# LiveCorp Submission

(to be read in conjunction with the MLA/LiveCorp joint submission)

## Senate Inquiry into animal welfare standards for Australia's live export markets

22 July 2011

# Table of contents

# Abbreviations

ABARE – Australian Bureau of Agricultural and Resource Economics

ACIAR – Australian Centre for International Agriculture Reseach.

CIE – Centre for International Economics

cwe – carcass weight equivalent

GVP – gross value of production

ILC – Indigenous Land Corporation

LEP – Livestock Export Program

LiveCorp – Australian Livestock Export Corporation

LTAWP – Live Trade Animal Welfare Partnership

lwt – live weight

MLA – Meat & Livestock Australia

R&D – research and development

swt – shipped weight

# 1 Introduction

The Australian Livestock Export Corporation Limited (LiveCorp) welcomes the opportunity to respond to the **second item** in the terms of reference of the Senate Inquiry into animal welfare standards for Australia's live export markets regarding the economic impacts of the livestock export trade.

LiveCorp has separately addressed this term of reference to emphasise the economic and other impacts of the livestock export trade on professional livestock exporters who form LiveCorp's membership.

# 2 Economic and other benefits of the livestock export trade

The live cattle, sheep and goat industry make a significant contribution to the Australian economy and livestock industry, particularly in regional areas where the livestock are sourced. The industry contributes an average of $1 billion annually in export earnings, with nearly three-quarters flowing back to the livestock producers.

## 2.1 Dependence of the trade in northern and western Australia

The importance of the live export industry particularly to northern and western Australia cannot be overestimated. The industry has emerged as one that is the sole source of income for many producers. Over 75 per cent of properties in the northern live export zone are partially or completely reliant on live cattle receipts (ABARE, 2007).

The live export industry has transformed the northern and western cattle production regions of Australia. Previously these regions produced livestock of variable quality, weight, condition and age. The subsequent returns to producers were marginal at best. Over the last 15 years, however, driven by live export demand, producers in these regions now respond to, and deliver on, the specific customer requirements of South East Asia and the Middle East.

Over three-quarters of livestock exports depart from northern and western Australia (80% for live cattle exports and 75% for live sheep exports between 2006-2009) (ABARE 2008). The majority of goat exports originate from New South Wales and South Australia (33 and 27 per cent, respectively). Given the regional specific nature of the trade, the continuation of this trade is vital to the future vitality of these regions.

## 2.2 Impact on regional and remote employment

The livestock export industry employs around 13,000 people (Hassall & Associates 2006), predominately in remote and regional areas of Australia. The industry contributes $1.8 billion to gross domestic product annually and pays wages and salaries totalling nearly $1 billion annually (Hassall & Associates 2006). The higher on-farm net returns received by livestock exporters (compared to alternative enterprises) have flow on effects to local communities through increased producer spending and consequently local employment.

A broad range of sectors are dependent on the international livestock trade: exporters, port and stevedoring services, shipping companies, road transporters, stockfeed and veterinary suppliers, helicopter and other specialist service providers.

AgEconPlus et al 2007 estimated the short, medium and long term impacts of a cessation of the live export trade on employment. The analysis indicated that 5,800 full time equivalent jobs (direct and indirect) would be lost within the first year. The net losses from a cessation of live exports will continue to be significant in the medium to longer term, with losses of 4,700 in year five and 3,700 in year 10.

The live export industry is also a significant employer of indigenous people across northern Australia, where alternative employment opportunities are scarce. The

Indigenous Land Corporation (ILC) is the largest indigenous owned, operated or associated enterprise. The ILC plays a key role in developing indigenous pastoral operations in the far north of Australia, the area where the majority of feeder cattle for Indonesia are sourced. The ILC collaborates with more than 80 indigenous properties collectively running over 200,000 head of cattle, employing over 700 people and with approximately 14,000 indigenous people living on or near these pastoral properties.

## 2.3 Impact on livestock prices and producer profitability

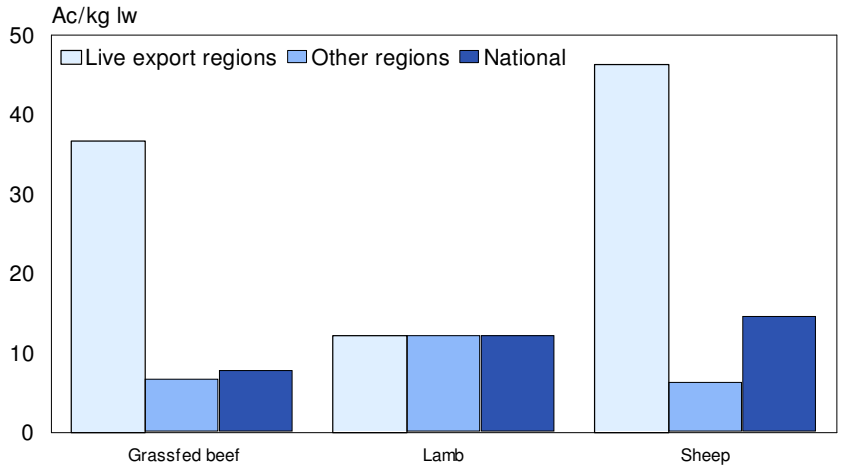
The livestock export industry plays a key role in underpinning Australian livestock prices and producer profitability, both nationally and in live export regions.

Independent modelling by the Centre for International Economics (CIE) concludes that the total cessation of live exports would impact national livestock prices as follows:

- The saleyard price of grassfed cattle would be 4% or 7.88¢/kg liveweight (lwt) lower
- The saleyard price of lambs would be 7.6% or 12.2¢/kg lwt lower
- The saleyard price of mutton would be 17.6% or 14.6¢/kg lwt lower

Figure 2.1 shows that the impacts on prices in northern and Western Australia far exceed the national price impacts above, with prices in live export regions expected to fall 37¢/kg lwt for cattle and 46¢/kg lwt for sheep (CIE 2011).

**Figure 2.1**
Contribution of the live trade regional farm gate prices




Source: CIE 2011

If live exports were banned, the overall impact on the gross value of production of the red meat and livestock industry – taking into account reduced livestock prices and higher production and exports – is estimated to be $209 million or 2.3 per cent **lower** per year. In terms of net farm income (value added), the reduction would be $99 million (see table 2.1). Of the $247 million in lost GVP to the **farm sector**, 68% would be lost in the live export regions (CIE 2011).

**Table 2.1: Impact of the live trade on cattle and ----sheep industry GVP and value added[a]**

| | | *Gross value of production* | | | *Value added* | | |
|---|---|---|---|---|---|---|---|
| | | Cattle | Sheep | Total | Cattle | Sheep | Total |
| *Total benefits* | | | | | | | |
| Farm sector | $m | -128 | -119 | -247 | -47 | -64 | -110 |
| Exporters | $m | -40 | -30 | -71 | -8 | -6 | -14 |
| Processors | $m | 70 | 38 | 108 | 18 | 8 | 25 |
| Total | $m | -98 | -111 | -209 | -37 | -62 | -99 |
| *Percentage contribution* | | | | | | | |
| Farm sector | % | 52 | 48 | 100 | 42 | 58 | 100 |
| Red meat chain | % | 57 | 43 | 100 | 57 | 43 | 100 |

[a] Average impact over the period 2005-06 to 2008-09. Value added is equivalent to farm income and net margins for exporters and processors, that is, total output less input and hired labour costs.

*Source:* GMI model and CIE calculations.

Despite red meat production in Australia increasing, the overall gross value of production across the red meat and livestock supply chain would **fall**.

### *2.3.1 LiveCorp perspective on the livestock prices and producer profitability*

Despite the weight of evidence from various reports and modelling exercises (independent, industry funded and from ABARES the Government forecaster) that quantify the positive contribution live export makes to the regional and the national economy, various attempts have been made to discredit live export's economic contribution.

In late 2008, RSPCA Australia commissioned ACIL Tasman to examine the likely scale and scope of the adjustments that would be required to the Western Australian (WA) sheep industry if the exportation of live sheep were to cease.

ACIL Tasman indicated that cessation of the live sheep trade in WA would reduce the value of the WA flock by $74 million.(1) In contrast, Clarke, Morison and Yates estimate that cessation of live sheep exports from Southern WA would result in a medium term "On-farm loss (livex)" of $120 million based on market conditions that prevailed in 2005-06.(2)

In light of the much lower estimates of the impact estimated by ACIL Tasman LiveCorp requested Economic Insights, as an independent economic research firm, to review the ACIL Tasman study. Economic Insights reported that the approach implemented by ACIL Tasman was reasonable as a 'first step' and has merit as a

[1] ACIL Tasman 2009, *The Value of Live Sheep Exports from Western Australia*, March, p.38.

[2] Michael Clarke, Julian Morison and Warwick Yates 2007,The Live Export Industry, Assessing the Value of the Livestock Export Industry to Regional Australia, Report prepared for Meat and Livestock Australia, p.99.

means for deriving an estimate of the impact of cessation of live sheep exports on the WA sheep industry.

However, they concluded that significant further work was required before the ACIL Tasman approach could produce reliable results. Much of the data and many of the assumptions built into the ACIL Tasman methodology remain to be verified or tested by industry. In addition, the report concluded that the ACIL Tasman methodology was underdeveloped in several important areas, including:

- The study did not fully utilise the results that can be generated by a decision tree analysis. This has the effect of underestimating by $40 million the effect of the cessation of live sheep exports on flock values in WA; and
- The methodology did not allow for sheep and mutton prices to be affected by increased supplies of these meats on the domestic market that would be generated by cessation of live sheep exports. This led to an underestimation by $115 million of the effects of the cessation of live sheep exports on flock values in WA.

Overall, and subject to the significant qualifications regarding the unverified data and assumptions built into the ACIL Tasman methodology, Economic Insights found that removal of live sheep exports in WA could lower the value of the WA flock by about $230 million not the $74 million reported by ACIL Tasman.

While these theoretical exercises provide insight for policy the current temporary closure of the Indonesian live cattle trade provides the real world evidence of the value of this industry. Industry reports a crippling loss of income in northern regions and knock on effects throughout the Australian industry. Impact on production and processors

While a complete ban of live exports would negatively impact live exporters and livestock producers, it would provide positive benefits to processors and meat exporters and their suppliers via reduced livestock prices and increased livestock supplies available for production (see table 2.1).

The diversion of livestock originally destined for live export to domestic processing facilities could increase beef production by 109,000 tonnes cwe or 5.1 per cent. Similarly, sheepmeat production could increase by 100,000 tonnes cwe or 14.6 per cent. The majority of this increased production (see table 2.2) is estimated to flow to export markets (CIE 2011).

**Table 2.2: Impact of the absence of the live trade on meat production, consumption and trade[a]**

| | | ***Grass fed*** | ***Grain fed*** | ***Beef*** | ***Lamb*** | ***Mutton*** | ***Sheepmeat*** |
|---|---|---|---|---|---|---|---|
| *Key aggregates* | | | | | | | |
| Production | *kt cwe* | 114 | -5 | 109 | 51 | 49 | 100 |
| | *%* | 6.9 | -1.1 | 5.1 | 12.0 | 18.9 | 14.6 |
| Domestic consumption | *kt cwe* | 1 | -11 | -10 | 10 | 2 | 12 |
| | *%* | 0.1 | -4.5 | -1.4 | 4.3 | 5.0 | 4.4 |
| Exports | *kt cwe* | 113 | 5 | 118 | 41 | 47 | 88 |
| | *%* | 9.5 | 2.1 | 8.2 | 21.5 | 22.1 | 21.8 |

[a] Change from the observed case. Values for key variables of the live trade are zero.
*Source:* GMI model and CIE calculations.

However, as discussed above, despite red meat production in Australia increasing, the overall gross value of production across the red meat and livestock supply chain would fall by $247 million.

### *2.3.2 LiveCorp perspective on production and processors*

Parts of the Australian meat processing sector have run a long-term campaign to have the live export trade closed, citing the trade as a key factor reducing the competitiveness of Australian meat processing and opportunities for employment within it.

Interests within the sector have argued that the live export trade reduces the opportunity for livestock to be slaughtered domestically and increases prices through increased saleyard demand.

This argument is made irrespective of whether livestock meet the specifications of the markets served by the processors, whether the livestock are located near available processing facilities (and in the absence of consideration of additional transport costs), and whether the markets to which the livestock are sold will accept boxed Australian chilled and frozen meat as a substitute for live animals.

Nonetheless, it is likely that the live export trade does have some impact on the prices that the domestic meat processing sector pays for inputs (slaughter-ready stock). However, it is not clear how restrictions on the trade of livestock can be achieved without reducing the price paid to producers.

The concerns from parts of the processing sector about the impact of the live export trade increasing the processors' cost base is illustrative of the benefits of the live export trade to cattle producers' incomes.

The meat processing sector is facing a number of challenges, including reduced demand, increased competition in export markets, variable feed grain prices and a higher Australian dollar. The meat processing sector may also have difficulty with capacity utilisation given the volatility in supply, notably due to periods of drought over the past decade, which for a capital intensive industry can make positive cash-flow and profit difficult to maintain. There has also been a long term rationalisation of processing capacity in Australia as old labour intensive plants close and new larger more efficient ones are built.

It is not clear what proportion of a processor's cost base is affected by the live export trade. However, in 2009-2010, exports of feeder and slaughter cattle accounted for approximately 11% of total cattle turnoff. Live sheep exports in the same period accounted for approximately 30% of older sheep turnoff (and approximately 10% of total sheep and lamb turnoff). It is likely that supply as a factor has a impact on the processing sector. It is also not clear where Australia's processors sit on global cost curves (international efficiency), especially around key factors of production like labour, and the extent to which developing more niche, higher value, offerings will be able to overcome any significant processor challenges.

A point of contention in this debate has been the extent to which the live export trade is able to supply markets that Australia would not otherwise be able to supply – because of logistics, cultural/religious and other consumer preferences, and cost competitiveness.

The extent to which the live export trade provides access to markets that the Australian chilled and frozen meat industry could not sell into is a key empirical point that needs to be established. The reality is, that in the absence of live exports from Australia, other countries would be able to fill the gap in demand for live animals, at an overall cost to Australia's export income and livestock producers returns.

In examining the claims made by parts of the meat processing sector that the live export trade is the principal factor affecting their competitiveness, the following points are relevant:

- Large supply volatility in the Australian livestock sector due to seasonal conditions affecting both turn-off and restocking decisions and changes in related markets (for example availability of sheep for processing is determined in part by changes in wool prices affecting producer decisions) which make acquisition of stock for the live export trade only one factor affecting processor supply.
- Cost increases in the production chain affect processor competitiveness which are greater than the impact on price resulting from live export trade demand. For example, changes in the need for and cost of supplementary feeding post farm-gate and rising labour costs (associated with the mining boom in Western Australia and other states).
- The changes to the domestic value chain and industry structure – increasing market power of retailers, including the major supermarket, is thought to be one factor reducing meat processor margins.
- Change in the demand for boxed beef and sheep meat products in export markets, with demand focussing on product lines Australia may be less able to supply.
- The strength of the Australian dollar, relative to the US, Australia's major boxed beef competitor, is also eroding returns for meat processors where the two countries compete (eg Japan, Korea and other parts of developing Asia).

Restricting trade, through the restriction of marketing opportunities for livestock, will reduce GDP and national income without necessarily favouring the processing sector.

Where other countries impose tariffs and subsidies to protect their domestic producers, it is not in Australia's interests to restrict trade in goods where we hold a competitive advantage. Furthermore, it is a common scenario that processed goods (agricultural or otherwise) face a higher import tariff than the unprocessed primary input, often for the same protectionist reasons in that country.

The interests of Australia are best placed by creating competitive, flexible and resilient markets, where resources flow to their most productive use. Rather than protecting industries through restricting trade, policy settings should seek to remove impediments to adjustment and manage for the consequences of competition rather than resisting change that enhances national outcomes.

### *2.3.3 LiveCorp perspective on the economic and policy settings of the live sheep export trade and sheep meat trade from Western Australia*

In September 2009 the World Society for the Protection of Animals (WSPA) released a report prepared by ACIL Tasman which analysed the economics and policy settings of the live sheep export trade and sheep meat trade from Western Australia.

The report claimed that there are significant subsidies paid on the slaughter of live sheep in the Middle East and that these subsidies and other claimed indirect support for the live sheep trade are one of the "strongest demand drivers for Australian live sheep in the Middle East".

The claimed subsidies and indirect supports were said to have influenced "the development of processing capacity and the markets for WA sheep meat products" which had "probably" reduced Gross State Product in Western Australia. An evaluation of multipliers indicated that "every $100 of additional output from exporting sheep live produces additional Gross State Product (GSP) of $82.50; for every $100 of additional output in the meat processing sector GSP increases by $101.50".

ACIL Tasman also implied that the claimed detrimental effect of the live trade may be growing through time because there "appears to be significant and growing substitution between sheep meat and live sheep in most Middle East countries".

Again, LiveCorp engaged Verve Economics to review the ACIL Tasman analysis and found that it significantly overstates the role subsidies have played in the development of the market for meat from freshly slaughtered Australian animals in the Middle East. This is because no evidence could be found of direct subsidies for consumption of meat from freshly slaughtered animals in Egypt, Oman, Jordan, the United Arab Emirates or Saudi Arabia.

Assistance arrangements to aid consumption of meat from freshly slaughtered animals are available in Bahrain, Qatar and Kuwait. However, in Bahrain and Qatar these arrangements have only provided assistance to the consumption of sheep meat from freshly slaughtered animals since about 2002-03 after sheep prices had risen significantly. In Kuwait the arrangements only provided assistance for the consumption of meat from freshly slaughtered sheep since 2009-10. Furthermore, in recent times the same assistance arrangements have been extended to Australian chilled carcases.

Thus the subsidy arrangements in Bahrain, Qatar and Kuwait appear to provide only temporary assistance for the consumption of meat from freshly slaughtered sheep when sheep prices are at historically high levels. As the subsides in Bahrain, Qatar and Kuwait are a form of temporary assistance and have only applied in recent times, their impact on "the development of processing capacity and the markets for WA sheep meat products" would not be expected to be large.

Verve also found that multiplier analysis is not an appropriate economic analysis tool to evaluate the effects of banning live exports. This is because live exports comprise a relatively large share of the Australian finished cattle and finished sheep markets. Consequently, banning such exports would be expected to lead to significant adjustments in the market place and hence the economy. These adjustments need to be taken into account to obtain reliable estimates of the economic effects of removing the live trade.

The ACIL Tasman report argued that the negative effect on GDP of a ban on live exports could be minimised by increasing the "level of substitution between the processed sheep meat and live sheep". It was argued that this would ensure that there would be limited substitution between Australian live sheep and sheep from other sources. However in the Middle East, substitution opportunities between Australian live sheep and sheep from other sources are increasing as a result of

regional market developments. For example, several Middle Eastern countries are actively developing alternate live sheep supply options to meet shortfalls in live sheep supply from Australia. These developments are focusing on live sheep supply from countries in the horn of Africa and supplies from these countries were recently claimed to have offset the reduced supplies in 2010 of Australian live sheep to the Middle East.

Thus even if substitution between the processed sheep meat and live sheep could be increased as ACIL Tasman proposed, the growing substitution opportunities between Australian live sheep and sheep from other sources would ensure that any loss of Australian live sheep in the Middle East would be largely offset by increased imports of live sheep from other sources.

The Verve report concluded that the most likely consequence of a ban on exports of live sheep from Australia would be a small increase in imports of chilled and frozen sheep meat to the Middle East, possibly from Australia but not guaranteed and largely determined by price. Additionally, this would be accompanied by a large increase in imports of live sheep from other supplying countries, primarily from the horn of Africa. The analysis of the ban on exports of live sheep from Australia indicates reduced Australian GDP.

Overall, the Verve review concluded that if identified subsidies to the consumption of meat from freshly killed animals in certain Middle Eastern countries were removed there would still be a substantial Australian live sheep export industry. To place a ban on live exports would reduce Australia's real GDP.

## 2.4 Impact of the recent suspension of the Indonesia market

The modelling work undertaken by CIE on the impact of a general closure of the live export trade is supported by actual observation of the impact of a suspension of live exports to just one market i.e. Indonesia.

Northern markets generally reacted swiftly to the news of the suspension of trade to Indonesia. At the time of the trade suspension the light feeder steer (270kg – 320kg) price was between $2.00 - $2.10/kg delivered Darwin. Following the suspension, some trade was done to the Philippines, but at 140c/kg lw ex Darwin, rather than $2.00 - $2.10/kg. Although a price fall may have been expected at this time of year (as turn off from northern Australia increases) the extent of the price fall is significantly greater than would normally occur.

Large cattle companies also factored in lower profits. For instance, AACo has advised the stock market that its forecast earnings have fallen from $60-65 million to $50-60 million EBIT. Similarly, Elders estimated the negative impact in the fiscal year to September of the suspension of live cattle exports to Indonesia would be $4.4 million-$7.3 million. It must be noted that large corporate operations generally have more flexibility to deal with market disruptions than small single family operations – e.g. by profitably streaming cattle south.

The closure also provided further evidence of the weakness in the argument that live exports have a negative impact on Australian meat processing activity and subsequent employment in that sector. With the closure of the Indonesian trade and the subsequent availability of some hundreds of thousands of additional cattle for processing in Australia, the Australian processing industry in fact closed a number of processing plants and reduced overall capacity through reduced working hours. This

is clear evidence that the processing industry in this country is affected far more by demand for meat than it is by the supply of livestock.

Finally, Westpac partly attributed a fall (from 0.05 to 0.04) in the Agribusiness Economic Performance Index in the June 2011 quarter to the suspension of the live cattle trade to Indonesia. While noting that the economic performance of agribusinesses remains positive, Westpac attributed the easing in the index to "rising operating costs, the uncertainties caused by the live cattle ban and the residual impact of adverse weather earlier in the year". Westpac went on to note that the greatest falls in the index were in Queensland and Western Australia, two states most affected by the live cattle trade suspension.

## 2.5 Impact on land management

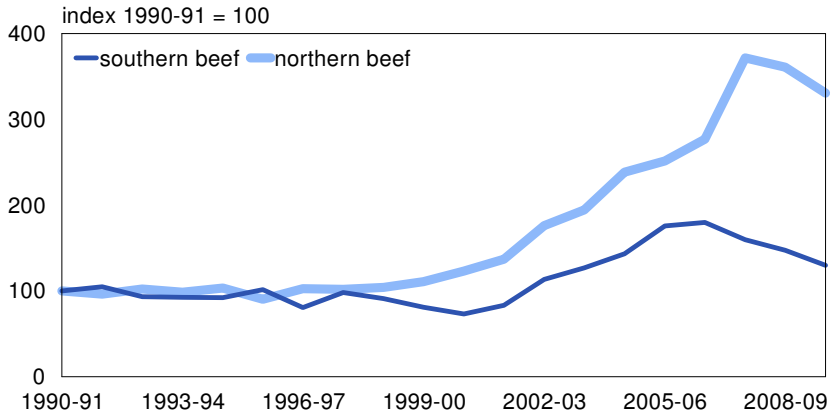
A significant benefit of the live cattle trade that emerged in the late 1980s – through improved and more stable livestock prices – has been the investment in herd management practices, animal genetics, animal husbandry techniques, feeding and veterinary care and increased focus on landscape sustainability and biodiversity stewardship.

Investment in property infrastructure followed including fencing, watering points and pasture management. This has resulted in the industry becoming more profitable and productive. Total factor productivity for northern beef properties grew at a rate of 2.1 per cent between 1985-86 and 2007-08 compared to 1.3 per cent for southern beef between 1977-78 and 2007-08 (CIE 2011). The higher productivity growth rate in the north reflects the expansion in output underpinned by the greater use of *Bos indicus* breeds and higher fertility rates and turnoff of cattle (ABARE 2009) at a younger age. These gains reflect, at least in part, access to live export markets and considerable industry investment by individual properties and industry organisations – instigated by the higher returns offered in the live export market relative to alternatives (CIE 2011).

## 2.6 Impact on property values

Over the past decade there has been a steady increase in land values in both southern and northern beef properties (see figure 2.2). This period coincides with a period of considerable investment in the live export industry. According to CIE, the increase in the acquisition of land, which has driven the increase in land values, is likely to be, in part, the result of the increased productivity and expected returns in the live export industry.

**Figure 2.2**
Average land values for beef industry farms




Source: ABARES

## 2.7 Impact on herd management

The live trade has fundamentally changed the nature of the northern production system from one of "wild harvesting" of bullocks for export meat processing to one that turns off younger cattle for live export. As a result, producers are better able to match annual turnoff to available feed supply and avoid forced sales of unfinished bullocks at reduced prices when feed becomes scarce (CIE 2011).

Cattle operations in northern Australia have been built around the live cattle trade to Indonesia. These operations revolve around carrying a high number of breeders and turning steers and heifers off at light weights (less than 330kgs). Continued turnoff is necessary to sustain the number of breeders that are carried on northern properties.

ABARE (2007) research indicates that a restriction in livestock exports would curtail the demand for *Bos indicus* breeds since meat from these animals would not command a high price in the absence of the live export trade. Brahman cattle are ideally suited for the live trade to Indonesia, but are in less demand in southern markets. Demonstrating this, in southern markets Brahman cattle sell at a significant discount to British breeds. For instance, southern Queensland and northern NSW feeder steer prices for the week commencing 20 June 2011, as collected by the National Livestock Reporting Service, were 197¢/kg lw for Angus steers, 190¢/kg lw for Hereford steers and 168¢/kg for Brahmans. This means that northern producers selling into southern markets take a double hit – they take a hit on transport costs (the cost of transporting cattle to southern markets represents a major impediment to northern producers - for instance, the transport cost from Katherine to Roma is about 45c/kg lwt) and they take a hit on prices.

Growing cattle (that were previously destined to live export) to slaughter-ready weights in Australia would require livestock to be fed for an additional six to 24 months (and possibly requiring transport to traditional finishing areas in the latter months before being sent to abattoirs).

There would be obvious negative cash flow implications for producers over the period as livestock are reaching slaughter-ready weights and additional freight costs of transport to finishing areas.

## 2.8 Impacts on trading partners

Our trading partners benefit from higher levels of live exports from Australia, namely:

1. Improvement in social and economic wellbeing
    - Consumers benefit from access to protein at a lower price than would otherwise prevail and ensuring meat satisfies religious and traditional needs.
    - The economy benefits through the opportunity to add value to imported feeder cattle through fattening. This brings financial returns to the owners of feedlots as well as providing increased employment opportunities in situations typically characterised by high levels of unemployment, or under employment (see box 2.1).

**Box 2.1: flow on effects of the live cattle trade in Indonesia**

The live cattle trade to Indonesia has a significant flow-on effect to millions of Indonesians. Initial analyses suggest that in 2010 – when approximately 500,000 cattle were exported from Australia to Indonesia – the trade provided approximately 1,750 shipments, 45,000 man hours of unloading time and 45,000 truckloads from port to feedlot. In 2010, approximately 100,000 tonnes of local feed was used, 90 per cent of which was agricultural waste, supplied by roughly 2,000,000 Indonesian farmers.

In addition, there was approximately 100,000 tonnes of usable natural compost produced from the feedlots which was used to produce a multitude of crops across the country.

Overall, this involved approximately 4,000,000 hours of labour for 20,000 workers, each with an average of five dependents.

A further 45,000 truckloads of cattle were transported to processing facilities and a further 2,000 people were involved in slaughter and processing. Approximately 20,000 people were involved in retail sales in wet markets and in the production of bakso balls (a beef meatball that is a staple in the diet of most Indonesians).

2. Technology spillovers

    A significant element of the MLA/LiveCorp Live Export Program (LEP) is directed at addressing specific marketing and technical problems in customer countries. These changes have delivered:

    - Improvements in animal welfare through reduced stress in handling, appropriate watering and feeding, and in more humane slaughter in local meat processing operations;
    - Higher quality meat products for consumers;
    - Lower production costs for producers; and
    - Breeding programs through jointly funded projects with the Australian Centre for International Agricultural Research (ACIAR).

3. Capacity building
    - Through the LEP's country specific ongoing R&D and advisory activities and its periodic delivery of short term technical support, it has improved

the capacity of ‘in country’ researchers, extension support processes and individual businesses to better address animal welfare and production issues (CIE 2010).

## 2.9 Biosecurity benefits

Livestock exported from Australia to neighbouring countries provide biosecurity benefits to Australia and our region. Australia is free from animal diseases such as foot and mouth disease and it is vital to our red meat and livestock industry that this status remains. As long as our neighbouring trading partners can secure livestock supplies from Australia, they are less likely to source livestock from other countries with questionable biosecurity risks.

## 2.10 International Investment and trade benefits.

Australia has consistently provided our international customers with a secure, reliable and transparent supply chain. This has encouraged regional foreign direct investment and increased economic growth in rural and regional communities. The reliable supply of agriculture produce has been a foundation for increased Australian exports and long-term customer development providing food security.

There is anecdotal evidence that the recent trade suspension has impacted on investor sentiment and downgraded Australia’s sovereign risk in capital markets for agriculture investment. However livestock agriculture supply chains need to deliver investment in improved welfare and these supply chains require confidence and supply security to maintain significant long-term capital investment.

The ongoing investment and participation by customer nations in the Australian livestock trade represents an opportunity for both Australian producers and overseas receiving customers to learn, invest and further develop upgraded animal welfare within competitive livestock supply chains.

Livecorp and the livestock export industry are working hard to deliver these benefits to the Australian and international community.

# 3 Bibliography

AgEconPlus, EconSearch, Warwick Yates and Associates, 2007, *The Live Export Industry: Assessing the Value of the Livestock Export Industry to Regional Australia*, Project Live.326, prepared for Meat & Livestock Australia, http://www.mla.com.au/CustomControls/PaymentGateway/ViewFile.aspx?VOHbBS5XcEL7KfYrWv3HCHcAOoGGq1/NgzFFoNbaroNYjKc5ANgEZ30SlP4hoZdT3EYMKKAfsht7d1Tnt3BqiA==

Australian Bureau of Agriculture and Resource Economics (ABARE), 2007, *Live Cattle Export Trade: Importance to Northern and Southern Australian Beef Industries*, Canberra, Prepared by Peter Martin, Thuy Can Mellor and Stephen Hooper.

Australian Bureau of Agriculture and Resource Economics (ABARE), 2008, *Live animal exports: a profile of the Australian industry*, research report 08.1, February, http://adl.brs.gov.au/data/warehouse/pe_abarebrs99001420/liveexports.pdf

Australian Bureau of Agriculture and Resource Economics (ABARE), 2009, *Financial Performance of Beef Producing Farms 2006-07 to 2008-09*, June, prepared by Stephen Hooper and Sarah Crooks.

CIE 2011, *The Contribution of the Australian live export industry*, prepared for LiveCorp and MLA, July.

Hassall & Associates, 2006, *The Live Export industry: Value, Outlook and Contribution to the Economy*, Project Live.314, prepared for LiveCorp and Meat and Livestock Australia, July, http://www.mla.com.au/CustomControls/PaymentGateway/ViewFile.aspx?zj6ruA8UZUcKxd130i0ydAIsTJJy7a2ZHkUT9SU2YwFq7T+CO1jcxP4jdnGmtnjK3EYMKKAfsht7d1Tnt3BqiA==