final report

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Market research – Australian goatmeat export

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Abstract

The Goat Industry Council of Australia (GICA) and Meat & Livestock Australia (MLA) identified a general lack of centralised information and understanding regarding current and potential markets for Australian goatmeat. Such information is required to guide prudent investment in growing and diversifying goatmeat export markets. As such, a research project was undertaken to provide an up-to-date assessment of the risks, volatilities, opportunities and areas of stability in the Australian goatmeat export market.

The research included an exploration of the fundamentals driving increased demand in Asia, particularly China – a market which offers great potential but about which little is known. Other markets examined were the United States of America, Caribbean, South Korea, Taiwan, India, the Middle East and the European Union.

Executive summary

The Goat Industry Council of Australia (GICA) and Meat & Livestock Australia (MLA) identified a general lack of centralised information and understanding regarding current and potential markets for Australian goatmeat. Such information is required to guide prudent investment in growing and diversifying goatmeat export markets. As such, a research project was undertaken to establish an up-to-date assessment of the risks, volatilities, opportunities and areas of stability in the Australian goatmeat export market.

The research included an investigation of rising goatmeat exports to Asia, driven largely by increased demand from China. The current and potential markets of the United States of America, Caribbean, South Korea, Taiwan, China, India, the Middle East and the European Union were also examined.

Thorough industry and market analysis was undertaken through desktop and in-market research (limited to China) as well as interviews with MLA Regional Managers and the majority of current goatmeat exporters to profile each market.

Qualifying the actual demand within markets proved to be difficult due to the lack of reliable data. Where data was available, this often included sheepmeat and failed to accurately reflect domestic production.

Overall, strong underlying demand for affordable protein is driving demand for goatmeat rather than demand for goatmeat per se.

With very few exceptions, goatmeat is traded as a commodity product, that is, an affordable form of protein. Goatmeat is not necessarily marketed as goatmeat but rather is often combined with, or substituted for, mutton.

There is a distinct lack of supply chain transparency in most markets making the identification of specific consumer preferences and product disposal methods difficult beyond general assumptions.

There is only limited capacity for destination markets to improve local production to satisfy domestic demand. Demand in these markets is always likely to exceed domestic supply capacity, underpinning ongoing demand for Australian goatmeat.

Australia is well placed to continue to supply affordable commodity goatmeat to global markets. The industry’s supply capacity may, however, be tested if demand becomes more specific (chilled or cut based).

Increased awareness of food safety in destination markets has created the opportunity for Australian product to be differentiated and its integrity underpinned through systems such as NLIS and LPA.

A full market profile, including literature review, was completed for each market.

Key recommendations stemming from the research include:

- The opportunity exists to better market the story of Australian goatmeat production. It is recommended that generic Australian goatmeat promotional material continue to be provided to support product in market in order to differentiate Australian goatmeat from local product which will generally be cheaper.

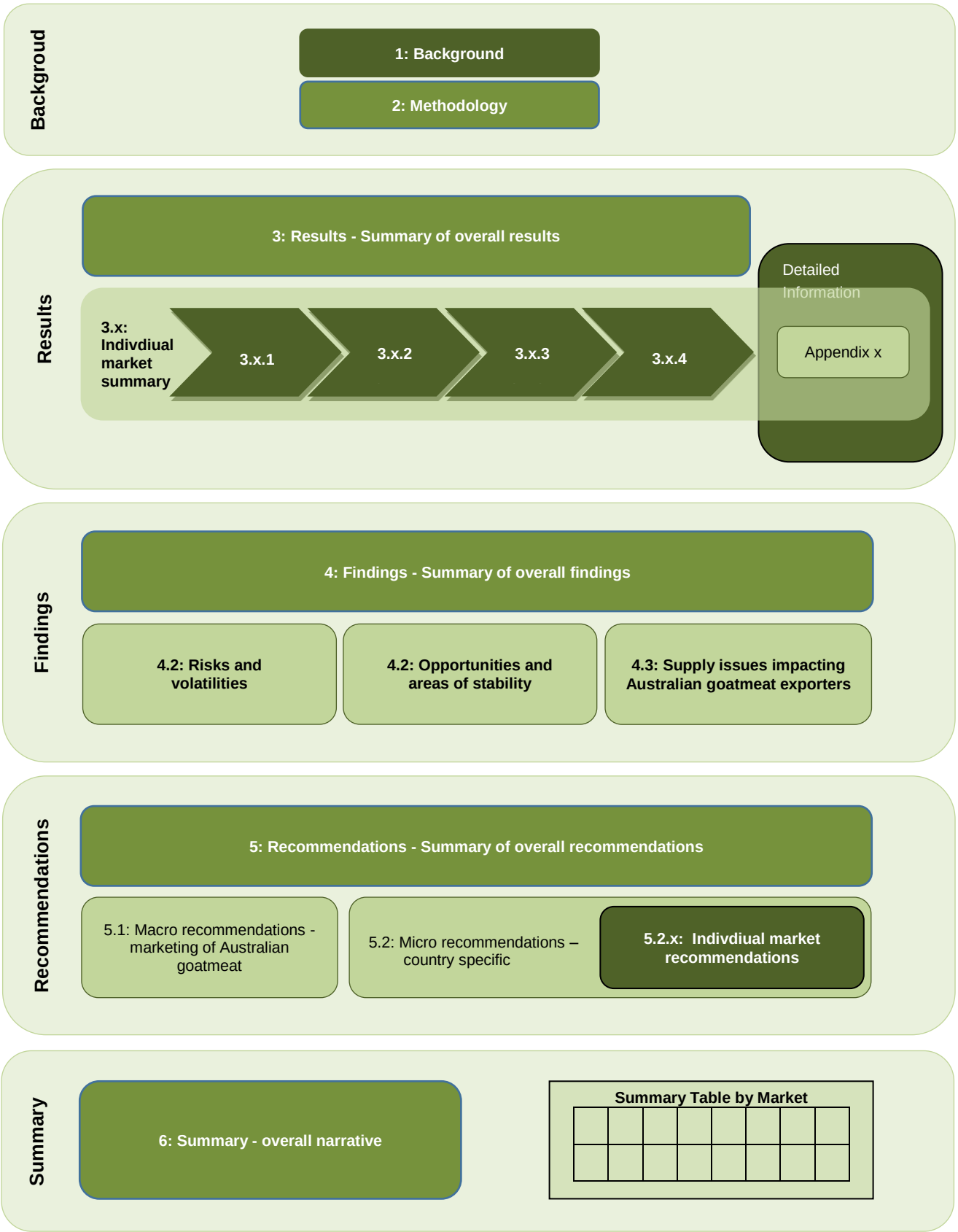
- A chronic lack of data regarding goatmeat consumption in the destination markets and a lack of supply chain transparency in many markets was identified. When developing business models, exporters will need contingency plans in place to allow for such unreliable market information. It is recommended that MLA continue to gather more specific information on supply chains and consumption in key markets. This will assist producers and exporters gain a greater understanding of market opportunities and enable them to make more informed decisions.

- Specifically for the Chinese market, it would be worthwhile physically tracking Australian goatmeat exports through to the end consumer to understand individual product demand and in-market supply chains and therefore determine how these products are being directed once in market. This will help overcome the current lack of understanding regarding product disposal.

- Opinions varied greatly among exporters regarding the opportunity presented by various markets. Acknowledging that exporters possess a unique insight into export markets, it is recommended that MLA support co-funded marketing initiatives designed to increase the appeal of, and opportunity for, Australian goatmeat.

Structure of this report

This document has been structured to allow a reader to view a summary of indivdiual market results as distinct sections, with more complete information provided in a related Appendix:



Contents

Tables

Figures

1. Background

Approximately 95 percent of Australia's goatmeat production is exported. The Goat Industry Council of Australia (GICA) has expressed interest in growing and diversifying export market destinations; however, a lack of quantifiable knowledge regarding current and potential markets for Australian goatmeat exists and is affecting the export decision making process.

In order to address this lack of information, Meat & Livestock Australia (MLA) commissioned this export market research project.

The objectives of this project were to:

1. Undertake thorough desktop research in order to determine an up-to-date picture of the risks, volatilities, opportunities and areas of stability in key export markets for Australian goatmeat.

2. Conduct industry analysis to identify and prioritise the issues impacting on Australian goatmeat exporters' ability to export and enhance their competitiveness in existing and potential export markets.

3. Undertake an in-market assessment of the Chinese market to identify, qualify and quantify the market opportunities for goatmeat exports. Specifically for the Chinese market - through investigation during SIAL (a food show based in Shanghai China in May 2014).

4. Compile research findings and provide a detailed report outlining trade and market intelligence information to GICA, MLA and goatmeat exporters. This report will include (where possible):

    i. Current market size for each market assessed;

    ii. a 15 year projection of goatmeat demand for each market assessed;

    iii. an up-to-date picture of risks, competing suppliers, volatilities and areas of stability and instability for each market assessed;

    iv. an assessment of the ability of the Australian goatmeat industry to supply the various markets with specific regional definitions on animal supply and processing;

    v. an assessment of the ability of the Australian goatmeat industry to supply these markets; and

    vi. recommendations for further actions and/or research by MLA, GICA and goatmeat exporters.

5. Provide content regarding the project for inclusion in two editions of the goat industry's quarterly eNewsletter Goats on the Move.

Outlined in Table 1 below are the objectives and corresponding sections of this report that address these objectives.

Table 1: Project objectives with reference to corresponding report sections

Objective	Reference
Thorough desktop market research completed to assist in providing an up-to-date picture of the risks, volatilities, opportunities and areas of stability in the Australian goatmeat export market.	Section 3 Appendix 1-8
Industry analysis to identify issues impacting on goatmeat exporter's ability to export and enhance their competitiveness in existing and potential export markets.	Section 3 Section 4 Section 5
In-market assessments of the Chinese market to identify, qualify and quantify the market opportunities for goatmeat exports.	Section 3.5 Section 4 Section 5 Appendix 3
Trade and market intelligence information compiled for GICA, MLA and goatmeat exporters.	Section 3-6 Appendix 1-8
Inclusion in two editions of the goat industry's quarterly eNewsletter Goats on the Move	Appendix 13

1.1. Scope

It should be noted that this project was initially titled "*Examine opportunities for Australian Goatmeat into the Chinese market*" and was to focus on China specifically. Subsequent discussions with MLA resulted in the scope of the project being broadened to, wherever possible, include examination of the following markets:

- United States of America (US)/Canada
- Caribbean
- China
- Taiwan
- South Korea
- India
- European Union (EU)
- Middle East

It was accepted by MLA and the project team that some of the information sought through the objectives was not available (eg 15 year projections). Where relevant, these limitations have been noted within the report.

1.2. Team conducting the project

The Project Team that undertook the work included:

Team Leader	**Morgan Gronold, Senior Trade & Investment Officer, Trade & Investment Queensland**
Team Members	Delphine Puxty, Consultant, Schuster Consulting Group Pty Limited
	Angela Schuster, Senior Consultant, Schuster Consulting Pty Limited
	Peter Schuster, Director, Schuster Consulting Group Pty Limited

2. Methodology

The project was conducted in four phases:

1. Data collection
2. Data review and collation
3. Data analysis
4. Communication to industry

2.1. Data collection

Data on the various markets was collected through desktop research, attendance at SIAL China 2014 – Asia's largest food and beverage show and interviews with MLA Regional Managers and exporters.

The data collection process focused on identifying sources of data related to the following key areas:

- Economic indicators;
- social indicators;
- supply factors;
- distribution;
- imports; and
- goatmeat (and mutton where interchangeable or consolidated when reported) consumption patterns.

The depth of analysis depended on the availability of data for each market.

2.1.1. Desktop research

The desktop research included a thorough online investigation of relevant publications, as well as materials supplied by Trade & Investment Queensland (TIQ) and MLA.

Sources of information included:

- ABARES (Department of Agriculture, Fisheries and Forestry)
- Australian Trade Commission (AUSTRADE)
- Department of Foreign Affairs and Trade (DFAT)
- European Commission
- Food and Agriculture Organization of United Nations (FAO)
- Meat & Livestock Australia Limited (MLA)
- Organisation for Economic Co-operation and Development (OECD)
- Online media sources (news)
- Published journals
- US Department of Agriculture (USDA)
- The World Bank Group

A complete bibliography is provided.

2.1.2. Attendance at SIAL

Two project team members partnered with MLA and goatmeat exporters to attend SIAL in Shanghai, China in May 2014.

SIAL was chosen as it is one of the world's largest food and beverage trade shows and because of the emergence of China as a substantial Australian meat customer over the past two years.

Most Australian goatmeat exporters and traders were present at SIAL including JBS Australia, Sanger, Thomas Foods International, Interagri, Midfield, SAMEX and Cedar Meats.

SIAL provided an opportunity for project team members to directly qualify current China related information, gather additional market intelligence specific to China and undertake further investigation.

During SIAL, the project team members:

- Met with all Australian goatmeat exporters participating in SIAL to outline the project and gather their feedback and experiences in the Chinese market;
- Partnered with TIQ Shanghai office representatives to hold meetings with Chinese customers interested in importing Australian goatmeat and gather first hand information on goatmeat consumption patterns in China; and
- Investigated possible competitors to Australian goatmeat exporters and visited Chinese markets to examine how similar meat products are sold.

MLA also showcased its new “True Aussie” brand for the first time at SIAL, including “True Aussie Goat”.

2.1.3. Interviews

Eleven interviews were conducted with MLA Regional Managers and staff covering South Korea, North America, South East Asia, European Union and the Middle East. Interviews were also conducted with the majority (approximately 80%) of Australian goatmeat exporters.

The purpose of the interviews was to collect additional data and validate the information gathered through the desktop research and SIAL attendance. Opinions expressed by the exporters were recorded on an anonymous basis. Where these were considered to add value to the report, these have been included and are attributed to “pers. comm. anon.”. Attempts were made to substantiate these opinions through the research although this was not always possible.

Questionnaire scripts were prepared in order to ensure consistency in data collection and assist with analysis (Appendix 11 and 12). Much of the information sought by the Project Team could not be provided by the interviewees because:

- It simply did not exist in a readily accessible form;
- goatmeat was reported within consolidated figures and not differentiated;
- the information was protected for commercial reasons; and/or
- Australian goatmeat was covertly substituted in market as local product and and as other proteins, typically mutton (but also dogmeat in South Korea).

Where specific data was not available, the interviews were repurposed to provide qualitative validation of the desktop review and allow general observations of export markets to be captured.

2.2. Data review and collation

Gathered data was reviewed to identify and assess:

- Gaps or paucity;

- creditability; and
- completeness.

Wherever possible, the team endeavoured to verify one set of data against another data source.

Where gaps exited, further information was sought in order to fill these gaps.

2.3. Data analysis

Depending on the information gathered, the data was analysed utilising a number of frameworks.

2.3.1. PESTL

PESTL is a critical assessment of the **p**olitical, **e**conomic, **s**ocial/cultural, **t**echnological and **l**egal/regulatory factors impacting the market of study.

A PESTL analysis also includes forecasting the probability of factors occurring within the next two, five and 15 year period and assessing the impacts (positive and negative) of such occurrences.

A PESTL analysis assists in not only identifying and assessing key factors but also in formulating strategies to manage those factors.

The following definitions were used in applying PESTL to this project:

- *Political*: The extent to which a market's political policies, activities and sentiments would impact on Australia's ability to export goatmeat to the market. Includes trade policies such as tariffs and quotas;
- *Economic*: Factors that impact both the export of goatmeat and the internal demand for goatmeat such as economic growth, exchange rates and the inflation rate;
- *Social/cultural*: Factors that impact demand for goatmeat such as cultural aspects, health and environmental consciousness, population growth rate and shifts in social and consumption trends;
- *Technological*: Factors that affect the ability to produce a product to meet specifications, ie R&D activity, automation, packaging etc; and
- *Legal/regulatory*: The extent to which relevant legal and regulatory factors impact Australia's ability to export goatmeat to the market.

2.3.2. Competitive analysis

A competitive analysis was undertaken on each market based on four key forces:

- *Barriers to entry:* Faced by the Australian goatmeat industry in entering the export market as well as faced by other countries in doing the same;

- *Powers of buyers:* Negotiation power and influence of buyers, including governmental influences;
- *Power of competitors*: Competitors to Australian goatmeat including alternative proteins, substitute products and competing countries offering goatmeat; and
- *Power of suppliers:* Australian exporters and the Australian goatmeat industry and their power to influence the market.

The purpose of such an analysis was to assist in establishing market attractiveness.

2.3.3. SWOT analysis

A SWOT analysis was conducted on each market to establish the internal and external factors affecting each market opportunity.

While traditionally strengths and weaknesses are internal to an organisation or industry and opportunities and threats are external, the application of the SWOT in this situation were against three factors:

- The market being reviewed;
- Australian exporters; and
- The Australian goatmeat industry.

2.3.4. Critical success factors

A significant output of the SWOT analysis was the identification of critical success factors for each market; that is those items that are critical for export market success (or opposing factors that may eliminate a market as a potential opportunity).

2.4. Communication to industry

Throughout the development of the report the project team presented findings and trade and market intelligence to date to a number of industry forums in a variety of formats. These included:

- MISP Charleville workshop - October 2014
    - “Australian Goatmeat Export project update” including SIAL visit and intial report findings and commendations.
- MLA Webinar - October 2014
    - “Australian goatmeat export opportunities” including SIAL visit and intial report findings and recommendations.
- Strategic Industry Planning meeting Sydney - November 2014

- "Australian goatmeat export project - risks, considerations, opportunities, goals and vision, and specific areas for the group to focus on".

- Two stories in MLA's Goats on the move e-newsletter issue in September 2014 and January 2015 - available in Appendix 13.

3. Results

This section outlines a macro perspective on global goatmeat consumption and trade. The Australian goatmeat industry including goatmeat export destinations and product description are then examined. The final section is the complete analysis of all markets investigated; the US/Canada and Caribbean, China, Taiwan, Korean, India, the Europe Union and the Middle East.

The data used in the analysis has been drawn from the following sources:

- The summary of the desktop research (literature review) - available for each market in Appendix 1-8.

- The questionnaires used for interviews with MLA regional managers - available in Appendix 12.

- The questionnaires used for interviews with exporters - available in Appendix 11.

- The summary of the SIAL Shanghai visit as part of the larger Milestone 2 report for this project - available in Appendix 10.

The following sections provide the findings from each of the analysis activities (PESTL, competitive analysis, SWOT and CSFs) for each market.

While a significant volume of data was gathered for each market, this data was often found to be incomplete or could not be validated through reference to an additional data source. While all observations are presented in the literature review (Appendix 1-8), these are subjective and should not be considered as qualified outcomes of this research.

Notes to data:

- Very limited specific data was available for goatmeat and so, where useful, data for mutton has been considered in the absence of specific data for goatmeat.

- There was a lack of 'real'/credible information about goatmeat in most markets.

- Identifying details have been removed from interviews and only aggregate information is provided in this summary.

3.1. Global goatmeat consumption and trade

Goatmeat is the most widely consumed meat in the world and is an important component of diets in the Middle East, North Africa (MENA) and Asia (MLA 2014a).

Total world production of goatmeat was around 5.2 million tonnes cwt in 2010; 53,000 tonnes, or one percent of which was traded on the export market at a total value of US$239 million (FAO statistics in MLA 2014a).

On a global basis and with the exception of Australia, the vast majority of goatmeat produced is consumed in the country of origin (MLA 2014a).

Rising living standards in some parts of the world and the migration of people preferring goatmeat to developed countries has also increased the demand for goatmeat in areas (Alandia Robles et al 2006).

Trade in ovine meat is set to register a second strong year and could grow by 16% to 961,000 tonnes (FAO 2013). Most of the increase is anticipated to stem from demand from China where imports have risen significantly in the past three years. Substantial growth in demand is also evident in a number of other markets including the EU, the US, the United Arab Emirates (UAE), Qatar and Malaysia (FAO 2013).

Almost 85% of world trade of ovine meat, excluding live animals, is supplied by Australia and New Zealand (FAO 2013). A shift in market demand to China and the Near East is leading to a change in the type of meat shipped, with a move toward whole carcases as opposed to more processed cuts (6-way and cubed) which are preferred by the EU and US markets (FAO 2013).

The goatmeat exporting countries of India (exporting to the Middle East, especially to the UAE and Saudi Arabia) and Uruguay (exporting to China and Brazil) have also realised significant growth (FAO 2013).

3.2. Australian goatmeat industry

(Source: MLA 2014a*)*

Over the past 20 years, the Australian goatmeat industry has experienced strong growth, largely underpinned by the sale of goats derived from rangeland or extensive production systems which account for around 90% of Australia’s meat production. The majority of these rangeland goats are mustered from the semi-arid regions of the eastern states.

The rangeland goat population was estimated to be 4-6 million head in 2011 although the widely dispersed and relatively uncontrolled nature of the rangeland herd, as well as the goats ability to reproduce quickly in favourable seasons, makes estimating the herd size an imprecise science.

The Australian goat slaughter was 2.07 million head in 2013, up 12% on the 2012 total and 29% on the five-year average, continuing what has been a decade of year-on-year increases.

Average goat carcase weights during 2013 were 15.2 kg/head, down 5% on the 2012 average, largely due to the drought conditions in the major supply regions, but up about 2 kg/head on the long term average (pers. coms. anon.).

Australia is the world leader in goatmeat exports with around 95% of Australian goatmeat exported, amounting to around 50% of the global goatmeat trade.

Over the past decade, the volume of goatmeat exported has more than doubled. Australian goatmeat exports during 2013 reached 32,671 tonnes swt, up 12% year-on year, and the highest volume on record. The 2013 goatmeat export value was $161 million, up 21% year-on-year.

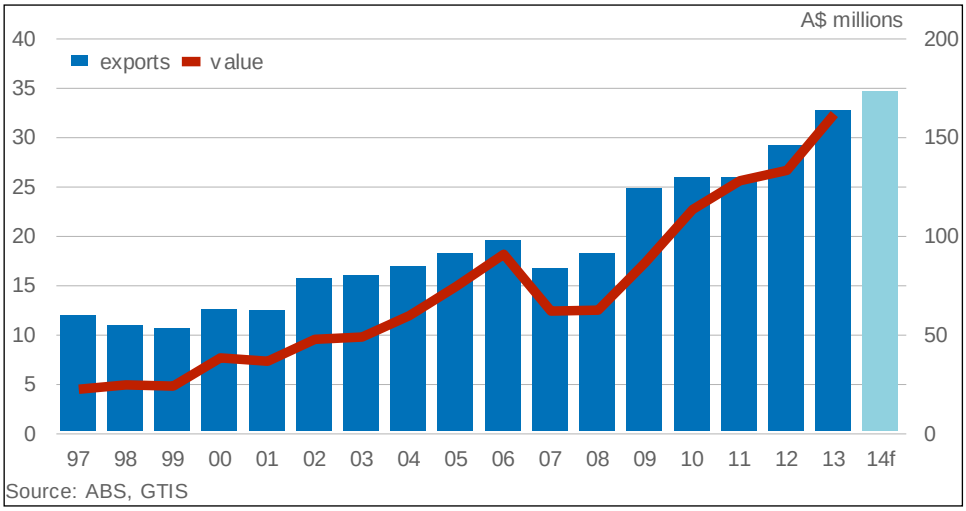


Figure 1: Australian goatmeat exports and values

3.2.1. Goatmeat export destinations

- **Asia** - Australian goatmeat exports to Asia grew 66% year-on-year and 105% on the five-year average during 2013, at 12,001 tonnes swt, comprising almost entirely of whole carcase (99.6% of exports).

    - **China** – Much of the growth in Asia was driven by a dramatic increase in demand from China, with the 4,736 tonnes shipped in 2013, up significantly from 373 tonnes swt in the previous year. The increase in goatmeat shipments to China was paralleled by record Australian beef and sheepmeat exports to the region, which increased 371% and 112% respectively in 2013.

      This increase in Chinese demand attracted some goatmeat away from other major markets (note the four percent decline in exports to the US and a 18% decline to the Caribbean) but also contributed to a net increase in exports. Much of the demand from China in 2013 abated in 2014 resulting in a normalisation of exports to China, possibly because of trade variations due to significant currency fluctations.

- **Caribbean** - Australian goatmeat exports to the Caribbean in 2013 totalled 2,541 tonnes swt, back 18% year-on-year and 13% on the five-year average. Trinidad and Tobago is the

largest market in the region, where volumes for the year increased 3% from 2012 volumes, to 1,942 tonnes swt, with an annual value of $9.9 million, down 5%.

Whole carcase exports to Trinidad and Tobago were up 5% year-on-year, at 1,507 tonnes swt. The entire volume shipped in 2013 was whole carcase, where in previous years this market has taken more processed product such as 6-way cuts, possibly due to reduced processing costs and therefore prices.

- **US** - Australian goatmeat exports to the USA in 2013 accounted for nearly half of Australia's total exports, at 15,479 tonnes swt – down four percent on the previous year, but 12% above the five-year average.

3.2.2. Product description

Goatmeat cuts are not marketed as primal and sub-primal cuts as is the case with beef and sheepmeat. Goatmeat product specifications include, but are not limited to:

- frozen whole carcase (skin on/off);
- frozen 6-way cut (skin on/off);
- frozen cubes (bone in, skin on/off);
- carcases under 12kg, under 16kg and over 16kg (skin on/off);
- burnt goat products; and
- offal.

Figure 2, below provides an overview of the volumne of goatmeat exports by cuts. Although not all cuts are represented in this graph.

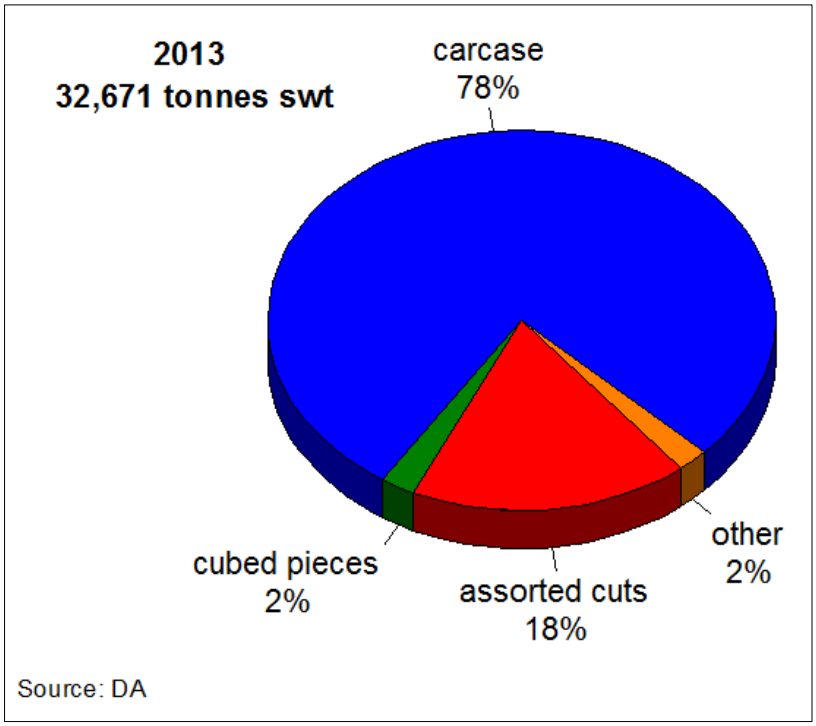


Figure 2: Australian goatmeat exports by cut - 2013

The limited demand for chilled primal and sub primal cuts is due to the majority of the product being prepared to suit traditional Hispanic, Middle Eastern and Asian cooking methods. These cooking methods generally involve slow, wet cooking of goatmeat, with or without the bone, or shredding of goatmeat, sometimes in combination with similar meats such as mutton. This customer preference, combined with high Australian processing costs, means the trade is based on a commodity product with very limited opportunity for value adding (pers. comm. anon).

3.3. Market summary - United States and Canada

Refer Appendix 1 for full details.

3.3.1. PESTL analysis

Event	Impact/Consideration
Political	
• Politically stable and allies of Australia.	Good acceptance of Australian product.
• No trade restrictions under AUSFTA (DFAT 2014c). • Existing strong market presence. (pers. comm. anon).	No restriction on volume or affect on pricing.
• Protectionist policies support local producers.	While the locally produced volume of goatmeat is small, government policies are in place to support local production.
Event	**Impact/Consideration**
Economic	
• Growth in Hispanic, Asian, black and other ethnic populations (Passel et al 2011; USDA 2012; Geisler 2013; ESRI 2012); Hispanic population growth higher due to greater birth rate; population also younger (ESRI 2012; Passel et al 2011). • Minority populations have significant/influential force on consumer trends (ESRI 2012), income growth (Ekanem et al 2013). • Large potential because of migrant population with money (pers. comm. anon.). • US likely to remain large consumer of Australian goatmeat due to growth of Hispanic population (MLA 2014a).	More people familiar with goatmeat demanding product.
• AU$.	Strong AU$ weakens Australia's trading position.

Market summary - United States and Canada, continued

• Currently demanding a mixture of products (skin on, skin off, 6 way polysock/carcase) (pers. comm. anon.). • Freight expensive compared to other countries (pers. comm. anon.). • In Australia our high cost to process and short supply of skilled labour is restricting our ability to compete (pers. comm. anon.).	Favours commodity, rather than value added trade.
• Growing dairy goat industry (Heritage Foods 2013; Dawson 2013).	Some capacity to meet increased demand through surplus animals.
• Price considered most important factor in decision to buy goatmeat (Ekanem et al 2013) NB: this was a limited survey in Nashville only.	Very price sensitive.
• Meat goat industry one of the fastest growing segments of livestock production in the US (Mintel 2004; USDA 2012); evidence of potential to expand the market to meet demand for fresh goatmeat (Knudson 2006).	Some capacity to meet increased demand through improved/increased production and meet local product preferences.
• Domestic production limited by distribution and marketing opportunities (Mintel 2004; USDA 2012; Dawson 2013).	Supply deficiencies still apparent in domestic production and may signal continued import opportunities.
• Inability of local production systems to replicate low cost, free range systems which characterise Australian rangeland goat production systems.	Australian goatmeat can be produced more cost effectively than local product.
• Goatmeat has the ability to trade at a premium to mutton in the market place (pers. comm. anon.).	Opportunity for product differentiation if drivers for price premium are well understood.

Market summary - United States and Canada, continued

Event	Impact/Consideration
Social	
• Consumption of goatmeat is largely restricted to particular cultural segments and festival/particular seasons (USDA 2012; Geisler 2013). • Diversity in the ethnic populations has led to unique preferences in goatmeat (Ekanem et al 2013). • Despite population growth of Hispanic population, greatest potential probably with Muslim market (Knudson 2006). • Demanded by lower socio-economic groups, high demand as it is a cheap protein source; is blended with mutton (cubed or shredded) (pers. comm. anon.).	Demand may be very variable and reliant on one or two market segments.
• Unlikely goatmeat will become as widely accepted as chicken or beef (Knudson 2006). • Pork, chicken and beef most popular in US market (even lamb and turkey have insignificant demand) (pers. comm. anon.).	Likely to remain a niche product (but with very large consumer base).
• Strong substitutability with mutton; trade of goatmeat began as it was a cheap substitute (pers. comm. anon.).	If price of Australian goatmeat increases relative to mutton, demand will drop.
• Preference for fresh goatmeat over frozen by most consumers (Knudson 2006; Ekanem et al 2013). • Demand a mixture of products (skin on, skin off, 6-way polysock/carcase). Product with heads and feet has higher value but not a huge volume (pers. comm. anon.).	Potential for chilled product.

Market summary - United States and Canada, continued

• Strong interest in food safety and quality, as well as health benefits of food, including recent wider acceptance of goatmeat as good source of protein (Ekanem et al 2013). • Current trends point to environmental sustainability, provenance and dietary profiles of foods (National Restaurant Association 2014).	Opportunity for positioning to focus on safety and quality. Leverage the unique attributes of goatmeat and goatmeat production i.e. rangeland. Possible opportunity for further description such as "natural".
Event	**Impact/Consideration**
Technological	
• Nil data available.	
Event	**Impact/Consideration**
Legal/Regulatory	
• Stricter import requirements (MICOR). • Requirements regarding country of origin labelling (pers. comm. anon.). • Carcase must be extremely clean (no contamination) therefore inspected and handled twice in the plant prior to export (pers. comm. anon.). • Only export 6-way cut carcases as whole carcases too risky (pers. comm. anon.).	Exporters should ensure they and their importer comply with all requirements. Packaging and labelling must be compliant.

Market summary - United States and Canada, continued

3.3.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of suppliers
• Very strict import requirements. • Robust food safety systems.	• Potential market size used as bargaining power.	• Mutton highly substitutable – if price of mutton drops, so will demand for goatmeat. • Beef, pork and chicken highly competitive due to familiarity and price. • Existing strong demand for other red meats, particularly beef – considered 'status' product. • Capacity to improve domestic production and better utilise surplus dairy animals. • Local protectionist policies i.e. Farm Bill.	• Existing strong market presence (pers. comm. anon.). • Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • No other country supplies goatmeat to US in significant enough volumes to meet demand. • Established "rangeland" label recognised by USDA and market.

3.3.3. SWOT analysis

Strengths	Weaknesses
• Large middle and high income populations. • Large and growing Hispanic and ethnic populations which are traditional goatmeat consumers. • Willingness of a market segment to consume goatmeat. • Small market segment in USA but potentially significant size for Australian goatmeat. • Few Australian exporters restricts the ability of importers to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source goatmeat from any other country (in significant volume). • Existing strong market presence. • Goatmeat has the ability to trade at a premium to mutton in the market place.	• Majority of market not familiar with how to cook goatmeat. • Not traditionally suited to white tablecloth food service. • Generally traded as a low cost protein, competing against other low cost protein sources (pork, chicken, mutton). • Relatively high freight costs.
Opportunities	**Threats**
• Leverage the unique characteristics of goatmeat • Positioning for "clean, green", safe. • Leverage “rangeland” label within labelling requirements.	• Risk of relying on unsubstantiated market information when developing a business model. • Enthusiastic local industry supported by protectionist government policies. • Access disruption due to contamination (chemical or physical).

3.3.4. Critical success factors

- Positioning of goatmeat in the market as clean, green and safe.
- Maintaining market access by ensuring contamination risks are managed effectively.

3.4. Market summary - Caribbean

Refer Appendix 2 for full details.

3.4.1. PESTL analysis

Event	Impact/Consideration
Political	
• Existing trading partner.	Well established reputation.
• No trade restrictions; same as the USA (pers. comm. anon.).	Unimpeded access.
Economic	
• GDP growth in Latin America Caribbean region projected to reach 3.5% by 2016 – 3.4% in Trinidad and Tobago but only 1.7% in Jamaica (WBO 2014a).	Moderate, albeit variable, potential for income growth and ability to purchase goatmeat.
• AU$.	Strong AU$ weakens Australia's trading position. Where goatmeat is traded as a commodity, it is very price sensitive.
• Currently buy heavier (greater than 16kg) product which can be either skin off, 6 way cut (pers. comm. anon.) or burnt skin on carcases due to cultural preferences. (pers.comm. anon.) • Freight relatively expensive compared to other countries. (pers. comm. anon.). • In Australia high cost to process and short supply of skilled labour is restricting our ability to compete (pers. comm. anon.).	Variation in demand profile needs to be carefully considered when determining most appropriate product for this market. Very price sensitive commodity market.
• Regional market for sheep and goatmeat characterised as underdeveloped (Hosein et al 2013).	Limited/inconsistent supply/availability of quality local meat provides opportunity for imports (marginally competitive with imported product).
• Price drives product specifications; prefer heavier skin off/6 way product as it is the cheapest product (pers. comm. anon.).	As price increases demand drops; unreliable demand very sensitive to price.

Market summary - Caribbean, continued

Event	Impact/Consideration
Social	
• Ethnic, cultural and religious factors influence consumption patterns for goatmeat (Singh et al 2006; Alexandre et al 2008; Hosein et al 2013).	Demand may be very variable, restricted to particular cultural segments and festival/particular seasons.
• Strong preference for fresh local meat over than frozen imported product (Singh et al 2006; Alexandre et al 2008) but still price sensitive.	Imported product must remain price competitive. Limited local production potential.
• Growing hotel and restaurant demand for goatmeat (including imported product) to replicate 'traditional' goat dishes (Singh et al 2006; Hosein et al 2013).	Increased opportunity for Australian goatmeat.
Event	**Impact/Consideration**
Technological	
• Nil data available.	
Event	**Impact/Consideration**
Legal/Regulatory	
• Easier import requirements compared to some other markets often with no known specific requirements that differ from relevant Australian standards (MICOR).	Exporters should ensure they and their importer comply with all requirements.

Market summary - Caribbean, continued

3.4.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of Suppliers
• Import requirements less strict than some other markets.		• Mutton and chicken highly competitive due to familiarity and price. • Consumer preference for fresh meat rather than frozen. • Proximity of other goatmeat producing countries (Argentina – although supply capacity unknown) (pers. comm. anon.).	• Established market presence. • Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • No other country supplies goatmeat to the Caribbean in significant enough volumes to meet demand. • Valuable market for heavy carcases that are out of specification for other markets.

Market summary - Caribbean, continued

3.4.3. SWOT analysis

Strengths	Weaknesses
• Willingness of a market segment to consume goatmeat – traditional meal. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product available - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source goatmeat from any other country (in significant volume). • Existing strong market presence. • Valuable destination for carcases too heavy for other markets.	• Traded as a low cost protein, competing against other low cost protein sources (chicken, mutton). • Fresh local goatmeat considered superior to frozen imported product. • Lack of 'real', credible information about the market. • Limited to commodity market.
Opportunities	**Threats**
• Linking to restaurants/hotels chain in tourist trade.	• Risk of relying on unsubstantiated market information when developing a business model. • Acutely price sensitive making market vulnerable to currency movements.

3.4.4. Critical success factors

- When developing business models for this market, exporters will need contingency plans in place to allow for unreliable market information.

3.5. Market summary - China

Refer Appendix 3 for full details.

3.5.1. PESTL analysis

Event	Implication/Considerations
Political	
• Permanent migration is discouraged by the Hukou system (household registration system which controls the movement of people), but temporary migration to urban areas is very apparent (Mullan, Grosjean and Kontoleon 2008 in Hamshere et al 2014).	Urbanisation of rural populations leading to reduced domestic goat production.
• Political unpredictability; China has a large and fragmented government that exercises enormous power and influence. It will continue to hold sway despite reforms (Vermilion 2014).	Consensus and consultation unlikely to occur prior to any change in trade relations. Significant potential for political influence or interference to distort demand.
• Trade restrictions and government control of import channels (GIRA 2013).	Potential for government interference with trade. Potential for trade sanctions to be applied suddenly. Consensus/consultation unlikely to occur prior to sanctions etc being put in place. Government control of import channels - difficult to plan export strategy around true demand.
• Agricultural sector is heavily protected, but predicted to decline in the next forty years (Hamshere et al 2014; AUSTRADE 2014a). • CHAFTA will eliminate tariffs on sheep and goatmeat that are currently 12-23% over eight years (DFAT 2014a) once ratified.	Opening up more import opportunities, making Australian imports more competitive.
• Time to establish trading arrangements can be lengthy (Graham and Lam 2004; Backman and Butler 2003). • Good cultural understanding is important (pers. comm. anon.).	Guanxi (term describing the complex interaction between business and relationships) an important consideration in trade. Guanxi which forms the basis for trade often takes years to develop.
• State owned enterprises no longer monopolise wholesale part of supply chain (ANZ 2013).	Opportunity for more importers to compete for product (previously would have been Government importers/single entry point). Opportunity for traders to distort market.

Market summary - China, continued

Event	Implication/Considerations
Economic	
• Between 2012 and 2050, GDP growth will slow but in real terms will more than quadruple (Hamshere et al 2014). • Remain around 7.5% (MLA).	General increase in consumption of protein. More opportunity for those familiar with goatmeat to seek product. More opportunity for those unfamiliar with goatmeat to experience cuisine through restaurant experiences. Potential to position goatmeat in food service (but not white tablecloth).
• Annual population increase of 0.46% per annum (MLA 2014a).	Combined with economic growth, will generate increased demand for red meat.
• Urbanisation has shifted labour pool from traditional agricultural production systems (OECD-FAO 2013; Sharma 2014; Hamshere et al 2014).	Less capacity to produce own food - increase in imports to fill gap. Need for cheap protein to feed labour pool.
• AU$.	Where goatmeat is traded as a commodity, it is very price sensitive. Strong AU$ weakens Australia's trading position.
• Understanding the supply chain is important to accurately target the right market and end-consumer (ANZ 2013).	If product is perceived to be expensive, this may dampen demand. Difficult to clearly understand true demand as little understanding of supply chains and because traders complicate the process.
• Cost of production in Aust. increases price (pers. comm. anon.). • High costs to process and short supply of skilled labour is restricting Australia's ability to compete (pers. comm. anon.). • In market freight relatively inexpensive compared to other countries (BMI 2014a; pers.comm. anon.).	Restricts the ability to compete on value added product. Reinforces commodity trade (whole carcases).

Market summary - China, continued

• All sheep and goatmeat is referred to as 'yang rou' – no distinction between the age or meat quality (Waldren et al 2004; Conforte et al 2013). • Variable product specifications, therefore most suitable product is carcase that can be processed in market to suit (pers. comm. anon.). • Carcase most cost effective product (pers. comm. anon.). • Goatmeat market will never be like beef or lamb in terms of primal cuts; will always be a commodity market (pers. comm. anon.).	Limits trade to commodity product.
• High substitutability between skin-off product and mutton (pers. comm. anon). • Tendency to substitute product by either swapping with mutton or relabelling local product as imported (pers. comm. anon.). • Goatmeat intermingled with sheepmeat (pers. comm. anon.).	Highly price sensitive. Goatmeat attracting high prices as it is intermingled with sheepmeat. Will impact the Australian brand/image but not long term trends Consumers currently pay a premium for a product marketed as 'sheepmeat' which is often goatmeat intermingled with sheepmeat – if goatmeat were to be differentiated, consumers may not demand goatmeat by itself (pers. comm. anon.).
• Supply issues (pers. comm. anon). • Tight seasonal supply but starting to encourage regular customers to forward book (pers. comm. anon); explaining supply issues – asking customer to fit with supply (pers. comm. anon.); customers need to learn to purchase throughout the year not just during peaks – this change happened in Taiwan eventually (pers. comm. anon).	Need to improve stability and secure supply. Aim to grow year round demand by encouraging/facilitating warehousing (pers. comm. anon.) but may be restricted by limited cold storage facilities.

Market summary - China, continued

Event	Implication/Considerations
Social	
• High price elasticity for mutton[1] (-1.89) (Liu et al 2009) meaning consumers are very sensitive to price changes.	Little opportunity to increase prices (assuming mutton and goatmeat are easily substitutable).
• High expenditure (income) elasticity for mutton: 1.38 average; 1.42 for urban and 1.18 for rural (Liu et al 2009); another study reported expenditure elasticity for goatmeat close to unity (Masuda and Goldsmith 2010) meaning consumers increase consumption of goatmeat at the same rate as income increases.	As income increases demand will increase. Assumes mutton and goatmeat are easily substitutable.
• Consumption of most commodities projected to rise, largest increases for high value products including sheep and goatmeat; urban consumers account for most growth (Hamshere et al 2014). • Conversely, ANZ (2013) consider that total food consumption in the wealthiest 20% of all households has stabilised and will not increase further with a rise in income.	Sound estimates of demand growth need to be established, however there may be potential to promote to high value market sector.
• Market will continue to grow and will require imported product (pers. comm. anon.). • Consumption of beef, mutton, lamb and goatmeat likely to increase in China because people in the country's south particularly, have increased their consumption of mutton in the last three decades (pers. comm. anon).	Strong underlying demand for commodity goatmeat as source of protein.

[1] No specific data available for goatmeat, where relevant, it can be assumed that data related to mutton can be applied to goatmeat.

Market summary - China, continued

• Currently mutton and goatmeat are more popular in the north-western provinces due to the influence of Muslim and Mongolian cultures (Conforte et al 2013; Hansen and Gale 2014). • Goatmeat more popular in north and west China (main production zone) as well as the large ethnic population there, such as Xinjiang, Ningxia, Inner Mongolia, Sichuan and Tibet (pers. comm. anon.). • Not widely consumed across China (pers. comm. anon.). • Skin on demand in China is regional (southern; in a few provinces) (pers. comm. anon.). • Muslim demographic regards goat highly; popularity spreading more broadly across China (pers. comm. anon.). • Cultural and medicinal links to goatmeat (pers. comm. anon.).	Some understanding of traditional consumption of goatmeat but little understanding and divergent opinion regarding supply chains, destination and consumption of imported Australian goatmeat. Possible opportunity to leverage traditional consumer habits (ie through ethnic restaurant chains such as hot pot).
• Demand for mix: skin on/off but has become carcase skin off, can be a 6-way market but is price dependent (pers. comm. anon.). • Demand for both skin on and skin off (pers. comm. anon.). • Shaved meat used in ‘hot pot’ not cube (pers. comm. anon.).	Supply limitations for skin on - few Australian Chinese-accredited skin on processors is good for existing processors with market access however is limiting overall market growth due to restricted supply options (pers. comm. anon.). Not clear whether use in hot pot restaurants is as goatmeat or generic shaved meat products.
• Growing trend to eat away from home, particularly of “new” foods including meat (items they may not be familiar cooking with) (Zhou et al 2012; Food Export Association of the Midwest USA 2014a; Liu et al 2009). • Food service plays a key role in diversifying meat consumption (Hansen and Gale 2014; Herzfelder 2014). • In particular, beef and mutton are important parts of popular hot pot, kebabs and other types of ethnic cuisine that are becoming popular among the broader population, particularly through the proliferation of restaurant chains (Food Export Assocation of the Midwest USA 2014a).	More people eating out - more likely to try 'new things'. Potential to position goatmeat in food service - particularly 'hot pot' as opposed to white table cloth.

Market summary - China, continued

• Growing environmental awareness but no evidence that consumers will pay for “green” food (Sharma 2014; Conforte et al 2013).	Conflicting advice was provided however there may be some opportunity to focus on 'green' image in marketing but may not necessarily attract premium prices given is predominately a commodity market.
• Growth of hyper and super markets (Hamshere et al 2014; ANZ 2013; Food Export Association of the Midwest USA 2014a). • Some Australian goatmeat available in supermarket; consumer can select cut from carcase; exporter aims to continue to develop this market (pers. comm. anon).	Improved access to different distribution channels; however, rather than pre-packaged products, goatmeat is presented in a similar manner to as in a wet market (although frozen).
• Growing interest in food safety and quality (Sharma 2014; Conforte et al 2013; Zhou et al 2012; Herzfelder 2014). • See opportunities to market product based on food safety credentials (pers. comm. anon.).	Increasing opportunity for positioning to focus on safety and quality.
• Consumption of goatmeat is restricted to cold seasons. • Goatmeat is consumed as part of a winter festival in a southern city (Shanghai Daily 2012). • Demand is seasonal, from October until Chinese New Year (Jan/Feb) (pers. comm. anon.); seasonal demand August to Christmas only (pers. comm. anon.); consume winter only (pers. comm. anon.).	Currently demand only significant for four months of the year (lead up to and during winter). Price spikes; inconsistent demand profile. Need to improve stability and secure supply. Aim to grow year round demand by encouraging/facilitating warehousing (pers. comm. anon.) but may be restricted by limited cold storage facilities.
Event	**Implication/Considerations**
Technological	
• Issue around product substitution is resulting in increasing interest in tamper proof packaging (pers. comm. anon.).	Exporters will need technology to enable them to provide tamper proof packaging (packaging may just be roll brands down a whole carcase).

Market summary - China, continued

Event	Implication/Considerations
Legal/Regulatory	
• MOU Requirements (for processing/abattoirs) and importing country restrictions are stricter than some other markets (MICOR). • Restrictions for some offal into China, such as tripe, liver, lung, kidneys and intestines however heart is acceptable (pers. comm. anon.).	Exporters should ensure their importer complies with any requirements to obtain a permit for imports into this country.
• Multilayered bureaucracy and fast changing regulation (ANZ 2013).	Potential for sudden change. Consensus and consultation unlikely to occur prior to change.
• Different attitudes to the enforcement of contracts and other legalities (ANZ 2013).	There can be uncertainty about payment, ability to ensure deals are executed according to the contract and legal recourse.

Market summary - China, continued

3.5.3. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of Suppliers
• Trade restrictions, including tariffs and quotas, until FTA ratified. • Stricter import requirements than some other markets. • Guanxi and need for language/cultural awareness - ability to negotiate, reach agreement, business acumen. • Supply chain access - not as established, opaque. • General lack of in market understanding/ transparency. • Lack of real information/ data - poor understanding of market opportunity.	• Potential market size used as bargaining power. • Eagerness of Australian businesses to establish presence in market. • Negotiating tactics - generational approach, long-term perspective, patience in negotiating. • Government control of import channels to manipulate prices. • Potential for overt product substitution. • Potential to substitute with mutton if goatmeat becomes too expensive.	• Pork and chicken highly competitive due to familiarity and price and can be produced en masse locally. • Mutton close substitute for goatmeat. • Price competitiveness of other goatmeat producing countries (Spain – although via grey channel through Hong Kong) (pers. comm. anon.). • Established grey market channels into market.	• Strong capacity to legitimately supply goatmeat to meet specifications. • Few Australian traders/suppliers - restricts importers ability to 'shop around'. • Relatively small volume of product available - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • No other country supplies goatmeat to China in significant enough volumes to meet demand. • Freight relatively inexpensive compared to other countries.

Market summary - China, continued

3.5.4. SWOT analysis

Strengths	Weaknesses
• Growing middle income. • Willingness of a market segment to consume goatmeat. • Traditionally eaten in some regions. • Small market segment within China but potentially significant size for Australian goatmeat. • Few Australian traders restricts the ability of importers to 'shop around'. • Relatively small volume of product availability therefore unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source goatmeat from any other country (in significant volume).	• Higher income may cause consumers to seek higher value, aspirational proteins such as beef and seafood. • Majority of market not familiar with how to cook goatmeat. • Not traditionally suited to white tablecloth food service. • Cultural attributes (guanxi) may restrict short term trade. • Traded as a low cost protein, competing against other low cost protein sources (pork, chicken, mutton). • Questionable if higher value chilled sub/primal cuts can be supplied profitably due to freight, processing costs, lack of consistent supply. • Lack of 'real', credible information about the market. • Consumption is seasonal – winter up to Chinese New Year.
Opportunities	**Threats**
• Product development to suit Chinese demand to “try something new”, including by-products. • Trade liberalisation. • Linking into a restaurant chain that supplies 'hot pot'. • Development of tamper-proof packaging to ensure food safety. • Positioning for "clean, green", safe. • Guanxi can facilitate long term trade. • Establish cold chain through supply chain - lengthen demand period. • Potentially very significant demand. • Desertification of some agricultural areas - increases import reliance.	• Influence of traders in supply chain. • Potential for political interference in trade - can impose trade restrictions at any time. • High risk of product substitution. • Contractual agreements not always as expected. • Risk of relying on unsubstantiated market information when developing a business model.

3.5.5. Additional observations relating to demand for sheepmeat in China

(Source: GIRA 2014*)*

- *Additional opportunities*
    - Domestic supply unable to match demand for the foreseeable future.
    - Increased demand for high value cuts and chilled meat.
- *Additional threats*
    - Overseas economic recession could reduce China's exports, reduce economic growth.
    - Domestic credit overhang from 2009-2012 stimulus could cause an economic destabilisation.
    - Local governments working to raise standards of care, feeding and genetics through live imports.
    - More marginal sheep farmers join the market, increase domestic supply and threaten imports.
    - Improved seed varieties would benefit overgrazed pasture (and therefore domestic production).

3.5.6. Critical success factors

- Identify and selectively seek partnerships with specific restaurant supply chains, particularly 'hot pot'.
- Identify and selectively target particular area/provinces that consume goatmeat first (increase demand) before pursuing new consumers.
- In order to increase demand to year round, exporters will need to work through chain to establish cold chain facilities.
- Approaches to China must be undertaken with a long-term view. Short-term, opportunistic behaviour is likely to deliver poor business outcomes and cause reputational risk to the Australian goatmeat industry.
- Australian exporters will require suitable technology to enable tamper-proof packing of whole carcases.
- Industry systems and branding must position goatmeat as clean, green and safe and appeal to audiences interested in 'trying something new'.

3.6. Market summary - Taiwan

Refer Appendix 4 for full details.

3.6.1. PESTL analysis

Event	Impact/Consideration
Political	
• Government support of local goat production (COA 2014a).	May limit trade opportunities/demand for Australian goatmeat.
• 15% bound (and applied) tariff (MLA 2014b).	Effectively increases prices of Australian goatmeat.
• Strong reputation currently associated with Australian food and beverage exporters (AUSTRADE 2013b). • Australia already a familiar trading partner with good reputation (pers. comm. anon.).	Facilitates strong marketing and promotion platform.
Event	**Impact/Consideration**
Economic	
• 3.58% GDP growth forecast in 2013, should slightly outperform South Korea (AUSTRADE 2013a); Prediction of strong, continuously rising year-on-year total GDP growth rates of 4.1% in 2013-14 and 5.8% in 2016-17 (AAFC 2013).	Changes in lifestyle and dietary culture coupled with increased income level have stimulated rapid growth of food service industry. General increase in consumption of protein from animal products. People familiar with goatmeat more able to seek it out. Possibly more people eating out - more likely to try 'new things'.
• Aging rural/agricultural workforce (COA 2014b).	Less capacity to produce own food - increase in imports to fill gap.
• AU$.	Strong AU$ weakens Australia's trading position.

Market summary - Taiwan, continued

• Carcase most cost effective export (pers. comm. anon.). • Currently demanding skin on frozen carcase (pers. comm. anon.). • Freight relatively inexpensive compared to other countries (pers. comm. anon.). • In Australia our high cost to process and short supply of skilled labour is restricting our ability to compete (pers. comm. anon.).	Favours commodity, rather than value added product.
• Commercial promotion activities highlighting medicinal and nutritional value of goat milk and goatmeat have successfully boosted market demand and domestic production (COA 2014a).	Increased consumer familiarity with goatmeat; however, may increase domestic production, especially due to surplus animals from local dairy industry.
Event	**Impact/Consideration**
Social	
• Current consumption trends reflect important on-going socio-economic changes (demographics, urbanisation, well-travelled young people, high disposable incomes) (Lee 2000; Kao 2012a; AUSTRADE 2013a; pers. comm. anon.).	Products that offer good value, high quality, health or nutritional benefits, new taste and convenience are showing strong growth. Growth in food service industry and eating away from home represents opportunity to expose market to Australian goatmeat.
• Massive growth in hypermarket sector and convenience stores – some hypermarkets replicating wet market products and styling (AAFC 2013).	Access to more retail channels. More access for pre-packaged products (as opposed to wet products). Particularly suited to imported products (wet markets traditionally local product).
• Preference to eat away from home (Kao 2012b; AAFC 2013). • Australian goatmeat processed in-market for food service/retail (pers. comm. anon.).	Potential to position goatmeat in food service to increase exposure of product - particularly 'hot pot' as opposed to white table cloth.
• Strong preference for western style and convenience foods (USDA 2011; Kao 2012a; AAFC 2013).	Willingness to try new products, western style meals.

Market summary - Taiwan, continued

• Strong interest in food safety and quality (Lee 2000). • Increased sales of seafood attributed to public concern over the use of ractopamine (feed additive to promote leanness in animals raised for meat) and other food safety issues (AAFC 2013).	Opportunity for positioning to focus on safety and quality.
• Australian produce appeals to Taiwanese buyers due to reputation for safe, quality food (AUSTRADE 2013b).	Leverage industry systems to exploit opportunity for positioning to focus on safety and quality.
• Strong growth in health products/healthy meals (Kao 2012a; AAFC 2013b). • Goatmeat considered medicinal (pers. comm. anon.).	Leverage health benefits of Australian goatmeat.
• In general, goatmeat not widely consumed; consumption of goatmeat is restricted to cold seasons in hot pot (MTDN 2010; pers. comm. anon.). • Aversion to 'gamey' flavour (Wang Steak).	Demand only significant for cold seasons.
• Prefer low fat score goats, firmer muscle, frozen and mostly carcase skin on (pers. comm. anon.). • Stronger market for skin on (pers. comm. anon.).	Avoid higher fat, cross bred carcases. Note carcase specifications.
• No available data on price and income elasticities specifically for sheep and goatmeat but likely to be price inelastic (Lee 2000). • The limited possibilities of substitution exist among animal products because of small negative cross-price elasticities (Lee 2000).	Demand expected to increase as long as consumer incomes keep rising.
• Significant cultural differences for doing business – guanxi concept applies due to Chinese influence – but less emphasis in Taiwan (Ai 2006). • Importance of establishing long term relationships and building on these (pers. comm. anon.).	Long term relationships may be required to facilitate business. Guanxi can take years to establish; however, less importance in Taiwan than mainland China and Australian exporters already have strong reputation associated with food imports.

Market summary - Taiwan, continued

• Buyers are very price-conscious, have a preference for stable and well-proven products, turn-key solutions, and have a strong reliance and expectation of after-sales support (AUSTRADE 13b).	As goatmeat is not necessarily a familiar commodity outside established supply chains, support and follow up will be required.
Event	**Impact/Consideration**
Technological	
• Nil data available.	
Event	**Impact/Consideration**
Legal/Regulatory	
• Less strict import requirements than other markets, often having no known specific requirements that differ from Australian standards (MICOR).	Exporters should ensure they and their importer comply with all requirements.
• Unique diplomatic situation and relationship with China has the potential to influence the trading environment, it is important to get legal advice before entering into a contract with a Taiwan party (Eastwood and Chen 2011). • Need to take into account close economic connections with China (Eastwood and Chen 2011).	May be uncertainty about: payment, ability to ensure deals are executed according to the contract and legal recourse. Need to be aware of potential issues although Taiwan's legal system is generally more straightforward than those of China and other jurisdictions in the region (Eastwood and Chen 2011).

Market summary - Taiwan, continued

3.6.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of suppliers
• Trade restrictions (tariffs and quotas). • Import restrictions less strict than some other markets. • Established relationships may make business difficult for new entrants.	• Potential market size used as bargaining power. • Negotiating tactics - generational approach, long-term perspective, patience in negotiating. • Influence of China and Chinese culture.	• Pork highly competitive due to familiarity, high domestic production and preference for domestic product (Huang and Show 2011; AAFC 2013). • Growing demand for seafood due to health concerns associated with meat (AAFC 2013).	• Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • No other country supplies goatmeat to Taiwan in significant enough volumes to meet demand. • Australia already a familiar trading partner with good reputation.

3.6.3. SWOT analysis

Strengths	Weaknesses
• Large middle and high income populations. • Willingness of a market segment to consume Western style food, to try new products. Strong interest in health and food safety. • Small market segment for Taiwan but potentially significant size for Australian goatmeat. • Few Australian exporters restricts the ability of importers to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source goatmeat from any other country (in significant volume). • Australia already has strong reputation for food production and is a familiar trading partner. • Established supply chains.	• Strong preference for domestic pork and seafood as opposed to goatmeat. • Majority of market not familiar with how to cook goatmeat. • Not traditionally suited to white tablecloth food service. • Traded as a low cost protein, competing against other low cost protein sources (pork, chicken, mutton). • Lack of publically available information about the market. • Consumption of goatmeat is restricted to cold seasons.
Opportunities	**Threats**
• Product development to suit Taiwanese demand to “try something new”, including by-products. • Linking into a restaurant chain that supplies 'hot pot'. • Positioning for clean, healthy and safe; leverage Australia’s strong reputation. • Good cultural understanding can facilitate long term trade.	• Influence of traders in supply chain. • Risk of relying on unsubstantiated market information when developing a business model. • Uncertain relationship with China.

3.6.4. Critical success factors

- Develop supply chains around restaurant chains - particular 'hot pot'.
- Continue to nurture existing supply chains.

3.7. Market summary - South Korea

Refer Appendix 5 for full details.

3.7.1. PESTL analysis

Event	Impact/Consideration
Political	
• Traditionally, significant support of local agriculture (Veeman et al 2002) and bias towards locally produced products (USDA 2013a).	May limit trade opportunities/demand for Australian goatmeat.
• Trade restrictions exist; however, Korea will eliminate its 22.5% tariff on all Australian sheep and goatmeat over 10 years (USDA 2013a; DFAT 2014b); to begin from 12 December 2014.	Tariff elimination will effectively reduce the price of Australian goatmeat in Korea and improve competitiveness.
• Government interested in overseas agribusiness development due to decreasing food self-sufficiency in 2010 (AUSTRADE 2013a).	May counter protection strategies.
Event	**Impact/Consideration**
Economic	
• Post-GFC GDP growth was highest of OECD members (Source IMF 2013 in AUSTRADE 2013a). • Forecast economic growth remains solid at 3.7% (Source IMF 2014 in AUSTRADE 2014b).	Changes in lifestyle and dietary culture coupled with increased income level have stimulated rapid growth of food service industry (Food Export Association of the Midwest USA 2011). General increase in consumption of animal protein. People familiar with goatmeat more able to seek it out. More people eating out - trying 'new things'.
• Urbanisation has shifted labour pool from agricultural production (Kim Tong-hyung 2005; Ji Soo Jeon 2011).	Less capacity to produce own food - increase in imports to fill gap.
• AU$.	Strong AU$ weakens Australia's trading position. Target less price sensitive sectors (organic/natural, premium or unique products with storytelling and functional ingredients).

Market summary - South Korea, continued

• In Australia, high cost to process and short supply of skilled labour is restricting our ability to compete (pers. comm. anon.). • Freight relatively inexpensive compared to other countries (pers. comm. anon.).	Favours trade in commodity, rather than value added product.
• Currently demand skin on frozen carcase (pers. comm. anon.). • Carcase most cost effective export (pers. comm. anon.).	Favours trade in commodity, rather than value added product.
• Participation of multiple layers of independent importers and distributors, or middlemen (USDA 2013a). • Local retailers, in general, lack experience and expertise on international sourcing (USDA 2013a). • Only a few importers who do not share information readily (pers. comm. anon.).	In part contributes to high consumer price of many imported products. Targeting retailers directly can avoid this. Poor supply chain visibility.
Event	**Impact/Consideration**
Social	
• Current consumption trends reflect important on-going socio-economic changes (demographics, urbanisation, well-travelled young people) (Food Export Association of the Midwest USA 2011; USDA 2013b).	Products that offer good value, high quality, health or nutritional benefits, new taste and convenience are showing strong growth in the market. Growth in food service industry and eating away from home represents opportunity to expose market to Australian goatmeat.

Market summary - South Korea, continued

• In general goatmeat is not widely consumed or demanded but products from the Korean black goat are highly regarded for health and medicinal benefits (Min, Kong and Song; Son 1999; FFTC 2008; Lee 2011; pers. comm. anon.). • Goatmeat has strong connections to health benefits for women (pers. comm. anon.) – important aspect for marketing to make product more mainstream. • Requests made for black goats, hocks on, but general acceptance of Australian goatmeat (pers. comm. anon.). • Some demand for medicinal attributes, aphrodisiac (pers. comm. anon.).	Leverage health benefits of Australian goatmeat by using imagery of black goats in promotion. Potential for all year round demand (pers. comm. anon.).
• Used as substitute (illegally) for dog meat in traditional dog restaurants (pers. comm. anon.). • Goatmeat being used to offset declining dog meat sales (The Australian, 28 Aug 2014). • Often substituted as dog, lamb or mutton (pers. comm. anon.) – goatmeat not visible.	Need to understand how acceptable goatmeat is to consumers if not marketed as such to consumers.
• Goatmeat not a favourite meal for Korean consumers (Min, Kong and Song 1999; Son 1999). • Very small demand; goatmeat not visible (pers. comm. anon.). • Consumed in some restaurants, BBQ, soups, is interchangeable with lamb (pers. comm. anon.).	Need to understand how acceptable goatmeat is to consumers if not marketed as such to consumers.
• Aversion to odour particularly in meat of male goats (Min, Kong and Song 1999). • Demand skin on, females over 16kg carcase, which can be difficult to source consistently (pers. comm. anon.).	Requires good customer negotiation (pers. comm. anon.).

Market summary - South Korea, continued

• Traditional dietary habits have remained relatively intact because of strong cultural respect for tradition (Lee, Popkin and Kim 2002; AAFC 2011; USDA 2013a); however, Western foods are more readily available and demanded (Veeman et al 2002; AAFC 2011).	May limit willingness to consume goatmeat regularly, but rather will be a protein consumed in restaurants or for special occasions.
• No available data on own-price and income elasticities for sheep and goatmeat but AUSTRADE (2013a) recommend targeting less price sensitive sectors.	Little opportunity to increase prices but demand may increase as incomes rise; targeting less price sensitive (organic/natural/premium) products with storytelling, functional ingredients and food technology.
• Growth of hyper/super markets/online shopping (Food Export Ass. of the Mid West USA 2011; AAFC 2011; USDA 2013a).	Increasing access to channels. More access for pre-packaged quality products. Particularly suited to imported products.
• Strong interest in, and sensitivity to, food safety, country of origin and quality (USDA 2013a; USDA 2013b; AUSTRADE 2013a).	Opportunity for positioning to focus on safety and quality.
• Growing trend to eat away from home; however, dominated by Korean style restaurants, although evolution of food service sector offers opportunities for new tastes (USDA 2013a; USDA 2013b). • Goatmeat demanded more for food service (restaurants); some for lower end supermarkets (pers. comm. anon.).	More people eating out and therefore potential to expose consumers to new products (goatmeat); however, would need to be presented in traditional style dish.
• Observe that demand may spread throughout the year, as much of Korea is cold all year; BBQ style diet favoured all year and some parts of Korea are not as tied to the Chinese New Year which is seasonal. (pers. comm. anon.).	Potential for year round demand (pers. comm. anon.).
• Seasonal demand (winter demand in hot wet cooking style) (pers. comm. anon.).	Potential for year round demand (pers. comm. anon.).
• Fast moving business culture (AUSTRADE 2013a) but strong respect for tradition and etiquette (USDA 2013b).	Responsiveness, timely shipping and correct documentation are crucial for business success.
• Korean retailers rely heavily on independent importers for imported food and agricultural products (AUSTRADE 2014b; USDA 2013b).	Many importers may not be familiar with goatmeat and this may limit its promotion to retailers.

Market summary - South Korea, continued

Event	Impact/Consideration
Technological	
• Nil data available.	
Event	**Impact/Consideration**
Legal/Regulatory	
• Government makes frequent changes to its food safety/labeling standards (USDA 2013a). • Country of origin labelling requirements exist so Australian goatmeat is labelled as Australian but not necessarily promoted as Australian (pers. comm. anon.). • Stricter import requirements than some other markets (MICOR).	Exporters should ensure they and their importer comply with all requirements.
• Comprehensive reform of customs service in 2008 (WBO 2011).	Facilitates easier importation.
• Ranks highly among global markets for respecting business contracts and legal requirements (WBO 2011) although goatmeat is a fringe market and care is required to ensure payment (pers. comm. anon.).	Greater certainty regarding payment and execution of contracts than some other Asian markets but care still required.

3.7.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of suppliers
• Trade restrictions (tariffs and quotas) exist though will be eliminated by 2025. • Significant support of local agriculture and bias towards local products. • Stricter import requirements than some other markets.	• Potential market size used as bargaining power. • Negotiating tactics based on cultural differences. • Few importers and ability to collude.	• Pork and chicken highly competitive due to familiarity and price. • Existing strong demand for other red meats, particularly beef – considered ‘status’ product (Jung and Koo 2002).	• Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • No other country supplies goatmeat to South Korea in significant enough volumes to meet demand.

Market summary - South Korea, continued

3.7.3. SWOT analysis

Strengths	Weaknesses
• Large middle and high income populations. • Willingness of a market segment to consume goatmeat or to try new products. • Strong market for “medicinal foods”, natural products • Small market segment for South Korea but potentially significant size for Australian goatmeat. • Few Australian exporters restricts the ability of importers to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source goatmeat from any other country (in significant volume). • Fast moving business culture - import markets can develop quickly. • Possibility of year round demand.	• Higher incomes may induce consumers to seek higher value, aspirational proteins such as beef and seafood. Majority of market not familiar with how to cook goatmeat. • Product not traditionally suited to white tablecloth food service. • Lack of good cultural understanding may restrict short term trade. • Traded as a low cost protein, competing against other low cost protein sources (pork, chicken, mutton). • Even if there is demand for a traditional higher value primal and sub primal cuts of chilled goatmeat product, profitability would be eroded by high costs associated with freight and processing as well as the lack of consistent supply. • Lack of 'real', credible information about the market.
Opportunities	**Threats**
• Leverage the unique characteristics of goatmeat (lean and natural, black goat narrative). • Product development to suit South Korean demand to “try something new”. • Trade liberalisation (tariffs on goatmeat to be phased out by 2025). • Positioning for "clean, green", safe. • Good cultural understanding can facilitate long term trade.	• Risk of relying on unsubstantiated market information when developing a business model. • Small number of importers and deliberate lack of supply chain transparency. • Nationalistic tendencies regarding farming. • Effective farm and consumer lobby groups opposed to importation.

3.7.4. Critical success factors

- Improve understanding of consumer and demand.
- Positioning of goatmeat in market needs to capture healthy, clean, safe and appeal to audiences interest in 'trying something new' but which fit within the local taste and preference spectrum.

3.8. Market summary - India

Refer Appendix 6 for full details.

3.8.1. PESTL analysis

Event	Impact/Consideration
Political	
• Significant support of local agriculture (Food Export Association of the Midwest USA 2014b).	May limit trade opportunities/demand for Australian goatmeat.
• Imports of most animal and livestock-derived food products from US are effectively banned (USDA 2013c).	Reduced competition for other exporters.
• Trade restrictions – tariff for goatmeat is 30% (AUSTRADE 2014c; Central Board of Excise and Customs).	Effectively increases the price of Australian goatmeat in-market.
Event	**Impact/Consideration**
Economic	
• Rising incomes and growth in middle class (more than double by 2025 to 550 million) (AUSTRADE 2014c).	General increase in consumption of protein from animal sources.
• Current domestic goat production very inefficient - great potential for improvement (Kumar and Pant 2002; Birthal and Rao 2002).	Capacity for Australian imports to fill gap until productivity improves; may not be long term trade if domestic productivity improves
• Net exporter of food (USDA 2013c), including mutton and goatmeat (FAO 2014). • Consumption of animal products largely met by the supply from domestic sources (Gandhi and Zhou 2010).	Could absorb increased demand by redirecting exports to domestic consumption.
• AU$.	Strong AU$ weakens Australia's trading position.

Market summary - India, continued

• India will be most interested in skin off product. Understand high value lamb and mutton currently being exported to India; see similar potential for goatmeat (pers. comm. anon.).	Potential for increased domestic production to meet demand but may be short term opportunity for Australian product while local supply capacity improves.
Event	**Impact/Consideration**
Social	
• Declining birth rates suggests Indian population will age over next 10 years - fastest growth occurring among those aged 30 and above, a group that comprises the highest earners (USDA 2013c). • Acceptance of packaged, convenience and ready-to-eat food products is increasing, especially among younger consumers and the urban middle class (USDA 2013c).	Potential for marketing of goatmeat to younger, more affluent population but consideration required of how this demographic will consume Australian goatmeat (food service vs at home).
• Taboos associated with beef and pork (Gandhi and Zhou 2010; USDA 2013c).	Goatmeat a widely accepted form of animal protein; but consumption levels of meat are extremely low due to cultural reasons (vegetarianism) and affordability.
• India is a country of markets within markets, involving many languages, cultures etc – great complexity (AUSTRADE 2014c).	Poses challenges to marketing and distribution across many different cultural segments.
• General dietary shift from cereals to fats, animal products and more vegetables but per capita calorie intake has in fact declined due to changes in preferences, activity levels etc (Morisset and Kumar 2008; Kumar et al 2007; Deaton and Dreze 2009; Gandhi and Zhou 2010; Kumar et al 2011; Basu and Basole 2012; Farid 2013). • Per capita meat consumption is still extremely low (Kumar and Pant 2002; Deaton and Dreze 2009; Gandhi and Zhou 2010) but expectation is it will grow (FAO 2011; BMI 2014). • Income growth may translate to higher demand for milk/ products, but only modest increase - meat, eggs, fish (Gandhi, Zhou 2010).	Increased consumption of animal proteins predicted, but largely milk and milk products.

Market summary - India, continued

• Increasing importance of modern retailing, food service and distribution systems (Minten et al 2009) but consumers still have very traditional food shopping habits (USDA 2013c) and distribution channels are very disorganised (AUSTRADE 2014c)	Increasing access to different outlets and supply channels but still a number of limitations.
• Growing interest in food safety and quality shown by relatively new Food Safety and Standards Authority of India (http://www.fssai.gov.in; USDA 2013c).	Opportunity for positioning to focus on safety and quality.
Event	**Impact/Consideration**
Technological	
• Limited warehousing, refrigeration and transportation facilities (Food Export Association of the Midwest USA 2014b; AUSTRADE 2014c).	Has constrained development of effective cold chain and therefore distribution of product such as imported meat.
Event	**Impact/Consideration**
Legal/Regulatory	
• Less strict import requirements compared to some other markets and in most instances has no known specific requirements that differ from relevant Australian standards. (MICOR)	Exporters should ensure their importer complies with any requirements to obtain a permit for imports into this country.

Market summary - India, continued

3.8.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of Suppliers
• Trade restrictions (tariffs and quotas). • Less strict requirements than some other markets.	• Potential market size used as bargaining power. • Ability to switch goatmeat exports to meet domestic demand. • Capacity to match demand with local production through improved productivity.	• Domestic production could increase significantly with minor modification/ improvements to production systems. • Chicken, mutton and legumes highly competitive due to familiarity and price.	• Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product.

3.8.3. SWOT analysis

Strengths	Weaknesses
• Growing middle and high income populations. • Willingness of a large market segment to consume goatmeat. • Few Australian exporters restricts the ability of importers to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to import goatmeat from any other country (in significant volume).	• Potential to meet demand through improved domestic herd productivity. • Capacity to switch exports to domestic consumption. • Unlikely to be able to compete on price with locally produced product. • Lack of good understanding of demand and local production capacity may restrict long term trade. • Lack of established cold chain functionality. • Traded as a low cost protein, competing against other low cost protein sources (chicken, mutton and legumes/vegetables). • Lack of 'real', credible information about the market.
Opportunities	**Threats**
• Product development to suit growing middle and high income populations. • Trade liberalisation. • Positioning for "clean and safe”. • Good cultural understanding can facilitate long term trade. • Increased disposable income may result in increased goatmeat consumption initially supplied by redirected domestic production away from exports. Once domestic supply reached capacity, may be an opportunity for imports from Australia.	• Risk of relying on unsubstantiated market information when developing a business model. • Increased domestic production. • Redirection of exported product into the domestic market. • Increased income may result in increased consumption of animal proteins in form of milk and milk products rather than meat.

Market summary - India, continued

3.8.4. Critical success factors

- When developing business models, exporters will need contingency plans in place to allow for unreliable market information and take into consideration potential growth of domestic production.
- Development of cold storage to facilitate appropriate supply chain activity.
- Small, qualified section of the market should be approached and developed initially before considering expansion to broader market.
- Must differentiate Australian product from local product to mitigate threat of local product being redirected from export market to compete on price in the local market.

3.9. Market summary - European Union

Refer Appendix 7 for full details.

3.9.1. PESTL analysis

Event	Impact/Consideration
Political	
• Existing trading partner.	Well established reputation.
• Goatmeat fits within quota for sheepmeat; tariff rate quota fulfilment is expected to remain below 70% (DG Agriculture 2014). • Trade restrictions due to sheepmeat quota (19,128t/annum) (pers. comm. anon.). • Must only be skin off to fit within sheepmeat quota (pers. comm. anon.). Skin on has no access.	Some availability in quota for increased imports of goatmeat. DOA allocate 19,128t to exporters, remainder is traded. Would need to bid for this quota and have customer lined up, as if it is not allocated, exporter may not be issued with future allocations. Most desired product, skin on, is currently excluded from market.
Event	**Impact/Consideration**
Economic	
• Weak GDP growth projected for the EU, improving by 2016 (European Commission 2014a). • Near stagnation in Russian GDP growth because of significant political instability (World Bank 2014b).	Limited potential for income growth and therefore ability to purchase goatmeat.
• Two very different markets in EU and Russia (pers. comm. anon.).	Two different strategies required.
• AU$.	Strong AU$ weakens Australia's trading position.
• Lack of clearly defined value added product specifications.	Restricts trade to commodity product.

Market summary - European Union, continued

• Good opportunity for skin on product but currently not permitted (pers. comm. anon.). • Potential (and some demand) for chilled boneless product but not economical because of high processing costs (pers. comm. anon.).	
• Cheap protein commodity in Russia, therefore very price sensitive (pers. comm. anon.).	Demand will be strongly influenced by price, may be substituted with mutton if becomes too expensive.
• Some surplus animals available from dairy industry (males) (Briggs 2013). • Local production based in Romania and Spain (pers. comm. anon.) and in other less productive areas of different countries (DG Agriculture 2014). • Spain strong competitor for skin off as no quota restrictions to Spain (pers. comm. anon.).	Limited local supply may lead to greater opportunity for imported product.
• Goatmeat available in specialty butchers (Halal) rather than in retail outlets (pers. comm. anon.).	Not widely available or visible.
• Mining camps in Russia have good distribution systems (pers. comm. anon.).	Potential market for Australian goatmeat – small market but relatively easy to access and supply.
Event	**Impact/Consideration**
Social	
• Goatmeat plays important role in particular festivals (Leguen de Lacroix 2004). • Ethnic, cultural and religious factors influence consumption patterns for goatmeat in EU (Muslim, North African, Indian populations) – evidence of growth (pers. comm. anon.).	Influences the seasonal patterns of production, prices and imports.

Market summary - European Union, continued

• Significant growth in food service sector in Russia in last 2-3 years (pers. comm. anon.).	Potential for differentiated, well branded product; opportunity for placement of Australian goatmeat in food service but would need to remain competitive on price.
• Mutton used in processed meat products such as kebabs, pre-prepared meals, Indian takeaways (pers. comm. anon.).	Goatmeat likely to be consumed in a similar manner; main competitor will be mutton.
• Significant demand from ex pat Asian communities, particularly those from India. Indian curries have become a favoured culinary alternative, particularly in the UK.	Opportunity for skin on goat in restaurant sector however product currently has no access.
• Chicken has large market share primarily driven by price; pork also relatively cheap; lamb most expensive (pers. comm. anon.).	Goatmeat will need to be competitive on price.
Event	**Impact/Consideration**
Technological	
• Nil data available.	
Event	**Impact/Consideration**
Legal/Regulatory	
• Strictest import requirements of all markets (MICOR).	Exporters should ensure they and their importer comply with all requirements. There are no generic permits required for products imported into the EU, but individual member states may have permit requirements for imported products. Exporters should ask their importer whether they need to obtain an import permit.

Market summary - European Union, continued

3.9.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of Suppliers
• Trade restrictions (tariffs and quotas). • Stricter import requirements than any other markets examined.	• Alternative suppliers, immature market.	• Poultry and pork are highly competitive based on price and familiarity. • Capacity to improve domestic production. • Potentially freer access available to competitors.	• Good economies of scale and productivity. • Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product.

3.9.3. SWOT analysis

Strengths	Weaknesses
• Willingness of a growing market segment to consume goatmeat. • Large number of traditional goatmeat consumers in ex pat communities in UK. • Few Australian exporters restricts the ability of importers to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source quality goatmeat from any other country (in significant volume). • Existing strong market presence (in other meats and live animals).	• Lack of skin on access. • Cost of transport. • Traded as a low cost protein, competing against other low cost protein sources (chicken, mutton) therefore very price sensitive. • Lack of information qualifying demand.
Opportunities	**Threats**
• Linking to restaurants/hotels chain. • Supplying curry market in the UK. • Skin on access.	• Risk of relying on unsubstantiated market information when developing a business model.

3.9.4. Critical success factors

- Negotiate access for skin on product.

3.10. Market summary - Middle East

Refer Appendix 8 for full details.

3.10.1. PESTL analysis

Event	Impact/Consideration
Political	
• Existing trading partner (AUSTRADE 2013c).	Well established reputation.
• 0-5% applied tariff to Australian sheepmeat (MLA 2014b). • No tariff or duty into Middle East for chilled goatmeat however 5% on frozen goatmeat (pers.comm. anon.).	Relatively low.
• Strong emphasis on food safety and security by ruling family (pers. comm. anon.) – price of meat is subsidised by government. • Ban on Iranian livestock and product from Oman due to food safety (pers. comm. anon.). • Government keen to develop trade for AU goats but preference for live animals (pers. comm. anon.).	Favourable environment to explore opportunities for trade.
• Political instability across the region (pers. comm. anon.).	Need to identify and concentrate effort on particular target markets.
Event	**Impact/Consideration**
Economic	
• Gulf Cooperation Council's (GCC) share of the world economy is expected to grow steadily between now and 2020 (The Economist 2009). Pace of growth will be slightly higher than aggregate global growth with an annual average of 4.5% in real terms.	Local wealth will facilitate the opportunity to trade.
• AU$.	Strong AU$ weakens Australia's trading position.

Market summary - Middle East, continued

• Local production limited and production growth stable (Sullivan 2008).	Supply and availability of quality local meat is a concern for local governments and provides greater opportunity for imported product (food security).
• Poultry meat consumption will continue to be a major competitor to beef, sheep, and goatmeats on price (Sullivan 2008).	Price will be important factor in determining demand.
• Product from major competitor (India) could become more expensive as the Indian currency is expected to appreciate putting pressure on (increasing) Indian exports prices and making our exports more competitive (pers. comm. anon.)	May make Australian goatmeat more competitive on price.
• Freight relatively expensive compared to other countries (pers. comm. anon.); however, growth in airfreight capacity changes Australia's export capability to region with a high reliance on imported quality food and beverage (AUSTRADE 2013c).	Improving opportunities for chilled product.
Event	**Impact/Consideration**
Social	
• Large proportion of population are Christian Indians (therefore eat meat), also Pakistani, Nepalese, with strong cultural preference for goatmeat (pers. comm. anon.). Goatmeat is eaten by all except Western expats and vegetarian Indians.	Strong, consistent demand with some seasonal fluctuations based on cultural events. One pot cooking (wet dish) suits Australian goatmeat product.
• Ethnic, cultural and religious factors influence consumption patterns for goatmeat (pers. comm. anon.). • Preference for goatmeat over sheepmeat due to leanness (Verma 2013). Often labeled as 'Indian mutton' (pers. comm. anon.).	Strong, consistent demand with some seasonal fluctuations based on cultural events. Recognised as a cheap source of protein.
• Very small quantities of branded chilled product entering market (pers. comm. anon.) – marketing emphasis is on telling the production story, food security etc.	Possible opportunity for branded, chilled product in high end retail or food service.

Market summary - Middle East, continued

• Preference for hot carcase as represents product freshness (pers. comm. anon.) and ensures halal requirements are met. • Strong demand for whole carcase due to large family structures (pers. comm. anon.).	Exporting whole carcases can be more costly in terms of freight, however savings may be realised through reduced processing and packaging costs.
• Demand evident for chilled product (carcases) but supply is currently the limiting factor (pers. comm. anon.); want lighter carcases within a consistent weight range (pers. comm. anon.). • Same cooking method as hot carcase (pers. comm. anon.).	Unqualified demand exists for goatmeat.
• Propensity for a wider diversity of products of sheepmeat imports (Sullivan 2008); carcasses and half carcasses, bone-in and boneless and sheep and lamb combinations mean that buyers are using these products in different market channels and segments.	Same may apply for goatmeat. Important to understand how these products are being directed once in the country of destination.
• Gulf States are experiencing unparalleled growth, especially in the food service industry (Sullivan 2008).	Opportunity for placement of Australian goatmeat in food service.
• Young and evolving market for different types red meats, and many more young people of different decent so are willing to try new things (pers. comm. anon.). • Preference for supermarket shopping (quicker than wet market) and more familiar to younger age groups (pers. comm. anon.).	Opportunity for product development.
• Preference for pasture raised goatmeat (Sullivan 2008).	Market rangeland production systems for Australian goatmeat.

Market summary - Middle East, continued

Event	Impact/Consideration
Technological	
• Nil data available.	
Event	**Impact/Consideration**
Legal/Regulatory	
• Stricter import requirements compared to some other markets though in most instances it has no known specific requirements that differ from relevant Australian standards (MICOR).	Exporters should ensure they and their importer comply with all requirements.

3.10.2. Competitive analysis

Barriers to entry	Power of buyers	Power of competitors	Power of Suppliers
• Trade restrictions (tariffs and quotas). • Stricter import requirements than some other markets. • Freight cost and distance.	• Traditionally source goatmeat from other markets (eg North Africa and Iran) with lower production and freight costs.	• Poultry is highly competitive based on price. • Mutton can be easily substituted with goatmeat based on price (pers. comm. anon.) although there is a preference for leanness. • Close proximity to North African goatmeat producing countries, as well as India and Pakistan (pers. comm. anon). • Established live trade for mutton from Australia and other North African and Middle Eastern countries.	• Existing strong market presence for other meats and live animals. • Good economies of scale and productivity. • Strong capacity to supply goatmeat to meet demand and specifications. • Few Australian exporters - restricts importers ability to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply on a commodity product.

3.10.3. SWOT analysis

Strengths	Weaknesses
• Willingness of a large market segment to consume goatmeat. • Few Australian exporters restricts the ability of importers to 'shop around'. • Relatively small volume of product availability - unable to flood the market/manipulate the price, demand exceeds supply but on a commodity product. • Unable to source quality goatmeat from any other country (in significant volume). • Existing strong market presence (in other meats and live animals).	• Traded as a low cost protein, competing against other low cost protein sources (chicken, mutton). • High cost of transport. • Lack of qualified demand profile.
Opportunities	**Threats**
• Linking to restaurants/hotels chain. • Chilled, high value product can be flown in. • Supplying worker camps with commodity product.	• Risk of relying on unsubstantiated market information when developing a business model. • Price competitiveness of other goatmeat producing countries. • Many markets and potential to overcomplicate supply chains.

3.10.4. Critical success factors

- Qualified demand profile is required to facilitate targeted supply.

4. Findings

This section outlines the risks volatilities, opportunities and areas of stability based on the analysis, as well as a summary of supply issues, facing Australian goatmeat exporters.

4.1. Risks and volatilities

Risks and volatilities for Australian goatmeat exporters were identified as:

- In general, it is difficult to quantify actual and potential demand for goatmeat in all markets due to a lack of reliable data. The available data is often combined with sheepmeat and is generally vague.
- The lack of information and unreliable nature of the data which is available regarding demand and consumption in market requires exporters to exercise extreme caution in reacting to perceived market signals.
- Goatmeat is typically traded and consumed as a low cost commodity protein.
- Goatmeat is a widely accepted form of low cost commodity animal protein; however, consumption levels are extremely low in comparison to other such meats including chicken, mutton and pork.
- Goatmeat is not necessarily marketed as such and is often combined with, or substituted for, mutton (or dogmeat in South Korea).
- There are a wide range of opinions, often conflicting, among those involved with the goatmeat industry regarding the current trading environment and, in particular, the opportunity for industry development.
- The demand for goatmeat is more influenced by seasonal demand associated with climate and festivals than other commodity proteins.
- There is anecdotal evidence of demand from markets such as the Middle East and EU for higher value cuts and chilled goatmeat; however, this demand needs to be qualified in terms of price sensitivity, supply costs and supply capability to ascertain whether this represents a genuine opportunity.
- Global demand for affordable protein exceeds the supply capacity of the goatmeat industry. There is a risk of over stating the ability of the Australian industry to supply goatmeat.
- The Australian goatmeat industry should continue to acknowledge the difficulty in competing on price with domestically produced goatmeat in most markets.
- The lack of a protocol to allow skin on goatmeat products to enter the EU means skin on goatmeat (a major market segment) is currently excluded from this market.
- Volatile (and recently high) AU$.

4.2. Opportunities and areas of stability

Opportunities and areas of stability for Australian goatmeat exporters were identified as:

- General and significant increase in animal proteins consumed in many export markets due to rising incomes and population.
- The local country domestic supply in Australia's export markets is typically unable to match demand.
- Increased interest in global markets in achieving food security is driving interest in establishing long term relationships with reliable suppliers of safe affordable protein.
- Increased interest in food safety is creating opportunities for Australian exporters to leverage industry systems such as Livestock Production Assurance (LPA) and the National Livestock Identification System (NLIS).
- Australian product should be differentiated from local product to increase the opportunity for price elasticity and leverage drivers associated with product integrity, food safety and provenance.
- Supply chains with a focus on restaurant chains, particularly 'hot pot' across China and other Asian markets, offer potential.
- Online shopping, although mentioned in the data, was not able to be fully verified so only an observation can be made. Given that goatmeat is typically traded as a commodity product, it is likely that opportunity for goatmeat to be purchased online would be limited primarly to established online shopping channels such as those offered by major hyper and supermarkets.

4.3. Supply issues impacting on Australian goatmeat exporters

The supply issues impacting Australian goatmeat exporters' ability to export to potential and current markets and potentially their competitiveness include:

- Supply of goats - both the limited supply and the seasonal nature of supply, remains a leading issue impacting on the ability for exporters to grow their business.
- Rising costs associated with delivering product to market, including the cost of electricity, transport, labour and fees and charges (government and halal), are impacting Australia's competitiveness.
- Increasing difficulty in sourcing and securing labour.

5. Summary

Qualifying the actual demand within markets proved to be difficult due to a lack of reliable data. Where data was available, this often included sheepmeat and failed to accurately reflect domestic consumption and production.

Opinions regarding market opportunity vary among exporters and those engaged in market and these opinions were often found to be contradictory.

Strong underlying demand for affordable protein is driving demand for goatmeat rather than demand for goatmeat per se.

With very few exceptions, goatmeat is traded as a commodity product, that is, an affordable form of protein. Goatmeat is not necessarily marketed as goatmeat but rather is often combined with, or substituted for, mutton.

There is a distinct lack of supply chain transparency in most markets making the identification of specific consumer preferences and product disposal methods beyond general assumptions difficult.

Middle Eastern, southern European, Indian, Hispanic and some Chinese populations have traditions and cultures which include goatmeat; however, in general, goatmeat is sought as an affordable protein rather than a delicacy.

Some Asian countries value goatmeat for medicinal purposes but only a minority and demand for such products is typically seasonal.

There is some preference for fresh meat over frozen in certain markets; however, price tends to be a more important consideration than whether the goatmeat is frozen or chilled.

Consumption is restricted in some markets to seasonal demand around weather and festivals.

There is only limited capacity for destination markets to improve local production to satisfy domestic demand. Demand in these markets is always likely to exceed domestic supply capacity, underpinning ongoing demand for Australian goatmeat.

Australia is well placed to continue to supply affordable commodity goatmeat to global markets. The industry’s supply capacity may, however, be tested if demand becomes more specific (chilled or cut based).

Increased awareness of food safety in destination markets has created the opportunity for Australian product to be differentiated and its integrity can be underpinned through systems such as NLIS and LPA.

Concern surrounding food security in global markets has created an opportunity for exporters to secure long term trading partners based on the reliable supply of affordable protein.

Improved cold storage capacity is required in markets such as China and India if the seasonal nature of demand from these markets is to be moderated.

The research revealed limited demand for higher value primal and sub primal cuts of chilled goatmeat in the Middle East and EU. The feasibility (cost and supply capability) of supplying such cuts remains unqualified.

The emergence of specialty restaurant chains in Asia, particularly 'hot pot' type restaurants, presents an opportunity for Australian exporters.

There is the opportunity to better market the story of Australian goatmeat production. In order to differentiate Australian goatmeat from local product, which will generally be cheaper, it is recommended that generic Australian goatmeat promotional material continue to be provided to support product in market. It is important for the Australian industry to maintain its focus as a reliable supplier of affordable commodity goatmeat, augmented where possible by qualified, high value, niche market opportunities.

A chronic lack of data regarding goatmeat consumption in the destination markets and a lack of supply chain transparency in many markets was identified. When identifying export market opportunities, exporters should make allowances for the unreliable nature of much of the market information

An exercise which may provide clarity in this respect would be the tracking of goatmeat exports to the end consumer in markets where such information was not available including China and South Korea. This may provide an insight into the nature of demand and in-market supply chains and would help overcome the current lack of understanding regarding product disposal. This may also assist in the identification of market development opportunities.

Opinions varied greatly with respect to market opportunities among exporters.

6. Recommendations

6.1. Macro recommendations - marketing of Australian goatmeat

The research has identified the opportunity to better market the story of Australian goatmeat production.

In order to differentiate Australian goatmeat from local product, which will generally be cheaper, it is recommended that consideration is given to the following:

- Generic Australian goatmeat promotional material continue to be provided to support product in market. This material should seek to differentiate Australian goatmeat as being clean, green, free range and safe, and leverage NLIS and LPA in the messaging;
- Australian goatmeat be positioned to appeal to audience interest in "trying something new" through telling the story of the Australian goatmeat industry;
- the "rangeland" description continue to be promoted in market; and

- industry maintain its focus as a reliable supplier of affordable commodity goatmeat, augmented where possible by qualified, high value, niche market opportunities.

The research has identified a chronic lack of data regarding goatmeat consumption in the destination markets and a lack of supply chain transparency in many markets. To address this, it is recommended that consideration is given to the following:

- MLA continue to gather more specific information on supply chains and consumption in key markets. This will assist producers and exporters gain a greater understanding of market opportunities and enable them to make more informed decisions.

The research demonstrated that opinions varied greatly with respect to market opportunities among exporters. Acknowledging that exporters possess a unique insight into export markets, it is recommended that consideration is given to the following:

- MLA support co-funded marketing initiatives designed to increase the appeal of, and opportunity for, Australian goatmeat in market.

6.2. Micro recommendations – country specific

When assessing market potential, exporters should be mindful that much of the information regarding demand and consumption is unreliable. Table 2 provides an overview by market.

6.2.1. United States

The US is now one of the Australian goatmeat industry's most mature markets and is characterised by well established supply chains.

It is recommended that consideration is given to the following:

- These supply chains continue to be supported through co-funded marketing opportunities tailored to meet the specific needs of the supply chain. For example, this may include point of sale cooking demonstrations.

- Programs such as NLIS and LPA should continue to be promoted to this market as industry systems designed to guarantee product integrity.

- The "rangeland" brand description has been valuable and should continue to be supported.

6.2.2. Caribbean

The Caribbean remains an important, unsophisticated market for secondary product. It is recommended that relationships be maintained to allow for continued market share.

6.2.3. China

China has emerged as a promising future market. It is recommended consideration is given to:

- Physically tracking Australian goatmeat exports through to the end consumer to understand individual product demand and in-market supply chains and therefore determine how these

products are being directed once in the country will help overcome the current lack of understanding regarding final product destination.

- Gathering more specific information on regional and ethnic population preferences to allow for more targeted export strategies. This may involve partnering with a local consumer market research organisation in order to specifically obtain this information.

- Identifying and selectively seeking partnerships with specific specific “hot pot” restaurant chains which promote the consumption of goatmeat in traditional-style meals.

- Further investigating the opportunity to improve access for goat by/co-products into this market.

- Examining opportunities to grow year-round demand by identifying specific partners interested in establishing cold chain facilities in-market.

- Examining tamper proof measures to discourage the misrepresentation of local product as Australian goatmeat (packaging, roll on brand etc).

6.2.4. Taiwan

Surprisingly little information was available regarding the Taiwan market given the important role Taiwan has played in the development of the goatmeat trade over time. It is recommended that consideration be given to the following:

- Further investigating opportunities for goatmeat by profiling demand and in market supply chains.

- Identifying potential partnership opportunities to promote goatmeat through specific “hot pot” restaurant chains to increase exposure to and consumption of Australian goatmeat.

6.2.5. South Korea

In this market, it is recommended consideration be given to the following:

- Further investigating opportunities by profiling demand and in-market supply chains.

- Identify and selectively seek out partnerships with specific “hot pot" or "BBQ” restaurant chains to increase exposure to product and grow demand for, and consumption of, Australian goatmeat.

- Examining opportunities to grow year round demand by identifying specific partners interested in establishing cold chain facilities.

6.2.6. India

In this market, it is recommended that consideration is given to the following:

- A watching brief be maintained to allow for the identification of changes in access and increased demand.

6.2.7. European Union

In this market, it is recommended that consideration is given to the following:

- Access for skin on goat be sought as a priority.
- Opportunities to supply goatmeat to Indian restaurants in the UK be explored.
- The opportunity for high value chilled Australian goatmeat be explored.

6.2.8. Middle East

In this market, it is recommended consideration be given to the following:

- Re-examining the opportunity for Australian goatmeat exports to this market in light of recent changes to livestock importing laws, including investigating the opportunity for a higher value, chilled product.
- Identify and selectively seek out partnerships with specific hyper/supermarket chains and investigate opportunities to increase exposure of product and grow demand for and consumption of Australian goatmeat.

Table 2: Summary by market

Market	Current market size (swt)	Main market risks	Market volatilities and instability	Market stability	Ability to meet specifications	Ability to meet demand	Critical success factors	Key recommendations
China	2012: 375 2013: 4,737 2014: 113	Demand may be restricted to a few cultural and income groups rather than widespread	Competing against other low cost proteins, particularly pork and chicken; contract enforcement, political stability and establishing guanxi; consumers unfamiliar with how to prepare and cook goatmeat	Significant population and economic growth predicted to continue; goatmeat traditionally consumed by some cultural segments; growing demand to eat away from home and try new foods	Current product demand can be well matched with current Australian production systems (commodity product)	Very strong seasonal demand may be difficult to match with current production systems	Develop supply chains around 'hot pot' restaurant chains. Identify and selectively target particular area/provinces that consume goatmeat first before pursuing new consumers. Development of cold chain facilities. Approaches must be taken with a long-term view to develop good trade relationships. Tamper-proof packing. Position goatmeat as clean, green and safe and appeal to audiences interested in 'trying something new'.	Physically track goatmeat exports to the end consumer. Gather more specific information on regional and ethnic population preferences. Identify and selectively seek partnerships with specific “hot pot” restaurant chains which promote consumption of goatmeat in traditional-style meals. Further investigate opportunity to allow all goatmeat by/co-products into market. Examine opportunities to grow year-round demand by establishing cold chain facilities in-market. Examine tamper proof measures to ensure Australian product is not substituted.

Market	Current market size (swt)	Main market risks	Market volatilities and instability	Market stability	Ability to meet specifications	Ability to meet demand	Critical success factors	Key recommendations
Taiwan	2012: 3970 2013: 3861 2014: 5075	Demand may be restricted to a few cultural and income groups rather than widespread.	Competing against other low cost proteins, particularly domestic pork and seafood; consumers unfamiliar with how to prepare and cook goatmeat.	Australia has strong trading relationship and reputation in market; willingness to try new foods.	Current product demand can be well matched with current Australian production systems (commodity product).	Seasonal demand may be difficult to match with current production systems.	Develop supply chains around restaurant chains - particular 'hot pot'. Continue to nurture existing supply chains.	Further investigate opportunities for goatmeat by profiling demand and in market supply chains. Identify and selectively seek out partnerships with “hot pot” restaurant chains to increase exposure of product and grow their demand for, and consumption of, goatmeat.
South Korea	2012: N/A 2013: 900 2014: N/A	Demand may be restricted to small market segment; nationalistic tendencies regarding farming/consumption.	Traded as a low cost protein, competing against other low cost protein sources (pork, chicken, mutton); consumers may seek higher value, aspirational proteins such as beef and seafood; majority of market not familiar with how to cook goatmeat.	Large middle and high income populations; strong market for “medicinal foods”, natural products; fast moving business culture - import markets can develop quickly.	Leverage the unique characteristics of goatmeat (lean and natural, black goat narrative).	Trade liberalisation (tariffs on goatmeat to be phased out by 2025).	Improve understanding of consumer and demand. Promote image of goatmeat as healthy, clean and safe and appeal to audiences interested in 'trying something new' but which fit within the local taste and preference spectrum.	Maintain relationships in this market.

Market	Current market size (swt)	Main market risks	Market volatilities and instability	Market stability	Ability to meet specifications	Ability to meet demand	Critical success factors	Key recommendations
India		Increased domestic production; redirection of exported product into domestic market; increased income results in increased consumption of animal proteins such as milk and milk products rather than meat.	Traded as a low cost protein, competing against other low cost protein sources (chicken, mutton and legumes/vegetables; unsubstantiated market information (including demand and level of domestic production); lack of cold storage facilities.	Growing middle and high income populations; willingness of a large market segment to consume goatmeat.	Current product demand can be well matched with current Australian production systems (commodity product).	Demand for goatmeat cannot be quantified so unable to determine ability to meet demand.	Contingency plans to allow for unreliable market information that takes into consideration potential growth of domestic production. Development of cold storage to facilitate appropriate supply chain activity. Small, qualified section of the market should be approached and developed initially before considering expansion to broader market. Differentiate Australian from local product to mitigate threat of local product being redirected from export market to compete on price in the local market.	Maintain a watching brief to allow for identification of changes in access and increased demand.

Market	Current market size (swt)	Main market risks	Market volatilities and instability	Market stability	Ability to meet specifications	Ability to meet demand	Critical success factors	Key recommendations
US/Canada	2012: 15,929 2013: 15,478 2014: 19,092	Enthusiastic local industry supported by protectionist government policies; access disruption due to contamination (chemical or physical).	Generally competing against other low cost protein sources (pork, chicken, mutton); majority of market not familiar with how to cook goatmeat.	Large and growing Hispanic and ethnic populations which are traditional goatmeat consumers; Existing strong market presence.	Leverage the unique characteristics of goatmeat Position as "clean, green", safe. Leverage “rangeland” label within labelling requirements.	The US is now one of the Australian goatmeat industry’s most mature markets characterised by well established supply chains.	Position goatmeat in market as clean, green and safe. Maintain market access by ensuring contamination risks are managed effectively.	Continued support through co-funded marketing opportunities tailored to meet the specific needs of the supply chain (may include point of sale cooking demonstrations). Programs such as NLIS and LPA should continue to be promoted to this market as industry systems designed to guarantee product integrity. The “rangeland” brand description has been valuable and should continue to be supported.
Caribbean	2012: 3,106 2013: 2,543 2014: 2,388	Poor forecast for economic growth	Competing with other low cost proteins – mutton and chicken; lack of credible market information.	Wide acceptance of Australian product.	Limited to commodity market; valuable destination for carcases too heavy for other markets.			Maintain relationships in this market.

Market	Current market size (swt)	Main market risks	Market volatilities and instability	Market stability	Ability to meet specifications	Ability to meet demand	Critical success factors	Key recommendations
European Union		Relying on unsubstantiated market information when developing a business model.	Lack of information qualifying demand.	Willingness of a growing market segment to consume goatmeat; large number of traditional goatmeat consumers in ex pat communities in UK.	Lack of skin on access.	Existing strong market presence (in other meats and live animals).	Negotiate access for skin on product.	Access for skin on goat be sought as a priority. Opportunities to supply goatmeat to Indian restaurants in the UK be explored. The opportunity for high value chilled Australian goatmeat be explored.
Middle East		Price competitiveness of other goatmeat producing countries; many markets and potential to overcomplicate supply chains.	Traded as a low cost protein, competing against other low cost protein sources (chicken, mutton).	Willingness of a large market segment to consume goatmeat; existing strong market presence (in other meats and live animals).	Chilled, high value product can be flown in.	Low value domestic and North Africa substitute animals readily available.	Qualified demand profile is required to facilitate targeted supply.	Re-examine opportunity for exports to this market following changes to livestock importing laws, including investigating a higher value, chilled product. Identify and selectively seek out partnerships with specific supermarket/hypermarket chains to increase exposure of product and grow their demand for, and consumption of, Australian goatmeat.

Appendix 1: Summary of literature review - United States

DATA ISSUES

Very limited information available about consumption and/or goatmeat production.

ECONOMIC

Income growth

Compared with the general population, the Hispanic segment is younger and is characterized by lower levels of educational attainment and a higher rate of poverty (Martin 2007). However by 2010 it was estimated this group had more than $1 trillion in disposable income and have become an economic powerhouse. They comprise over 16% of the total US population and accounted for 56% of all population growth from 2000 to 2010 (ESRI 2012).

Hispanic growth has outpaced that of the US population by more than four times from 2000 to 2010, fueled by families larger than the US average and immigration (ESRI 2012).

SOCIAL

General trends

Increasing health-consciousness also poses a threat to red meat consumption, though this could give a boost to poultry consumption. Apart from the higher fat content, a well-publicised study by the US National Cancer Institute released in March 2009 claims that people who eat more red meat are at higher risk of both cancer and heart disease. More news such as this could see per capita consumption of red meat fall faster than we expect (BMI 2014b).

Locally sourced meat, seafood and produce remain at the top of the trends, along with environmental sustainability and children's nutrition (National Restaurant Association 2014).

"Today's consumers are more interested than ever in what they eat and where their food comes from…and the dietary profiles of those meals." (National Restaurant Association 2014)

The 2010 Census counted 50.5 million Hispanics in the United States, making up 16.3% of the total population (Passel et al 2011). The nation's Latino population, which was 35.3 million in 2000, grew 43% over the decade. The Hispanic population also accounted for most of the nation's growth (56%) from 2000 to 2010.

Not only is the US becoming a more diverse melting pot, but more and more individuals are melting pots themselves (ESRI 2012). This trend makes marketing even more complex. Consumers identifying themselves as multiracial may fit the cultural paradigms and consumer behaviors of several races or may reflect none.

This change in the demographic makeup of the United States has, and will continue to have, a dramatic effect on American business including how business is conducted, workplace dynamics,

languages, lifestyles, and cultural references in packaging and marketing - especially in the products and services offered.

The $2.6 trillion in disposable income from minority consumers is a significant and influential force in the American economy (ESRI 2012).

Consumption trends for goatmeat

Ethnic composition in America's cities and urban areas distinctly differ in their goatmeat preferences depending on the location of the city (Ekanem et al 2013). There are currently more than 14 million Muslims in the United States. The diversity in the ethnic populations has led to unique preferences in goatmeat in the United States. While young goats are preferred by Mexican-Americans, Chinese and Koreans prefer young goats of good quality weighing 27-32kg lwt. Americans of Jewish extraction also prefer high quality kids (9-18kg lwt). African immigrants from the West Indies prefer older goats of lesser quality, with a preference for males.

The two largest markets for Australian goatmeat exports are the US and Taiwan (DAFF in MLA 2013a). Demand in the US is generated mainly from the Hispanics, the largest minority group in the US.

The growing demand for goatmeat reflects an increase in Hispanic, Middle Eastern, south east Asian and Caribbean populations in the United States, as well as the growing niche markets interested in the unique flavour and health benefits of goatmeat. These factors will likely continue to be the driving force for the US meat goat industry (USDA 2012).

Recently, the United States has witnessed a rise in ethnic population, increased religious diversity and expanded disposable income (Ekanem et al 2013). These factors derive the demand for goatmeat. The recent acceptability of goatmeat as an excellent source of nutritious and healthy source of protein for meat eaters has opened the market for goatmeat consumption in the US.

Despite the increase in the Hispanic population the greatest potential probably lies in selling products to the Muslim market (Knudson 2006).

USDA does not track US goat consumption (Geisler 2013). Domestic consumption is centered in areas where goatmeat is a traditional staple. Goatmeat (cabrito and chevon) is rarely seen in mainstream grocery stores because of limited, variable and inconsistent supplies. It is also more expensive than poultry and other red meats.

Growth in US ethnic populations and the desire for healthy diets are driving the demand for goatmeat. Certain holidays, such as Easter, Christmas and New Years, increase demand for goatmeat. The weight and sometimes gender of the goat is determined by the holiday. It ranges from a milk-fed kid weighing 9kg lwt to a weaned kid weighing up to 54kg lwt (Geisler 2013).

For those celebrating Western or Roman Easter, the ideal goat is a milk-fed kid weighing 14kg lwt. The desirable goat for the Eastern or Greek Easter is a slightly larger, milk-fed kid weighing about 16kg lwt (Geisler 2013).

Muslim holidays are based on a lunar calendar. Ramadan is a Muslim, month-long holiday. Families typically gather for celebrations at the beginning and end of Ramadan. Festive meals take place each night of Ramadan since no food is consumed between sunrise and sunset during this holiday. Male or female kids less than one year old weighing 27kg lwt are desired. Depending on the buyer, weaned kids ranging from 20 to 54kg lwt are accepted (Geisler 2013).

Goat cheese is wildly popular in the US in direct opposition to goatmeat (Dawson 2013).

Overall, the opportunities for expanding and developing this market are limited (Knudson 2006). It is unlikely that goatmeat will become as widely accepted by U.S. consumers as chicken or beef.

In making the decision to buy goatmeat, Ekanem et al (2013) in a survey of goatmeat consumers in Nashville found that price was considered important by 85% of the buyers while 15% did not consider price important. Taste, package, and nutrition information were considered important by 84%, 75%, and 58% of respondents, respectively. Almost 60% of the participants indicated that they would buy more goatmeat if additional information on nutritional value of goatmeat was available to them.

This is evidence that there is the potential to expand the market for goat production in the US (Knudson 2006). This is particularly true given the fact that imported goatmeat is mostly frozen and many customers prefer the taste of fresh goatmeat.

Ekanem et al (2013) found that 77% of the participants preferred buying fresh goatmeat, 15.1% preferred frozen, and 7.5 % had no specific preference. Regarding specific cuts, 1.9% said they purchased ribs, 5.7% tenderloin, 30.8% chops, 9.6% other parts, and 52% had no preference, would buy nearly any part, or were simply glad to find goatmeat for their special occasions.

SUPPLY

Domestic production

Growth over the past decade has been strong enough to prompt the president of the AMGA to say in 2004, “Anytime you have the opportunity to be involved in a livestock industry experiencing 7% plus growth per annum in both production and consumption, and still have rising prices being paid for the commodity produced, you have made the right decision” (Mintel 2004).

The meat goat industry is one of the fastest growing segments of livestock production in the United States. The majority of all US goats and kids are raised for meat (USDA 2012). The rise in popularity and demand for goatmeat is the primary reason for the industry’s rapid growth (Spencer 2008).

Overall, 42.6% of US goat operations focused primarily on meat production, as opposed to dairy, fibre or “other” production (USDA 2012).

Surplus dairy animals

The ‘No Goat Left Behind’ program and ‘Goatober’ are initiatives of Heritage Foods USA to increase demand for goatmeat and to reduce wastage of surplus animals from dairy farms. The programs involve 14 family farms and over 50 restaurants throughout New York City, all of which

commit to purchasing goatmeat from local dairy farms. Partner farmers will raise their goats to Heritage Foods USA's specifications, guaranteeing pasture-raised animals with no growth hormones or antibiotics. Partner chefs will create a cornucopia of delicious dishes and recipes (Heritage Foods 2013).

Goatober or not, sales of goatmeat *are* growing (Dawson 2013). In fact, the industry is one of the fastest growing segments of livestock production in the United States. But to catch up with beef, it has a ways to go. The latest reports - the few that cover goat production - indicate that there are approximately 3 million meat goats (and about 400,000 milk goats) in the US, compared to 89 million beef cattle, according to the USDA and the National Cattleman's Beef Association.

The lack of American interest in goatmeat is in many ways confounding: it's affordable (often clocking in around US$5 per pound, or around $13.50/kg), lean, and often produced on small sustainable farms (Dawson 2013).

Erin Fairbanks of Heritage Foods USA guesses most people have no experience with eating goat – or perhaps have had an unpleasant one eating curry cooked with older goat, which might have a gamey taste or tough texture (Dawson 2013). "When the animal is younger, it's going to have a more delicate, grassy, vegetal flavor," she says. Another hurdle for goatmeat: Consumers don't see it on menus. "It's not part of the fine dining culinary landscape," says Fairbanks.

Production limits

In the last few decades, the demand for goatmeat has far outstripped the supply (Ekanem et al 2013).

DISTRIBUTION

The industry is still splintered in how it organizes itself and brings product to market. A significant percentage of sales are still conducted at the farm gate, where consumers can choose the animal and negotiate the price, either by head of animal, or by cut of meat. Lack of cooperative marketing practices and commitments among producers also affect consistent delivery of product to key markets (Mintel 2004).

Marketing animals at an auction or sale barn requires little effort in finding a buyer (USDA 2012). However, direct sales to consumers can be more profitable since there may be no transportation costs, middleman, or sales commission. About three of four meat goat operations (72.3%) had turned off either goats or kids during the previous 12 months. Of these operations, about two-thirds marketed the animals through an auction/sale barn. Similarly, about two-thirds of all goats or kids permanently removed from meat goat operations were marketed through an auction/sales barn. Disposal through an auction/sale barn was more common for meat goat operations (64.8 and 61.7% of operations, respectively) than dairy goat operations (45.3 and 34.5%, respectively). Similarly, a higher percentage of goats or kids on meat goat operations were marketed through an auction/sale barn (62.3 and 62.7%, respectively) than goats or kids on dairy goat operations (43.9 and 27.5%, respectively).

Unlike in the beef, pork or chicken markets, wholesale buyers rarely buy goats for meat. Instead, a quarter of all goat kids raised in the US are sold directly to consumers or to small markets. Finding

these consumers and arranging slaughters takes time and energy – often time and energy that small farmers just don't have (Dawson 2013).

IMPORTS

Requirement for importation

The two largest markets for Australian goatmeat exports are the US and Taiwan (DAFF in MLA 2013a). Demand in the US is generated mainly from the Hispanics, the largest minority group in the US.

Importing opportunities

Two thirds of all agricultural tariffs - including in important commodities such as lamb, sheepmeat and horticultural products, were eliminated immediately when the Australia-US Free Trade Agreement came into force in 2005 (DFAT 2014b).

Import regulations

Stricter import requirements (only EU has more strict requirements) than some other markets additional specific requirements include but are not limited to:

- US listing, establishment listing, and ATM listing audit required
- Loss of listing - On the recommendation of an ATM, the Field Operations Manager may suspend or revoke US listing if an establishment does not maintain US requirements. US listing will be revoked if an establishment is suspended from exporting to the US for a period of more than 28 days.
- To export to the USA, or store US-eligible product, independent coldstores must be listed for the USA. Coldstores listed for the USA must be audited a minimum of four times per year.
- For access of feral goatmeat and meat products, the goats must have undergone veterinary antemortem and postmortem inspection in an establishment listed for the USA
- In their HACCP plans, all establishments must address the issue of E. coli O157:H7 as a hazard and incorporate a critical control point (CCP) for its control. HACCP plans must be reassesd annually.
- All sanitation standard operating procedures as defined in the 'Approved arrangement guidelines' in ELMER 3 must be signed and dated by the QA manager and ATM.
- Animals slaughtered in Australian establishments must be derived from livestock which received ante-mortem and post-mortem veterinary inspections at the time of slaughter in plants certified for importation of their products into the United States
- Contamination - The USA has a zero tolerance (ZT) for faecal, ingesta, or milk contamination. Daily verification for the ZT CCP is mandatory, with all results recorded.

- Unique shipping marks are essential for all shipments of edible meat
- If carcases will be exported as carcases, or sent to a separate boning establishment, the carcases (including telescoped sheep and goat carcases) must be stamped with the AI official mark, either by hot brand or approved dye.
- Only US-eligible meat may be in the processing area while meat product is being prepared for export to the USA.
- Labelling - All processed meats must have a label approval from FSIS and include:
    - country of origin, preceded by the words ‘product of’
    - name of product
    - ingredient statement (if applicable)
    - safe handling statement (if applicable – see ‘Safe handling’ instructions label)
    - net weight (if applicable)
    - nutrition labelling (if applicable)
    - inspection legend ('AI' official mark) and establishment number
    - distributor’s name and address. Full address details are required if the company is not listed in the telephone directory, otherwise the company name, city, state and postcode are required.

Appendix 2: Summary of literature review - Caribbean

DATA ISSUES

Very little data was available for this market. Jamaica and Trinidad-Tobago were used as proxies for the market where data was available.

ECONOMIC

Income growth

	'00-09 (a)	2010	2011	2012	2013e	2014f	2015f	2016f
Argentina (b)	2.9	9.1	8.6	0.9	3	0	1.5	2.8
Belize	3.7	3.9	2.3	5.3	0.7	2.5	3.7	4.1
Bolivia	3.4	4.1	5.2	5.2	6.5	5.3	4.3	3.9
Brazil	2.9	7.5	2.7	0.9	2.3	1.5	2.7	3.1
Colombia	3.7	4	6.6	4.1	4.3	4.6	4.5	4.4
Costa Rica	3.8	5	4.4	5.1	3.5	3.7	4.3	4.6
Dominica	3.1	1	-0.3	-1.7	0.8	1.7	2.6	2.9
Dominican Republic	4.5	7.8	4.5	3.9	4.1	4	4.2	4.5
Ecuador (d)	3.8	3.5	7.8	5.1	4.5	4.3	4.2	5.1
El Salvador	1.7	1.4	2.2	1.9	1.7	2.1	2.6	2.8
Guatemala	3	2.9	4.2	3	3.7	3.4	3.5	3.6
Guyana	1	4.4	5.4	4.8	4.9	4.4	3.5	3.6
Honduras	3.7	3.7	3.8	3.9	2.6	3	3.5	4
Haiti	0.6	-5.4	5.6	2.8	4.3	3.6	3.2	3
Jamaica	0.7	-1.5	1.7	-0.5	0.2	1.1	1.3	1.7
Mexico	1.3	5.1	4	4	1.1	2.3	3.5	4
Nicaragua (b)	2.5	3.3	5.7	5	4.6	4.5	4.4	4.4
Panama	5.6	7.5	10.8	10.7	8	6.8	6.2	6.4
Peru (b)	4.6	8.5	6.5	6	5.8	4	5.6	6
Paraguay	2.2	13.1	4.3	-1.2	13.9	4.8	4.3	4
St. Lucia	2.2	0.4	1.3	0.5	-0.9	0.9	2.2	2.8
St. Vincent and the Grenadines	3.2	-2.8	0.1	2.3	2.1	1.7	2.8	3.9
Venezuela, RB	3.3	-1.5	4.2	5.6	1.3	0	1	1.9

Recently transitioned to high income countries (c)

Chile	3.3	5.8	5.9	5.6	4.2	3.3	4.5	5
Trinidad and Tobago	5.6	0.2	-1.6	1.5	1.5	2.3	2.8	3.4
Uruguay	2.1	8.9	6.5	3.9	4.2	3.1	3.4	4

Series: GDP at market prices (2005 $)
Data from database:GEP Summer
Last Updated:
Source: World Bank 2014

Income/price elasticity

While CARICOM (or the Caribbean Community, a organisation of 15 Caribbean countries and dependencies) countries have ready access to relatively cheap supplies of frozen mutton and chevon from extra-regional sources, most consumers in the region have a strong preference for fresh mutton and chevron produced from local flocks (Singh et al 2006). This, in part, is reflected by the much higher prices consumers are willing to pay for the latter. This distinction and preference provides the basis for the observed segmentation of the domestic market between locally produced fresh meats and frozen imports. Notwithstanding this segmentation, there is a trigger price at which imports begin to substitute for fresh. The level of this trigger price depends on the individual's income level as well as cultural background.

SOCIAL

Consumption trends

A significant share of the sheepmeat is directed to the service industry (tourism) while goatmeat is used to satisfy the exotic taste of the indigenous population (Singh et al 2006). Progressively, goatmeat is being introduced to the tourist sector in Jamaica and Trinidad and Tobago. The success of this programme will to some extent depend on how meats of sheep and goats are presented to these consumers and would extend beyond the forms currently consumed by the indigenous population.

Currently sheep and goat consumption is less preferred in some sections of the population because of the meat odour (Singh et al 2006). If this constraint is addressed, together with an appropriate pricing and marketing strategy, Singh et al (2006) are of the opinion that its acceptance will increase substantially. The acceptance of 'freshly slaughtered' meats has already been demonstrated in the case of broilers by indigenous consumers and Singh et al (2006) believe that such acceptance can be replicated in the small ruminant industry if accompanied by the appropriate price incentives. They also believe that Trinidad and Tobago and Jamaica would continue to be major consumption centres and thus production initiatives starting with these countries could become the nucleus of a regional sheep and goat industry. However Singh et al (2006) qualify this opinion by reiterating that expansion of the initiative should await the results of their competitiveness analysis as the current pricing structure that exists in the major exporting countries could have significant implications for industry development.

Ethnic, cultural and religious factors influence consumption patterns for goat and sheepmeat in the region (Singh et al 2006). Fresh goat and sheepmeat is consumed in the region throughout the

year with peaks associated with various celebrations and religious events such as Christmas, *Eid Ul Adha* and *Eid Ul Fitr*. In Jamaica, the consumption of goatmeat is widespread in the local community and the product is being readily introduced to the tourist trade as part of the local cuisine.

In spite of strong demand, much work needs to be done on product marketing, proper meat handling and product presentation. Conditions and facilities for slaughter needs to be improved; and by-product utilization and value added needs to be exploited. Only a small fraction of locally produced mutton and chevron is marketed through the established supermarkets; grades and standards need to be established to fully optimize returns; and products need to be promoted to extract value.

In Guadeloupe, goatmeat is consumed in two different ways depending upon the cultural origin of the consumer (Alexandre et al 2008). The Indian community have a very strong preference for skinned carcass (100% of those surveyed), however the Black community has a strong preference for dehaired (70% of those surveyed) (Alexandre et al 2008).

Regarding the reasons for consuming goatmeat (in Guadeloupe), 42% said that they had a taste preference towards goatmeat and 32% because of habits and customs (Alexandre et al 2008). Seventy precent of people surveyed bought only fresh meat and a lower percentage (21%) sometimes purchased frozen imported meat.

The Afro-Guadelopeans (AC group) stated that the skin and the fat underneath gives the meat a ‘stronger (“wilder”), more pungent taste which is highly rated in the AC group. Moreover, the presence of the skin acts as a sort of guarantee to the consumer that the meat is local since imported goat carcasses are usually skinned (Alexandre et al 2008).

SUPPLY

Production and requirement for importation

Expansion of sheep and goat supply on the market depends on how the industry is reorganized and developed to reduce dependency on imported products region-wide (Singh et al 2006). With the exception of Jamaica and Trinidad and Tobago, the rate of expansion through increased supplies will depend on the success of micro breeding initiatives currently in place and the introduction of appropriate production systems / models (both intensive and extensive).

With respect to the type of meat, the principal import into the region is mutton, accounting for 86% of imports on a value basis (Singh et al 2006). Goatmeat imports accounts for only 11% of the total with lamb imports being very small at 2%.

The consumption of sheepmeat (1.5kg/capita) in the region (CARICOM) is twice that of goat (0.6kg/capita) (Hosein et al 2013). Ethnic, cultural and religious factors greatly influence consumption patterns. The regional market for sheep and goatmeat can be characterised as being underdeveloped with supply and availability of quality meat being the main concerns. This has resulted in a high dependency on imports (up to 75% of consumption requirements) from countries such as New Zealand and Australia. Jamaica is the largest importer of small ruminant meat in the region, followed by Trinidad and Tobago.

In the case of goats, one semi-intensive goat production model in Jamaica showed some marginal competitiveness (Hosein et al 2013). All other countries in the study (Trinidad and Tobago, St Lucia and Jamaica) were uncompetitive. It was generally felt that competiveness is not only influenced by production technologies employed or breeds used but is more affected by management practices including herd health, housing, and quality of supplements. Most Caribbean countries with the exception of Guyana may find it difficult to compete with the imported small ruminant product on the basis of price alone.

Small ruminants have always played an important economic and nutritional role in Jamaican small farming systems, with goatmeat being the more popular (Thomas 2012 in Hoesin et al 2013).

Large quantities of chevon and mutton are being imported to satisfy local demand which exists primarily in the hospitality sector (Hosein et al 2013). Hence, increasing the production of these commodities continues to be among the top priorities of the Government of Jamaica's food security strategy. Currently, production from the sector accounts for only 15% of total mutton and chevon consumption locally while the remaining 85% is derived from imports, mainly from Australia, New Zealand and the United States of America. The most recent surveys have shown that between 2007 and 2011, the sheep population increased by 17%, while the goat population saw significant increases of up to 45% moving from a total of 482,345 in 2007 to approximately 700,000 in 2011. Despite these positive movements, however, Jamaica still imports over 4,600 MT of sheep and goatmeat in 2012 valued at over US$21 million (International Trade Centre 2013 in Hosein et al 2013), indicating that there is still a great void to be filled by local production.

Similar to sheep production, there is a significant demand/supply gap which could be exploited by goatmeat producers (Hosein et al 2013). Approximately 40% of the goats produced are slaughtered at the public abattoirs and the remaining at private facilities with the majority of the meat being retailed for local consumption. In addition to the meat, and similar to the market in Trinidad and Tobago, there is demand for 'fifth quarter' parts (offal). With regards to value added products, some leather products are manufactured.

In Jamaica, goats are utilised mainly for meat (Hosein et al 2010). However, there is tremendous scope for dairy goat production with consequent marketing of fresh milk, various cheeses and other value added products such as goat milk body lotions and soaps.

Best agricultural practices are required to improve production efficiencies and to this end capacity building initiatives have been implemented including training in all aspects of goat production, value added production and group dynamics. In addition, a goat-rearing pilot project implemented by FAO, the EU and the Jamaica Goat Farmers Association concluded in 2011 and sought to demonstrate best practices in goat rearing through the establishment of a goat house and storage area on a private farm (Gayle 2012).

DISTRIBUTION

Even though CARICOM countries, including Trinidad and Tobago, cannot compete with the imported product in terms of price, producers have no difficulty selling their products on the local market because of the freshness and flavour attributes of local small ruminant meat (Hosein et al 2013). In Trinidad and Tobago in particular there is a strong preference throughout the year for

locally produced fresh mutton and goatmeat over imports with demand peaking at cultural and religious festivals and celebrations. Additional revenue is also made with the marketing of 'fifth quarter' parts such as the head, liver, feet and intestines. The majority of the fresh meat is marketed at roadside stalls, which are becoming increasing prevalent and there is a very low presence of local meat on supermarket shelves.

Due to the diversity of production systems and breed characteristics, there was variability in carcass quality reaching the supermarkets (Hosein et al 2013). Also, supermarkets have expressed the view that purchasing agreements with local farmers are often difficult to maintain primarily due to consistency and reliability of supply.

Food safety

The region's consumers of meats of sheep and goats should be afforded high levels of quality assurance and food safety (Singh et al 2006). As an importing region, there is not yet the capacity to ascertain the post-arrival condition under which the products are produced and handled. This scenario thus calls for development of appropriate protocols for protection at the point of entry.

IMPORTS

Import regulations

Easier import requirements compared to some other markets often with no known specific requirements that differ from relevant Australian standards some exceptions may include but are not limited to:

- For sheepmeat, meat products and edible offal, require use of E171 with endorsement 3090. (*Additional endorsement 3090* I certify that Australia is free from Foot-and-Mouth Disease, Rinderpest and Scrapie.)

Appendix 3: Summary of literature review - China

DATA ISSUES

Projecting the future food production of China, and domestic consumption and trade in food products requires reliable data and soundly based forecasting. While the sound forecasting approaches abound, the necessary data of acceptable quality are generally not available (Cao et al 2013).

It is difficult to accurately estimate or predict consumption of red meats (beef, lamb, mutton and goatmeat) as these are not traditionally consumed foods and are mostly eaten away from home. China State Statistical Bureau collects consumption data at a household level and therefore consumption of red meats at restaurants is not recorded. This means the SSB data *underestimate* food consumption in China, particularly for foods of animal origin (Cao et al 2013).

Furthermore, goatmeat is not currently a widely eaten meat in China and therefore consumption is not generally reported. The fragmented nature of production and marketing systems in industries in China such as the sheepmeat and goatmeat industry make the collation and interpretation of aggregate statistics extremely problematic (Waldren et al 2004).

No distinction is made in the official statistics between sheepmeat and goatmeat, both of which are called “yangrou” (Waldron et al 2004).

Production data

Fuller et al (1999) question the validity of underlying data about China’s livestock sector and determining how much they can produce themselves.

Animal inventory statistics are also suspected to contain a significant degree of error (Fuller et al 1999), mainly due to faulty accounting practices.

Errors in China’s agricultural data may skew agricultural trade polices (Fuller et al 1999).

Chinese national statistics are largely seen as ‘indicative’, China over-reports meat production data and meat consumption data is under-reported given that household surveys only address consumption at home (reference 18 in Sharma 2014).

Consumption data

Away-from-home consumption of beef is not included in the data. It is more than likely that the actual consumption of beef is much higher than what the data demonstrates (Zhou et al 2012).

Often contradictory information is reported on many aspects of the fresh and packaged food supply chain and consumer trends in China (ANZ 2013).

General observations

While there is no shortage of sound forecasting approaches, data of acceptable quality is generally not available (Zhou et al 2012).

Interpreting projections of China's future food supply must be done with caution (Zhou et al 2012). Any projections require reliable data and information as inputs. The quality of data and information from China is often a concern. This is partly related to possible inflation or deflation in statistics reporting. It is also partly related to the fast changes in the economy which often lead to changes in statistical indicators. When changes are made to indicators, their definition and scope of coverage could all differ from existing ones, making data incomparable and reducing the usefulness of a time series.

Data unreliability may have also been related to the fact that little attention has been paid to some key parameters such as government food buffer stock levels (Zhou et al 2012). Of most concern regarding forecasting accuracy are the abrupt changes in policy made possible by China's centralised government. The timing and the scale of the changes are generally hard to predict and incorporate into forecast models. Hence, caution should be always exercised when interpreting any forecasts on China's food supply. Generally, the forecasts for immediate coming years will have some accuracy but the accuracy declines rapidly for those beyond four or five years, although they may still provide useful information about likely directions of change.

ECONOMIC

Income growth

Rapid economic growth in the postreform era has increased the disparity in incomes between China's rich and poor (Fuller et al 1999).

To 2050, the proportion of urban high income bracket is expected to stay the same, but the urban middle class will grow dramatically, taking over as dominant group from rural (Hamshere et al 2014). There will be slowing growth in GDP but in real terms will more than quadruple between 2012 and 2050.

Urbanisation has been underpinned by the rapid growth in the world economy and in the proportion of gross world product and of workers in industrial and service enterprises. Globally, agriculture has met the demands from this rapidly growing urban population, including food that is more energy, land, water, and greenhouse gas emission-intensive. However hundreds of millions of urban dwellers suffer under-nutrition. Therefore the key issues with regards to agriculture and urbanisation are whether the growing and changing demands for agricultural products from growing urban populations can be sustained while at the same time underpinning agricultural prosperity and reducing rural and urban poverty (Satterthwaite et al 2010).

Income/price elasticity

Evidence of a substantial segment of low-income urban residents experienced a decline in both nominal and real incomes in recent years (Funing Zhong in Fuller et al 1999). Thus consumption of

livestock products may have slowed in response to weak income growth among consumers with high income elasticities for meat.

With respect to income increase, pig meat consumption is inelastic (0.151 meaning consumption remains stable even when incomes rise), mutton and goatmeat, and poultry meat are close to unity (0.882 and 1.057 respectively); therefore consumption rises at almost the same rate as income rises), but beef consumption is elastic (1.56) over the long term 1964 to 2008 (Masuda and Goldsmith 2010).

As per capita pork consumption in China is about 5kg greater than in US, Fuller et al (1999) argue that Chinese pork consumption might be reaching saturation level. Alternatively, enormous increase in per capita pork consumption seen in the past several years implies a large expenditure elasticity.

As China integrates with the world economy, some food prices in China could rise while others fall (Hsu, Chern and Gale 2002). Price elasticities of demand indicate that China's consumers are sensitive to food prices, suggesting that realignments of prices could have important effects on food demand. Urban consumers are especially sensitive to prices of pork, poultry, and eggs. Effects of changing prices could offset or reinforce effects of income growth. If, for example, meat prices were to rise after China's World Trade Organization accession, the price effect might slow the growth in meat demand stimulated by rising income.

The consumption elasticities presented by Liu et al (2009) show that as income increases, the consumption of aquatic products, beef, and mutton will increase more than pork and poultry, indicating that with more income, meat consumption in both urban and rural China would become more diversified. This trend may stimulate the creation of a large non-traditional meat market, such as beef and mutton, as indicated by their high expenditure elasticities (mutton: 1.38 for average, 1.42 for urban and 1.18 for rural; beef: 1.34 for average, 1.45 for urban and 1.15 for rural).

The own-price elasticity of mutton (-1.89) is the highest, indicating that the consumption of mutton is greatly influenced by change in price (Liu et al 2009). This is especially true in rural China (-3.19), indicating that demand is very sensitive to the price changes.

SOCIAL

Consumption trends

Per capita private consumption increased at an average annual rate of 6.8% from 1989-1999 (Fuller et al 1999). Trade liberalization may further increase consumption of red meat products.

Associated with changes in the economy are changes in food expenditure (Conforte et al 2013) such as growing preferences towards:

1. High-value, quality foods – spending more on better cuts of meat.
2. Food safety – 90% of consumers are worried about food safety, but it is difficult to implement food safety systems at the farm level.

3. Environmental awareness and the emergence of green food – however, majority of Chinese consumers are not yet willing to pay a premium for green products or are willing to shoulder the cost for certified traceable food.

4. Convenience – Chinese consumers are interested in more convenience foods.

5. Eating out – consumers are spending more money eating out, when eating out they were more likely to spend money on meat, in particular sheepmeat followed closely by beef – may reflect willingness to try different things when they eat out, and the unfamiliarity of preparing dishes with beef or sheepmeat at home (same may apply to goatmeat).

Between 1980 and 2009, total food consumption measures in calories, increased by 40%. Total protein intake increased by 73%. The contribution of cereals to the total calorie intake declined from 66% to 48% in the same period. Consumption of meat increased from 5.9% to 14% (Hamshere et al 2014).

High value products

The affluent urban households will comprise incomes that have reached a level such that overall consumption intake has stabilized (ANZ 2013). This group spends up to five times more on products, such as dairy, seafood and meat compared to those in the lowest income brackets. Much of the spending reflects higher per unit spending in the search for quality due to food safety concerns, but there is an increasing presence of processed and packaged products in shopping baskets (ANZ 2013).

Wealthier consumers prefer a diet rich in protein and vitamins but low in carbohydrates (ANZ 2013). They also tend to purchase more expensive cuts, branded or package products and more costly products.

While consumption of most commodities is projected to rise, the largest increases are for high value products such as beef, dairy, sheep and goatmeat, and sugar (Hamshere et al 2014). Urban consumers generally account for most of the growth in high valued products over the projection period; for this group, consumption of sheep and goatmeat is expected to grow by 162%. Within urban populations, most growth is in the high income bracket, reflecting the higher assumed income growth for the urban high-income group (Hamshere et al 2014).

However, ANZ observes that total food consumption in the wealthiest 20% of all households has now stabilised and will not increase further with a rise in income (ANZ 2013).

General trends

Consumption of food in restaurants has also increased in China as incomes have risen and as the population has become more urbanized (Hamshere et al 2014). Expenditure on food consumed outside the home by urban consumers increased from 15% of total food expenditure in 2000 to 22% in 2009 (Zhou et al 2012). Consequently, the consumption of some foods, such as meat, has risen because it forms a larger component of restaurant meals than of meals consumed at home.

Given that most Chinese consumers are not familiar with the cooking methods of some non-traditional meat items (e.g. beef and mutton), they may prefer to consume them at restaurants (Liu et al 2009). Other factors, such as urbanisation, preference, changing lifestyles and health concerns need to be considered when examining consumer behaviour and at-home meat consumption patterns in China. For example, this study finds that consumers' changing preferences provide more opportunities for some segments of meat markets, such as beef and mutton, with the aid of some new cooking methods (Liu et al 2009).

However, as in the case of beef, a significant amount of mutton consumption takes place away from home. The quantity consumed of mutton as reported by Zhou et al (2012) would be much higher if away-from-home consumption could be adequately included.

For all income groups, the rise in total consumption of beef, sheep and goatmeat, and in sugar in 2050 is principally the result of an increase in the quantity demanded rather than a significant rise in the real price (Hamshere et al 2014).

The convergence in food tastes and preferences between people in different parts of China in the past decade has been slow. Nonetheless, such convergence is expected to accelerate in the years to come due to the following three major reasons as outlined by Zhou et al (2012):

- The improved availability of chilled transportation facilities, where some foods (such as aquatic products, beef and mutton, dairy products) will become more widely available across the country. Improved home refrigeration facilities will also enable and encourage people to buy such foods.

- Travelling between different parts of the country has become much easier, enabling regional cuisines to be enjoyed across China.

- A large number of workers, mainly from rural areas, seek employment in other provinces and are exposed to, and influenced by, different foods which could affect the foods that are consumed in their own homes.

Meat consumption is expected to increase strongly as income levels increase further (Zhou et al 2012). How China is going to supply more animal products to its consumers is not yet clear. There are three major options available for the Chinese government: (1) produce more at home; (2) import live animals; and (3) import animal products. For pork, if China wants to produce more at home, then more maize imports will be needed. Alternatively, it is most likely that China will increase its poultry meat imports.

The concept of trading higher prices for convenience will take time to be accepted by Chinese consumers (Food Export Association of the Midwest USA 2014a).

High-end restaurants and hotels are less constrained by price considerations and more interested in presenting dishes and products that are unique. If successful, their efforts are likely to be copied by other restaurants, bringing them closer to mainstream middle-class consumers. Another important trend is the recent emergence of medium to high-end restaurant chains. Like other high-end restaurants, these are interested in offering consumers something different and unique, but unlike them, if a product is successful, they can purchase directly and in bulk, reducing cost

considerably. This development holds a great deal of promise, as Chinese consumers view restaurant chains as a guarantee of quality in a largely unregulated industry. Though still in its infancy, this trend may become an important factor for imports (Food Export Association of the Midwest USA 2014a).

There is debate about whether the disparities between urban and rural consumption and the singular focus on meat production will lead to redistribution and nutritional balance or simply more meat consumption (Sharma 2014).

Urbanisation

Another driver of the changes in food consumption is the proportion of the population living in urban areas in China, which has increased markedly in the past few decades (Hamshere et al 2014). In 1990 just over 25% of China's population lived in urban areas; in 2011 it had increased to 50%; and it is projected to increase to more than 75% by 2050. Urban dwellers have higher incomes and different dietary and shopping patterns from rural dwellers. Per person consumption of meats, eggs, dairy products and fruits is much higher in urban areas than in rural areas, while consumption of food grains is lower.

While many workers from rural areas migrate permanently to the cities, others work in the cities for a number of years before returning home. Permanent migration has been discouraged by the Hukou system, also known as the house registry system, that requires people to register at their place of residence and allows the provision of health, education and social welfare services only in the place they are registered (Mullan, Grosjean and Kontoleon 2008 in Hamshere et al 2014).

SUPPLY

Domestic production

Livestock production tends to be over-reported due to a number of reasons including human error, as well as the inflation of production figures by regional leaders to further their own interests (Fuller et al 1999).

Domestic production exploded in the 1990s with annual growth in production of livestock products averaging 13.5% from 1991 to 1996 (Fuller et al 1999). Household sales of livestock products increased an average of 3.6% in the same period, which included a 0.9% annual increase in the number of rural households.

Another product whose production may affect China's red meat supply is wool (Zhou et al 2012). Changes in wool production will not directly affect grain supply as the competition from wool for arable land is not that strong. However, the supply of mutton/lamb may be affected. In the past few decades the wool price was relatively low and the relative price of mutton and lamb has become more attractive. Many producers have moved away from wool production to raise sheep for meat or for both wool and meats. This has led to an increase in mutton output in the past few years. It is likely this trend will continue unless the wool price significantly improves relative to prices for mutton and lamb. This of course will encourage more Chinese wool growers to shift to produce meat, increasing China's supply of mutton and lamb. Regardless of which scenario occurs, the

potential effect on China's total sheepmeat supply is likely to be small and China will still need to import lamb and mutton to meet rising demand.

Small increases in beef and sheepmeat production are possible (Zhou et al 2012). The production of these meats will not directly compete for limited arable land as such. In agricultural areas they eat crop residuals with little reliance on high valued grains. Their production in agricultural areas has now become more important than that in pastoral areas. If the western and north-western provinces are considered as pastoral regions (including Tibet, Qinghai, Xinjiang, Gansu, Shaanxi, Ningxia and Inner Mongolia), these regions together only produce about 20% of China's total beef and 45% of China's total lamb production. Cattle and sheep farming are also intensifying. The impact of increased production of cattle and sheep in both agricultural and pastoral areas on the environment is a cause for concern.

Production trends

Growing trend of large-scale livestock farms and sophisticated agribusinesses. More slaughtering is being mechanized instead of by hand and is estimated to be 70% by 2020 (ANZ 2013).

State owned enterprises no longer monopolise wholesale sector of the supply chain. There is now diverse ownership structure of the manufacturing industry and competition. Low entry barriers have enabled a large number of private participants with relatively small amounts of capital to enter. The popularity of private small-sized manufacturers in the industry is likely to further constrain development (ANZ 2013).

Most manufactured food is produced and consumed in coastal areas due to urbanization and higher consumer purchasing power in these regions (ANZ 2013).

China is projected to produce significantly more livestock products in 2050. The real value of beef production, for example, is projected to rise between 2009 and 2050 by 171%, and sheep and goatmeat by 30%. Dairy production is projected to rise by 70% (Hamshere et al 2014).

To enhance China's agricultural development, the Chinese Government has implemented a suite of policies relating to agricultural production, the sale of resulting produce and foreign investment in agriculture (DFAT 2012). These include policies to improve domestic agricultural production capacity;

- A strict arable land protection system to ensure the arable land area for agriculture is not less than 120 million hectares, and strengthening the arable land protection accountability system.
- Developing a range of policies and measures on increasing agricultural research and development (R&D) input, encouraging innovations in improved varieties and agricultural production technologies and strengthening the promotion of agricultural technology to continuously improve the contribution rate of scientific and technological progress in agriculture.

- Policies on increasing investment in agricultural and rural infrastructure to gradually improve agricultural production conditions through better infrastructure such as irrigation and water conservation, power supply and roads.

- Advancing the transferability of agricultural land and increased scale of production, developing specialised production organisations, and boosting large-scale production, standardisation, and modernisation of agricultural production.

- Encouraging sustainable agricultural resource utilisation and environmental protection, and developing a series of policies and measures on the rational utilisation and effective protection of agricultural resources, agricultural energy saving and emission reductions.

Developing livestock industries within China is a major strategic decision to 'modernise agriculture' (IGA 2014).

Self-sufficiency

China is largest consumer of food in the world and also one of the largest producers; is self-sufficient in a number of basic strategic crops and food sources (ANZ 2013).

Its ability to meet its food needs has exceeded most analysts' expectations and was probably producing well below its potential prior to reform. However, productivity has slowed sharply in recent years (ANZ 2013).

Nearly all produce is bought and sold at market prices but collective land ownership, ambiguous water rights and weak legal and financial systems confound market-driven adjustments, farm consolidations, and agricultural investments. The lack of well-functioning market-supporting institutions, means Chinese economic policy makers shift towards a range of market interventions to resolve market failures (ANZ 2013).

China is likely to maintain self-sufficiency in horticultural production due to availability of labour and reduced requirement for capital and resources (ANZ 2013).

Self-sufficiency in livestock and grain production will be more difficult as these sectors are usually more land-intensive and not produced as efficiently in China relative to other more land and water abundant countries (ANZ 2013).

Production limits

Increasingly intransigent environmental, health and food safety problems associated with the livestock industry are beginning to make some Chinese experts, government authorities and consumers question the current approach to meat production and consumption (Sharma 2014). The debate so far has focused on whether to import feed or meat. Some are also beginning to question if the market has already reached peak meat consumption levels.

Simpson (1997) in Fuller et al (1999) expected an increase in exports or stocks, as supply outstripped consumption but this did not happen. The available data implied that disappearance is at least twice as large as surveyed consumption for meats and eggs. This could be due to inability to account for changes in meat stocks, but given the scarcity of refrigerated storage facilities,

particularly in China's rural areas, it is unrealistic to assume that increases in stock holdings could account for the growing difference between the two data sets. Another explanation is that more people eat away from home or that migrant workers from rural areas that live in urban areas, consume more meat yet are not covered in regular consumption surveys. Carcass to retail conversion factors may also not be an accurate reflection of the cutting practices in China but this would counter the trend of improved production practices observed in China (Simpson 1997 in Fuller et al 1999).

There are signs that China's demand for feed grains has reached a turning point as a tightening labour supply and rising feed costs force significant structural change in China's livestock sector (Hansen and Gale 2014). Over the last 5 years, economic growth has absorbed surplus rural labour and rural wages began rising 15 to 20% annually. Labour scarcity, animal disease pressures, and rising living standards are prompting rural households to abandon "backyard" livestock production. More recently, livestock production has increasingly become a specialized farm enterprise, with farmers focusing on maximizing growth of animals, and substituting commercial feed for wastes and forages gathered from the countryside.

Livestock production growth was particularly strong during the decade post 1986, but slowed as the market matured and meat consumption levels reached higher levels (OCED-FAO 2013).

China has limited arable land area for production and urbanization due to massive exodus of rural labour into cities is reducing labour pool and increasing labour costs in agriculture (Sharma 2014; Hamshere et al 2014). These factors are creating real limits on China's ability to expand meat production and raise critical questions about the ecological and social tradeoffs involved (Sharma 2014).

Grasslands and pastures are scarce and often degraded, limiting the supply of beef, sheep, and dairy cattle (Hansen and Gale 2014).

Emigration out of rural communities, encouraged by higher wages in urban communities, particularly for more highly educated and younger labourers, has left a higher age labour force in rural China (OCED-FAO 2013). Policies surrounding land tenure may also limit the incentives for younger producers to remain in rural areas and invest in productivity enhancing technologies. Effectively, this situation will continue to deprive the sector of the modern, skilled workforce which it needs for more complex and larger scale farming operations, including using modern machinery and equipment, diagnosing diseases and pests, employing investment and marketing tools, and managing effectively complex operating units. The net result will limit productivity in the future, curb supply potential, and limit farm sector competitiveness.

Protection

China's agricultural sector is heavily protected (Hamshere et al 2014). The high level of support for the agricultural sector in China has significantly lowered the cost of production faced by producers and has, as a result, led to much higher agricultural production than would have occurred without the support.

China's agricultural and food sectors are developing quickly, becoming not only more modern but also more reliant on international trade (Hamshere et al 2014). Over the next forty years it is likely

that the degree of market support received by agricultural producers, as well as the government transfers benefitting consumers, will be reduced as income growth continues. Exactly what areas of support might be changed and who those changes would affect remains uncertain at this stage.

Market access is improving, but the government controls the import channels, both by direct and indirect trade measures, making it difficult for exporters to plan production – or even export strategies - around Chinese demand (Claxton 2013). The government flexes the import volumes as an important safety valve for controlling prices in China.

The Chinese Government has implemented a suite of policies relating to agricultural production, the sale of resulting produce and foreign investment in agriculture (DFAT 2012), including policies aiming to build a good market environment. These include:

- Reform of the agricultural product distribution system aimed at marketisation has been generally successful, and the prices for most agricultural products are generally determined by the market.

- China strictly complies with its World Trade Organization (WTO) commitments. In accordance with its Protocol of Accession to the WTO, China's tariff level has dropped significantly. China is committed to advancing fair and free trade in agricultural products, and is actively taking part in international agricultural cooperation.

Following entry into the World Trade Organization, China has reduced its overall average tariff for agricultural products from 21.2% to 15.3% (AUSTRADE 2014a). The China-Australia Free Trade Agreement includes the phasing out of tariffs on sheepmeat (including goatmeat) of 12 to 23% over eight years (DFAT 2014a).

DISTRIBUTION

Wet markets

Produce is typically purchased directly from farmers, often just after harvest and on the roadside, by hundreds of thousands of private traders; in this way farmers save time and transportation costs and cash payments are assured. Traders then sell their load to larger traders or to wholesale markets, where stocks are further aggregated (ANZ 2013).

Wet markets are still very important for fresh produce but are losing market share to organized retail (supermarkets etc). More consumers are concerned about hygiene and food safety, changing consumption patterns to more packaged and processed foods and tax structures making it more difficult to operate wet markets (ANZ 2013).

Cold storage/cold chain

In 2010, the food distribution system in China was developing but still had serious weaknesses (Conforte et al 2013). China lost $9.25 billion of food products during transportation according to an estimate in 2008; 90% of the meat products were shipped without cold chain facilities. Ownership of product changes hands many times before it reaches final client.

Distribution is affected by lack of cold storage once imported product leave ports (ANZ 2013).

Improved availability of chilled transportation facilities, where some foods (such as aquatic products, beef and mutton, and dairy products) will become more widely available across the country is expected to accelerate in years to come (Cao et al 2013). Improved home refrigeration facilities will also enable people to utilize these foods.

Retail

The best distribution channels to access these consumers are through hypermarkets, specialty supermarkets, online, high-end hotels and restaurants, and fast-food restaurants (ANZ 2013). Direct access is traditionally difficult to achieve, although a clearly visible focus from the Chinese on supply-chain control and/or significant influence will create tremendous opportunity for progressive producers and processors in high quality productive origin countries such as Australia (ANZ 2013).

Hypermarkets are also the major sales venue for imported food products, due to international retailer‘s familiarity with imported products and better management and organization skills. Most are experienced in promoting new products, and Shanghai flagship stores like Carrefour‘s Gubei store or Lotus “Superbrand” Mall store in the Pudong area have it down to a science. Despite this, imports rarely constitute more than 5% of total stock keeping units even in high profile stores. Nevertheless hypermarkets are the single best retail venue for imported products (Food Export Association of the Midwest USA 2014a).

Supermarkets and hypermarkets, which have an increasing presence in urban food retailing in China, are playing an important role in meeting the demand for high-value products by urban consumers (Hamshere et al 2012).

Modern and efficient food marketing chains with established quality and safety regimes have become increasingly prevalent in response to consumers’ changing demands (OECD-FAO 2013). Supermarkets account for an increasing proportion of food retailing in China and this is expected to continue as the urban centres expand (Hamshere et al 2014).

Most imported products have their greatest success in the specialty stores and hypermarkets (Conforte et al 2013).

Dining out is more popular across China, mostly in big cities and foodservice is a key player in introducing imported foods (ANZ 2013).

Food safety

Traditional production and processing of domestic food products is extremely flexible and low cost, but these efficiencies come at the expense of providing strong incentives for producers, traders, manufacturers and others in the supply chain to achieve quality or safety (ANZ 2013).

Benefits to farmers of providing food safety assurances are limited because their products are aggregated with others. Government regulation limited and not successful yet (ANZ).

China perceives Australia as a clean, safe and reliable food producer in close geographical proximity (ANZ 2013).

Modern and efficient food marketing chains with established quality and safety regimes have become increasingly prevalent in response to consumers' changing demands (OECD-FAO 2013).

Demand for safe foods of high quality is increasing. Foods of dubious quality have to a small extent negatively affected consumer demand for those foods. Chinese consumers, particularly the wealthy, are demanding foods of superior quality. Some of them consume mainly imported foods due to concerns over safety of foods produced in China (Zhou et al 2012).

According to Wang et al (2014), quality certification was the most important characteristic for consumers of pork, followed by appearance, and traceability information. In addition, "government certification", "fresh-looking", and "traceability information covering farming, slaughter, and processing, and circulation and marketing" were the most preferred levels of quality certification, appearance, and traceability information, respectively.

Despite a promising outlook for the feed industry in China, Business Monitor International believe the sector will remain vulnerable to quality issues (BMI 2014a). Animal diseases remain a salient threat to China's livestock industry, especially as the hygiene and animal health standards fail to keep pace with the rapid expansion of animal husbandry. BMI further believe that continued food scandals - such as the recent New Hope Liuhe and Yum! Brands scandal regarding high levels of antibiotics in chicken meat - ensure that quality controls will continue to be a major concern for the animal feed industry as it goes through an overhaul in the coming years alongside the livestock industry.

Overall, exports to China are likely to remain volatile as the country is liable to impose swift trade restrictions to protect its domestic industry if there is a disease outbreak, or doubts about the meat quality (such as use of growth hormones). As a result, it will be vital for Australia and New Zealand to maintain the state-of-the-art quality and safety standards in order to maintain their reputation as high-quality suppliers (BMI 2014a).

In response to rising inflation and food safety concerns, more mainstream Chinese people are cutting back on eating out and are now cooking more at home. Consumers of imported food are generally expatriates and high and upper–middle income locals. They are least affected by inflation and pay great attention to food safety. Consumption of western style products continues to grow as they generally are regarded as good quality, nutritious and safe (Food Export Association of the Midwest USA 2014a).

IMPORTS

Requirement for importation

China will continue to import more beef and mutton as arable land is not plentiful and is diverted to other crops, however there is scope to improve the productivity of pastoral areas through improved production systems and genetics.

China will continue to produce nearly all of its own meat; however, imports of beef have grown sharply since 2010 and are expected to rise to over 750,000 million tonnes by 2023/24 (Hansen and Gale 2014). Despite this increase, imports will account for only 3% of China's meat consumption by the end of the decade.

While it is projected that the majority of China's future food demand will be met by domestic production there are many challenges to improving productivity growth, including increasing input costs and depleted or deteriorated natural resources used in agricultural production (Hamshere et al 2014).

China's production of most agrifood commodities is projected to increase but at a lower rate than consumption. As a result, food imports will be an increasingly important component of China's food supply toward 2050 (Hamshere et al 2014).

The real value of China's sheep and goatmeat imports is projected to increase significantly between 2009 and 2050 to US$2.0 billion (in 2009 US dollars), albeit from a low base. The import share of total Chinese sheep and goatmeat consumption will increase from around 2% in 2009 to 26% in 2050. In quantity terms, China's sheep and goatmeat imports are projected to rise from 50 000 tonnes to about 1.3 million tonnes (Hamshere et al 2014).

China's agricultural and food sectors are developing quickly, becoming not only more modern but also more reliant on international trade. Over the next forty years it is likely that the degree of market support received by agricultural producers, as well as the government transfers benefitting consumers, will be reduced as income growth continues. Exactly what areas of support might be changed and who those changes would affect remains uncertain at this stage (Hamshere et al 2014).

When domestic support is removed by 2050, production and consumption are projected to increase but less than in the reference scenario. In contrast, the commodities whose imports are higher than in the reference scenario include beef, sheep and goatmeat, dairy and vegetables. Significant opportunities for exporters of these commodities would therefore arise as support is lowered (Hamshere et al 2014).

Imports of beef and mutton/lamb are expected to increase to meet the demands of high-end hospitality industries, foreigners (expatriates and tourists), and wealthy local consumers (Cao et al 2013), however the quantity will be small (Zhou et al 2012). Import volumes of mutton and goatmeat are estimated to be around 0.3 million tonnes by 2020 (Zhou et al 2012; Cao et al 2013) but mainly for high-value product for restaurant and food service.

Business Monitoring International see the production deficit in all livestock segments growing in the coming years as a result of China's growing appetite for meat. China's imports are therefore likely to increase, especially pork and beef. Pork will remain the most consumed meat in China, and the country's output is unlikely to keep up with demand. Regarding the beef sector, BMI see potential for strong growth in cattle imports, as the country has only limited capacity for domestically bred cattle owing to the bans on grassland grazing in northern regions (BMI 2014a).

Importing opportunities

In 2013, exports of goatmeat to China reached 4,736 tonnes swt (Source: MLA in http://www.beefcentral.com/p/news/article/4158#sthash.3IhmQHz2.dpuf).

Australia is well placed to supply China with mutton and goatmeat because of increasing concerns about food safety and quality in affluent consumers likely to purchase lamb, mutton and goatmeat.

Opportunities exist for progressive primary and secondary production/processing entities to explore means of co-operation on an individual and collective basis, particular beyond traditional trading relationships (ANZ 2013).

Private food labels only have one percent share of the market within all fast moving consumer goods, but their role is expected to grown because consumers believe that branded products are superior (Conforte et al 2013).

Australia is better positioned than most to benefit from China's needs for increased food imports, due to the strong complementarities in the trade of agricultural products between Australia and China, as described by Zhou *et al.* (2007) in Zhou et al (2012). Australia's reputation for producing good quality products is advantageous to increasing its food exports to China.

Australian products, because of their higher quality or scarcity in China, do not compete with locally produced low-cost products. The imports of high quality beef and mutton/lamb are expected to increase to meet the demands of high-end hospitality industries, foreigners (expatriates and tourists) and rich local consumers (Zhou et al 2012).

Looking ahead, Business Monitor International believe Australia is one of the best placed countries to benefit from China's rising beef imports (BMI 2014a). Indeed, it is already enjoying the status of being the largest beef exporter to China, accounting for over 40% of Chinese beef imports by value. Not only is Australia closer geographically, and enjoys lower freight rates, but it is well placed to supply a variety of beef products to meet different segments in China's market, including the growing high-end market. The probable signing of a Free Trade Agreement between China and Australia is likely to reduce beef trade tariffs, improving the competitiveness of Australian products. So far, only New Zealand has an FTA with China, which lowered the import duties on New Zealand beef to 4%, compared to 12% paid by other suppliers.

Consumer oriented foods with the highest potential in the Chinese market include nuts and dried fruit (prunes, raisins) seafood, poultry meat, red meat (U.S. beef and related products are currently not permitted entry into China) frozen vegetables, especially sweet corn, baby food, dairy products (cheese and butter), baking ingredients and bread bases, cereals, frozen potato products, fresh fruit (oranges, apples) and premium ice cream. Products not present in significant quantities which have good sales potential include fresh fruit (cherries, pears), processed dried fruit (blueberries, cranberries), Mexican and Indian food, ready to cook and ready to eat foods, natural and organic foods (niche market) and functional foods (Food Export Association of the Midwest USA 2014a).

The focus for Australian exporters should not necessarily be on wealthiest households but accessing the growing number of affluent urban households (ANZ 2013). This is where per unit expenditure and consumption levels of Australia's main exports are highest. Assisted by recognition by Chinese consumers of Australia's produce being high quality and being from a reliably safe source (ANZ 2013).

Interviews with HRI food service professionals repeatedly confirm that US food exporters should select top quality products for export to China. US foods benefit from expectations of high quality, attractive appearance, convenient package and food safety. On the other hand, it is difficult for most US food products to compete with Chinese domestic products on price, particularly for those

foods in demand by the HRI market. Instead, suppliers should consider targeting niche as well as regional markets with top-quality products that are unique, healthy, and nutritious (Food Export Association of the Midwest USA 2014a).

Food Export Association of the Midwest USA reports that a combination of product uniqueness, comparative price advantage, thriving degree of sub food sector, and marketing efforts are the most decisive ones and would largely determine if a product would have a good prospect in China. Based on those assumptions, almonds, walnuts (including black variety), and meats (pork) and by products, poultry and by products, surimi and seafood wastes, starch, fruits and wheat flour fit into the matrix (Food Export Association of the Midwest USA 2014a).

Importing challenges – general

Understanding supply chains and distribution channels will be most important for Australian exporters, as well as recognizing the length of time it can take to establish workable trading arrangements between parties.

Australia will need to identify markets within China that offer facets that are complimentary to the basket of goods we can provide, such as refrigeration and distribution functionality (ANZ 2013).

China is Australia's largest agricultural export destination accounting for 17.1% of exports in 2011 (ANZ 2013). The largest export products are wool and skins, and horticultural products; meat is the smallest export.

Understanding the supply chain is more important than ever to accurately target the right market and end-consumer (ANZ 2013).

Each industry needs to target specific food categories and the corresponding consumer channel that offers the highest margins and the least risk. This can be challenging at times (ANZ 2013).

Understanding how to access the best distribution channels to consumers is changing and China still has a highly fragmented distribution system (ANZ 2013).

China is attracting a growing level of interest from other countries, and has signed or is negotiating bilateral trade pacts with many of its neighbours. Third country competition comes in two distinct areas: commodity-type products such as frozen meat, poultry, seafood and fresh fruit, and western-style niche products such as canned and prepared foods and ethnic cuisines and ingredients. Competition in the fresh and frozen meat, fruit and vegetables arena, as well as dairy, comes primarily from Pacific Rim neighbours, including Thailand, New Zealand, Australia, Canada and Chile, as well as South Africa and Brazil (Food Export Association of the Midwest USA 2014a).

China is becoming a key market for global exporters, originally for offal, but increasingly for high quality muscle cuts at globally competitive prices (Claxton 2013). Although still at well under 5% of Chinese consumption, imports have grown fast – but erratically. Market access is improving, but the government controls the import channels, both by direct and indirect trade measures, making it difficult for exporters to plan production – or even export strategy - around Chinese demand. The government flexes the import volumes as an important safety valve for controlling prices in China.

Importing challenges - cultural

China is a multiplicity of markets. Some differences in the Chinese market compared to Western export destinations include as per ANZ (2013):

1. Vast scale and pressure this places on distribution channels.
2. Multi-layered bureaucracy and fast-changing regulation causes complexity and business uncertainty, especially for food safety standards.
3. Fragmented cool chain outside tier one cities that still supports 'wet markets' as major means of trade.
4. Cultural aspects affecting consumer trends, tastes and business practices.
5. Time and cost required to become truly established.
6. Different attitudes to the enforcement of contracts and other legalities.

China's laws are broad and non-specific, providing latitude and power to the government official that interprets them (Vermilion 2014). China has a large and fragmented government that exercises enormous power and influence and will continue to hold sway despite reforms (Vermilion 2014).

Chinese businesspeople prize relationships among friends, relatives, and close associates which is referred to as guanxi (personal connections). Favours are always remembered and returned, though not necessarily right away. Ignoring reciprocity is considered immoral (Graham and Lam 2004). Although the role of guanxi is fading against the backdrop of population mobility and the Westernisation of some Chinese business practices, it remains an important social force (Graham and Lam 2003).

Connections and relations (in Asia) matter because legal protection is weak, so businesspeople find other ways to protect themselves (Backman and Butler 2003). A general rule of thumb is that the weaker the legal system, the more needed are well-founded local personal connections to trade and invest successfully. They are very necessary in Indonesia and China, less so in Malaysia and Korea and less still in Singapore.

Despite differences in business culture and uncertainly about import requirements, U.S. exporters will find that this expanding economy continues to create business opportunities (Food Export Association of the Midwest USA 2014a).

Import regulations

Stricter import requirements than some other markets additional specific requirements include but are not limited to:

- Export registration, Chinese listing, ATM listing audit, Chinese inspection for listing and Chinese listing approval are all required

- Product may be exported directly from a fully integrated establishment that is listed for China. China defines fully integrated establishments as those that slaughter, bone, store and export from the same establishment. Activities including the transfer of product and consolidation of export loads between China-listed fully integrated establishments are not permitted.

- During a production shift, all equipment that contacts meat (such as smocks, aprons, gloves and knives) must not leave the controlled environment. When not in use, this equipment must be sanitised and stored in an ante-room or the boning room during breaks.

- Workers must only move within and between work areas.

- Specific labeling is required for outer packing, inner packaging and ensure carton batch numbers must correspond exactly with the batch number on the official health certificate for meat (M490).

- Cartons must be handled in a manner that minimises the potential of contamination. Cartons must be assembled in an area outside of the boning room. The carton liner is to be used to provide a barrier to prevent contact between the exposed carton and the product, and between the exposed carton and any other equipment which comes into contact with meat, such as gloves worn by workers packing product into cartons.

GOATMEAT (AND MUTTON) CONSUMPTION PATTERNS

Consumption of sheepmeat (which includes goatmeat) in 2010 was 4.03 million tonnes and is forecast to reach 5.02 million tonnes by 2020 (China's National Beef and Sheepmeat Production and Development Plan in MLA 2013b).

Geographic

Mutton and goatmeat are more popular in north-western provinces due to influence of Muslim and Mongolian cultures however in general, consumption of beef and mutton has increased, mostly in urban areas/cities.

Sheepmeat is major part of consumer diets in the northwest areas due to the influence of Muslim and Mongolian cultures, and is more popular in urban areas compared to rural areas (Conforte et al 2013).

Consumption of ruminant meats like beef and mutton was traditionally concentrated in regions of western China where grasslands were abundant (Hansen and Gale 2014). As the broader population gains a taste for these meats, supply is falling behind demand and prices are soaring.

Rural populations consume more mutton than beef per capita than urban populations but mutton is still well below consumption levels for pork and poultry. Urban populations consume more beef than mutton, behind pork overall (Zhou et al 2012).

As with beef, mutton is chiefly consumed in China's north and northwest. Pork is widely consumed in different parts of the country, with southern provinces consuming comparatively the most. North-

west China has a higher per capita consumption of beef and mutton. Poultry meats and eggs are more preferred by people in central and eastern China (Zhou et al 2012).

For consumers with higher incomes, consumption of mutton is reported by Zhou et al (2012) to be much higher. The consumption of mutton by the top income group was about 50% higher than that by the bottom income group in both rural and urban areas. The consumption of lamb in absolute amounts remained very low and increased very slowly. Again, the actual consumption level would be much higher had away-from-home consumption been included (Zhou et al 2012).

The two main sheep and goat producing regions are the north west and plateau areas characterized by extensive grazing (often in conjunction with cattle raising), and the central plains provinces of the north east and east regions characterized by agricultural and intensive production systems (Waldron et al. 2007 in Rae and Zhang 2009).

Cultural

The coefficients of the presence of children, urban experience and education are significant for some meat items, such as aquatic products, beef and mutton, indicating that social and demographic factors have a significant effect (Liu et al 2009).

Some cultural traditions involve goat consumption such as Zhangqiao village in Jinshan District (Shanghai Daily 2012).

Like beef, mutton, lamb and goat are not traditional types of meat consumed by the Chinese. Total production will continue to fall behind total consumption, leading to continued net imports of around 0.30 million tonnes by 2020 (Zhou et al 2012).

Preparation

All sheepmeat and goatmeat is referred to as ‘yang rou’ – no distinction is made between the age of the animal or quality of the sheepmeat. Meat from older animals is considered more nutritious and delicious. Mutton flaps are a premium product, in particular above pork and chicken. Generally low end cuts of sheepmeat are hidden in complex dishes. As a result Chinese consumers are unfamiliar with lamb as a main stand-alone menu item. The Chinese use a lot of spices and other accompaniments to achieve colour, aroma and taste. Overall low-end cuts of sheepmeat are popular (Conforte et al 2013).

Restaurants, fast food chains, and cafeterias play a key role in diversifying meat consumption since many feature specific kinds of meat or chicken. In particular, beef and mutton are important parts of popular hot pot, kebabs, and other types of ethnic cuisine that are becoming popular among the broader population (Hansen and Gale 2014).

The growth of ‘hot pot’ restaurants has stimulated demand for sheepmeat as it is the main ingredient (Conforte et al 2013) and the fat in the meat is an important source of flavour.

The ‘meat-strings’ method originated with the ‘roasted-mutton-string’ which evolved chiefly in China’s north west regions (e.g. Xinjiang), and is similar to satay consumed in some south east Asian countries (Liu et al 2009). Mutton, beef, pork and poultry meat, and even squid, are cut into

small cubes, then placed onto bamboo or iron skewers and roasted over an open fire stove. Seasonings of choice may be added after the meat is cooked.

In addition, other foreign cooking methods, such as the Korean and Japanese style barbecue, are becoming popular in China (Liu et al 2009). Moreover, the present survey finds that young consumers in urban regions are tending to consume meat items that require less time to prepare, because of the faster rhythm of urban life (Huang and David 1993; Wang et al. 2005; Ma et al. 2006 all in Liu et al 2009).

Given that most Chinese consumers are not familiar with the cooking methods of some non-traditional meat items (e.g. beef and mutton), they may prefer to consume them at restaurants (Liu et al 2009). Other factors, such as urbanisation, preference, changing lifestyles and health concerns need to be considered when examining consumer behaviour and at-home meat consumption patterns in China. For example, this study finds that consumers' changing preferences provide more opportunities for some segments of meat markets, such as beef and mutton, with the aid of some new cooking methods (Liu et al 2009).

Demand growth for mutton and lamb remains very strong (Herzfelder 2014), despite the high prices because of:

- Increased disposable incomes led first to consumers wanting more protein and then variety beyond pork and chicken.
- Freer movement of people introduced regional dishes to a wider audience.
- Healthy green image of sheep grazing on the grasslands was underlined by poultry and pork safety issues in 2013.
- Chinese muslims give the market a solid base with inelastic demand.
- Improved cold chain permits national distribution.

Urban restaurants are also growth drivers as (Herzfelder 2014):

- In major cities, residents now eat 30% of their meat outside of the home.
- Diners are not as picky as shoppers on price and look for something other than the pork they eat at home.
- Hotpot has become ubiquitous, even in south China's Guangzhou.
- Strong demand for flaps for hotpot. Lamb roll is the basic hotpot input.
- Emerging demand for higher-quality cuts, even in hotpot.

Top income groups developing taste for Western lamb dishes, preferring imported lamb (Herzfelder 2014).

Substitution

The results indicate that, generally, pork is a substitute for all other meat items; poultry appears as a reasonable substitute for pork and mutton, but is complementary to beef and aquatic products. Beef seems to be a substitute for pork, mutton and aquatic products, but is complementary to poultry; mutton seems to be a substitute for all other meat items except for aquatic products, and aquatic products are substitutes for pork and beef, but are complementary to mutton and poultry. Among the above complementary relationships, only mutton and aquatic products are statistically significant (Liu et al 2009).

The above mentioned substitution and complementary relationships could be related to aspects of current Chinese diet. For example, the complementary relationships between meat items may partly result from two popular cooking methods: ‘hot-pot’ and ‘meat-strings’, which have recently become widespread in China (Liu et al 2009). With the ‘hot-pot’ method, sliced beef (or veal) and mutton (or lamb), poultry, fish and other raw meat items are quickly dipped into boiling seasoned soup in the ‘hot-pot’ and then eaten by mixing with other seasonings, and a wide choice of side dishes.

Appendix 4: Summary of literature review - Taiwan

ECONOMIC

Income growth

GDP growth forecast for 2013 was 3.58% and was predicted to slightly outperform South Korea, Singapore and Hong Kong (AUSTRADE 2013a).

Euromonitor predicted Taiwan would see strong, continuously rising year-on-year total GDP growth rates of 4.1% in 2013-14 and 5.8% in 2016-17 (AAFC 2013).

The average gross annual income in Taiwan, in 2011, was US$18,070, much higher than the Asia-Pacific average of US$5,118 (AAFC 2013). Euromonitor is also forecasting that the average income will rise to US$22,184 by 2017. Some 51% of households in Taiwan have an annual disposable income of over US$35,000, and 23.8% of the population enjoy an annual disposable income of over US$55,000.

Income/price elasticity

Meat, poultry and seafood are found to be all price inelastic. The cross-price elasticities are generally small. Most commodities are identified as gross complements except for the gross substitution exhibited between meat and poultry, fishery fish and aquaculture fish (Lee 2000).

The results also indicate meat and fishery fish demand is expected to increase further as long as consumer incomes keep rising. The limited possibilities of substitution exist among animal products because of small negative cross-price elasticities (Lee 2000).

Strong empirical support for the hypothesis that demand for food is substantially influenced not only by growth in family income and price changes as might be expected but also by differences in urban and rural lifestyles, the development of more advanced marketing systems, and occupational changes that are closely linked with increasing GNP per capita (Huang and Bouis 2001).

Taiwanese mainly choose domestic pork, accounting for 50.1% of total meat expenditure (Huang and Show 2011).

The expenditure on domestic and imported meat is significantly related to seasonal changes (Huang and Show 2011). When other conditions are maintained, the total meat expenditure of the Taiwanese changes in the same way as consumption; that is, when the meat expenditure of the Taiwanese increases, meat consumption also increases. The consumption elasticity of domestic pork and fish and imported beef and chicken is greater than 1, indicating that when the total expenditure of meat increases, the demand for domestic pork and fish and imported beef and chicken also increases.

The own-price elasticity of domestic pork and fish and imported meat is greater than 1, indicating high elasticity and that the consumption is easily influenced by price (Huang and Show 2011). That

is, when the price of domestic pork and fish and imported chicken increases, the consumption decreases; whereas if the price decreases, the consumption greatly increases. In contrast, the own-price elasticity of domestic chicken and imported pork and beef is smaller than 1, indicating the lack of elasticity and that consumers are not easily influenced by price. This result can serve as reference for producers when making a pricing strategy.

SOCIAL

Consumption

Salient growth in personal disposal income, increases in the prices of food and non-food items, and dramatic changes in lifestyle have impacts on the structure and pattern of Taiwanese food consumption. Meanwhile, socio-demographic characteristics of the Taiwanese population which may affect food consumption have changed significantly in past decades. These changes include the declining rate of growth of population, the composition of age, and size of households, the increasing labour force participation of women (Lee 2000).

The crucial question for demand projections in these economically more advanced countries (Taiwan, Japan and Korea) is at what point these structural shifts will slow down and perhaps stop, at which point the upwardly biased estimates of income elasticities for meat, fish, and dairy products will begin to overstate future demand (Huang and Bouis 2001).

Foreign cuisine is influencing the Taiwanese consumer, with a trend towards mixing foreign and traditional ingredients and cooking methods when preparing meals at home (AAFC 2013). In the home setting, you can find young parents and singles preparing easy-to-make meals, such as cheeseburgers, meatballs, and other Western-inspired dishes.

In recent years, Taiwanese food has absorbed the Western dish and has fused new cuisine into existing ones to provide a more diversified, prominent gastronomic culture of the world (Kao 2012a).

As Taiwan travelers continue to go abroad in large numbers to vacation and conduct business, their appreciation and expectation of food diversity has created room for high end retailers (USDA 2011). Taiwan consumers have discovered European cuisine through increased travel to Europe over the last decade (USDA 2011). Products advertising Italian, French and even British flavors are highly popular among middle and upper class consumers.

The diet has greatly varied owing to the growing number of single households, change of family structure including nuclear families, increasing social participation by women, and change of lifestyle such as coming home late (Kao 2012a). The recent trend shows that fewer women in 20's and 30's can cook traditional dishes owing to the difficulty to pass down the time-honored cuisine from mothers to daughters. Accordingly home-cooked meal is likely to become more and more simple in the future.

Foods such as rice, soya, seafood and pork are mainstays in the Taiwanese diet. In addition, Taiwanese consumers have the highest per capita consumption rate of fruit in the world (AAFC 2013).

In the 30 years between 1959–1961 and 1989–1991, per capita rice consumption in Taiwan declined by one-half (Table 1). Consumption of meat (including pork, chicken, and beef) quadrupled (Huang and Bouis 2001).

Meat is the main source of nutrients for the Taiwanese and accounts for the largest share in the Taiwanese's food expenditure (Huang and Show 2011). The annual consumption of meat per capita was 54.30 kg in 1985 and gradually increased to 73.72 kg in 2009. The demand for pork was the highest, that is, 38.11 kg, followed by other types of meat, namely, poultry, beef, and mutton at 30.28, 4.19, and 1.11 kg, respectively (Food Supply and Utilization Yearbook, 2009). As such, meat plays an important role in the food consumption of the Taiwanese.

Total grocery spending per capita, in Taiwan, has grown from US$2,480 (approximately 28% of total consumer spending) in 2009 to US$3,218 (approximately 29.5% of total consumer spending) in 2012. Planet Retail is forecasting total grocery spending, per capita, in 2017, will be US$3,963 (approximately 30% of total consumer spending per capita).

Taiwanese on the west coast of the island generally spend more on food than people living on the east coast. Official figures also show that Taipei and Kaohsiung have the highest expenditures for food. The majority of all retail stores are located on the northern portion of the island.

Taiwan has one of the highest per capita rates of expenditure on food in the region, with relatively high disposable incomes and a strong preference for convenient, healthy, quality and premium food and beverage products. Although the local food manufacturing industry is well established, Taiwan is still heavily reliant on imports (AUSTRADE 2013b).

Eating out/gourmet culture

The average Taiwanese consumer prefers to dine out, and dining-in is most commonly carried out by older people or young families co-habiting with their parents (AAFC 2013). There is a tide of fashionable, urban, singles, couples and young families turning that notion around, viewing cooking as a recreational activity. While cooking habits varying greatly, most meals that are prepared at home are prepared by women. This is an important indicator, as the growth in the number of full-time female workers in Taiwan is outpacing the growth in the number of full-time male employees. Young Taiwanese often opt for ready meals they can eat at home, while prepared foods are increasingly popular, especially since product choices now include greater variety and healthier options.

Euromonitor cites a 2011 survey conducted by MasterCard as finding, 64% of Taiwanese respondents who said they preferred eating out over any other leisure activity (AAFC 2013). The same survey revealed that the Taiwanese dine out more often than consumers in the 14 other markets in the Asia-Pacific region that were included in the study.

Although the economy seems to be slowing down in Taipei, popular restaurants enjoy a lot of customers queuing up for their seats (Kao 2012b). Taipei people enjoy meals at such famous restaurants, talking with their friends and family. They also enjoy taking photos of the dishes and uploading them to Facebook or other social media. This is a new style of entertainment to "share meal with friends". The middle class use such brand restaurants as local chain stores "Wang

Steak" and "Zoe International", or famous Japanese restaurants of sweets and Ramen noodles, which are all extremely popular.

Healthy eating

Both men and women often eat out for they are convenient and moderately priced in most cases (Kao 2012a). However, frequent eating out may cause some problems. Excessive intake of oily Taiwanese food causes metabolic troubles both in men and women. Maintenance of slender figure is a greatest matter of concern for the Taiwanese citizens. In order to serve such needs, the market is growing of healthy cuisine and food of low sugar, low fat, low calorie and low salt designed for the condition of each person's body. An example is a pot dish for a person who wants to eat a lot of vegetables.

Also the popular menus are health-conscious or stylish dishes of recipes introduced on TV programs or by famous cooks (Kao 2012a).

Taiwanese consumers are becoming more aware of the benefits of healthy eating. Not surprisingly, this has led to increased demand from consumers for organic foods (AAFC 2013).

Increased concerns of nutrition and health may have changed food consumption patterns in Taiwan. These claims have been based on the fact that there have been substantial increases in per capita consumption of dairy products during the recent years (Lee 2000).

SUPPLY

Domestic production

The number of goat farms in Taiwan totalled 698 as of the end of 2000, with the total number of goats 112,554 or 161 goats per farm. The daily milk yield per goat was 1.7kg on average, and thus the annual production of goat's milk amounted to 30,006 metric tons with a self-efficiency rate of 58.1%. According to the same statistics, meat goat farms totalled 4,317, together raising as many as 202,491 goats or 290 goats per farm. The goat farming industry in Taiwan enjoyed an annual production value of NT$2.4 billion (COA 2014a).

Agriculture has served as a strong foundation for Taiwan's economic miracle. After retrocession from Japan in 1945, the government announced a long-term development strategy of developing industry through agriculture, and developing agriculture through industry. Thus, agriculture became the foundation for Taiwan's economic development, while promoting growth in industry and commerce. In 1951, agricultural production accounted for 35.8% of its GDP (http://en.wikipedia.org/wiki/Economy_of_Taiwan#Agriculture).

Today, agriculture only comprises about 2.6% of Taiwan's GDP or about US$1 billion. In 2002, farming accounted for 43.33% of the industry, with livestock (30.02%) and fishing (26.41%) making up a significant portion of the rest. Since its accession into the World Trade Organization and the subsequent trade liberalization, the government has implemented new policies to develop the sector into a more competitive and modernized green industry (http://en.wikipedia.org/wiki/Economy_of_Taiwan#Agriculture).

Although only about one-quarter of Taiwan's land area is suitable for farming, virtually all farmland is intensely cultivated, with some areas suitable for two and even three crops a year. However, increases in agricultural production have been much slower than industrial growth. Agricultural modernization has been inhibited by the small size of farms and the lack of investment in better facilities and training to develop more profitable businesses (http://en.wikipedia.org/wiki/Economy_of_Taiwan#Agriculture).

Taiwan's agricultural population has steadily decreased from 1974 to 2002, prompting the Council of Agriculture (COA) to introduce modern farm management, provide technical training, and offer counselling for better production and distribution systems (http://en.wikipedia.org/wiki/Economy_of_Taiwan#Agriculture).

Promotion of farm mechanization has helped to alleviate labour shortages while increasing productivity; both rice and sugar cane production are completely mechanized Taiwan's main crops are rice, sugar cane, fruits (many of them tropical), and vegetables. Although self-sufficient in rice production, Taiwan imports large amounts of wheat, mostly from the United States. Meat production and consumption has risen sharply, reflecting a high standard of living. Taiwan has exported large amounts of frozen pork, although this was affected by an outbreak of hoof and mouth disease in 1997. Other agricultural exports include fish, aquaculture and sea products, canned and frozen vegetables, and grain products. Imports of agriculture products are expected to increase due to the WTO accession, which is opening previously protected agricultural markets (http://en.wikipedia.org/wiki/Economy_of_Taiwan#Agriculture).

Production trends

Due to the collective effort of industry, government and academia, traditional goat grazing, mainly taking the form of a side farming activity in the early eighties, has gradually emerged as a specialized and commercialized operation. For more than a decade, commercial promotional activities that highlighted the medicinal and nutritional value of goat's milk and goatmeat have successfully boosted market demand for related goat products, and consequently increased in the total number of goat on local farms. In the meantime, vast qualities of breeding goat imports, the research and testing effort on feeding and management, the provision of technical support, and the establishment of goat's milk processing plants, have together boosted the local goat's milk market, and contributed to the current prosperity of the goat farming industry in Taiwan. However, after the WTO entry, the relatively high cost in goat's milk and goatmeat production is expected to pose a great challenge to local farmers (COA 2014a).

Commercial promotional activities that highlighted the medicinal and nutritional value of goat's milk and goatmeat have successfully boosted market demand for related goat products (COA 2014a).

Recent achievement: Provided assistance with co-distribution and co-selling for meat goats, and supported the organization of public auctions to ensure an open and fair trading system and to develop a sound market mechanism for the goat industry (COA 2014a).

Future plans of the Council of Agriculture include (COA 2014a):

- Assisting with the establishment of goatmeat markets in the northern parts of Taiwan to boost goatmeat consumption.

- Assisting with the establishment of legal slaughtering houses that apply high hygiene standards for slaughtering, cutting, and packaging, with an aim to enhance the competitiveness of domestic goatmeat products.

- Developing local brands to help consumers distinguish domestic goatmeat products from imported ones.

Agriculture is the basic industry of a country. Faced with highly trade liberation, dramatic climate change, natural resources limitation, farm products unstable supply as well as the shortage of its marketing channels, we are now urgently improving these disadvantages (COA 2014b http://eng.coa.gov.tw/list.php?catid=8799). At the same time, the industry also faces aged producers so government should work out the measures to attract more young people to get involved in this business in order to accelerate the structure change, increase the production efficiency, activate the resource utilization to achieve the objective of sustainable agricultural development. In the future, COA will follow the Executive Yuan's policy instruction "increasing people's wealth and let the people feel secure", based on focusing health, efficiency as well as sustainability as the core value along with the integration of advanced agricultural technology, rural culture, farmland and rural labour resources through the use of advanced information and green technology to increase the agriculture management efficiency in order for Taiwan's agricultural sector to comply with the need of international trend.

IMPORTS

Import demand

The growing debate over meat imports into Taiwan that is pitting America, the island's most important ally, against the vast mass of public opinion is forcing the government of President Ma Ying-jeou to manoeuvre frantically between the two. American exports to Taiwan of meat that contains ractopamine, a controversial growth compound fed to cattle and pigs is banned by Taiwan, the European Union and China (JR 2012).

Taiwanese mainly choose domestic meat and domestic and imported meat is not entirely substitutable (Huang and Show 2011). Hence, imported meat cannot substitute domestic meat, indicating that the Taiwanese have great demand for domestic meat and that the domestic meat market can still grow further.

Importing opportunities

The two largest markets for Australian goatmeat exports are the US and Taiwan (15% in volume; 14% value) (DAFF in MLA 2013).

Australian food suppliers entering the Taiwanese market will benefit from the strong reputation currently associated with Australian food and beverage exporters (AUSTRADE 2013b):

- Australian produce is free from disease, particularly BSE and foot-and-mouth disease,

- Australia offers counter-seasonal supply for a range of products which can provide a competitive advantage for exporters, and

- An increasing number of high-end supermarkets are adding to the demand for high quality imported food and beverage products.

Australia is currently the third largest supply source of food and beverages in Taiwan (AUSTRADE 2013b). Australian produce holds appeal to Taiwanese buyers looking to take advantage of Australia's veritable variety of counter-seasonal supply, and reputation for safe, quality food. Major export items include meat, seafood, grain and dairy products.

Importing challenges - cultural

Taiwan buyers remain extremely price-conscious, and have a preference for stable and well-proven products, turn-key solutions, and a strong reliance and expectation on the supplier to provide after-sales service support (AUSTRADE 2013b).

It is also important to be aware of significant cultural differences in Taiwan (AUSTRADE 2013b). As well as having a general understanding of the historical and cultural background of Taiwan, you need to understand and practice the day-to-day business culture if you are to foster alliances.

While Guanxi is most properly associated with the Chinese Mainland, it is also associated with those economies with a predominantly Chinese culture such as Taiwan, Hong Kong or Singapore (Ai 2006). However, a survey of Taiwanese senior managers indicates this group believe that it is less likely that Guanxi network provides a benefit to reduce business expenses (Ai 2006).

Having a good private Guanxi network with private firms will be more beneficial in helping to sell one’s lower quality products, and to lower the cost of resources needed, since both senior managers in Taiwan and college students in the Mainland rank these two elements higher than the senior manager group in the Mainland (Ai 2006). On the other hand, while the Taiwan senior manager group believes that Guanxi with private firms is less important than senior managers in the Mainland, college students in the Mainland give the highest rank for this issue. This, however, indicates that in the future China, Guanxi with private firms will remain important if the business environment stays the same as today, or it will become less important if there is a continuing western exposure in China and a growing number of new laws and regulations coming out to regulate the market.

Given Taiwan’s unique diplomatic isolation, it can be helpful to get legal advice at a couple of key junctures: before entering into a contract with a Taiwan party and before commencing litigation against a Taiwan party. Not planning ahead and not taking into account the close economic connections between Taiwan and China can severely limit options later on (Eastwood and Chen 2011).

While it may be smart to stay out of relatively undeveloped court systems that have a history of anti-foreigner prejudice, the Taiwan legal system is generally cleaner and more straightforward than those of the PRC and many other jurisdictions in the region – and depending on the goals of the litigation, it offers many advantages with regards to speed (Eastwood and Chen 2011).

Importing regulations

Less strict import requirements than other markets often having no known specific requirements that differ from Australian standards. Some exceptions may include but are not limited to:

- Export registration, Taiwanese registration and ATM listing audit are all required, and
- For sheep, goat and deer meat, meat products and edible offal, use Z828 with endorsement (Foot-and-mouth disease, contagious bovine pleuropneumonia and rinderpest do not exist in Australia).

DISTRIBUTION

General

For meat products the traditional distribution route is importer to wholesaler, then distributor to retailer, caterer or food service industry (AUSTRADE 2013b). However, the importer, wholesaler and distributor are often the same company for imported meat. Also, imported meats are only available in Western-style supermarkets and hypermarkets with adequate refrigeration facilities, where they are butchered into different cuts and packaged. By comparison, in traditional local markets, consumers select the cut of meat they require from a large piece.

Hypermarkets in Taiwan have become popular by offering attractive pricing in a one-stop, modern, shopping destination. Since their launch in Taiwan, most operators have been busy fine-tuning their stores to local tastes. In particular, much effort has been made to offer fresh produce in hypermarkets that is comparable to that found in the wet markets (AAFC 2013).

Supermarket leaders in Taiwan, however, are still opening new supermarkets, focusing on areas with low hypermarket penetration. In addition, there has also been a focus on expanding the fresh food areas of stores as a way of competing with the hypermarkets and traditional wet markets (AAFA 2013).

It is well known that Taiwan has more convenience stores per capita than any other country in the world (AAFC 2013). The convenience store’s format owes its success to the changing needs of Taiwanese consumers, who are increasingly demanding longer opening hours, greater convenience and more diverse product and service offerings. Traditionally, convenience stores have sold general food products, such as snack foods and noodles, but as convenience stores became more popular, these stores grew their ranges and sales volumes, with particular emphasis on growing cooked product lines offering meal solutions.

Food safety

Taiwanese law requires all products (except those destined for use by the food service sector) to have a Mandarin Chinese language label using traditional characters affixed before products can clear customs (AUSTRADE 2013b).

In addition, food safety issues have become another critical concern for consumers. An obvious evidence for supporting these views is organic products consumption have been widely popular in

Taiwan. These and other changes in food consumption pattern have implications for the food industry, especially if these changes continue into the future (Lee 2000).

Planet Retail estimates that there has been an increase of 30% to 40% in sales of seafood in major Taiwanese supermarkets. This increase has been attributed to public concern over the use of ractopamine (a drug used as a feed additive to promote leanness in animals raised for meat) in the livestock industry and other food safety issues (AAFC 2013). American exports to Taiwan of meat that contains ractopamine, a controversial growth compound fed to cattle and pigs which is banned by Taiwan, the European Union and China (JR 2010). Public opinion and Taiwanese meat producers vociferously support the ban.

Loyalty to imported food is both a function of higher expendable incomes and a growing concern about food safety (USDA 2011).

GOATMEAT (AND MUTTON) CONSUMPTION PATTERNS

For more than a decade commercial promotional activities that highlighted the medicinal and nutritional value of goat's milk and goatmeat have successfully boosted market demand for related goat products (COA 2014a).

Yang-rou (goat/mutton) hot pot, prepared with Chinese herbs, is a very popular meal in Taiwan during cold winter days and is expected to cost consumers more this year, as mutton and goatmeat prices continue to rise (China's Goat Farmer Association in MTND 2010).

Driving Taiwan's domestic goat price increase has been a lift in animal fodder costs, lifting retail goatmeat prices about 17% year-on-year, to average NT$279/kg (AU$9.25/kg). Meanwhile, imported mutton prices also increased between 20-30% compared with three months ago, as supply from Australia was limited by rain delayed stock movements and the strong A$ against the NT$ (MTND 2010).

While the majority of hot pot restaurant operators refrained from raising prices on the menu, about 10% of restaurants using local goatmeat have reportedly increased prices from around NT$400 (AU$13.26) per 300-gram servings to about NT$450 (AU$14.92) (MTND 2010).

Appendix 5: Summary of literature review - South Korea

ECONOMIC

Income growth

During the height of global economic crisis, in the autumn of 2008, the South Korean economy contracted by 15% as exports, hit by poor credit conditions and declining investor confidence, plunged by 34% (See Bernanke 2009 in World Bank 2011).

In 2010, as the world economy slowly recovered from the crisis, South Korea's growth rate reached 6.1%, the highest among OECD members and up sharply from the 0.2% rate in 2009 (See PCNC 2011 in World Bank 2011).

Expected 3.6% GDP growth rate in 2013 (Source: IMF in AUSTRADE 2014b); Korea recovered from global ecomonic crisis faster than any other OECD countries.

Forecast economic growth in Korea remains solid at 3.7% (Source: IMF in AUSTRADE 2014b).

Price elasticity

The empirical results showed that South Korean beef consumers are shown to be negative but not sensitive to changes in the own price of each source-differentiated beef (AUS, US and Canada) product except for New Zealand beef. For South Korean beef, all four foreign sourced beef products were shown to be substitutes. In particular, U.S. beef exhibited the greatest degree of substitutability with South Korean beef. This study also found that, with increasing market size, Canadian beef and U.S. beef were shown to easily extend their South Korean market shares relative to other origin differentiated beef sources (Lee and Kennedy 2009).

As a warning to economists and analysts who evaluate other markets, this simulation underscores that the impact of changes in product quality depends on other features of the market, such as market size and the overall level of prices (Lee and Kennedy 2009). Not only did the magnitude of consumer response to quality changes vary with market size and the level of prices but even, in one instance, the direction of consumer response depended on these other market features.

Another finding was that an increase in the prices of foreign sourced beef and a decrease in the price of South Korean beef do not necessarily decrease market demand for the foreign sourced beef products (Lee and Kennedy 2009).

A combination of high expenditure elasticity for imports and inelastic own price elasticity for imports from a given exporter imply strong export potential for that export source in a given import market (Veeman et al 2002).

Own-price elasticities are negative in all four meat (chicken, beef, pork and other) markets for all import sources (USA, Canada, Oceania and Others), and these are mainly significant at the 5% level.

Oceania and Canada face an inelastic response for their beef exports in South Korea (as price rises there is no affect on demand) (Veeman et al 2002).

Own price elasticities are elastic in the majority of cases except in the meat import market of South Korea (Veeman et al 2002).

Expenditure elasticities are positive and elastic for import sources of the different meat types, except for “other meats” from the EU (Veeman et al 2002). In the beef market, as total expenditure on beef increases, South Korean consumers tend to spend three and four times more on U.S. beef than they do on beef from Oceania and Canada, respectively (Veeman et al 2002).

SOCIAL

Consumption trends – traditional and local bias

South Korean society has undergone vast changes in the consumption of clothing, food and housing due to industrialisation. However, its dietary habits have remained relatively intact despite the influx of changes, due to the conservative attitude of Koreans towards food (Lee, Popkin and Kim 2002).

There has also been a recent boom in the demand for traditional restaurants in South Korea. Restaurants called ‘Country dining table’ that serve mostly vegetable side dishes, ‘Raw vegetable house’ where people use assorted vegetables to wrap their own food, and ‘Native local food restaurants’ and ‘Buddhist temple restaurants’ where meats are excluded, are gaining popularity, even among modernised people (Lee, Popkin and Kim 2002).

Concern on the part of the government, scholars and citizens about health and efforts to protect rural and local economies also played a large role in conservation of the traditional Korean diet (Lee, Popkin and Kim 2002). Due in part to the aging population, there is a heavy emphasis among the general public on healthy eating, which is interpreted into a strong demand for organic and functional foods (USDA 2013b).

Despite support for globalization, respect for tradition and ingrained cultural thinking is also reflected in the concern expressed by South Koreans that their way of life needs to be protected against foreign influence (AAFC 2011).

Consumers are generally biased toward locally produced products. Many consumers still maintain a negative view on the quality and safety of imported foods. Imported foods are often associated with contaminations and potential food-borne diseases. In addition, food safety issues are increasingly becoming means to restrict imports (USDA 2013a).

Consumption trends – westernization and willingness to try new foods

A large increase in the consumption of animal food products and a fall in total cereal intake summarise the major dietary changes in the South Korean nutrition transition (Lee, Popkin and Kim 2002).

The most noticeable feature of the South Korean nutrition transition is that the dietary shift has not been linked with a level of fat intake commensurate with its income level (Kim et al 2000 in Lee, Popkin and Kim 2002).

Fat intakes derived from plant foods and animal foods are both increasing. However, the animal fat share among total fat intake has increased from 30.6% in 1970 to 48.2% in 1998, while the plant share of fat intake has decreased gradually from 70% in the 1970s to approximately 50% in the 1990s (South Korean Ministry of Health and Wealth in Lee, Popkin and Kim 2002).

After the 1990s, fat obtained from meat and meat products began to predominate in the South Korean diet. Fat from pork products represented 13.7% of the total amount of fat consumed in 1998. In the early 1990s and afterwards, beef, soybean oil, rice, ramen, eggs, milk, confectioneries and baked goods, and sesame oil followed pork as the main sources (South Korean Ministry of Health and Welfare; Park et al 1997 in Lee, Popkin and Kim 2002).

Traditionally, South Korean consumers were homogeneous in nature, however they now appear to be rapidly embracing international influences, particularly with respect to food (AAFC 2011). Increased food imports have been expected as Koreans develop a taste for Western style cuisine (Veeman et al 2002).

The South Korean consumer's preference for local or domestic food products is evolving, as tastes are becoming more sophisticated and accepting of international influences (AAFC 2011). In particular, better-traveled young consumers, many of whom are educated in foreign countries, are ushering more international products and food culture into the market (USDA 2013b).

South Korea is an emerging market where new ideas and trends are eagerly tried and accepted, leading to greater opportunities for new-to-market products. Consumers are looking for new and international tastes as their income level continues to rise (USDA 2013a). Like consumers in developed countries everywhere, Koreans are looking for new taste, better value, convenience, high quality, and most of all, safe and healthy food in their daily diet (USDA 2013b).

High value products

Current consumption trends in South Korea reflect important on-going socio-economic changes, which include retirement of baby boomers, more women in the workforce, downsizing of the family, well-traveled younger generation, urbanization, information technology, and inflation pressure. As a result, products and businesses that offer good value, high quality, health or nutritional benefits, new taste, and convenience are showing a strong growth in the market (Food Export Association of the Midwest USA 2011).

The South Korean food market is also rapidly evolving, driven by changing consumer tastes and expanding distribution channels, including new retail outlets and online platforms (AUSTRADE 2014b).

Changes in lifestyle and dietary culture coupled with increased income level have stimulated a rapid growth of the food service industry in South Korea (USDA 2013b). Monthly per capita household spending on eating outside of the home has more than doubled in the last ten years, reaching nearly US$70 dollars in 2010, up 2.3% from the previous year. In other words, each

household spent 48.1% of its food and beverage expenditure, or 12.4% of total consumption expenditure on eating outside the home. It is expected that spending on eating outside the home will remain strong in the coming years as Korean consumers face ever busier lifestyles with increased number of dual-income families and single-member households.

However, restaurants serving Korean dishes were the single largest segment of the industry by accounting for W36.8 trillion won of sales (USDA 2013b). Over 77% of the restaurant industry sales were by full service restaurants whereas quick service restaurants accounted for the rremaining 23% of the sales. However, quick service restaurants in general have shown much bigger sales growth in recent years than full service restaurants as the demand for quick meal solutions among the general public increased.

The evolvement of the food service sector is generating new opportunities for imported products that offer new tastes, healthy recipes, added-value, stable supply, and specifications catered to the food service industry use, characteristics where U.S. products are competitive (USDA 2013b).

Statistics Korea attributes a greater interest in health to increases in income and the accompanying improved living standards, in addition to better understanding, promotion and education about health-related risks. As a result, fresh and healthy foods and their preparation in healthy ways, such as using less fat and salt, are becoming increasingly important to South Korean consumers (Euromonitor 2009 in AAFCanada 2011).

Urbanisation

As South Korea went through dynamic economic reforms and rapid industrialization during the 1960s under a military regime led by President Park Jung-he, Seoul became the virtual manufacturing center and heart of the nation's industrialization and development process (Kim 2005; Ji 2011). As Seoul provided greater opportunities for employment, much of the rural population that had laboured in the agricultural sector moved into the city. As a result, Seoul quickly became overpopulated and the focus of the Korean economy shifted from agriculture, forestry, and fishing based to a manufacturing and services based economy (Kim 2005; Ji 2011).

SUPPLY

Domestic production

It was projected that by 2004, agriculture's share of the Korean GDP would decrease to just 3.6% and the farm population will decline to 3.12 million. High cost small owner-operated farms characterize Korean agriculture. Rice remains the dominant crop, accounting for about one-third of the total agricultural output value. Meat production has risen annually with consumer demand. Beef, pork and chicken represent 14, 63, and 23% respectively of total meat production (Veeman et al 2002).

The goat population in South Korea was relatively small in the early 1900's (Min, Kong and Song). During the Korean War the whole country suffered serious animal losses; however, the number of goats continuously increased until the late 1990's. Overcoming a few short-term depressions such as during the Olympic Games in 1988, when hygienic slaughtering of specific animals including goats was strictly controlled by the government, the Korean native goat (or Korean Black goat)

population has remarkably grown since 1997. The increase in the goat population was definitely attributed to the general growth in the South Korean economy.

The rising goat population continues because of consumers' preference for healthy food (primarily meat and blood) from indigenous goats, which are perceived to have health and medicinal benefits considered not available in imported goats and their meat (Min, Kong and Song).

Protection

South Korea has highly supported its agriculture. Some of the trade restrictions in place in South Korea include quantitative restrictions, such as quotas and tariff-quotas, tariffs, food safety restrictions, food additive restrictions, labeling regulations, customs reclassification, inspection and documentation. Lack of transparency in regulations is viewed as a serious problem. However, as a result of the Uruguay Round negotiations, South Korea agreed to liberalize trade in various agricultural and food products (implementing this by July 1997 for numbers of commodities), with plans to provide domestic farmers with assistance to enable them compete with imports (Veeman et al 2002).

In 2008 the Korea Customs Service launched a comprehensive reform plan aimed at establishing the world's best customs clearance system (See Korea Customs Service 2009b in World Bank 2011). By 2009 the agency had moved from an "E-customs system" - an electronic data interchange system with access for subscribers only - to a "U-customs system", a global internet-based customs portal linking financial institutions, customs agencies, logistics companies and 23 government agencies.

Imports of many products still face restrictive trade barriers. The South Korean government makes frequent changes into its food safety/labeling standards (USDA 2013a).

South Korea will eliminate its 22.5 % tariff on all sheep and goatmeat from Australia over 10 years by 2025 (DFAT 2014b).

DISTRIBUTION

Supply chain

The supply chain for imported agricultural and food products in general involves multiple layers of middlemen and distributors, which is part of the reason for high consumer price of many imported products in Korea (USDA 2013b).

Distribution of products in the food service industry still relies heavily on traditional channels, which involve multiple layers of small-scale middlemen distributors between the producer and the restaurant (USDA 2013b). However, restructuring of the sector, mainly fueled by expansion of large-scale corporations into the food service business over the last several years, has led to a rapid growth of large-scale restaurants and bars, many of them under franchise operation, at the expense of small-scale, independent businesses. The industry restructuring has also coincided with a rapid development of large-scale, broad-line food service distributors that offer streamlined and consolidated product supply over the years.

It is notable that the local processing industry is led by a small number of large-scale players, as indicated by the fact that only 1% of the 4,169 processors had over 300 employees, while 81% have less than 50 (USDA 2013b).

South Korea maintains a strong food processing industry, which presents tough competition to imported consumer-ready products. High markups coupled with tariffs often deteriorate price competitiveness of imported products against locally processed products (USDA 2013a).

Streamlining of the supply chain is another area in which the sector has made a significant progress over the years along with the growth of the large-scale restaurant business. Large-scale broad line distributors, which offer lower cost and more efficient service, should show a strong growth in the future (Food Export Association of the Midwest USA 2011).

Local retailers in general lack experience and expertise on international sourcing (USDA 2013a). As a result, the flow of imported products to the retailer is often participated by multiple layers of middlemen, which adds cost and inefficiency to the supply chain. Retailers are reluctant to carry imported products of short shelf life.

Retail

Modern format, large-scale retail businesses such as hypermarket chains, grocery supermarket chains, convenience store chains, and on-line retailers have grown rapidly at the expense of traditional retail outlets of street markets and family-operated small retailers over the years. Expansion of these new retail channels, coupled with introduction of new information technologies, has significantly changed the way South Korean consumers purchase daily necessities, including food (Food Export Association of the Midwest USA 2011).

Grocery supermarkets have found a new growth momentum in recent years in ‘Super Supermarket (SSM)’ business. SSM is grocery supermarket that targets congested metropolitan residential areas where larger scale hypermarket stores cannot infiltrate (Food Export Association of the Midwest USA 2011).

Internet retailing continues to grow and most grocery retailers and hypermarket companies have internet stores (AAFC 2011).

Expansion of large-scale retail businesses coupled with the introduction of information technologies has led a rapid evolvement of the retail food sector in South Korea over the last two decades. While hypermarkets and grocery supermarkets are likely to see stagnant growth as a result of slow economic growth in the coming years, on-line retailers, convenience stores, and department stores are expected to maintain solid growth for strong consumer demand for value, convenience, and quality (USDA 2013a).

Growth of the retail sector is led by modern format, large-scale retail businesses, which offer a better environment for imported products to compete against locally grown or manufactured products. Large-scale retailers are actively seeking ways to increase the assortment of imported products (USDA 2013a).

Growth of modern retail business in South Korea has coincided with the development of a modern large-scale logistics service industry. Leading retailers are equipped with temperature controlled distribution network of trucks and warehouses that cover the entire market. On the other hand, small to medium size retailers in general rely on third party logistics service providers. The logistics service industry is likely to continue a rapid growth in the coming years particularly due to a rapid rise in demand for home delivery service, which is now widely offered not only by online retailers but also by conventional retail stores (Food Export Association of the Midwest USA 2011).

Food safety

There is increasing consumer concern on origin of country and food safety (AUSTRADE 2013a).

South Korean consumers are extremely sensitive to food safety issues as they have gone through many big and small food safety scandals over the years (USDA 2013b). A series of public food safety scandals associated with imported products from China and Japan in recent years has led the general public and traders to be more concerned about the quality of imported product that they buy (USDA 2013a). Traders are likely to switch procurement sources to safer sources, including the United States, in an effort to regain consumer confidence.

IMPORTS

Requirement for importation

The South Korean government interested in overseas agribusiness development due to decreasing food self-sufficiency grain (27.6%) and food (54.9%) in 2010 (AUSTRADE 2013a).

Korea, by nature, depends heavily on imports for its food and agricultural needs. On-going elimination of import barriers will improve market access and price competitiveness of imported products. In particular, KORUS FTA will help American products better compete in the Korean market under reduced import tariffs (USDA 2013a).

South Korea imports approximately 60-70% of its food requirements (AAFC 2011).

The importation of goats and goatmeat noticeably increased with the opening of international markets under the WTO system (Min, Kong and Song). For example, in the period from 1990 to 1994, the total importation of goatmeat amounted to 5,500 tons, of which Australia accounted for more than 90%.

Importing opportunities

Favourable image of Australian products as premium, safe and quality, but price competitiveness is an issue (AUSTRADE 2013a):

- Major agri/food competitors have concluded FTAs with Korea (EU, USA and Chile)
- High Australian dollar

Targeting less price sensitive sectors can be a good strategy, such as organic and natural food, premium and unique products with story telling, functional ingredients and food technology (AUSTRADE 2013a).

Since Korea is dependent on food imports, Australia is in a strong position to supply many food and beverage products to the market (AUSTRADE 2014b). Australia is well regarded in Korea as a supplier of quality and safe food products with its high food safety standards. The Korean food market is also rapidly evolving, driven by changing consumer tastes and expanding distribution channels, including new retail outlets and online platforms. Opportunities exist for Australia in a range of food and agricultural items such as wine, nuts, dairy, meat, and fresh fruits.

Importing challenges – general

Disease problems or constraints on production may limit other competitors' (competitors of Canada and Alberta) access to particular markets (Veeman et al 2002).

Henneberry and Hwang (2007) emphasized that quality differences should be recognized when analyzing the South Korean meat import demand.

South Korean retailers in general rely heavily on independent importers for imported food and agricultural products (USDA 2013b). Although leading players are currently seeking ways to increase direct importing for lower cost and improved product assortment, their attention is mainly targeted on a limited number of large volume products such as fresh oranges and walnuts because of lack of experience and expertise. On the other hand, retailers of international origin, Costco Wholesale Korea in particular, procure a larger part of the imported products that they sell directly through their international sourcing networks. Leading retailers maintain heavy efforts to expand private label brand (PB) business on both local and imported food and agricultural products for higher profit and customer loyalty.

Participation of multiple layers of independent importers and distributor middlemen in the supply chain is part of the reason behind high consumer price of many imported products in South Korea (USDA 2013a). The independent importers are required to bear greater amount of the risk than the retailers when placing a new product on the shelf, which forces the importers to add high markup on new products to cover potential loss. In contrast, products brought in directly by retailers can be sold at much lower price due to less distribution cost and markup. In addition, scale of economy under direct importing by the retailer allows the foreign supplier to eliminate the potential service of export middlemen, which further reduces the product cost and helps the retailer exert more aggressive promotional push on the product.

The evolvement of the food service sector is generating new opportunities for imported products that offer new tastes, healthy recipes, added-value, stable supply, and specifications catered to the food service industry use (USDA 2013b).

Importing challenges – cultural

Fast moving business culture – quick reply, timing of shipping, correct documentation are crucial for business success (AUSTRADE 2013a).

South Korea is a country of tradition (DFAT 1999; USDA 2013b). While South Korean importers understand international business customs and practices, paying attention to cultural differences and localities will facilitate building a trusted business relationship.

WBO (2014c) Enforcing contracts ranking = 4

- Procedures (number) 32
- Time (days) 230
- Cost (% of claim) 10.3

In 2008 the Korea Customs Service launched a comprehensive reform plan aimed at establishing the world's best customs clearance system (WBO 2011).

Importing regulations

Stricter import requirements than some other markets specific requirements include but are not limited to:

- Republic of Korea Listing, ATM listing and Republic of Korea Listing approval are all required
- For bone-in goat carcases from domesticated goats, use E188 with endorsement 116. The exporter must provide a declaration that the carcases are derived from domesticated farm goats.
- In addition to the relevant Australian Standards, product destined for the Republic of Korea must be adequately segregated from product destined for other countries
- The Korea food additive standard lists chemicals that may be used in food. Korea does not permit any chemicals to be used on meat or meat products, unless the chemical is listed in the food additive standard for use on meat or has a general permission for use.
- Wrapping and packaging - Only clean, new bags, wrappers and packaging may be used in the preparation of meat and meat products.
- Korea has use-by date limits for some products; AQIS advises exporters to consult with their importer.
- The health certificate must arrive in the Republic of Korea before the consignment. If the health certificate does not arrive in the Republic of Korea before the consignment, the Republic of Korea's inspection staff will detain the consignment and may reject it

Advantages and Challenges Facing U.S. Products in South Korea (from USDA 2013a)

Advantages	**Challenges**
Korea is an emerging market where new ideas and trends are eagerly tried and accepted, leading to greater opportunities for new-to-market products. Consumers are looking for new and international tastes as the income level continues to rise.	Consumers are generally biased toward locally produced products. Many consumers still maintain a negative view on the quality and safety of imported foods. Imported foods are often associated with contaminations and potential food-borne diseases. In addition, food safety issues are increasingly becoming means to restrict imports.
Korea, by nature, depends heavily on imports for its food and agricultural needs. On-going elimination of import barriers will improve market access and price competitiveness of imported products. In particular, KORUS FTA will help American products better compete in the Korean market under reduced import tariffs.	Imports of many products still face restrictive trade barriers. Many American fresh fruits have no access to Korea. Certain food additives approved for use in the United States may not be approved in Korea. Korean government makes frequent changes into its food safety/labeling standards.
A series of public food safety scandals associated with imported products from China and Japan in recent years has led the general public and traders to be more concerned about the quality of imported product that they buy. Traders are likely to switch procurement sources to safer sources, including the United States, in an effort to regain consumer confidence.	Local retailers in general lack experience and expertise on international sourcing. As a result, the flow of imported products to the retailer is often participated by multiple layers of middlemen, which adds cost and inefficiency to the supply chain. Retailers are reluctant to carry imported products of short shelf life.
Growth of the retail sector is led by modern format, large-scale retail businesses, which offer a better environment for imported products to compete against locally grown or manufactured products. Large-scale retailers are actively seeking ways to increase the assortment of imported products.	Korea maintains a strong food processing industry, which presents tough competition to imported consumer-ready products. High markups coupled with tariffs often deteriorate price competitiveness of imported products against locally processed products.
Due to the long history of economic and political ties between Korea and the United States, many Korean consumers are familiar with American products and food trends. Consumers maintain a positive view on the quality and value of American products. English is the most popular foreign language in Korea.	Consumers maintain negative perceptions about GMO products. Retailers fear reprisal from anti- GMO activists and, consequently, refuse to stock any product that would have to be labeled "Contains GMO". Many U.S. products would be required to have "Contains GMO" labeling under Korean regulations.

GOATMEAT (AND MUTTON) CONSUMPTION PATTERNS

Cultural

Meat from Korean native (or Korean black) goat is not popular like beef, pork or chicken because of the unpleasant odour which occurs mainly in males, but has been consumed continuously for medicinal purposes, especially for women (Min, Kong and Song; Son 1999). Goat stew is mainly available in the Chungcheong Province, the central-west region of South Korea, but it is not a familiar dish anywhere else, as most Koreans found the distinctive caprine odour offensive (Lee 2011).

Among meat products, beef is the preferred meat in South Korea, but pork has become more popular since it is less expensive. People in high-income groups tend to eat more beef, while low-income consumers generally choose less expensive pork. Pork consumption could decrease in the future as income increases, while beef consumption could increase (Jung and Koo 2002).

Medicinal food (*boyangshik*) is a wide variety of specialty foods prepared and eaten for medicinal purposes, especially during the hottest 30-day period in the lunar calendar, called *sambok*. Hot foods consumed are believed to restore *ki* as well as sexual and physical stamina lost in the summer heat commonly eaten *boyangshik* include: ginseng, chicken, black goat, abalone, eel, carp, beef bone soups, pig kidneys and dog (http://en.wikipedia.org/wiki/Korean_cuisine#Meat).

Traditionally, dog stew was consumed mainly by men as a medicinal tonic (for virility) (Lee 2011). Meanwhile, women's nutritional version of dog stew was a dark, intense medicine extracted from steaming herbs with Korean black goat, the only indigenous goat breed of Korea. The drink was believed to be rich in protein, iron and calcium, which are essential to women's health. Thus, goatmeat became the natural substitution for dog meat, especially because the texture of black goat is said to be very similar to that of stewed dog meat, although the flavour of goat is milder and sweeter.

Korean native goat has been consumed much more in processed form like an extract rather than meat itself (Min, Kong and Song; Son 1999). For manufacturing the extract, a young goat of 13-15kg liveweight is used with four to ten different kinds of medicinal herbs. The extract consumed was equivalent to about 500,000 head each year until 1997 (data can not be verified). The meat is sold not at ordinary butchers but at specialized restaurants as a type of roasting, cooked meat or soups and the extract is sold mostly by home visiting and in some health food stores.

Goatmeat has been recognized traditionally as a healthy or functional food, or for health-giving purposes other than for dietary purposes. For instance, in South Korea, goats are generally regarded as a healthy food source that helps the human body to get used to seasonal climatic changes (FFTC 2008).

The price of goatmeat is approximately 1.5 times and 3 times more expensive than beef and pork, respectively (Min, Kong and Song). The extract is about 5-6 times more expensive compared to other beverages because it is consumed mainly as a medicinal purpose. The consumption of the extract has not increased due to the high prices but is expected to increase if the medicinal effects are verified scientifically and the prices become low.

KNG meat helped develop an effective “deodorizing agent” for cooking and processing the meat. At least 27 menus (items) have been developed for goatmeat and seven procedures for steaming or roasting and recipes for soups are favourite dishes served to customers at specialized restaurants (Min, Kong and Song).

The consumption of goatmeat was estimated to be about 500,000 head a year (30kg liveweight) in the 1990’s (not including goats used for extracts) (Min, Kong and Song). The meat is only sold in specialized restaurants, located in big cities or around these city, as a favourite dish for consumers seeking good health. The meat is often served in the farms around a park or big city on some special events, such as a social meeting, family gathering, farewell party or reception dinner, as a type of roasted meat or in soups.

Appendix 6: Summary of literature review - India

ECONONIC

Income growth

The Indian economy has recently grown at historically unprecedented rates and is now one of the fastest-growing economies in the world. Real GDP per head grew at 3.95% a year from 1980 to 2005, and at 5.4% a year from 2000 to 2005. Measured at international prices, real per capita income in India, which was two-thirds of Kenya's in 1950, and about the same as Nigeria's, is now two and a half times as large as per capita income in both countries (Deaton and Dreze 2009).

In 2010, annual GDP growth reached 8.5%, then slipped to a ten-year low of 5% in 2012 and to 4.4% for the quarter ending June 30, 2013 (USDA 2013c). The economy is challenged by year-long depreciation of the rupee, stubborn inflation and a looming fiscal deficit. Nevertheless, India has one of the world's fastest growing large economies and, by some estimates, is projected to become the world's third largest economy by 2025.

Food inflation, which has been in the double digits for much of the past few years, is a particular concern (USDA 2013c). Food inflation has moderated to 8-10% over the past few months, but remains stubbornly high despite the excellent 2013 monsoon. Thus far, the Government of India has not taken recent steps to lower tariffs or to improve access for imported products as a means of easing food inflation. Nevertheless, led by commodities such as pulses and vegetable oil for which tariffs were already low, India's agricultural imports jumped from $7.2 billion in 2007 to $20.3 billion in 2012. Imports of consumer-ready foods, led by nuts and fresh and dried fruits have doubled since 2008 to $2.1 billion.

Around six million of the country's households are considered to be "rich" and spend more than US$28 billion per year. This represents approximately only 2.5% of all households (Census of India 2011). Currently, India is the world's 12th largest consumer market, roughly equivalent to that of Brazil with a population only a sixth the size of India's. By 2015, India's consumer market could match that of Italy's in absolute terms. India now ranks as the third largest economy in the world measured as an individual state in 2012, an event recently not predicted to take place until 2015. However its per capita GDP (PPP) ranks it 164th in the world, indicative of such a larger population and income disparity. (Food Export Association of the Midwest USA 2014b).

According to the Asian Development Bank, India's middle class is expected to grow from 250 million to 550 million by 2025 (AUSTRADE 2014c). Based on the high growth rates of the last decade, there has been a discernible increase in purchasing power in many parts of the country and rising affluence in urban pockets. The economic growth and rising disposable income levels of the upper middle class will continue to drive consumer demand and influence buying behaviour.

With a population of 1.2 billion, India is the world's second most populous country (USDA 2013c). India is also one of the youngest countries in the world with a median age of 25. Nearly 60% of Indians are under the age of 30. However, declining birth rates suggest that the Indian population will age over the next 10 years with the fastest growth occurring among those aged 30 and above,

a group that comprises the highest earners. Nearly half of all Indians are married and families traditionally live in joint or extended families resulting in an average household size of 4.9 people in 2012. In urban areas, smaller nuclear families are becoming more common as mobility and employment opportunities increase.

Over 840 million Indians live in rural areas compared to 390 million who live in urban areas (USDA 2013c). While the urban population is growing at more than double the rate of rural areas as migrants move to cities in search of opportunity, it will likely be several decades before India's population will become majority urban. Agriculture accounts for an estimated 15% of Indian GDP, but over half of Indians are employed in agriculture, suggesting that urban areas will continue to gain population as surplus labour moves to cities. Nevertheless, rural areas are emerging as important markets for fast moving consumer goods. Aside from vegetable oil and pulses, opportunities for imported value-added or consumer-ready foods are likely limited in rural areas.

Income/price elasticity

The urban households recorded an increase in income available for total consumption between 1972/73 and 2004/05 (Morisset and Kumar 2011). The overall economic growth of the Indian economy was beneficial to urban households. It is surprising that in real terms the rupees spent on food did not increase.

It goes against the common perception that there is an increase in food expenditure (in absolute terms) even though there is decrease in its relative importance in total expenditure (Morisset and Kumar 2011).

The situation of rural India is slightly better and is revealed from the income and consumption pattern of rural households (Morisset and Kumar 2011). Firstly, the income growth of rural households was marginally superior (37.5%) to that of the urban households (35.1%). Secondly, a marginal increase in food expenditure (in real terms) was observed over the 32 years period.

This finding has an important consequence on the food consumption analysis (Morisset and Kumar 2011). The development relies on the fact that the newly created wealth benefits all classes of the Indian society. It is also assumed that high income elasticity of demand for food exists, therefore, if the income growth is not there, there will be no progress in demand and no markets for food products.

The proportion of "primary products" consumed does not show much increase with increase in income (Morisset and Kumar 2011). The "first (low) processed products" as a proportion of total food consumed recorded significant decrease with the increase in income. On the other hand the "first (high) processed products" (including meat) as a proportion of total food consumed recorded substantial increase across the expenditure continuum. The benefit of changes in consumption pattern across expenditure groups goes to the "second processing" resulting in increase in its share from 4.0% to 17.5% for the lowest expenditures to the highest expenditures group, respectively. Thus as expected the higher expenditure groups are consuming more of products with a higher level of processing. This is observed despite the fact that the budget dedicated to food expenditures is proportionately falling for urban households.

In the case of livestock product consumption the demand rises very rapidly when income rises, and crosses the demand for all other food product groups to become the highest for higher income groups (Gandhi and Zhou 2010). In urban areas, the demand for livestock products rises even faster when income starts to increase whereas the demand for other food groups rises much less. These results strongly support the proposition that as income rises, the demand for livestock products will tend to rise very rapidly and will surpass the demand for other food groups.

Demand for specific animal product changes with income increases. It shows that, for rural areas, among the different livestock products, milk and milk products have the largest rise with income increases (Gandhi and Zhou 2010). This is followed, with a huge margin, by meat, then fish and eggs. A similar pattern also exists for urban residents. Clearly, these patterns indicate that income growth is likely to translate into a much higher demand for milk and milk products, but only a modest increase in meat, eggs and fish.

For livestock products, however, the elasticities are much higher as a whole: 1.67 for rural and 1.04 for urban for value. This indicates that a one percent increase in income will translate to greater than a one percent increase in demand/expenditure for livestock products (Gandhi and Zhou 2010).

In terms of all meats (meat total), rural has a much higher elasticity than that in urban areas. Indeed, for all other livestock products (milk and milk products, eggs and fish), the income elasticities of demand are higher in rural areas. The fact that the elasticities of milk and milk products are higher than those of meats, eggs and fish suggests that there will be a more rapid growth in their demand when consumer income increases. Within meats, beef appears to be an inferior good (due to cultural and regious reasons) in urban areas with negative income elasticities (Gandhi and Zhou 2010).

Rapidly rising demand for livestock products is predicted with the expenditure growing at about 10% per year in the near future based on the expected income growth rate and elasticities of demand (Gandhi and Zhou 2010). Milk demand may grow at about 10.6% per year, egg demand at 7.4% and meat demand at 8.4%.

SOCIAL

Consumption trends

There is not a clear relationship between income growth and consumption patterns, as calorie intake has recently declined despite increased incomes.

There has been a decline in the proportion of expenditure on food items in last three decades in both urban and rural areas (Min. WCD 2007b). The proportion of expenditure on non-food items has increased from 24% to 37.7%. However, the expenditure on food remained higher in rural areas as compared to urban areas.

The consumption pattern when viewed from the level of processing shows that the consumption of first (low) processed products (flour, rice, pulses) decreases while that of primary products (fresh fruit, eggs, milk), first (high) processed (meat, butter, sugar), and second processed (baked goods

etc) increases. The magnitude of changes is very high for second processed products (Morisset and Kumar 2011).

Increased income has been diverted towards other items, including fuel, lighting, health care, education, taxation and rent.

Even in rural areas the expenditure on food recorded marginal decrease across all income groups (Morisset and Kumar 2011). These results are contrary to expectations and only higher income groups of households have gained from the economic growth. It is evident that the importance of food in total expenditures is decreasing over the period. Two commodity groups are observed to be gaining importance in the household consumption expenditure. The first being “fuel and light” whose share in total household expenditure increased during the period 1972-73 to 2004-05 from 5.6% to 9.9% and from 5.6% to 10.2% for urban and rural households, respectively. The second commodity group is “miscellaneous goods and services” that covers education, medical care, rents and taxes. Its share increased significantly from 19.2% to 37.2% and from 8.7% to 23.4% for urban and rural households, respectively.

Real per capita consumption has also grown rapidly, at 2.2% a year in the 1980s, at 2.5% a year in the 1990s, and at 3.9% a year from 2000 to 2005 (Deaton and Dreze 2009). Yet, per capita calorie intake is *declining*, as is the intake of many other nutrients; indeed fats are the only major nutrient group whose per capita consumption is unambiguously increasing. Today, more than three quarters of the population live in households with per capita calorie consumption below 2,100 per day in urban areas and 2,400 per day in rural areas – numbers that are often cited as “minimum requirements” in India (Deaton and Dreze 2009).

As far as the decline in per capita calorie consumption is concerned, one plausible hypothesis, on which much work remains to be done, is that while real incomes and real wages have increased (leading to some nutritional improvement), there has been an offsetting reduction in calorie requirements, due to declining levels of physical activity and possibly also due to various improvements in the health environment. The net effect has been a slow reduction in per capita calorie consumption (Deaton and Dreze 2009).

Over the past four decades, India has witnessed a paradoxical trend: average per capita calorie intake has declined even as real per capita monthly expenditure has increased over time. Since cross sectional evidence suggests a robust positive relationship between the two variables, the trend emerges as a major puzzle (Basu and Basole 2012). Our results suggest that the puzzle can be explained by a combination of the following three factors: a food budget squeeze, declining subsistence consumption and diversification of diets. We do not find evidence of a strong effect of declining calorie needs (Basu and Basole 2012).

Consumer attitude and preferences is undergoing a shift owing to factors like increasing disposable incomes, changes in life style pattern, shift in age structure, increasing number of working women and multi culture exposure (Farid 2013). These would lead to increase health consciousness in the future. Organic food or wellness products would be emerging opportunities in years to come.

Indians tend to take pride in the many regional and varied foods that comprise Indian cuisine (USDA 2013c). In general, Indians have a strong preference for fresh products, traditional spices and ingredients, which has generally slowed the penetration of American and other foreign foods. However, the acceptance of packaged, convenience and ready-to-eat food products is increasing, especially among younger consumers and the urban middle class. Many Indians are quite willing to try new foods while eating out, but often return to traditional fare at home. Italian, Thai and Mexican foods are reportedly the fastest growing new cuisines in India and consumers are slowly diversifying their consumption patterns.

Dietary shift

The consumption of food is falling because of shift in consumption away from cereals to high calorie commodities such as meat, milk, fish etc, in other words from low value to high value commodities (Kumar and Kumar 2004; Meenakshi 1996 in Morisset and Kumar 2011).

Dietary diversification increases with increasing family income (Min. WCD 2007b). Consumption of milk and animal products increases with increase in income. In the highest income group, they are the major sources of protein in the diet. There is also an increase in the intake of vegetables with increasing family income.

While the shift from cereal-based diets to more diversified diets is already happening to some extent in India (Kumar et al 2009), Indian diets remain very frugal (Deaton and Dreze 2009).

The total consumption expenditure at Rs 1052 per month in urban areas is almost twice that in rural areas at Rs 559 per month. However, the total food expenditure does not differ by that much, with a difference being Rs 140. It is important to note that the consumption difference in livestock products explains the largest portion of the total food consumption difference. This suggests that there is an enormous potential for an increase in livestock product consumption if rural income was higher given the huge rural population in India (Gandhi and Zhou 2010).

In rural areas, foods dominate the consumption expenditure (averaged over all income classes). Within foods, cereals dominate. Nonetheless, the percentage of expenditure on foods has dropped from 73.6% in 1970/71 to 55.0% in 2004/05. The percentage of expenditure on cereals within food has dropped from a dominant 54.4% to 32.7% during the same time period. After cereals, livestock products clearly are the next important food group, with an expenditure share reaching 21.4% in 2004/05, being the second largest (Gandhi and Zhou 2010).

In urban areas, the share of expenditure on food has also dropped but still remains substantial at 42.5%. However, the importance (share) of livestock products has increased to 25% by 2004/05, surpassing the share of cereals which has fallen to 23.7%. The cross-over is recent and took place between the last two surveys. Other foods such as pulses, edible oils, and vegetables and fruits lag substantially behind livestock products (Gandhi and Zhou 2010).

Milk and milk products have the largest share in the livestock product demand. In rural areas, the share is 71.8% and in urban areas it is even higher at 74.5%. At the national level, the share comes to 72.8%. This dominance of milk and milk products is apparently unique to India and may be associated with largely vegetarian diets and food habits in India. Meat follows after a huge margin with a share of about 14% in both rural and urban samples (Gandhi and Zhou 2010).

One of the conspicuous outcomes of the economic development India has experienced in recent years is a marked change in the dietary pattern of its population (Kumar et al 2011). Several studies have shown dietary diversification of Indians towards the high-value food commodities such as milk, meat, fruits, fish, processed food products, etc. and away from the traditional cereals-dominated food basket (Kumar *et al.*, 2006; 2007 in Kumar et al 2011). Rapid urbanization, increased disposable incomes of households, availability of a larger variety of food commodities in the market and growing food processing facilities in the country are some of the predominant factors behind this shift.

Over the years, the per capita annual consumption of edible oils, vegetables, fruits, milk, meat, fish, eggs and sugar has increased substantially in each of the income groups. This increase is quite substantial in the bottom group. The dietary shift in favour of high-value food products has been found prominent and pervasive for all the income groups (Kumar et al 2011).

The budgetary allocation to meat, fish and eggs in total food expenditure has depicted a consistent rise across all the income groups during the past two decades. This rise in budgetary allocation has been significant, varying from 39% among the very poor category to 25% among high income group. This shows the rising diversification in consumption towards livestock products across all the income groups (Kumar et al 2011).

Consumers have been found to shift their budgetary allocation from cereals based food towards high-value commodities like fruits and vegetables, milk, fish, meat and meat products, etc. The study has attributed this structural shift to ‘consumption diversification effect’ arising out of changes in tastes and preferences, easier access to supply, variation in relative prices, etc on the one hand, and to ‘pure income effect’, resulting from the increase in income levels of the consumers, on the other (Kumar et al 2011).

The experimental nature of shoppers has been encouraging for the growth in imported and gourmet foods (AUSTRADE 2014c). Consumer awareness of packaged foods is increasing in India with good sales growth that is expected to continue.

Meat consumption

Goatmeat is the most preferred meat in the country. Almost 95% of the goatmeat produced in the country is consumed locally; though per capita availability is far below the requirement (Kumar and Pant 2002).

1993-94 per capita consumption of goatmeat was 0.7kg/annum compared with 0.2 for mutton and 0.3 beef, 0.3 buffalo and 0.3 chicken (Birthal and Rao 2002).

In India, for example, there are cultural biases against the consumption of goatmeat and pigmeat and so programmes where these meats are intended to play a central part may have limited success (FAO 2002).

In India per capita availability and consumption of meat, fish, milk and milk products and eggs is quite low (Min, WCD 2007a). Current consumption levels of these products are well below Indian Council of Medical Research (ICMR) dietary guidelines. Animal products are expensive and are consumed mainly by the middle and high-income group; even among these segments they are not

consumed on a daily basis or in large quantity because of high cost and ready availability of nutritious and tasty vegetables at a substantially lower cost.

The consumption of eggs, fish, meat/mutton and chicken is higher in urban areas as compared to rural areas (Min. WCD 2007b).

In terms of the quantity consumed per capita, the consumption of meats in India is very small. Per capita annual consumption of both goatmeat/mutton and chicken is very low at the all-India level, with a national average being about only 0.7kg. Manipur (state in north-eastern India with 0.22% of India's population) has the lowest goatmeat/mutton consumption at 0.05kg while Jammu and Kashmir (state in northern India with 1.4% of India's population) the highest at 1.97kg (Gandhi and Zhou 2010). The latter's cuisine is strongly influenced by its proximity to Tibet, accounting for the greater demand for goatmeat.

Meat consumption in India is very low and is dominated by goatmeat/mutton (Gandhi and Zhou 2010). Beef consumption still faces serious religious and socio-cultural taboo. However, beef consumption among consumers of non-Hindu religion is on the rise. Expatriates also consume beef. Tapping into niche consumer markets in India with reputable quality of Australian beef, though challenging, but should not be impossible.

The meat expenditure in urban areas at Rs 15.95 is considerably higher than that in rural areas at Rs 9.30. The quantity stands at 0.158kg per capita per month nationally (Gandhi and Zhou 2010). This is constituted by goatmeat/mutton, beef/buffalo meat, pork, chicken and other meats.

The largest is goatmeat/mutton with a share of 46.3% in rural areas, 49.2% in urban areas, and 47.4% nationally (Gandhi and Zhou 2010). The other major meat in demand is chicken which has a share of about 34% across both samples. Beef/buffalo meat has a small share of around 14%, perhaps due to the religious taboo against beef. Pork has a share of only 3-4%, and other meats about 1%. Clearly, meat consumption in India is dominated by goatmeat/mutton, and chicken.

In Asia, India could possibly replace China as a locomotive for livestock sector growth depending on how diets develop in India (Steinfeld 2013).

It is possible that India will assume a large global growth role in future given its massive population and current low level of meat consumption (3.1kg per capita), but it is unlikely to have an impact on global and regional averages exerted historically by China (FAO 2011). Despite the slowdown in consumption, a slower growth rate applied to a large base level in China will still produce large absolute increases in production – accentuating resource constraints and environmental problems that are already associated with such large livestock sectors in the Asian region (Henderson and Steinfeld 2013).

An estimated 20-30% of the Indian population is strictly vegetarian in accordance with the tenets of Hinduism (USDA 2013c). Those Hindus who eat meat tend to do so sparingly and beef consumption is taboo among Hindus, Jains, and Sikhs who comprise over 80% of India's population. Furthermore, non-vegetarian food is not consumed during special days or religious observances. India's large Muslim population (estimated at 160 million) does not consume pork and eats Halal animal products that are sourced from livestock that were slaughtered according to the tenets of Islam.

Driven by rising incomes – the result of consistent economic growth over the past decade – Indian per capita meat consumption has risen by 76% over 1998 to 2010 to 3.95 kg/person. The Food and Agriculture Policy Research Institute estimates this could reach 4.1 kg/person by 2015. Over the rest of the forecast period, we expect meat consumption to rise significantly (BMI 2014c).

Despite its politically sensitive nature, we still forecast beef demand to increase 20.2% to 2.5 m tonnes over the five years to 2018. Beef consumption will increase owing to population growth among non-Hindus. Finally, buffalo meat consumption is expected to become more popular as a source of protein than some pulses, which have been affected by increasing price inflation over the past year (BMI 2014c).

Poultry

As far as meat consumption is concerned, the US leads the world in per capita consumption by a wide margin (Varma 2008). Beef consumption, for example, is 42.6kg per person per year, compared to a mere 1.6kg in India and 5.9kg in China. In case you are thinking that perhaps Indians might be going in for chicken, think again. In the US, 45.4kg poultry meat is consumed every year by each person, compared to just 1.9kg in India.

Poultry's share of Indian meat consumption is higher than mutton, goat and pig meat (Suri 2012).

We have revised up our poultry consumption forecast out to 2018, as chicken meat will be stronger than expected. This is mainly due to the fast rise of quick service restaurants (mainly KFC and Yum! Brands' restaurants), which primarily focus on poultry products in India. Poultry consumption growth will outpace beef consumption, as India will turn to poultry, mutton or fish meat rather than beef with income growth. However, given India's preference for vegetarian proteins, poultry consumption is not expected to grow to the levels seen in other countries (BMI 2014c).

We forecast poultry demand growing by 31.3% between 2013 and 2018 to 4.5m tonnes (BMI 2014c).

SUPPLY

Domestic production and production trends

Productivity of Indian livestock is low compared to many developed and developing countries. Cattle milk yield in India is about 12-15% that in the USA, Canada, and Israel. Meat yield of sheep and goats is about 60% less (Birthal and Rao 2002).

The growth in productivity of species such as sheep and goats has been negligible (Birthal and Rao 2002). Therefore, the real prices of products of sheep and goat, where technology uptake had been lacking, witnessed an upward movement (Birthal and Roa 2002).

Average meat yield of goats, sheep, and pigs in India is 10, 12, and 55kg per annum respectively; about 60% less than those of the above countries. Off-take rate of cattle and buffalo is low. About 6% cattle, 11% buffalo, 38% goats, and 33% sheep are slaughtered every year. These figures suggest considerable scope for raising livestock productivity and production (Birthal and Roa 2002).

The productivity of goats in India is low (Kumar and Pant 2002). The average carcass weight is only 10kg, lower than the world average of 12kg. The milk productivity is also low. One of the main causes of low productivity is lack of adoption of scientific methods of production, and limited commercialisation of goat keeping. Nevertheless, there is considerable potential to raise the productivity of goats and their economic and food security contributions, as India has a large number of important breeds of goat.

According to estimates, beef holds the largest share of 51% of meat production, followed by chicken at 27%, goatmeat/mutton at 13%, and pork at 9% (Gandhi and Zhou 2010). It may be noted that these estimates are at substantial variance with the demand distribution across these meats presented above, in which beef is a minor meat in consumption and goatmeat/mutton have a larger share in meat consumption than chicken. This variance between production and consumption is because India is a substantial exporter of beef and pork to the countries in the region, and there is a cultural/religious taboo on the eating of beef and pork in India.

The contribution of meat from buffalo is about 23.33%, while cattle contributes about 17.34%, sheep 4.61%, goat 9.36%, pig 5.31%, poultry 36.68% and other species 3.37% (Suri 2012).

The value of output of livestock has grown at a much faster rate of 4% compared to the crop sector which grew at 2.9% between 1980 to 2010-2011. The growth in the value of meat (all types) was 4.3% per annum during this period (Kumar et al 2013).

Self-sufficiency

The above estimates suggest there has been strong momentum in the production of eggs, milk, and chicken meat. However, the growth in the production of beef, goatmeat/mutton and pork has slowed down in the past 10 years or so. Nonetheless, given that India's trade in livestock products have been very limited, it means that India's consumption of animal products in the past years has been largely met by the supply from domestic sources (Gandhi and Zhou 2010).

Production is growing at a much slower pace (Ghandi and Zhou 2010). Milk production is growing at 3.7%, egg production at 5.9%, and meat production at 3.1%. Except for the growth rate in chicken which somewhat exceeds the demand growth, large gaps are likely to emerge for many meats as well as in eggs and dairy products as economic development proceeds and demand for livestock products continue to increase.

India clearly suffers from an over-emphasis on self-sufficiency in basic foods and an under-emphasis on being competitive on their farms and in their markets (Reardon and Timmer 2014). Providing stability to domestic food systems is a worthy goal, but local self-sufficiency campaigns have a poor track record even on this score.

Protection

Food exporters face high tariffs, effective bans on some products and strong competition from domestic producers, but opportunities are emerging for certain products (Food Export Association of the Midwest USA 2014b). Exporters seeking to establish a presence in the Indian market should first seek to determine if a product has market access and then be prepared to be patient, start small and comply with special labeling requirements.

Imports of most animal and livestock-derived food products from US are effectively banned because of established Indian import requirements (USDA 2013c). This includes dairy products classified in Chapter 4 and Chapter 21 of the Harmonized Tariff Schedule, poultry meat, lamb and mutton, seafood, goat and pork products including pet foods. Imports of beef are banned due to religious concerns.

In India, tariffs are generally 30-50% on imported food products and to 150% on imported wines, which, when coupled with local excise and sales taxes, distributor margins, and transportation costs, retail prices can end up three to four times the Free On Board (FOB) value of an imported product (AUSTRADE 2014c). See also Central Board of Excise and Customs (http://www.cbec.gov.in/customs/cst2013-14/cst1314-idx.htm).

DISTRIBUTION

The observed development of organized and modern food retailing and food processing industry has to be understood in the light of the presence of a major unorganized sector that may be replaced over time (Morisset and Kumar 2011).

The growth of modern retail in recent years has been estimated at 65% annually, the food service industry (restaurants, fast-food, takeaway, cafés/bars, food stalls/kiosks) overall at 9%, the processing sector at 7%, and parastatal marketing at 7% (Minten et al 2009). As urban food expenditures grew more slowly (at 3.4% annually over the last 10 years, based on the NSSs), this indicates the increasing relative and absolute importance of modern channels in food supply chains. These growth and diversification trends in urban demand and the increasing importance of modern marketing channels are expected to continue in the future, and they might have important implications for all stakeholders in rural-urban food supply chains.

Indian consumers still have very traditional habits when it comes to food shopping (USDA 2013c). They use a variety of small stores, such as bakeries and butchers, as well as push cart vendors, but most dry goods and household items are purchased from kirana stores, which are typically family-owned outlets found on almost every street corner. These usually also offer home delivery.

Indian retail growth was largely driven by increasing disposable incomes, favorable demographics, changing life styles, growth of middle class segment and the growing urbanization and consequent nuclear families and forcing consumers to seek convenience (Farid 2013). There is a rising demand for ready to cook and ready to eat foods. However, on the onset of the global finance crisis, Indian retailers have been suffering from the effects of rapid credit squeeze, high operating costs and low customer confidence.

Indian food retailing is still largely a traditional business (Farid 2013). The food retail markets consists of the total revenue generated through food sales from supermarkets, hypermarkets, cooperatives, discounters, conveniences store, independent grocers, bakers, butchers, fishmongers and all other retailers' of food and drinks for of the premises consumption.

Challenges to food retailing from the demand side include (Farid 2013):

- Value consciousness and fresh food criteria: Indian consumers prefer fresh cooked food instead of packed food,

- Diversity of taste and Preferences: Multiple culture, language and religion have a huge sharing on tastes and preferences, which pose challenges for retailer to develop pan-India presence, and

- Willingness to travel: Retailers have to motivate to the consumer to trade convenience with price range and ambiance.

One way of trimming cost is use of technologies in supply chain, inventory management and use of IT tools to track the consumption pattern and the changing habits of the consumers (Farid 2013).

The “organized” or “modern” food retail sector in India has begun to emerge over the past five years. The number of modern retail outlets has increased from an estimated 200 outlets in 2005 to 3,000 outlets in 2012. The modern retail sector, which includes a mix of supermarkets, hypermarkets, specialty and gourmet stores and convenience stores, is dominated by large Indian companies (Food Export Association of the Midwest USA 2014b).

While India is one of the world’s largest producers of fruits, vegetables, cereals and milk, a significant amount of food is lost each year due to the lack of storage, transportation, cold storage and processing facilities. A key component of the Government of India’s strategy to reduce food losses and contain persistently high food inflation involves attracting investment in food processing and the food value chain. India’s emerging modern food retail industry is also creating new demand for processed foods and food processors are introducing new products and improving traditional recipes using improved technology, innovative packaging and aggressive marketing (Food Export Association of the Midwest USA 2014b).

The vast majority of the food and grocery retail sector in India is unorganised eg. street markets, kiosks and small vendors (AUSTRADE 2014c). Organised (modern) retail is only a small part of the overall food and grocery retail segment, currently worth US$9 billion and expected to grow to US$34 billion by 2016. The organised hospitality sector currently US$1.6 billion is forecast to grow to US$4.6 billion by 2016. The imported food segment was valued at US$269 million in 2012 accounting for 10 to 15% of organised retail shelf space growing at 30% per annum. Imported products have had higher acceptance in urban pockets.

In India, refrigerated warehousing and transportation facilities are limited and costly, but are gradually improving (AUSTRADE 2014c). In some cases, high electricity costs and/or erratic power supplies have constrained cold chain development. The recent decision to allow Foreign Direct Investment (FDI) in the retail sector is expected to lead to improvement in infrastructure. Currently however, the huge demand-supply gap of support infrastructure acts as a constraint in the supply chain of imported products.

Food Service

India's hotel, restaurant and institutional (HRI) sector continues to expand and modernize as domestic and international tourism and business travel increases and Indian consumers increase the frequency with which they consume food outside the home. While traditional hotels and restaurants dominate the market, four and five-star hotels and modern restaurants are benefiting from India’s growing economy, a willingness among consumers to try new foods and cuisines and increasing urbanization. Imported foods must compete with improving locally produced and

processed foods in terms of both quality and price. As mentioned, high tariffs and ongoing market access issues also limit opportunities for imported food products. Nevertheless, niche opportunities for products that are not readily available in India are improving. Identifying a reputable local importer with a strong distribution network continues to be the best way to supply the Indian HRI sector (Food Export Association of the Midwest USA 2014b).

Food safety

The Government of India has recently consolidated its food laws under a single regulatory authority, the Food Safety and Standard Authority of India (FSSAI) (USDA 2013c). Exporters from other countries have to follow an array of food laws covering use of additives, colours, labeling requirements, packaging, weights and measures, and shelf-life.

IMPORTS

Requirement for importation

Imports of goat and sheepmeat products in 2012-13 (up to Dec 2012) were 8609kg (Ministry of Agriculture 2013 - Annexure XII).

A steep rise and then, within a few years, an equally steep fall in the exports of goatmeat from India has exposed failings within the country's supply chain (Verma 2013). A 500% collapse in the Indian goatmeat exports has been sparked by rising domestic prices. *"Within the last few years the prices jumped three times and are now ranging between US$6 to US$8 per kg,"* according to Mansoor Nadeem Lari, managing director of Abdullah Fresh Foods in Lucknow, Uttar Pradesh.

"With processing, chilling and transporting costs, the meat becomes uncompetitive in Arabian markets. As the goatmeat is lean on fat and therefore healthy, the Arabian nations started preferring it over the sheepmeat imports from Australia".

Importing opportunities

Australian manufactured foods are establishing a reputation of 'clean and green' and assurance of quality, competing for shelf space along with other foreign imported food categories from Europe and North America (AUSTRADE 2014c). Austrade South Asia has been focusing on both 'modern retail' as well as the Hotel, Restaurant and Catering (HORECA) segment for key product lines of dairy, seafood and meat, wine and processed food. Australia's formalised protocol arrangements with the Government of India in September 2012 provide access for the import of lamb, pork and goat. Demand for lamb racks is growing in the HORECA and organised retail segments.

Import challenges

Global goatmeat production has been increasing from 2.65 million MT in 1990 to 4.93 million MT in 2008 (Aziz 2010). The major part of this amount is not traded as other major meats. It is usually produced and consumed locally among the poor in the developing countries. A profitable goatmeat business can be ensured by proper knowledge of goat husbandry, budgeting and marketing techniques. There are several challenges associated with increasing meat production including

consumer education, producer education, lack of slaughter and processing plants and lack of organized breeding programs, markets and marketing channels.

India effectively prohibited imports of most food products up until 10 years ago (USDA 2013c). Consequently, the business of importing food is relatively new and consumer awareness of imported foods is limited, but growing.

Impediments to imported food products include (USDA 2013c):

- High Tariffs: Tariffs are generally 30-50% on imported food products, which, when coupled with local excise and sales taxes, distributor margins, and transportation costs, retail prices can be double or triple the FOB price of an imported product;
- Infrastructure: Refrigerated warehousing and transportation facilities are limited and costly, but facilities are improving. In some cases, high electricity costs and/or erratic power supplies have constrained cold chain development. Whereas infrastructure projects were previously reserved for the public sector, private investors are now being encouraged to participate in developing roads, warehouses markets and transportation links. The recent decision to allow FDI in the retail sector may eventually lead to some improvement in infrastructure in states where stores are allowed to open;
- Stringent Food Laws: The Government of India has recently consolidated its food laws under a single regulatory authority, the Food Safety and Standard Authority of India (FSSAI). Exporters from other countries have to follow an array of food laws covering use of additives, colours, labeling requirements, packaging, weights and measures, and shelf - life. See IN2150, IN2069, IN3094, IN3134 for more information; and
- Diverse Food Habits: Indians have a number of food preferences that are derived from religious requirements such as Halal and vegetarianism. In addition, food habits and preferences can change dramatically from region to region, presenting a challenge for food marketers.

Imported food products in the Indian retail market face a high level of competition from domestic products (USDA 2013c). India is a significant agricultural producer and a net exporter of food products. Domestic production has the added advantage of low-cost labour, easy access to raw materials and the protection of high tariffs, which provides an edge over imported food products.

India is a country of markets within markets, involving numerous languages, varying tastes and cultural preferences - posing challenges to nationwide advertising and marketing and hindering pan-Indian distribution (AUSTRADE 2014c). Given the complexity of the market, it is advisable to engage with a partner that is reputable and to start small, ie. consolidate the business in a specific geography and demonstrate success before expanding across India.

Importing regulations

Less strict import requirements compared to some other markets and in most instances has no known specific requirements that differ from relevant Australian standards some additional exceptions include but are not limited to:

- Export registration, Indian Listing, ATM listing audit are all required
- If the product is derived from sheep or goats, the source animals must have been kept on properties which, for the last 2 years, were free from:
    - Border's disease (ovine pestivirus or hairy shaker disease)
    - Ovine epididymitis
    - Anthrax
    - Blackleg
    - Leptospirosis
    - Caprine arthritis/encephalitis;
- DOA understands India may have specific labelling requirements for meat products.

GOATMEAT (AND MUTTON) CONSUMPTION PATTERNS

Wazwan, a multi-course meal in the Kashmiri Muslim tradition (northwest India), is treated with great respect. Its preparation is considered an art. Almost all the dishes are meat-based (lamb, chicken, fish). Beef is generally not prepared in the Srinagar region, but is popular among the other districts. It is considered a sacrilege to serve any dishes based around pulses or lentils during this feast. The traditional number of courses for the wazwan is thirty-six, though there can be fewer. The preparation is traditionally done by a vasta waza, or head chef, with the assistance of a court of wazas, or chefs.

Wazwan is regarded by the Kashmiri Muslims as a core element of their culture and identity. Guests are grouped into fours for the serving of the wazwan. The meal begins with a ritual washing of hands, as a jug and basin called the tash-t-nari are passed among the guests. A large serving dish piled high with heaps of rice, decorated and quartered by four seekh kabab, four pieces of meth maaz, two tabak maaz, sides of barbecued ribs, and one safed kokur, one zafrani kokur, along with other dishes. The meal is accompanied by yoghurt garnished with Kashmiri saffron, salads, Kashmiri pickles and dips. Kashmiri Wazwan is generally prepared in marriages and other special functions. The culinary art is learnt through heredity and is rarely passed to outside blood relations. The wazas remain in great demand during the marriage season (May - October).

Bearing in mind that the Wazwan consists of meat, mostly all lamb dishes, as lamb is considered the occasional delicacy, some of the essential Wazwan dishes include but are not limited to:

- Rogan josh (lamb cooked in spicy red gravy)
- Yakhni (lamb, usually shanks cooked in curd based gravy)
- Rista (pounded lamb meatballs in spicy red gravy)

- Tabakh maaz (fried rack of lamb also known as qabargah. Hindu and Muslim differences make way for specific names for food authentic to the prevalent religion in the area.)
- Kaanti (lamb pieces in red hot gravy, usually eaten as a snack and not part of the main course)
- Syoon olav (meat with potatoes cooked in spicy gravy)
- Syoon pulaav (meat pulao)

Appendix 7: Summary of literature review - European Union

DATA ISSUES

Very limited information available about consumption and/or goatmeat production.

ECONOMIC

Income growth

The European Commission's autumn forecast projects weak economic growth for the rest of 2014 in both the EU and the euro area. In the course of 2015, a gradual strengthening of economic activity is expected and growth is projected to rise further in 2016. All EU countries are set to register positive growth in 2015 and 2016. This is also when the lagged impact of already implemented reforms should be felt more strongly (European Commission 2014a).

The World Bank says there are substantial risks to the medium-term outlook for Russia's 2014-2016 growth (World Bank 2014b). As the Russian economy needed to internalize several rounds of sanctions, countersanctions and measures to stabilize the economy, this environment of higher risk lowered domestic demand.

In the first half of 2014, macroeconomic stability continued and Russia remains in possession of large buffers to uphold stability in the near future (World Bank 2014b). However, there is little movement on the structural reform agenda, which could boost Russia's growth potential in the medium-term. Both of these observations together are captured in the World Bank's most likely scenario - the baseline scenario - with positive but low growth near stagnation in 2015 and 2016.

SOCIAL

Consumption trends for goatmeat

Sheepmeat and goatmeat is appreciated by consumers for its natural origins, its flavour and for the range of convenient cuts of meat that are available, making it a highly versatile product. It also retains its quality in either chilled or frozen form (Leguen de Lacroix 2004). EU-15 (the 15 member countries of the European Union prior to the accession of ten candidate countries on 1 May 2004) consumers eat nearly 1.4 million tonnes of sheep and goatmeat per year (3.5kg per head, compared to 43kg/head for pigmeat).

They play an important role in particular festivals in EU countries and there is clearly potential to improve consumption of sheepmeat/goatmeat. Peaks in sheepmeat consumption are often linked to special festivals such as Easter, Christmas and those of other religious faiths — this has a particular influence on the seasonal patterns of production, prices and imports (Leguen de Lacroix 2004).

Chefs are jumping at the chance to put goatmeat on their menus, given its versatility and subtle flavor (Briggs 2013). "It's really important to explain that we're selling kid goatmeat not goat," says Matthew Williamson, head chef at Flinty Red restaurant in Bristol. "The difference is really stark -

like if you were selling mutton instead of lamb." But convincing people that kid goat is a good thing to eat ultimately comes down to price.

SUPPLY

Domestic production

The importance of sheep and goat production to the EU's regions can be seen in the numbers of farmers engaged in this activity, particularly in certain Member States. Four Member States (France, Greece, Spain and the United Kingdom) account for nearly 80% of EU-15 production (Leguen de Lacroix 2004).

Sheep and goatmeat is the most important sector of animal production in Greece, representing 43% of the gross value of animal production and 13% of the gross value of crop production. A large proportion of sheep and goatmeat production takes place in disadvantaged areas. Disadvantaged areas are characterised by poor resources in comparison to other rural areas and remoteness from main centres of population. They are concentrated in hilly and mountainous areas. Livestock production, which is largely extensive, is one of the main economic activities in such areas and is considered to be a potential option for rural development (Stoforos and Apostolopoulos).

In the future it is possible that Bulgaria and Romania — more important sheepmeat producers — will make a greater impact on the EU sheepmeat market (Leguen de Lacroix 2004).

Production of sheepmeat/goatmeat in the EU was strongly affected by the foot-and-mouth disease (FMD) epidemic in 2001 (more than 5 million sheep were slaughtered and destroyed in its wake) and output fell by around 9.6% in 2001 (Leguen de Lacroix 2004). In the medium- and long-term, after an expected gradual recovery, a slight downward trend both for production and per capita consumption was estimated by Leguen de Lacroix (2004) but data is not available to verify this.

Goat production systems fall into the same three principal categories as sheep production: production primarily for meat; production for milk; and keeping animals for their fibres (Leguen de Lacroix 2004). However, in the countries of northern Europe, goat production is not common. In southern Europe, goat production is almost universally associated with milk production and kids are weaned and finished at a wide range of weights in similar patterns to lambs from dairy sheep flocks.

The sheep and goat flock is estimated to have contracted by 1.7% against the 2012 level, in particular the sheep flock of Spain retreated by 0.4% and of France by 3.5% but Italy improved its numbers by 2.4% and Romania by 5.3%. After a depressing 2012 picture in terms of production and consumption, 2013 depicts slightly more positive prospects with net production and consumption still on declining path but a much slower pace (DG Agriculture 2014).

Surplus dairy animals

Defra estimates that 30,000 billies (young male goats) are born every year but most of them are slaughtered and their carcasses burnt shortly after birth (Briggs 2013). The increase in demand for

goat dairy products in recent years, which means farmers have to expand their milking herds and are left with greater numbers of billies.

Affordability is difficult given the amount of feed required to rear billy goats properly. "Goats are browsers rather than grazers and take longer to mature than lambs," says John Mettrick of Mettrick & Sons butchers in Derbyshire.

"It's a more expensive meat than lamb, which is already seen as expensive..."With the rise in the price of conventional meat we don't seem to be asked for goat as much as we were."

Protection

As sheep and goat production is carried on mainly in the ‘less favoured areas’ (LFAs), the EU’s rural development policy measures are also important for such farmers (Leguen de Lacroix 2004). They may benefit from a series of measures, including specific LFA payments made direct to farmers to compensate for the natural handicaps of working in difficult terrain and other conditions. There are also grants for improvements to farm buildings and various other measures. These combine to help sheep and goat production to continue in many regions of the EU.

Against the background of lower EU production and an expected recovery in New Zealand production, 2015 imported volumes of this origin, as well as from Australia, are expected to grow and to contribute to a relatively stable consumption. The tariff rate quota fulfilment is expected to remain below 70% (DG Agriculture 2014).

DISTRIBUTION

The distance between where sheep and goats are reared and where their meat is consumed, and the seasonal nature of sheep and goat farming, mean that a proportion of animals may be transported over long distances, either between different farms or from farms to slaughterhouses (Leguen de Lacroix 2004). This has raised concerns over the welfare of animals transported over long distances.

IMPORTS

Requirement for importation

The EU has traditionally been a net importer of sheepmeat (Leguen de Lacroix 2004). This is partly a legacy of trade arrangements brought to the EU by new Member States. For example the United Kingdom’s trade agreements with New Zealand and Australia to import sheepmeat had to be accommodated within the EU’s sheepmeat regime. Such arrangements continue. New Zealand remains the major external supplier to the EU market, much of the meat arriving in the EU at a time when domestic EU supply is at its seasonal low point.

These quotas represent approximately 20% of total EU sheepmeat and goatmeat production, though the quotas are not always fulfilled by all suppliers. Other third countries are seeking to negotiate import quotas. Very little sheepmeat or goatmeat is imported at full tariff outside these import quotas.

Imports increased in 2013 driven by higher availability in New Zealand (European Commission 2013). Meat exports are always marginal (around 30 000 tonnes in 2013), though on an increasing path, while strong live exports took place towards Libya, Jordan and Lebanon (totalling 26,000 tonnes in 2013). Imports are expected to grow marginally towards 2023, but still remain well below quota levels. Despite forecasts of higher production, New Zealand and Australia are not expected to fill their quota because of growing opportunities in non EU-markets.

Import regulations

Strictest import requirements of all markets examined specific requirements include but are not limited to:

- Export registration, EU Listing, ATM listing audit, EU Listing approval are all required
- Establishments that export edible products to the EU must be included on the lists on the European Commission's (EC) website. Listing of new establishments that produce edible products for export to the EU can take up to five months
- Slaughter, and inedible byproducts establishments that are listed for the EU, must have access to facilities for washing trucks. Establishments may use truck wash facilities in nearby authorised places such as saleyards
- Microbiological and physico-chemical testing requirements - All establishments involved in the production of food to be exported to the EU must undertake potable water testing in accordance with EU requirements
- The Approved Arrangement (AA) of slaughter establishments listed for the EU must include procedures to ensure compliance with the *National Animal Welfare Standards for Livestock Processing Establishments Preparing Meat for Human Consumption, Australian Meat Industry Council, second edition (2009)*
- Slaughter establishments must have an EU segregation program that starts at the time animals arrive in the lairage. This segregation program must ensure that EU-eligible animals are clearly identifiable and kept separated from animals that are not EU-eligible
- Edible products must be derived only from species for which there is an EU-approved residue monitoring program.
- Slaughter establishments must have procedures that guarantee that individual animals or lots of animals are properly identified. These procedures must also guarantee that animals are accompanied by food safety information in vendor declarations, which are supported by the records kept at the last holding.
- All slaughter, boning, processing and storage establishments listed for the EU must apply controls on product segregation, receival and dispatch

Appendix 8: Summary of literature review - Middle East

DATA ISSUES

Very little data was available for this market.

INCOME

Income growth

	'00-09 (a)	'10	'11	'12	'13e	'14f	'15f	'16f
Algeria	3.6	3.6	2.6	3.3	2.7	3.3	3.5	3.6
Djibouti	3.5	3.5	4.5	4.8	5	6	6.5	6.5
Egypt, Arab Rep.	4.4	3.5	2	2.2	2.3	2.7	3.1	3.2
Fiscal Year Basis	*4.7*	*5.1*	*1.8*	*2.2*	*2.1*	*2.4*	*2.9*	*3.2*
Iran, Islamic Rep.	4.6	5.9	2.7	-5.6	-1.7	1.5	2	2.3
Iraq	-1	5.9	10.2	10.3	4.2	5.9	6.7	8.2
Jordan	6.1	2.3	2.6	2.7	2.8	3.1	3.5	4
Lebanon	4.4	7	3	1.4	0.9	1.5	2.5	3
Libya	3.8	5	-62.1	104.5	-9.4	-9.7	28.8	9
Morocco	4.6	3.6	5	2.7	4.4	3	4.4	4.5
Syrian Arab Republic (b)	4.6	3.2	-3.4	-21.8	-22.5	-8.6	-6.2	1.7
Tunisia	4.2	3	-2	3.6	2.6	2.7	3.5	4
West Bank and Gaza	2.4	9.2	12.2	5.9	1.5	2.5	2.7	2.9
Yemen, Rep.	3.5	7.7	-12.6	2.4	4	5.9	4.2	3.8
Recently transitioned to high-income economies (c)								
Oman	4.3	5.6	0.3	5.8	4.8	4.5	4	4
Saudi Arabia	4.6	7.4	8.6	5.1	4	4.1	4.2	4.3

Series: GDP at market prices (2005 $)
Data from database:GEP Summer

World Bank 2014

a) GDP growth rates over intervals are compound average; current account balance shares are simple averages over the period.

b) The estimates for GDP decline in Syria in 2012 and 2013 are subject to significant uncertainty.

c) The recently high-income countries are based on World Bank's country reclassification from 2004 to 2014.

The GCC's share of the world economy is expected to grow steadily between now and 2020 (The Economist 2009). The pace of growth will be slightly higher than aggregate global growth with an annual average of 4.5% in real terms, compared with 3.3% globally.

Gulf States are experiencing unparalleled growth, especially in the food service industry (Sullivan 2008). There has been double digit growth in tourism and the number of hotels built in the last several years. Market research is needed on what these HRI buyers need in the way of beef, sheep, goat and variety meats for their market segments.

SOCIAL

Consumption

Per capita consumption is around 3.8kg per capita but varies from the highest in Qatar of 22.2kg per capita to 5.1kg per capita in Saudi Arabia (Sullivan 2008). Qatar consumption has been growing at a rate of 3.8% per year from 2000 to 2005.

Poultry meat consumption will continue to be a major competitor to beef, sheep, and goatmeats on price (Sullivan 2008). Poultry has been the major competitor to red meat. Poultry consumption per capita has been increasing steadily. UAE had the highest per capita consumption of poultry 68.5kg per capita and Egypt the lowest (7.74kg per capita).

The Middle East market reveals a propensity for a wider diversity of products of sheepmeat imports (Sullivan 2008). Carcasses and half carcasses, bone-in and boneless, and sheep and lamb combinations mean that buyers are using these products in different market channels and segments. It is important to understand how these products are being directed once in the country of destination.

In the GCC markets, the preference for sheep and goatmeat is from animals that have been pasture raised (Sullivan 2008). In this regard, Ethiopia has the opportunity to fill a consumer niche. It will be important to emphasize the positive attributes of Ethiopian sheep and goats in promotion programs in the importing markets. Fat tail sheep from Syria and Iran are preferred in the Gulf markets.

"As the goatmeat is lean on fat and therefore healthy, the Arabian nations started preferring it (Indian goatmeat) over the sheepmeat imports from Australia". (Mansoor Nadeem Lari, managing director of Abdullah Fresh Foods in Lucknow, Uttar Pradesh quoted in Verma 2013). *"With processing, chilling and transporting costs, the meat becomes uncompetitive in Arabian markets."*

SUPPLY

Production

The major producers were Iran, Turkey, Syria and Algeria (Sullivan 2008). Production in the region had been relatively flat or slightly declining during the period of 2000 to 2005. Data is not available for more recent periods.

DISTRIBUTION

A report from recent World Bank funded market research on horticulture markets in the Gulf States indicates that the rise of the supermarket segment increases the need for developing alliances or market agreements with some of these chains (Sullivan 2008). Some of these chains will be demanding standards and volumes that may make it impossible at this time for Ethiopia exporters to participate, e.g. traceability of the meat to the producer and necessary health certificates from the Central Veterinary Service (CVS). More vertical integration and coordination by Ethiopian meat companies will be a key to success in the future. This will require increased levels of investments.

IMPORTS

Requirement for importation

GCC spending on food imports is projected to more than double from US$24 billion in 2008 to US$49 billion by 2020 (The Economist 2009). An important reason for this growth in imports is water scarcity, which means that domestic agricultural production tends to be costly.

There is increasing investment in foreign agricultural land and it is anticipated that GCC will be competing with China and India for land in Africa in 2020 (The Economist 2009).

As the population grows, demand for imported goods and services will continue to expand steadily (The Economist 2009).

Growing GCC population points towards increased dependence on imported food staples (AUSTRADE 2013). The region's dependence on desalinated water means that meeting more of its food needs through domestic production is not an option in the long term. Some trends in some countries include:

- Saudi Arabia – short term opportunities in red meat; rapidly expanding retail sector combined with 'Western' diets and food preferences.
- UAE – growing demand in chilled lamb, organic and wagyu beef; market competition is fierce from other supply countries; expansion in the hospitality sector as a result of increasing tourist numbers; domestic farming is not sustainable (considerable strain on already scarce land and water resources).
- Oman – rising consumer spending on food and agriculture; foodstuffs exempted from customs duty.

Importing opportunities

Australia is well regarded and networked in MENA (AUSTRADE 2013c).

Growth in airfreight capacity changes Australia's export capability to the region with a high reliance on imported quality food and beverage (AUSTRADE 2013c).

Importing challenges

Investment in facilities and technologies [in Ethiopia] down the supply chain will be crucial to the ability of the exporters to be competitive (Sullivan 3008). Quality of meat will have to be improved, especially in hygiene and consistency in product standards, e.g. size of cuts, colour, and fat cover.

Importing regulations

Stricter import requirements compared to some other markets though in most instances it has no known specific requirements that differ from relevant Australian standards. Some additional exceptions include but are not limited to:

- The slaughter establishment must comply with all requirements of the Australian Government Authorised Halal Program. Imports of red meat and meat products into the UAE require a halal certificate in addition to an AQIS health certificate. The slaughter establishment must obtain a halal certificate for red meat from an Islamic organisation that has an Approved Arrangement with AQIS

- UAE adopts Gulf Standard GSO150/2007 for shelf life requirements. Production and expiry dates must be declared on the package or package label as follows:

    - Day-month-year for food products that have an expiration period less than 3 months

    - Month-year for food products that have expiration period greater than 3 months.

- Documentation - For meat, meat products and edible offal, use Z516 with endorsement 209. A halal certificate issued by an Islamic organisation approved by the UAE is required. The halal certificate must include slaughter dates.

- Port of entry testing - The UAE conducts port-of-entry testing on vacuum-packaged chilled product and consignments may be rejected on the basis of excessively high total plate counts. The UAE takes 5 samples. Of these, a maximum of 3 samples may have a value between 1 million/g or per ml, and 10 million/g or per ml. No sample may be over 10 million/g or per ml.

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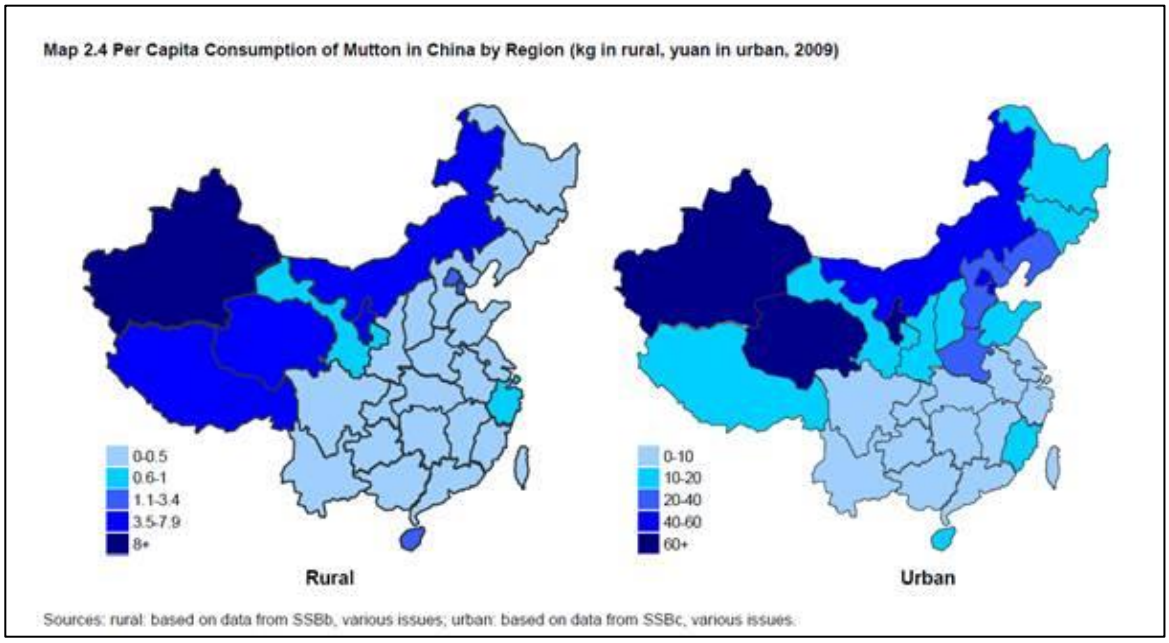
Appendix 10: Market intelligence gathered at SIAL

Similar to other industries and countries, China has many small backyard goatmeat farmers as well as large operations. Small farmers tend to keep their goats near their home and feed them corn plant through fence line feeders. The goats also graze outdoors. Larger farm scale operations keep their goats in brick buildings with concrete floors and feed their goats with corn silage, hay and grain. This better nutrition is often more than small scale farmers can afford.

China's goat industry competes in four production areas in the market: meat, goatskin, milk, and cashmere. China is home to more than 100 million meat goats. Most of the meat produced is consumed domestically with little exported.

The consumption of beef, mutton, lamb and goatmeat will probably continue to increase in China because in the past three decades people in the country's south particularly, have increased their consumption of mutton.

Diagram 1: Per capita consumption of mutton in China by region to use as a guide
(as no information of goatmeat is available online).



Traditional Chinese medicine holds that goatmeat is especially good in winter as it contains hot energy "to warm and power your system". Eating goatmeat can also help expel toxins, especially when combined with drinking strong liquor such as Baijiu or Chinese distilled alcoholic beverage.

Generally speaking, eating goatmeat is more popular in North and West China because of its geographic location as well as the large ethnic population there, such as Xinjiang, Ningxia, Inner Mongolia, Sichuan and Tibet.

Consumption patterns could be divided into:

- North and West China:
    - Products: whole/half carcass or large cuts.

  - Way of Cooking: roast/broil, hotpot, boil, fry.
  - Preference: both skin-off and skin-on.
  - Consume all year-round as they cannot consume pork (Muslim) and summer is less humid.

- Inner Mongolia:
  - Whole carcass.
- South and East China:
  - Products: medium parts (tenderloin, shank, leg, steak) or small cuts (diced meat, strips).
  - Way of Cooking: stew/braise, stir-fry, quick-fry, simmer.
  - Preference: skin-on and meat cubes.
  - Consume winter only as wet hot summer don't consume in summer.

The retail prices vary due to quality and retail channels. Chilled product is approx. RMB 50-70/kg and fresh product approx. RMB 100-150/kg.

Consumers are currently paying 12% tax + 13% value tax for imported goatmeat from Australia.

Feedback from Australian goatmeat exporters participating in SIAL on their activity and experiences in the Chinese market

- Seasonal demand August to Christmas only (stops after Christmas).
- Skin on and skin off exports.
- Three provinces only not the whole country consume goatmeat.
- Product either over 17kg or under 17kg skin on carcass into South China.
- China has been a good market the last 12 months has been able to take a lot of product but seasonal (many concurred on this point).
- Goat job never going to be like beef or lamb never going to be racks, commodity only.
- USA currently largest market. Would supply more to China but US price higher so better returns.

Appendix 11: Questionnaire template - Exporters

MLA Goatmeat Market Project
Exporter Interview Questionnaire

Questionnaire Purpose:

Identify issues impacting on goatmeat exporter's ability to export and opportunities to enhance their competitiveness.

Introduction/ Project Objectives:

Working with MLA and GICA to develop:

- An up-to-date picture of the risks, volatilities, opportunities and areas of stability in the Australian goatmeat export market.
- Identify issues impacting on goatmeat exporter's ability to export and enhance their competitiveness has been completed.
- Identify, qualify and quantify the market opportunities within major export markets (current and potential)
- Deliver trade and market intelligence information to GICA, MLA and goatmeat exporters.

Confidentially:

All information collected will be confidential - only aggregate data will be provided in the final report. We appreciate some information may be commercially sensitive and will respect the confidential nature of what you provide.

Exporter	Interviewer	Date completed

Questions

1. **Since Christmas last year (2013) - how many goats have you been slaughtering? (ie: What was the average weekly throughput in head, average carcase weight and when did it peak and what did it peak at (weekly, head).).**

Avg weekly head slaughtered	Avg carcase weight (kgs)	Peak			
		Period (month/week)	Weekly slaughter during peak (head)	Product	Market/s
		mth/wk			

2. Since Christmas last year - What product have you been turning out (% if mixed product) - to which markets - what volume of each (tonnes)?

Market	Skin-on		Skin-off		Burnt/ Smokies		6-way cuts		Carcase		Frozen		Chilled		Offal		Other		
	%	t	%	t	%	t	%	t	%	t	%	t	%	t	type	t	What	%	t
China																			
Taiwan																			
US																			
Caribbean																			
Middle East																			

Other comments

3. **Do you produce any value-added or high value products (ie: not traded totally as a commodity on a price basis - eg: shanks, cuts, burnt-heads) to any markets? If so, which and what?**

Market	Product	tonnes	Comments (ie only during x times etc)

4. **Are there any unique requirements your customers ask for (eg: legs/tails on to show colour/species, labeling/packaging, age/gender etc).**

Market	Unique requirements

5. **Why are you going to these markets, what is the strategy, how long have you been going to these markets?**

Market	Why are they targeting - what's their strategy for targeting?	Length of time in market? (years/month)

6. **Can you tell us about where your product ends up and how it gets?**

Answer	Yes/No
Market	**Distribution channel**

7. For each market, how satisfied are you with the following:

Market						
Factor	**Not at all satisfied**	**Slightly satisfied**	**Moderately satisfied**	**Very satisfied**	**Completely satisfied**	**Why this rating?**
Security of market (ie 'safe'/long term)						
Margin						
Ease of doing business						
Potential for it being sustainable						
Product feedback						**What sort of feedback?**

Market						
Factor	**Not at all satisfied**	**Slightly satisfied**	**Moderately satisfied**	**Very satisfied**	**Completely satisfied**	**Why this rating?**
Security of market (ie 'safe'/long term)						
Margin						
Ease of doing business						
Potential for it being sustainable						
Product feedback						**What sort of feedback?**

Market						
Factor	**Not at all satisfied**	**Slightly satisfied**	**Moderately satisfied**	**Very satisfied**	**Completely satisfied**	**Why this rating?**
Security of market (ie 'safe'/long term)						
Margin						
Ease of doing business						
Potential for it being sustainable						
Product feedback						**What sort of feedback?**

Market						
Factor	**Not at all satisfied**	**Slightly satisfied**	**Moderately satisfied**	**Very satisfied**	**Completely satisfied**	**Why this rating?**
Security of market (ie 'safe'/long term)						
Margin						
Ease of doing business						
Potential for it being sustainable						
Product feedback						**What sort of feedback?**

Market						
Factor	**Not at all satisfied**	**Slightly satisfied**	**Moderately satisfied**	**Very satisfied**	**Completely satisfied**	**Why this rating?**
Security of market (ie 'safe'/long term)						
Margin						
Ease of doing business						
Potential for it being sustainable						
Product feedback						**What sort of feedback?**

8. Over the last 10 years, have the markets you've targeted changed? If so, how?
OPEN DISCUSSION

a) What markets did you use to go to that you don't any more?
b) Why don't you any more (or what changed)?
c) When was this (2 years ago, 10 years ago etc)?
d) How did it go?
e) If it went poorly why/what happened?
f) What would they do differently (ie what could they have done)?
g) What advice would they give to others considering this market?
h) What could have been done to assist them (ie what could MLA have done)?

Market	Discussion (what, why, how, who, where, when)

9. What's impacting on your businesses ability to export (ie what's holding you back) to current markets or potential markets*?
UNPROMPTED (note obstacles if agreed through prompting)

Market	Obstacle (refer below if prompting required)

*** Important to gain information on potential markets**

9a. If no answers forthcoming OR if only a few - prompt ("What about...")

	Prompted list
a	AQIS/Vets
b	Currency/Exchange rates
c	Consistency of supply (or have depots resolved this)
d	Feedback from the market (ie getting mixed signals, issues securing contracts)
e	Seasonality of DEMAND
f	Seasonality of SUPPLY
g	Understanding of product specifications
h	Influence of other players in the supply chain (ie traders, importers etc)
i	Labour costs (Australian-based labour)
j	Lack of understanding of cooking/eating goatmeat
k	Commodity 'stigma'
l	Lack of product specifications/feedback/understanding of requirements
m	Lack of real understanding of market opportunity
n	Cultural barriers
o	How animals are being delivered (ie: Animal welfare issues / Residues) (what/detail)
p	Market access - better access to some markets, tariffs/quotas (internal - ability to access markets or external - tariffs/quotas)

10. How could your competitiveness be enhanced (what can remove those obstacles)?
UNPROMPTED (note removal strategies if agreed through prompting)

Obstacle	Removed through (refer below if prompting required)

10a. If no answers forthcoming OR if only a few - prompt ("What about...") and match with below

	Prompted list
a	Better promotion of goatmeat in-market
b	Product development/innovation
c	Better market intelligence
d	Better cultural understanding

11. If more than three mentioned (excluding price/exchange rates) - **Out of everything you've mentioned in terms of options to enhance competitiveness (remove obstacles), what would be the most important three in each market:**

Market	Obstacle/Removal 1	Obstacle/Removal 2	Obstacle/Removal 3

12. Where do you source your information about markets from?

Market	Source of information

13. What competes with your goatmeat product that you export in your markets (this could be another country's goatmeat and/or alternative protein)?

Market	Competition (country/product)

14. What gives that competing option a competitive advantage? (ie: alternative protein - cheaper/more familiar, country - cheaper labour etc)

15. What would the Australian goatmeat market have to do to be able to compete for higher value market segments?

Appendix 12: Questionnaire template - Regional managers

MLA Goatmeat Market Project
Questions for MLA Regional Managers

Regional Manager - Market	Interviewer	Date completed

1. Overall questions about consumption

a. How is goatmeat being consumed (hot pot etc) in each of these markets (depending on who is being interviewed there may be multiply markets)?
b. Who is eating it (ethnic segment)
c. Where is it being purchased (looking for home vs restaurant consumption)?
d. When is it being eaten (seasonality/festivals/all year)?

Geography	How it's being consumed	Who is eating it (ethnic segment)	Where it's purchased	When is it being eaten

2. Can you provide information on the distribution network within your market (what are the logistics of getting it to the final consumer)?

3. Is goatmeat (in general) already visible in-market (ie: in supermarkets, wet markets, restaurants etc)

4. If goatmeat is visible - Is it Australian goatmeat?

5. Are there any threats to Australian goatmeat imports from domestic production or other countries? If so, please elaborate.

6. What products are currently demanded (in what form and from where geographically)?

Geography	Skin-on	Skin-off	Burnt/ Smokie	6-way cuts	Carcase	Frozen	Chilled	Offal	Other

7. Any particular market specifications (ie: sex, age, feet, heads, etc)

Geography	Requirements

8. What are the current wholesale and/or retail prices?

Geography	Currency	Product	Prices (Wholesale)	Prices (Retail)

9. Can you tell us the price per kilogram of any competing products (ie: mutton, pork, chicken, beef, buffalo)?

Geography	Currency	Mutton	Pork	Chicken	Beef	Buffalo

10. Are there opportunities for higher value products and/or market sophistication opportunities (organic, green, healthy, primals, offal)? If so, please elaborate.

11. Are there trends that may impact upon the demand for goatmeat? If so, please elaborate.

12. What are the import requirements for goatmeat into your market (ie: tariffs, import duties, labelling, protocol access, processing requirements)?

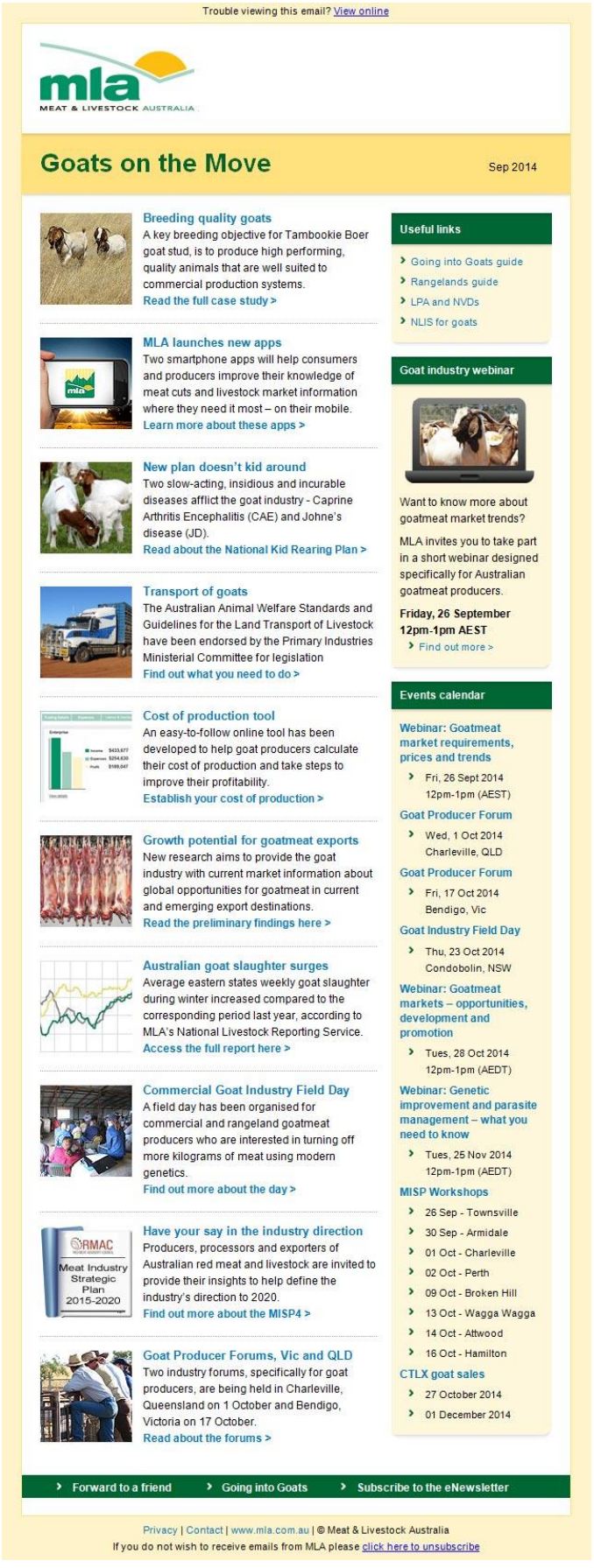
13. What unique factors should exporters be aware of when looking to export goatmeat to your market? (ie: cultural, political, economic, legal/regulatory).

14. Where do you source your information from? (ie: general observations, specific observations, specific research findings).

15. If formal research reports - Can we have copies of this information?

Appendix 13: Goats on the Move Articles

Article 1: Included in September 2014 edition



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mla MEAT & LIVESTOCK AUSTRALIA

Goats on the Move

Sep 2014

Breeding quality goats
A key breeding objective for Tambookie Boer goat stud, is to produce high performing, quality animals that are well suited to commercial production systems.
Read the full case study >

MLA launches new apps
Two smartphone apps will help consumers and producers improve their knowledge of meat cuts and livestock market information where they need it most – on their mobile.
Learn more about these apps >

New plan doesn't kid around
Two slow-acting, insidious and incurable diseases afflict the goat industry - Caprine Arthritis Encephalitis (CAE) and Johne's disease (JD).
Read about the National Kid Rearing Plan >

Transport of goats
The Australian Animal Welfare Standards and Guidelines for the Land Transport of Livestock have been endorsed by the Primary Industries Ministerial Committee for legislation
Find out what you need to do >

Cost of production tool
An easy-to-follow online tool has been developed to help goat producers calculate their cost of production and take steps to improve their profitability.
Establish your cost of production >

Growth potential for goatmeat exports
New research aims to provide the goat industry with current market information about global opportunities for goatmeat in current and emerging export destinations.
Read the preliminary findings here >

Australian goat slaughter surges
Average eastern states weekly goat slaughter during winter increased compared to the corresponding period last year, according to MLA's National Livestock Reporting Service.
Access the full report here >

Commercial Goat Industry Field Day
A field day has been organised for commercial and rangeland goatmeat producers who are interested in turning off more kilograms of meat using modern genetics.
Find out more about the day >

Have your say in the industry direction
Producers, processors and exporters of Australian red meat and livestock are invited to provide their insights to help define the industry's direction to 2020.
Find out more about the MISP4 >

Goat Producer Forums, Vic and QLD
Two industry forums, specifically for goat producers, are being held in Charleville, Queensland on 1 October and Bendigo, Victoria on 17 October.
Read about the forums >

Useful links

- Going into Goats guide
- Rangelands guide
- LPA and NVDs
- NLIS for goats

Goat industry webinar

Want to know more about goatmeat market trends?

MLA invites you to take part in a short webinar designed specifically for Australian goatmeat producers.

Friday, 26 September 12pm-1pm AEST

- Find out more >

Events calendar

Webinar: Goatmeat market requirements, prices and trends
- Fri, 26 Sept 2014 12pm-1pm (AEST)

Goat Producer Forum
- Wed, 1 Oct 2014 Charleville, QLD

Goat Producer Forum
- Fri, 17 Oct 2014 Bendigo, Vic

Goat Industry Field Day
- Thu, 23 Oct 2014 Condobolin, NSW

Webinar: Goatmeat markets – opportunities, development and promotion
- Tues, 28 Oct 2014 12pm-1pm (AEDT)

Webinar: Genetic improvement and parasite management – what you need to know
- Tues, 25 Nov 2014 12pm-1pm (AEDT)

MISP Workshops
- 26 Sep - Townsville
- 30 Sep - Armidale
- 01 Oct - Charleville
- 02 Oct - Perth
- 09 Oct - Broken Hill
- 13 Oct - Wagga Wagga
- 14 Oct - Attwood
- 16 Oct - Hamilton

CTLX goat sales
- 27 October 2014
- 01 December 2014

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Article 1: Research identifies growth potential for goatmeat exports

Source: http://www.mla.com.au/News-and-resources/Industry-news/Research-identifies-growth-potential-for-goatmeat-exports

New research aims to provide the goat industry with the most current market information available to allow for more informed decision making when it comes to assessing global market opportunities.

MLA is currently funding the research which aims to identify the risks, volatilities, opportunities and areas of stability in Australian goatmeat export markets. The project includes desktop research, exporter interviews and a visit to SIAL tradeshow in China.

Established goatmeat export markets, as well as potential markets, are being examined including China, India, Taiwan, South Korea, the United States, the Middle East and the Caribbean.

Spotlight on China

Preliminary research findings about the Chinese market indicate most Australian goatmeat exports to that market are frozen, skin-on carcases. Demand remains seasonal (August-December) with peak demand coinciding with the lead up to the Chinese New Year. Goatmeat tends to be more popular in northern and western provinces such as Xinjiang, Ningxia, Inner Mongolia, Sichuan and Tibet due to their traditional pastoral history and familiarity with goatmeat consumption, as well as the influence of Muslim and Mongolian cultures.

China has limited arable land available to increase domestic production of meat with fierce competition from other commodities. It is more likely the remaining arable land will be used for the production of grain and vegetables for human consumption rather than livestock production.

The research will examine the supply chains and distribution channels which will be important for Australian exporters who are considering entering the Chinese market. Early findings recognise the length of time it can take to establish workable trading arrangements between parties.

Further information

Morgan Gronold
Trade & Investment Queensland
T: 07 4651 2997

Article 2: Included in January 2015 edition

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MEAT & LIVESTOCK AUSTRALIA

Goats on the Move

Jan 2015

Focus on supply critical in rangelands

A long term strategy to ensure supply is critical to the future success of the industry according to producers Dan and Sally Muenster.
Read the full case study >

New cost of production tool

This new tool can help you understand your cost of production and compare the profitability of different livestock enterprises.
Learn more about the tool here >

Strong demand for Australian goatmeat

Global demand for goatmeat continues to surge as more markets recognise Australia as a reliable source of high quality product.
Learn more about what is driving demand >

Tips for exclusion fencing

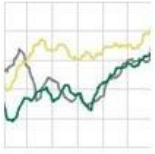
Wild dogs present an increasing risk to goat producers in mainland Australia with stock losses reported in most major regions.
Read about what producers are doing >

Improving eating quality of goatmeat

A revolutionary meat processing technology proves promising for goatmeat eating quality and shelf life.
Discover what's involved >

Industry priorities for next five years

MLA and GICA are working together to develop a five year strategic plan for the goatmeat and livestock industry.
Learn more about the industry plan >



Goat prices strong in 2014

The industry commenced 2014 on a positive note and continued in that theme to realise some of the highest prices seen since 2011.
Access the full report here >

Useful links

- Going into Goats guide
- Rangelands guide
- Cost of Production Tool
- LPA and NVDs
- NLIS for goats

Other news

- Old Versions of LPA NVDs to be Phased Out
- NVD book-ordering service resources increased
- Horizon scholarship offers $5,000 for ag students
- How to sustainably feed nine billion people
- Steps to managing climate variability

Events calendar

Influential Women's Workshop - Corowa

- 25 Feb 2015
  Read more >

ABARES Outlook 2015 conference

- 3 Mar 2015
  Read more >

Goat sales

- Dubbo, 10 Feb 2015
  11am start
  Ph: Joe Portelli
  0418 835 464

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Article 2: Understanding export demand for Australian goatmeat

Source: http://www.mla.com.au/News-and-resources/Industry-news/Export-demand-for-Australian-goatmeat

Global demand for goatmeat continues to surge as more markets recognise Australia as a reliable source of high quality product.

However, it's remained a mystery what's been driving this demand and exactly what customers of Australian goatmeat are looking for.

In seeking to address this, the Goat Industry Council of Australia (GICA) and Meat & Livestock Australia (MLA) commissioned research in 2014 to investigate current and potential markets for goatmeat. A better understanding of existing and potential markets as well as the opportunities they present will facilitate targeted industry investment to maximise the opportunity for market development.

More specifically, the project sought to establish an up-to-date assessment of the risks, volatilities, opportunities and areas of stability in the Australian goatmeat export market.

The research included an investigation of the recent expansion of goatmeat exports to Asia, driven largely by increased demand from China. The existing and potential markets of the United States of America, Caribbean, South Korea, Taiwan, China, India, the Middle East and the European Union were also examined.

While qualifying the actual demand within markets proved to be difficult due to the lack of reliable data, the research uncovered a range of interesting and unexpected information about goatmeat consumption and production in overseas markets.

Overall, strong underlying demand for affordable protein is driving demand for goatmeat rather than direct demand for goatmeat itself.

With very few exceptions, goatmeat is traded as a commodity product, which is seen as an affordable form of protein. Goatmeat is not necessarily marketed as goatmeat but rather is often combined with, or substituted for, mutton.

There is a distinct lack of supply chain transparency in most markets, making the identification of specific consumer preferences and product disposal methods beyond general assumptions, difficult.

Despite these limitations, there is only limited capacity for destination markets to increase local production to satisfy domestic demand. Demand in these markets is always likely to exceed domestic supply capacity, underpinning ongoing demand for Australian goatmeat.

What does this mean for the industry?

Australia is well placed to continue to supply affordable commodity goatmeat to global markets although growing demand is likely to continue to test supply capacity.

The production of low cost, high quality goatmeat for export should remain a priority for the industry. Australian goatmeat should also be positioned to appeal to audiences interested in “trying something new” particularly through the restaurant chain sector that is growing in China and is popular with younger, more affluent populations.

Increased awareness of food safety in destination markets has created the opportunity for Australian goatmeat to be differentiated from local and other imported product, and to be marketed as safe and clean.

A full market profile, including literature review, was completed for each market.

The report is due for release later in 2015 and will be made available on the MLA website.