有通过了质量认证的标志	1	2	3	4	5	6	7	8	9
我会通过网站来寻找更多该奶制品的信息	1	2	3	4	5	6	7	8	9

您认为17下哪个国家	(地区)	最以 中产代质的生奶和奶制品闻名?	

澳大利亚 巴西 加拿大 中国 欧洲 新西兰 美国 _____(其他地区?)

假如有一个网站或者一款 Iphone 的应用软件,可以证明一种来自新西兰的奶制品是<u>安全</u>的、产自<u>愉快地</u>生活在<u>清洁</u>的<u>碧绿大草</u>原上的<u>健康奶</u>牛,您愿意额外支付(请圈出您的选项):

1元 2元 3元 4元 5元 6元 7元 8元 9元 10元

感谢您抽出宝贵时间完成问卷。谢谢!

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