# Assessing consumer preferences and willingness to pay for NZ food attributes in China, India and the UK

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## Abstract

Understanding international consumer preferences and attitudes towards food is important in maximizing the value of food exports. This study aims at assessing these preferences and attitudes towards a number of food attributes, alongside consumer's willingness to pay (WTP) for food certified for these attributes. These attributes include basic attributes such as price and quality, but also extend to environmental and social attributes such as recyclability and animal welfare. The study focuses on China, India and the UK, being three important export markets for New Zealand's food exports, and the global impact of the WTP for each of these countries has been modelled using the Lincoln Trade and Environment Model (LTEM). *Method*: Surveys of consumers in each country, stratified by social class or income. Modelled trade and production from the various WTP's from the LTEM. *Results*: This study found that consumers valued the attributes positively and were willing to pay up to 10 per cent extra for certified food products. In many cases India and China valued attributes more than in the UK especially environmental quality, animal welfare and recyclable attributes. The LTEM showed the impact on New Zealand and EU (European Union-27) producer returns was significant.

**Keywords** Willingness to pay, Choice experiment, Food labelling, Sustainability, Cross-country comparison

**JEL code** Q18, Q56

## 1. Introduction

Attributes of food are important to consumers. The value that consumers place on different food attributes, the product's environmental and social performance and its country of origin is likely to vary across different countries and commodities. These values, attitudes and preferences towards different food attributes have been investigated in several studies worldwide (Saunders et al, 2010; NZTE, 2008). However, the literature has tended to be concentrated on consumer preferences in developed country markets such as the United Kingdom (UK), and only a few studies have been published on how consumers in emerging markets such as India and China evaluate different attributes of food products.

New Zealand is a developed country which is heavily dependent on agricultural exports. Historically, New Zealand's main export market has been the UK but in recent years, China and India have gained in importance for New Zealand. It is therefore important that New Zealand understands the attributes of food that these markets value and how they differ from other markets. This will allow New Zealand farmers and growers to determine and interpret market signals and align them with on and off farm practices.

Therefore, this paper assesses consumer preferences for different food attributes in the UK, India and China. In particular, the paper evaluates consumer's attitudes and preferences towards a number of attributes in food products from New Zealand, their willingness to pay (WTP) for these attributes, and the impact of this on producer returns in New Zealand and the EU (European Union). The methodology in this study used a two stage web-based survey and trade modelling using the Lincoln Trade and Environment Model (LTEM).

The paper is structured as follows. The remainder of Section 1 describes the trade flows from New Zealand into the UK, China and India, and the literature on consumer preferences for food attributes in the UK, China and India is reviewed. This is followed by the methodology for the study in Section 2. Then the presentation and discussion of survey results on consumer preferences for several food attributes and the impact of the WTP results upon producer returns in New Zealand and the EU is outlined in Section 3. Finally, brief conclusions are made in Section 4.

### 1.1 The importance of emerging markets and consumer preferences

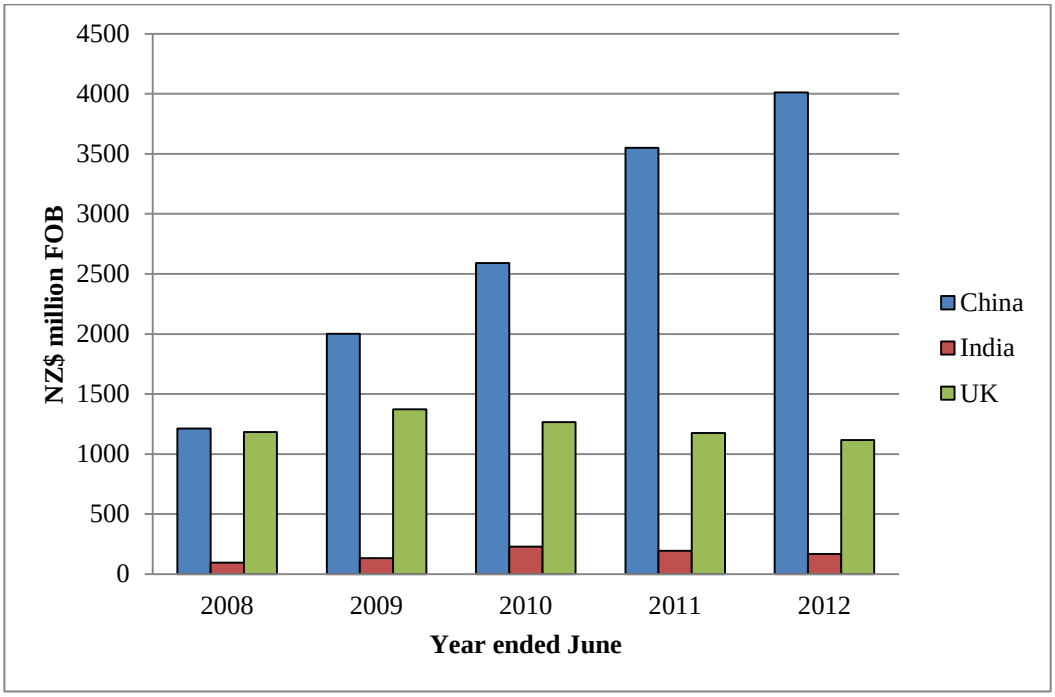
Historically, the UK was New Zealand's greatest export market taking almost all exports until 1960. In 2012, the UK was the fifth important export market for New Zealand taking 4 per cent of all agricultural exports, at a value of NZ$1.1 billion as shown in Figure 1. The main commodity was sheep meat with the UK taking 20 per cent of New Zealand's sheep meat exports, valued at NZ$534 million as shown in Figure 2. Dairy exports to the UK from New Zealand are restricted by quota access and were NZ$28 million in 2012 (Statistics New Zealand, 2012).

China and India are two growing export markets for New Zealand and exports to these countries have risen steadily. Agricultural exports to China have more than tripled between 2008 and 2012 accounting for an increase of NZ$2.8 billion. Since 2010, China is New Zealand's key export market for agricultural commodities. The highest growth was recorded for dairy exports which increased five-fold between 2008 and 2012, and sheep meat exports

which more than tripled during the same period (Statistics New Zealand, 2010; 2012). The increase in trade flows between New Zealand and China was facilitated by the Free Trade Agreement (FTA) between the two countries which came into force in 2008. New Zealand was the first OECD economy to sign a FTA with China, and it provided for the successive removal of tariffs on 96 per cent of traded goods (Ministry of Foreign Affairs and Trade, 2008).

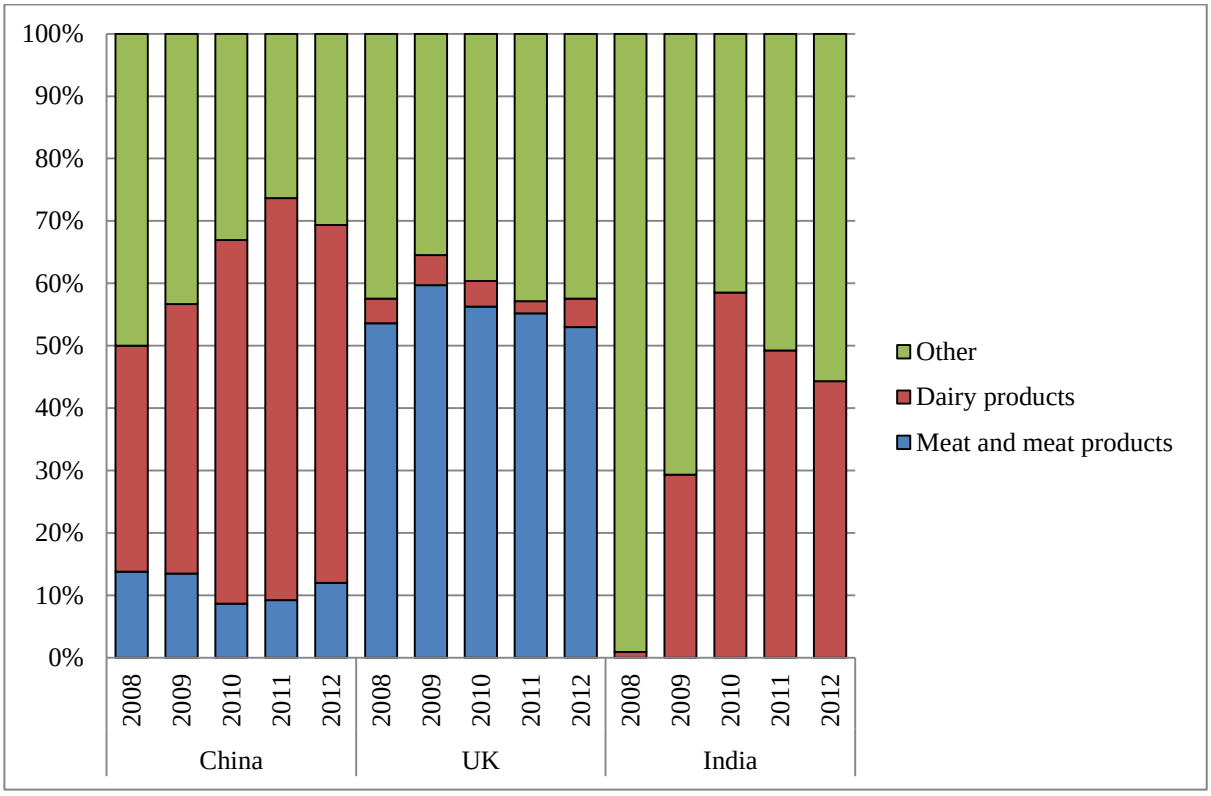
New Zealand's exports to India have also increased significantly between 2008 and 2012 (Statistics New Zealand, 2012). Since 2008, New Zealand's agricultural exports to India have grown by more than 75 per cent accounting for an increase in value of NZ$72 million. Highest growth levels were recorded for dairy exports which increased by more than 19-fold between 2008 and 2012 (Statistics New Zealand, 2010; 2012). India has started negotiations towards a bilateral free trade agreement with New Zealand in 2010, and in January 2012 New Zealand hosted the seventh round of these negotiations (Ministry of Foreign Affairs and Trade, 2012).

**Figure 1: New Zealand agricultural exports to China, India and UK in NZ$ million FOB, 2008 – 2012, YE June.**




Source: adapted from Statistics New Zealand, 2010; 2012.

**Figure 2: New Zealand exports to China, India[(1)] and UK by selected commodity as percentage of total agricultural exports, 2008 – 2012, YE June.**




Note:
(1) According to Statistics New Zealand, New Zealand is not trading meat to India. This has been cross-checked with the FAO database (FAOSTAT, 2012) which confirms that only very small amounts of pigmeat have been traded between New Zealand and India between 2008 and 2012.

Source: adapted from Statistics New Zealand, 2010; 2012.

As income grows consumer behaviour changes and product attributes other than prices play a greater role in consumption decisions including in emerging markets (Dong & Fuller, 2007). There are a few studies indicating that consumers in China and India do value attributes in food products. However, only a few studies give cross-country comparisons.

A 2007 survey, with 14,220 participants across 21 countries, showed that China had the highest number of consumers of all countries (76 per cent) indicating they did 'buy green products' to reduce the effects of climate change; this is higher than the global average of 54 per cent. In contrast, 42 per cent of UK consumers and 37 per cent of Indian consumers stated to 'buy green products' to mitigate the effects of climate change. Moreover, the majority of Chinese (77 per cent), UK (75 per cent) and Indians (74 per cent) indicated they 'saved power' to reduce the effects of climate change. In addition, 77 per cent of Chinese, 72 per cent of Indians, and 53 per cent of UK participants indicated they 'reduced water consumption' to mitigate impacts of climate change (Synovate, 2007).

With regards to consumer attitudes towards different food attributes, Betts et al. (2010) examined Chinese attitudes towards sustainability attributes of New Zealand kiwifruit. Results showed that Chinese consumers' value sustainability attributes in fruit products, and have an increasing interest in sustainable practices and purchases. Participants valued most products that have 'no chemical residue at point of sale', 'coming from pollution-free

production area' and from 'environmentally-friendly production'. There was indifference towards products indicating 'low carbon emissions' during production and products with 'biodegradable packaging'. Information on the product's water efficiency was selected as the least important by all participants. The study showed further that consumers valued country of origin information on fruit products but concern was noted over a lack of trust in the validity of product labels (Betts et al., 2010).

A study, using choice experiments, assessed Chinese consumers' WTP for food safety attributes in pork. Results showed that Chinese consumers were willing to pay more for food safety certified pork. They were willing to pay double the price for government certified pork, 70 per cent more for privately certified pork and 50 per cent more for pork certified by assurance schemes (Ortega et al., 2010).

Cross- country comparisons (including China) conducted in 2008 examined consumers WTP for attributes of onions. This showed that Chinese participants placed a higher value on pesticide-free production than on either GM content or country of origin information. They were willing to pay more than double (+ 120 per cent) for pesticide-free products and 40 per cent more for GM-free products (Ehmke et al., 2008).

Krishna & Qaim (2008) assessed Indians WTP for residue-free vegetables. Results showed that Indians were willing to pay 57 per cent more for residue-free vegetables. In contrast, Birol et al. (2009) assessed Indians WTP for food safety and organics in grapes and found that the price did not influence the participants' choice of grapes. However, more than half of the respondents agreed that food safety is 'the first most important food characteristic' (Birol et al., 2009).

To summarise, while these results do indicate a certain level on environmental concern amongst Chinese, Indian and UK consumers, there is still little known about consumers' attitudes and preferences for the different attributes of food products in emerging markets, especially for food from New Zealand.

## 2. Method

This study used a two stage survey process. The first stage included a structured and self-administered pilot survey which was conducted in the UK, China and India in August 2012. The survey was administered through Qualtrics™, a web-based survey system, and had a sample size of 100 consumers in each country. The pilot survey informed the attribute selection for the second survey which included a discrete choice experiment. The choice experiment was conducted in China, India and UK in November 2012 with a sample size of 2,067 participants which was comprised of 686 participants in China, 695 participants in India and 686 participants in the UK. These surveys were implemented using Qualtrics™.

The sampling strategy for the surveys involved the recruiting of participants from an online panel database of consumers. Each survey was stratified by the countries' age, household income distributions and occupation of the chief income earner of the household. The sample was randomly distributed within the regions in China, India and the UK. The original survey was in English. For the Chinese survey the questionnaire was translated into traditional Chinese by a professional translation service and cross-checked by another translation service.

Survey respondents were screened out by income (i.e. Indian households earning less than Rs 1,000,000 p.a., Chinese households earning less than RMB 50,000 p.a. and UK households in the NRS[1] social class D and E were screened out). Respondents were further screened out when they were not going grocery shopping at least once a month and when they were not aware of New Zealand as a country.

The pilot survey was comprised of a range of questions constructed to assess consumers' attitudes and preferences towards a number of attributes and origins of generic food products from New Zealand. The attributes rated by consumers in the survey consisted of basic food attributes followed by environmental and social attributes. This survey then evaluated the amount consumers would be willing to pay, using an open-ended contingent valuation method, in addition to the cost of their usual grocery bill for food products certified for food safety, farm animal welfare and environmental quality. This was to establish bounds for the choice experiment in the second survey.

The second survey included a choice experiment to assess consumers' willingness to pay for the certification of certain food attributes in both, lamb and dairy products. The completed choice experiment yielded data on preferred choice outcomes conditional on different combinations of attribute levels. The detailed results are however not in the focus of this study, and this paper is to focus on these attributes and benefits to New Zealand and the EU. The WTP results of the choice experiment were analysed using stated preference method (Tait et al., 2013) and were then further analysed to obtain the impact on producer returns using the Lincoln Trade and Environment Model (LTEM), a partial equilibrium model of international trade (Cagatay & Saunders, 2003; Saunders & Cagatay, 2004; Saunders et al., 2006).

## 3. Results & Discussion

In this section the results of the pilot survey are presented. In addition, the WTP results of the choice experiment are outlined and finally, results on producer returns from the trade modelling are discussed.

### 3.1 Consumer preferences for food attributes in the UK, China and India

The results of the pilot survey provided information on the attitudes and preferences of consumers in the UK, China and India towards attributes of New Zealand food products. As stated above, the sample size of the pilot was 100 in each country.

Based on a five-point Likert scale varying from *very important* to *not important at all*, participants were asked about the importance of the following attributes in New Zealand food products. These attributes were: Freshness; Taste; Quality; Price; and Brand.

[1] The NRS social grades are a system of demographic classification used in the United Kingdom. The social grades are based on the occupation of the chief income earner of the household. Income is not part of the social grade classification. However there is a strong correlation between income and social grade. The classifications are often grouped into ABC1 and C2DE in order to equate to middle class and working class, respectively (NRS, 2010).

The majority of consumers in all countries rated freshness, taste and quality as *very important* as shown in Figure 3. Interestingly, Indian and Chinese participants rated freshness and quality greater than the respondents from the UK, however this may not be surprising given that the UK has a well-established, generally safe, supply chain and therefore consumers are at less risk of obtaining poor quality produce. Participants in all countries rated taste similarly, with an average of 80 per cent of participants across all countries indicating that taste is *very important* in a New Zealand food product. Most respondents rated the product's price as *important* or *very important* (an average of 87 per cent across all countries selected *important* or *very important* for the price) but fewer selected price as *very important* compared with the importance of other attributes. The brand was the least important attribute in New Zealand food products compared with the other attributes. UK consumers rated this lower (19 per cent indicating the brand is *very important*) than consumers from India and China with 48 per cent and 42 per cent, respectively, indicating the brand is *very important.*

**Figure 3: Importance of attributes in New Zealand food products**

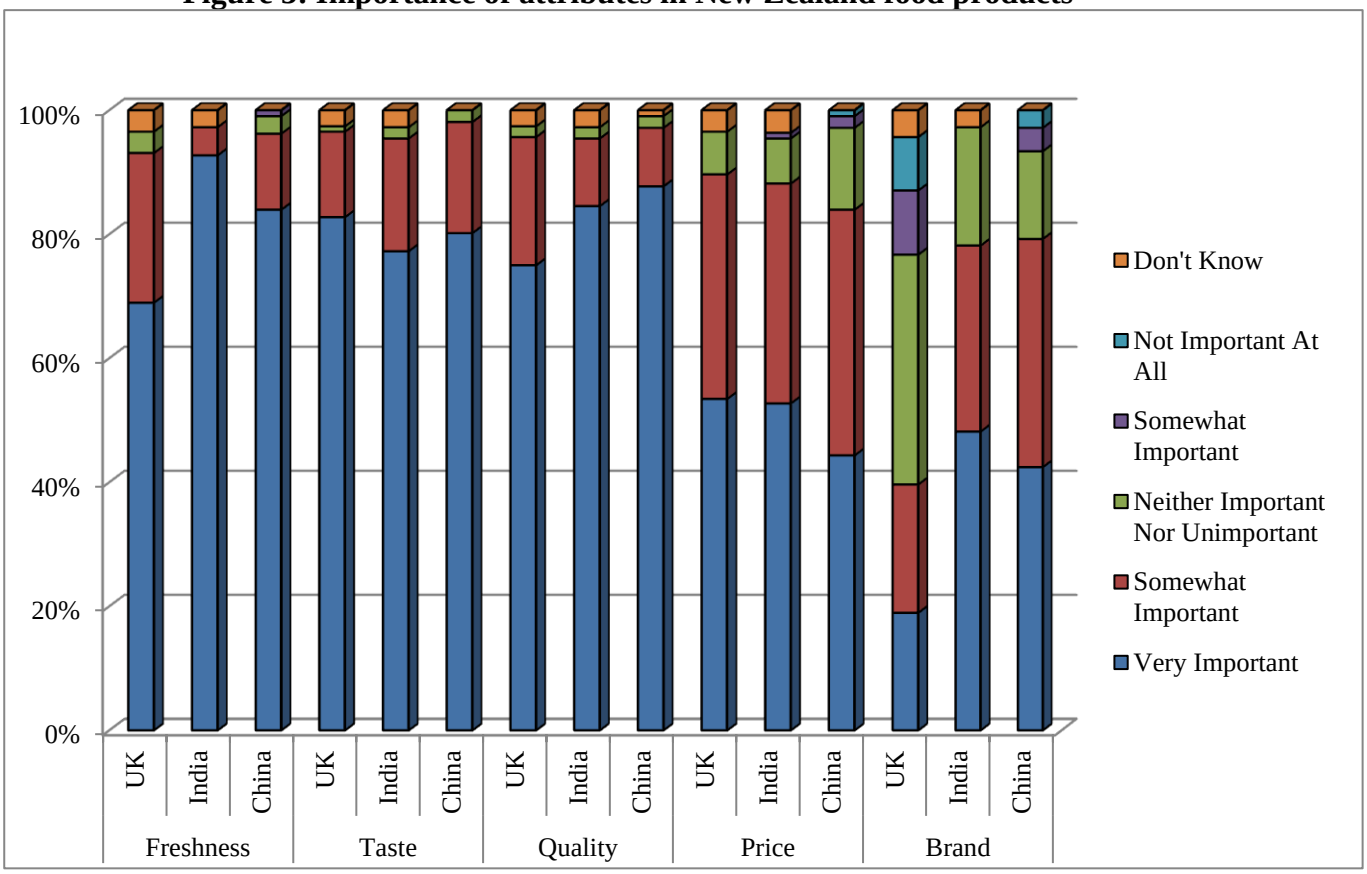



Figure 4 and Figure 5 show the respondents' importance towards ethical, environmental and other attributes in New Zealand food products. These attributes included: Certified for food safety standards; Country of origin; Recyclable/re-usable packaging; Certified for animal welfare standards; Certified for environmental quality standards; Traceability; Organic; GM-free; and Fair Trade.

Results showed respondents in India and China rated food safety certification as more important than respondents from the UK, with 75 per cent of Chinese and 65 per cent of Indians stating food safety is *very important* while only 41 per cent of UK respondents find this attribute *very important* in New Zealand food products. Again this is not surprising given

the relatively safe value chain in the UK and recent food scares in China. Similarly, country of origin was rated more important in China (54 per cent indicating *very important*) and India (40 per cent indicating *very important*) than in the UK (29 per cent indicating *very important*) which may be for similar reasons. However, more surprising is that both Indian and Chinese respondents rated the product's recyclability much more important than the UK with 27 per cent of Chinese and 45 per cent of Indian respondents rating it very important compared with only 22 per cent from the UK. Even more surprising is the rating for animal welfare and environmental quality certification with UK respondents reporting this was less important than those from India and China. For animal welfare and environmental quality, in the UK 34 per cent and 29 per cent of respondents, respectively rated them as *very important*; these numbers were much higher for China and India, with 42 per cent and 58 per cent in China, and 50 per cent and 55 per cent in India rated them as *very important*.

The results for environmental quality were perhaps the least expected with twice as many respondents in India and China finding this *very important* than in the UK. The survey did ask about the interpretation of the terms used in the description of the attributes, especially animal welfare and environmental quality and what represented good and bad practice. Most respondents did state they understood the terms especially those from India and China. When describing good environmental quality related to food production respondents in all countries described it predominantly as an activity that does not harm the environment. In 'not harming the environment', Indian respondents frequently referred to *environmentally-friendly*, *eco-friendly* and *pollution-free* production methods. Similarly, Chinese respondents commonly commented that the activity should be *non-polluting*, and they made more references to *organic* as indicator for good environmental quality than India or UK respondents.

With regards to describing good animal welfare Indian and Chinese respondents mainly referred to good quality of life for the animals including not being mistreated and being well cared for. Indian respondents also commented on animals being well fed as indicator for good animal welfare. In contrast, UK respondents predominantly described good farm animal welfare as free and natural treatment meaning animals are entitled to behave naturally, and *free range* was a term commonly used in this regard.

Figure 5 shows that the majority of consumers in the UK did not value traceability, organic, GM-free and fair trade as *very important*, especially compared to Indian and Chinese respondents. This is perhaps not surprising for traceability given the UK supply chain, especially with New Zealand, is relatively safe. However, this is more surprising for the other attributes. Organic in particular was the lowest rated of all attributes in the UK, with only 16 per cent of respondents indicating it is *very important* in a food product, and two thirds of respondents not thinking of it as *important*. In contrast, 56 per cent of Indians and 45 per cent of Chinese stated organic was *very important* in a New Zealand food product. The results for GM free and fair trade were similar. Fifty four per cent of Chinese, 51 per cent of Chinese and 16 per cent of UK respondents indicated that GM-free is a *very important* attribute in New Zealand food products. Fair trade was seen as *very important* by 50 per cent of Indian respondents, 42 per cent of Chinese and 21 per cent of UK respondents.

**Figure 4: Importance of ethical and environmental attributes in New Zealand food products**

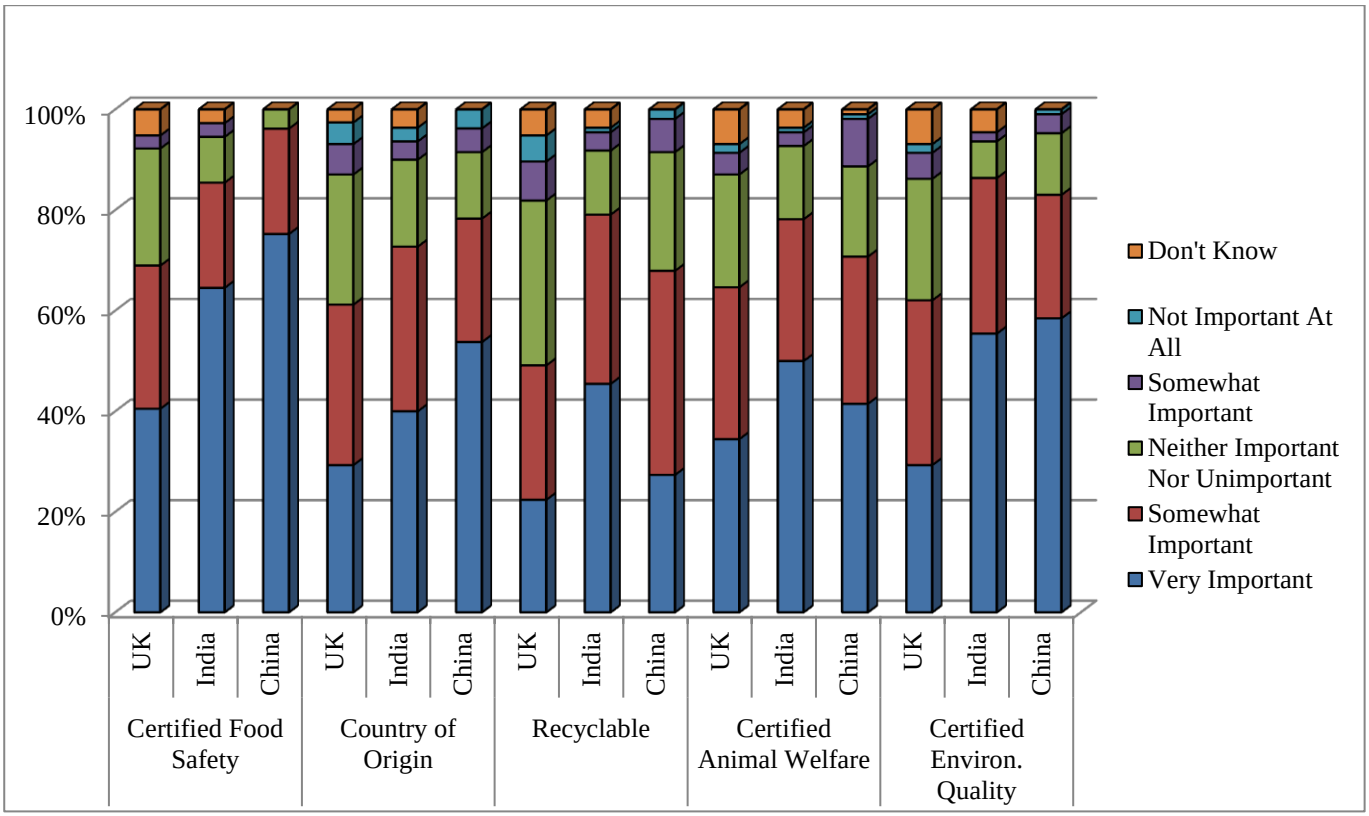
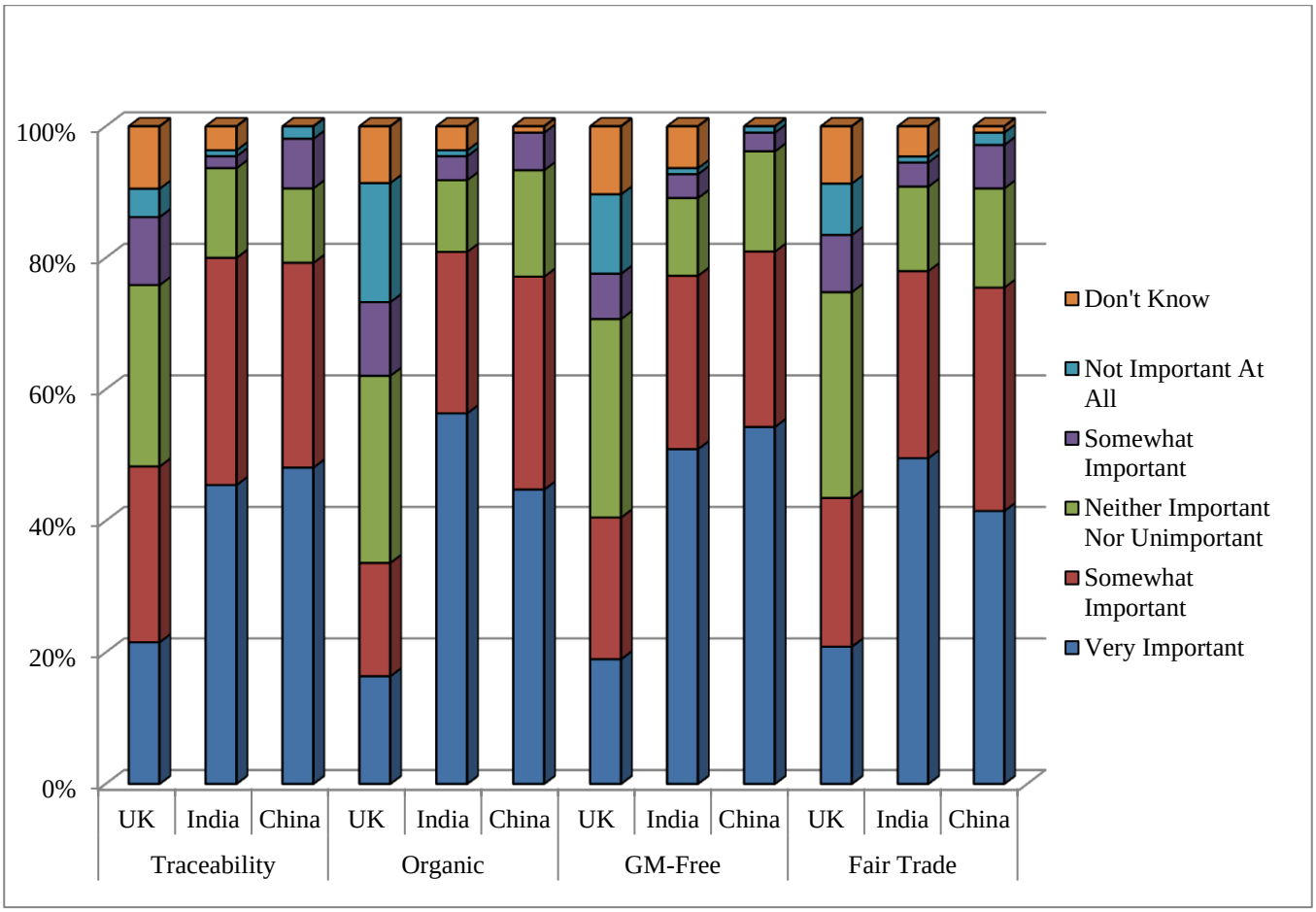


**Figure 5: Importance of ethical and environmental attributes in New Zealand food products**




### 3.2 Willingness to pay for food attribute certification in the UK, China and India

In order to assess consumers' willingness to pay for the certification of certain food attributes in both, lamb and dairy products, the second survey included a choice experiment based on the discrete choice modelling approach. The choice experiment included eight choice sets with seven attributes each made up of a paired comparison of three alternatives. Respondents were asked *"Compared to the lamb you normally buy which of the three types of lamb below would you prefer at the price indicated?"* The attributes included the certification for: Food safety; Farm animal welfare; Water pollution minimisation; Greenhouse gas minimisation; Biodiversity enhancement; Foreign country of origin; and NZ origin.

The WTP results are presented in percentages for all countries in Table 1. Overall, UK participants were less willing to pay extra for product certification than Chinese or Indian respondents; this again may be due to current standards already in place in the food available to UK consumers. If they do not see these issues as in question currently, they may be less willing to pay extra to assure it. UK participants showed highest willingness to pay for animal welfare certification in lamb products. They would pay 22 per cent more than the normal price for the lamb product with such certification. Chinese respondents' showed highest willingness to pay for food safety certification in dairy products. Respondents were willing to pay 74 per cent more than the normal price. In contrast, Indians showed highest willingness to

pay for food safety certification in lamb products for which they would be willing to pay an extra 77 per cent. Chinese had the lowest willingness to pay for lamb products that were certified of not being from China, they were only willing to pay an additional 10 per cent. In comparison, Indian respondents require a 20 per cent price reduction for dairy products that are certified of being from other countries than India. Similarly, UK respondents require a 5 per cent price discount for lamb products that were not produced in the UK.

**Table 1: Food attribute willingness to pay as a percentage of product price in China, India and the UK**

| | China | | India | | UK | |
|---|---|---|---|---|---|---|
| | **Dairy** | **Lamb** | **Dairy** | **Lamb** | **Dairy** | **Lamb** |
| **Safety** | 74% | 44% | 73% | 77% | 16% | 18% |
| **Animal Welfare** | 26% | 13% | 42% | 41% | 17% | 22% |
| **Water** | 16% | 12% | 19% | 26% | 3% | 7% |
| **GHG** | 25% | 14% | 38% | 39% | 7% | 7% |
| **Biodiversity** | 22% | 15% | 27% | 42% | 6% | 6% |
| **Foreign Origin** | 26% | 10% | -20% | - | -4% | -5% |
| **NZ Origin** | 49% | 24% | 10% | 21% | 3% | 6% |
| Notes: | WTP derived using Krinsky and Robb (1986; 1990) method. | | | | | |

### 3.3 Impacts on New Zealand and EU producer returns from the WTP results in China, India and the UK

The impact of the WTP results for producer returns was modelled using the LTEM. Several scenarios were modelled assuming the WTP for certification for food safety, animal welfare and biodiversity enhancement of sheep meat and dairy exports to China, India and the UK. The changes in value for New Zealand and EU producer returns are presented in Table 2. In addition, more detailed results on the impacts on producer returns for both regions are shown in Appendix 1 and 2.

**Table 2: Change to New Zealand (NZ) and European Union (EU-27) producer returns by selected commodities to 2020, in US$ million**

| | Food Safety | | Animal Welfare | | Biodiversity enhancement | |
|---|---|---|---|---|---|---|
| | **EU-27** | **NZ** | **EU-27** | **NZ** | **EU-27** | **NZ** |
| Sheep | 43.81 | 12.44 | 32.66 | 9.63 | 6.49 | 1.70 |
| Butter | 24.19 | 18.98 | 8.16 | 6.57 | 6.31 | 5.37 |
| Cheese | 16.56 | 22.64 | 9.93 | 8.02 | 11.38 | 6.65 |
| Whole milk powder | 230.54 | 139.96 | 76.57 | 47.14 | 63.75 | 39.09 |
| Skim Milk Powder | 65.89 | 53.04 | 22.94 | 18.40 | 20.05 | 15.71 |
| **Total** | **380.99** | **247.06** | **150.26** | **89.77** | **107.99** | **68.53** |

Overall, product certification for food safety, animal welfare and biodiversity enhancement of sheep meat and dairy exports to China, India and the UK was projected to increase New Zealand and EU producer returns significantly. However, projections showed that potential increases from food safety, animal welfare and biodiversity enhancement certification for dairy and sheep meat exports to China, India and the UK were higher for producer returns in the EU which were projected to increase by US$639 million to 2020 than for New Zealand with a projected increase of US$405 million to 2020.

Projections showed that the potential increase in EU producer returns from dairy and sheep meat exports to China, India and the UK were highest for food safety certification with a projected increase of US$381 million to 2020, with the most significant increase projected for the food safety certification of whole milk powder accounting for an increase of US$231 million to 2020. Projections also indicated that animal welfare certification of dairy and sheep meat exports would increase EU producer returns by US$150 million to 2020 while biodiversity enhancement certification was projected to increase producer returns by US$108 million to 2020.

Similarly, the potential increase in New Zealand producer returns from dairy and sheep meat exports to China, India and the UK for food safety certification was projected at US$247 million to 2020, with the most significant increase expected for the food safety certification of whole milk powder accounting for an increase of US$139 million to 2020. Projections further showed that animal welfare certification of dairy and sheep meat exports would increase New Zealand producer returns by US$89.8 million to 2020 while biodiversity enhancement certification was projected to increase producer returns by US$68.5 million to 2020.

## 4. Conclusion

Several studies have investigated consumers' attitudes and preferences towards different food attributes across countries. However, there are only a few studies that assessed consumer attitudes towards basic food attributes, the product's environmental and social performance and its country of origin in emerging markets such as as India and China. These emerging markets are gaining importance for New Zealand and therefore, information on consumers preferences towards food attributes in these markets and how they differ from other markets are important aspects for New Zealand producers.

In a two-staged survey process, this study surveyed consumers in India, China and the UK to assess their attitudes towards several food attributes of New Zealand products, their WTP for these attributes, and the impact of this on New Zealand producer returns.

Overall, the results of this study find evidence that consumers in the UK, China and India value different food attributes in New Zealand products. It was shown that consumers in the UK, India and China have similar preferences for quality, taste and freshness in a New Zealand product. With regards to attributes for the product's environmental and social performance, among all countries food safety was the most important food attribute, however India and China rated food safety certification as more important than respondents from the UK. The least important food attribute for consumers in all countries was the product's brand. An important finding was that in many cases Indian and Chinese consumers valued attributes more than in the UK, especially for environmental quality, animal welfare and recyclability.

Differences were observed for consumers' willingness to pay for the certification of different food attributes in lamb and dairy products. While UK participants showed highest willingness to pay for animal welfare certification in lamb products, Chinese and Indian respondents showed highest willingness to pay for food safety certification in both, dairy and lamb products.

Product certification for food safety, animal welfare and biodiversity enhancement of sheep meat and dairy exports to China, India and the UK was projected to increase EU and New Zealand producer returns by more than US$639 and US$405 million to 2020, respectively. For New Zealand, highest increase was projected for food safety certification accounting for an increase of US$247 million and lowest increase was predicted for sheep meat and dairy exports certified for biodiversity enhancement accounting for an increase of US$68 million to 2020. For the EU highest increase was projected for food safety certification accounting for an increase of US$381 million and lowest increase was predicted for sheep meat and dairy exports certified for biodiversity enhancement accounting for an increase of US$108 million to 2020.

To conclude, consumer preferences and their willingness to pay for different food attributes differ across countries, and it may be beneficial for New Zealand and EU producers to certify New Zealand products for certain attributes.

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## Appendix 1

**Changes in New Zealand Producer Returns (US$ million)**

| | Food Safety | | | | Animal Welfare | | | | Biodiversity enhancement | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Commodity** | **Base** | **Scenario** | **change** | **% change** | **Base** | **Scenario** | **change** | **% change** | **Base** | **Scenario** | **change** | **% change** |
| Sheep | 1,206 | 1,218 | 12.442 | 1.03 | 1,206 | 1,216 | 9.633 | 0.80 | 1,206 | 1,208 | 1.698 | 0.14 |
| Butter | 1,143 | 1,162 | 18.977 | 1.66 | 1,143 | 1,150 | 6.567 | 0.57 | 1,143 | 1,149 | 5.374 | 0.47 |
| Cheese | 1,714 | 1,736 | 22.639 | 1.32 | 1,714 | 1,722 | 8.022 | 0.46 | 1,714 | 1,720 | 6.654 | 0.01 |
| Whole Milk Powder | 2,708 | 2,848 | 139.963 | 5.17 | 2,708 | 2,756 | 47.144 | 1.74 | 2,708 | 2,748 | 39.094 | 1.44 |
| Skim Milk Powder | 1,437 | 1,490 | 53.038 | 3.69 | 1,437 | 1,455 | 18.400 | 1.28 | 1,437 | 1,453 | 15.711 | 1.09 |
| **Total** | | | **247.059** | | | | **89.766** | | | | **68.531** | |

## Appendix 2

**Changes in EU-27 Producer Returns (US$ million)**

| | Food Safety | | | | Animal Welfare | | | | Biodiversity enhancement | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Commodity** | **Base** | **Scenario** | **change** | **% change** | **Base** | **Scenario** | **change** | **% change** | **Base** | **Scenario** | **change** | **% change** |
| Sheep | 5,141 | 5,185 | 43.81 | 0.85 | 5,141 | 5,173 | 32.66 | 0.64 | 5,141 | 5,147 | 6.49 | 0.13 |
| Butter | 7,709 | 7,733 | 24.19 | 0.31 | 7,709 | 7,717 | 8.16 | 0.11 | 7,709 | 7,715 | 6.31 | 0.08 |
| Cheese | 43,074 | 43,091 | 16.56 | 0.04 | 43,074 | 43,084 | 9.93 | 0.02 | 43,074 | 43,085 | 11.38 | 0.03 |
| Whole Milk Powder | 3,180 | 3,410 | 230.54 | 7.25 | 3,180 | 3,256 | 76.57 | 2.41 | 3,180 | 3,243 | 63.75 | 2.00 |
| Skim Milk Powder | 2,692 | 2,758 | 65.89 | 2.45 | 2,692 | 2,715 | 22.94 | 0.85 | 2,692 | 2,712 | 20.05 | 0.74 |
| **TOTAL** | | | **380.99** | | | | **150.26** | | | | **107.99** | |