

# Processing cost competitiveness

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**PREPARED BY:** S G Heilbron Economic and Policy Consulting

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## **1.0 MILESTONE DESCRIPTION**

This report represents the final report for project 2019-1011 encompassing assessment and recommendations regarding preparation of a COALAR grants proposal taking into account AMPC's response to the results of Milestones 7 and 8, focusing on the South American component of the project only in accordance with email correspondence with AMPC dated 19 December 2018.

## **2.0 ABSTRACT**

This report provides an introduction to the project, an outline of the results of the project, an assessment of future potential for collaboration with researchers on comparative costs and industry economics in Brazil and Argentina, future collaborative means, and the benefits which will accrue to Australian red meat processors and other Australian stakeholders from such collaboration, and well as consideration of critical timing issues.

## **3.0 PROJECT OBJECTIVES**

The objective of the project is to improve the understanding of red meat industry processing costs economics and means of improving cost economics by the red meat industry of Australia, through the gathering of data and through the sharing of information and collaborative research on cost economics in Australia, Brazil and Argentina, and thereby increase the economic benefits flowing to the red meat industry and the broader economy.

## **4.0 INTERNATIONAL COLLABORATIVE RESEARCH**

This Milestone Report represents the final report (Milestone 9) for project 2019-1011 encompassing assessment and recommendations regarding preparation of a COALAR grants proposal taking into account AMPC's response to the results of Milestones 7 and 8, focusing on the South American component of the project only in accordance with email correspondence with AMPC dated 19 December 2018.

It provides an introduction to the project, an outline of the results of the project, an assessment of future potential for collaboration with researchers on comparative costs and industry economics in Brazil and Argentina, future collaborative means, and the benefits which will accrue to Australian red meat processors and other Australian stakeholders from such collaboration, and well as consideration of critical timing issues.

### **4.1 Introduction**

The South American collaborative research component of 2019-1011 identifies the potential for collaboration between Australia, Argentina and Brazil in analysing processing cost competitiveness as recommended by Project 2017-1062. The latter project found that Australia had a major processing cost disadvantage against the South American countries, which were increasingly gaining access to Australian high-value export markets for beef.

The overall objective of the project is to improve the understanding of red meat industry processing costs economics and means of improving cost economics by the red meat industries of Australia and Argentina/Brazil, through the sharing of information and collaborative research, and thereby increase the economic benefits flowing to the red meat industries and broader economies of the three countries.

Milestone 5 of the project entailed the development of a plan for a potential collaborative research project between Australia, Argentina and Brazil on processing cost economics; Milestone 6 entailed the conduct of investigations in Brazil and Argentina to scope the potential for a collaborative project; Milestone 7 reported on the results of the investigations and Milestone 8 discussed the feasibility of a grant under the Federal Government's Council for Australia Latin American Relations (COALAR) grant program.

## **4.2 Planning of the investigations**

An exploratory investigation in Brazil and Argentina to follow up on the indications of interest received from potential parties for the collaborative research and assess the potential, means and benefits of collaboration was conducted from 30 November to 9 December 2018.

The main aims of the investigations were:

1. To engage with the potential collaborators.
2. To understand the basis of the processing cost data currently available to the parties and determine the extent to which it concurs, or can be adjusted to concur, with the template for data collection undertaken in Australia.
3. To determine the potential interest in collaboration through the establishment of a unified set of comparable cost data covering the three countries, and the potential for further analysis of cost-related issues such as processing productivity.
4. To determine the interest in the collaboration being undertaken via various organisations and funding mechanisms, including via a COALAR grant administered by DFAT.
5. To determine the potential for the collaborative project to identify further research in each country on key parameters of costs to explore in more detail the drivers of improved efficiencies e.g. labour, regulatory costs and potential to exchange results.
6. The opportunity will also be taken to discuss and obtain data on the current industry situation and prospects, and access to markets.

Meetings were arranged directly with the collaborators previously identified i.e. Thiago Carvalho of CEPEA Economic Research Centre, University of Sao Paulo at Piracicaba which has conducted cost analysis with Brazilian beef processors, and Victor Tonelli, Technical Coordinator of the Argentine Round Table Meat Board, members of which have been participants in a processing cost analysis study conducted in Argentina. Information on the collaborators is provided in an Appendix to this report.

The meetings were held as planned with CEPEA in Sao Paulo (Piracicaba) on Monday 3 December and in Buenos Aires on Thursday 6 December with provision for follow up meetings on Friday 7 December. Meetings were also held with the Austrade representatives at the Australian Embassies in Sao Paulo on 4 December and Buenos Aires on 7 December, both as a courtesy and also to promote the concept of COALAR grants in support of the project.

Agendas for the meetings were prepared as follows and sent to the collaborators in advance of the meetings:

- Introductions
- Agreement on agenda
- Update on status of processing cost data and reporting in each country
- Review of Australian data template and comparison with template in collaborating country
- Requirements for concordance of data and reporting in each country
- Potential scope for collaborative project to compare and analyse data of processing costs
- Potential organisation and funding sources for the collaborative research (including Australian Government COALAR grant)
- Potential for the collaborative project to identify further research in each country on key parameters of costs to explore in more detail the drivers of improved efficiencies e.g. labour, regulatory costs and potential to exchange results.
- Next steps.

A copy of the template for data gathered from Australian processors was sent to both collaborators, requesting that they review the data they currently have (or will be able to obtain) and identify the issues associated with making the data sets or results comparable with the data gathered in Australia. A copy of the final CTO report was also sent to them as the report had been publicly released and was available on the AMPC website. A list of the key questions to be addressed in the meetings was prepared prior to the meetings. A list of KPI's for the visits was also prepared. These were:

- Successfully engage with the potential collaborators;
- Achieve an understanding of the basis of the processing cost data currently available and determine the extent to which it concords, or can be adjusted to concord, with the template for data collection undertaken in Australia;
- Determine the potential interest in collaboration through the establishment of a unified set of comparable cost data covering the countries concerned;
- Determine the interest in the collaboration being undertaken (either on a bilateral or multilateral basis) via various organisation and funding mechanisms, including via a COALAR grant administered by DFAT;
- Determine the potential for the collaborative project to identify further research in each country on key parameters of costs to explore in more detail the drivers of improved efficiencies e.g. labour, regulatory costs and potential to exchange results; and
- Discuss and obtain data on the current industry situation and prospects, and access to markets of collaborating countries.

### 4.3 Results of the investigations

#### Collaboration with Brazil

The Consultant met with researchers Dr Thiago de Carvalho, Ciao Monteiro and Gabriela Ribeiro who were CEPEA participants in a project conducted together with Bain & Co for the Nature Conservancy. The project was completed in March this year but used data for 2016 from 3 beef processing plants ranging from 600-100 head per day capacity (this is considered medium size for beef processing in Brazil). CEPEA was responsible for the collection and analysis of the data and the report was compiled with Bain.

The data was very detailed and comprehensive, covering costs and revenues. Costs covered were operational as well as overheads and also finance costs, and revenues covered included those relating to sales by main cuts and markets. With information on costs and revenues, the analysis produced information on profits and cash flows.

The results of the analysis and report were private to the Nature Conservancy. However, CEPEA is able to present aggregated results of the analysis for the purposes of research so would be able to provide such results in the event of collaborative research being undertaken with AMPC.

The concept of potential collaborative research between CEPEA and AMPC was canvassed. The idea, as discussed between SG Heilbron and AMPC previously, was that a workshop be held in Australia with two key objectives:

1. To understand the methodologies and results of research on processing costs undertaken by AMPC and CEPEA; and
2. To assess the potential for the collaborative project to identify further research in each country on key parameters of costs to explore in more detail the drivers of improved efficiencies e.g. labour, regulatory costs and potential to exchange results.

In addition, the possibility would be explored for meetings to be held with Australian industry representatives and possibly for visits to be arranged to processing facilities following the workshop. CEPEA representatives were strongly supportive of the above idea.

Discussion was also held on how further research could be undertaken on key parameters of costs to explore in more detail the drivers of improved efficiencies. Some relevant ideas emerged which provide a potential path forward. These will be canvassed in the Milestone 7 report. An issue to be resolved is who would pay for the time costs of CEPEA associated with the further research. This would need to be addressed at the workshop.

The opportunity was also taken to brief the Austrade representatives at the Consulate in Sao Paulo about the project, and potential workshop and COALAR grant funding application. The representatives offered to facilitate an application for a visa for a CEPEA participant in the workshop.

In addition, during the investigations in Brazil information was obtained on the current beef processing industry situation and prospects, and access to markets. Key points to be noted are:

- Brazil had 221 million cattle in 2017, making it the biggest producer in the world, and the cattle slaughter was 39 million with production of 9.7 million tonnes of beef.
- A growing proportion of the herd is being raised in feedlots – 10 per cent of total slaughterings in 2017, up from 7 per cent a decade ago.
- Brazil exports over 20 per cent of its production.
- The biggest markets are Hong Kong and China (where Brazil has a 34 per cent market share).
- Industry forecasts suggest the herd will be similar in a decade to its current size, but production will increase by 25 per cent and export volumes by 50 per cent.
- There is some optimism generally following the election of Jair Bolsonaro as President, with expectations of increased economic growth and continuing low inflation.
- Beef production in the current year is recovering from the 2017 adulteration crisis, with slaughtering increasing marginally in 2018.
- However, it is expected to rise meaningfully in 2019 with the increase driven by strong exports with an emphasis on China.
- Brazil has an objective of being FMD-free without vaccination by 2025, which is considered unlikely but nevertheless it is expected that some States will achieve regional freedom, increasing Brazil's access to premium beef markets.
- Brazil's access to the US beef market was stopped following the 2017 crisis and has yet to be reopened. The political similarities between Presidents Bolsonaro and Trump are expected to result in progress in the near future however.
- The Brazilian government and packers are intensifying trade missions and export promotional activities for beef in all overseas markets, but mostly in Asia and the Middle-East regions, which account for over 50 percent of all beef exports.
- The Brazilian government strategy is focused on market access in several countries, including South Africa, Iraq, Iran, Malaysia, Myanmar and Singapore. In these countries, the strategy is to maintain and/or increase the number of Brazilian plants authorized for exports.
- Other negotiations to open market access for Brazilian beef are concentrated in Thailand and Taiwan. Brazil is also very active in Muslim markets and 90 percent of Brazilian packers are eligible to produce "Halal" meat.

#### Next steps

Following the extensive discussions it was decided that the next steps would be:

1. SG Heilbron will commence the preparation of a proposal to AMPC for the conduct of the workshop and associated activities.

2. SG Heilbron will, subject to AMPC's agreement, commence preparation of a proposal by AMPC for a COALAR grant to cover the travel costs for a CEPEA representative to take part in the above activities.
3. CEPEA will provide a spreadsheet summary of the template used for the processing plants research.
4. CEPEA will review the results of the CTO report and provide an initial overview on the concordance between the results and the results of their analysis, with further detail to be provided at the workshop.
5. CEPEA will also continue the process of considering how further research could be undertaken on key parameters of costs to explore in more detail the drivers of improved efficiencies, as input into the possible workshop.

These steps are all consistent with the parameters of project 2019-1011 and meet the KPI's for the international investigations.

On the basis of the above investigations, SG Heilbron considers that there is a viable pathway towards effective collaboration with Brazil in the form of CEPEA on processing costs that will generate value for the red meat processing industry in Australia consistent with the aims of the project, beginning with a workshop as outlined above, where the results of currently available cost information will be exchanged and analysed, and the potential for further research on a collaborative basis will also be examined.

Longer term CEPEA could be an invaluable resource for the Australian industry in gathering market intelligence on the international competitiveness of the Brazilian industry.

### **Collaboration with Argentina**

The Consultant met with Victor Tonelli who is the technical coordinator of the Argentina Meat Roundtable and founder of the Argentine Roundtable Sustainable Beef. Mr. Tonelli also arranged for a meeting with the President of the Argentina Beef Consortium (ABC), which is the organisation representing the largest beef processors in Argentina.

ABC members cover 20 facilities accounting for around one third of Argentina's total beef slaughter. ABC commissioned Bain & Co in Argentina to undertake an analysis of the industry including collection of data from 10 facilities. Mr. Tonelli provided the Consultant with a copy of the Bain report, which is attached to this Milestone Report. It does include an estimate of processing costs, commercial and administrative cost, direct taxes and channel costs, although there is no detail provided in their report on the methodology, definition or composition of these cost categories. The Consultant requested that ABC ask Bain to provide information to address the above gaps and this was agreed to.

Mr. Tonelli has also obtained some very detailed revenue and cost data for his own purposes, and provided some headline results from his analysis, focusing on the data from a large scale beef plant of some 1000 head per day throughput. Based on a comparison with the average operational costs for Argentina identified in the CTO report, the plant concerned has costs roughly 30% lower than the



average. This could reflect the fact that 1000 head per day is roughly double the size of the average facility for Argentina, but it emphasises the very low operational costs that are achievable in Argentina beef processing.

The concept of potential collaborative research between Mr. Tonelli as coordinator, ABC and AMPC was canvassed. The idea, as discussed between SG Heilbron and AMPC previously, was that a workshop be held in Australia with two key objectives:

1. To understand the methodologies and results of research on processing costs undertaken by the various cost studies in Argentina
2. To assess the potential for the collaborative project to identify further research in each country on key parameters of costs to explore in more detail the drivers of improved efficiencies e.g. labour, regulatory costs and potential to exchange results.

In addition, the possibility would be explored for meetings to be held with Australian industry representatives and possibly for visits to be arranged to processing facilities following the workshop. Mr. Tonelli and the ABC representative were strongly supportive of the above idea. ABC indicated that Mr. Tonelli should be the party with whom communications should be channelled.

Discussion was also held on how further research could be undertaken on key parameters of costs to explore in more detail the drivers of improved efficiencies. Some relevant ideas also emerged in these discussions which provide a potential path forward. An issue to be resolved is who would pay for the time costs of Mr. Tonelli or other researchers associated with the further research. This would need to be addressed at the workshop.

The opportunity was also taken to brief the Austrade representative at the Embassy in Buenos Aires about the project, and potential workshop and COALAR grant funding application. The representative concerned is one of the officials who is responsible for reviewing COALAR grant applications and provided very helpful insights on the way in which a grant proposal should be structured and the supporting arguments that should be included. The representative also offered to facilitate an application for a visa for an Argentina participant in the workshop.

Given his role as facilitator for the discussions and contacts made in Argentina, it is likely that Mr. Tonelli would be the most appropriate representative to be funded by a COALAR grant. However, if ABC wishes to send its own additional representative at its own expense then this should be accommodated.

In addition, during the investigations in Argentina information was obtained on the current beef processing industry situation and prospects, and access to markets. Key points to be noted are:

- Argentina has a cattle herd of around 54 million, up from a low of 48 million head in 2011, although the herd expansion rate has stalled due to the 2017/18 drought, a low-weaning calf ratio and high slaughter of cows for export.

- Argentina has approximately 450 slaughter plants in operation with over 95 percent monitored by government authorities. Plans are underway to provide consistent sanitary standards at the national, provincial and county levels.
- In 2019, Argentina is expected to slaughter 13.2 million head, the highest number in over a decade. Average carcass weight is projected to increase somewhat in response to export demand for heavier animals and a government policy change to restrict slaughter of lighter-weight cattle.
- From 2005-2015, governmental policies limited exports and fostered domestic consumption at low prices which resulted in producers finishing light-weight animals of around 300-380 kilos live weight. Heavier animals, preferred in export markets, had finite demand, cost more to produce and were unprofitable during that time.
- Argentina's export beef industry is currently performing strongly. In the coming year Argentine beef production is forecast to increase 2% with exports benefitting from the increased supply. The severe depreciation of the currency has seen beef exports in October 2018 up 71% compared with the same period last year, almost all of which has gone to China.
- Argentina has had a major market access breakthrough. During the week of the Consultant's visit to the country it was announced that it is now eligible to export chilled and frozen beef to the US. Argentina will have a 20,000 tonne swt country specific quota on beef exports to the US, identical to that of Uruguay, and out of quota trade will incur a 26.4% tariff.
- Australia may face increased competition in the US market from Argentine manufacturing beef, as it is believed that Argentina will mostly export frozen beef trimmings (90 CL – chemical lean) for industry use.
- Argentina is building on its successes to target other premium beef markets. In mid-2018, Argentina exported its first shipment of fresh beef (albeit only 200 kilos) to Japan by air. Argentina continues to pursue access to key markets such as Mexico, and South Korea is a clear target for the future.
- A major issue facing the industry is the lack of enforcement of regulations and taxes on the many small domestic beef plants which make up the majority of the kill. The representatives of the major export plants commissioned Bain & Co to report on the impact of this on the state and competitiveness of the industry.
- Bain reported that as a result of the lack regulatory and taxation enforcement, meat processors in the so-called informal sector who process lighter-weight cattle for the domestic market have total processing costs some 45 to 60 per cent lower than those in the formal sector who commonly process heavier animals for export markets.
- The actions of the informal sector lead to depressed returns to meat processing in general and this flows on to cattle producers who thus have reduced incentive to produce more, heavier animals.
- The ABC has initiated a campaign to address this problem with Government. If successful, the competitiveness of the industry will increase beyond its current level as it rationalises and scale increases.

Following the extensive discussions it was decided that the next steps would be:

1. SG Heilbron will commence the preparation of a proposal to AMPC for the conduct of the workshop and associated activities with one or more representatives from Argentina.
2. SG Heilbron will, subject to AMPC's agreement, commence preparation of a proposal by AMPC for a COALAR grant to cover the travel costs for Mr. Tonelli as coordinator to take part in the above activities.
3. ABC though Mr. Tonelli will be asked to provide information on the methodology, definition or composition of the cost categories used by Bain & Co for their processing plants research.
4. Mr. Tonelli will review the results of the CTO report and provide an initial overview on the concordance between the results and the results of his work and that by Bain, with further detail to be provided at the workshop.
5. Mr. Tonelli will also continue the process of considering how further research could be undertaken on key parameters of costs to explore in more detail the drivers of improved efficiencies, as input into the possible workshop.

These steps are all consistent with the parameters of project 2019-1011 and meet the KPI's for the international investigations.

Overall the very favourable response to the discussions during the international investigations on the potential for collaboration suggests there is a viable pathway for such collaboration. In the first instance this is based on a workshop which will review current information and plan for subsequent and deeper research on the drivers and productivity of processing in the countries concerned.

## **5. FUTURE COLLABORATION**

The investigations above concluded that there is a viable pathway towards effective collaboration with Brazil in the form of CEPEA, and with Argentina in the form of Mr. Tonelli and ABC, on processing costs economics that will generate value for the red meat processing industry in Australia consistent with the aims of project 2019-1011. The potential means and benefits of such collaboration are as follows.

### **5.1 Future collaboration potential**

The potential for collaboration on processing cost economics research has been assessed in the course of the international investigations as outlined above and the additional information obtained during those investigations.

Project 2017-1062 identified a significant disadvantage in processing costs for Australia relative to Argentina and Brazil. Historically this has not been a major cause for concern because Australian exports have been largely protected from South American competition by Sanitary barriers to trade. However, in recent times Brazil and Argentina have gained access to key Australian export markets, and a continuation of this trend will expose the Australian red meat industry (which depends heavily on export markets for major part of its production) to heightened competition and risk of market share loss.

Evidence for this abounds. Argentina's success in obtaining access for chilled meat in China has resulted in major market share loss for Australia. Very recently, Argentina has secured access to 20,000 tonnes of chilled and frozen beef in the USA, which is likely to provide lower cost competition against Australian beef for manufacturing in that market. Argentina has also recently secured access to the high value Japanese beef market.

Brazil has access to the US market which was suspended during 2017 as a result of a meat safety scandal, but access is expected to be reopened in the near future. Brazil aims to be Foot and Mouth Disease-free for beef without vaccination by 2015, which is considered unlikely but nevertheless it is expected that some States will achieve regional freedom, increasing Brazil's access to premium beef markets.

Researchers in Brazil and Argentina have undertaken very detailed cost (and revenue) analysis for a small number of beef processing plants and are willing and able to share the results of their analysis in collaboration with Australia. This has the potential to augment and deepen the information generated under project 2017-1062.

However, the potential for collaboration goes beyond simply exchanging information on costs. A collaborative project has the potential to improve the understanding of red meat industry processing costs economics and means of improving cost economics by the red meat industries of Australia and Argentina/Brazil, through the sharing of information and collaborative research, and thereby increase the economic benefits flowing to the red meat industries and broader economies of the countries.

The current information available from project 2017-1062 identified costs on a comparative basis. However, whilst it describes the key variances in the major operational cost components of processing, it does not explain the drivers of those differences. There can be differences in costs which reflect differences in productivity, for example. Different labour costs could be justified because of differences in output per worker. There is potential for deeper analysis of costs to be undertaken on a collaborative basis that helps processors better understand these differences and provides ideas for improving productivity. The specific themes for such deeper research under the umbrella concept of enhancing productivity need to be identified in a structured way by the collaborating parties, and a means of achieving this is outlined below.

Over the longer-term, the project also has the potential to provide AMPC with independent sources of information on the market activities of processor competition by the two countries concerned for Australian exports. A collaboration with the researchers in Brazil and Argentina can generate valuable strategic information and insights about the competitive threats and opportunities posed for the Australian industry.

Finally, there is potential for the project to facilitate enhanced two-way collaboration in commercial relationships at an industry level over time. Already the Brazilian industry has a major investment in Australian red meat processing, and there is potential for more two-way investment, technology and commercial cooperation with the project as a starting point.

## 5.2 Future collaboration means

### a) Workshops and Field Trips

There are many ways of undertaking collaborative research, with key distinguishing features being the degree of formality in modus operandi and institutional structure, the number and nature of participants, and the local or international dimension of the collaboration.

On the basis of the scoping exercise undertaken for this project, it seems appropriate to commence a collaborative initiative in a modest way and in a largely informal manner. Once the relationships between the participants have been developed, more formal arrangements can be established.

The first part of this process would be the holding of two separate workshops in Australia for representatives from the Australian industry and collaborators from each of Brazil and Argentina respectively (for reasons of the sensitivity of eth information concerned) with two key objectives:

1. To understand the methodologies and results of research on processing costs undertaken by the various cost studies in Argentina and Brazil; and
2. To assess the potential for the collaborative project to identify further research in each country on key parameters of costs to explore in more detail the drivers of improved efficiencies e.g. labour, regulatory costs and potential to exchange results.

The workshops would be held under the auspices of AMPC and the participants would be:

- AMPC representatives
- the Australian consultants responsible for Project 2017-1062
- the researchers in Brazil (CEPEA) and Argentina (Mr Tonelli as well as possibly representatives from ABC) in their respective workshops
- Australian industry and Government representatives (to be determined by AMPC).

Each workshop would be conducted over one day and would comprise the following:

- Session 1 - Industry overview: detailed presentations would be prepared and given by each of the researchers on their red meat processing industries and their processing costs – The contents of these presentations would be developed in advance and agreed with the South American participants but the industry information would need to encompass the whole supply chain and focus on the processing sector, including information on the number of facilities, their scale, the degree of industry concentration, nature of their markets. This in itself would provide valuable information and insights for the Australian industry.
- Session 2 – Comparative costs: the Australian and international researchers would each present their comparative cost data and develop an understanding of the key similarities and differences, working towards a common data set.

- Session 3 – Future collaborative research: the participants will identify next steps for possible research, focussing on a deeper understanding of the drivers of cost differences and identify key themes for collaboration.

The workshops would be followed by one day field trips for the Argentinian and Brazilian researchers to visit one or two processing plants. This will help place the Australian costs data in a practical context.

A detailed costing has been prepared for the workshops and field trips which is attached to this report. The estimated costs comprise \$76,955 for AMPC including all fees and expenses, and an assumed \$39,655 to be covered by a COALAR grant (this is discussed further in the following section).

The outputs of this project would comprise the following:

1. Materials or comments provided by collaborators on their current cost reports reviewed
2. Consultations undertaken and contacts and service providers approached for workshop and tour
3. Agendas for workshops and tours prepared by Consultant and agreed with AMPC
4. Requirements for presentations at workshop prepared by Consultant for approval by AMPC
5. Communication and exchanges undertaken by Consultant with collaborators on presentations and workshop
6. Research, analysis and presentation on Australian industry prepared by the Consultant
7. COALAR grant application by AMPC prepared by Consultant
8. Arrangements for workshop and tour made by Consultant
9. Consultant participation and conduct of workshop and tour
10. Report on workshop and tour with recommendations regarding further collaboration prepared by Consultant.

## **b) COALAR grants**

Grants are provided annually under the International Grants Program of the Council for Australian and Latin American Relations (COALAR).

The objectives of the Program are to promote people-to-people links and a contemporary and positive image of Australia and support for the Australian Government's international policy goals.

The expected outcomes of the Program are:

1. strengthened bilateral relationships in areas of mutual interest with particular countries and regions,
2. international networks, collaboration and connections between institutions and communities to build understanding, trust and influence,
3. enhanced Australian international reputation and reach through the promotion of our economic, creative and cultural, sporting, innovation and science, and education assets, and
4. increased understanding of Australians of the cultures and opportunities in each of these countries.

5. COALAR is a Federal Government entity which decides on grant applications, with the Department of Foreign Affairs and Trade administering the program. Eligible expenditure under the grants includes:
- Economy flights, modest accommodation costs, meals and travel allowances, other transport
  - Communication and translation
  - Venue hire and catering
  - Advertising and promotion, graphic design, photography and printed material,
  - Production costs, including freight and artists' wages
  - In general, the costs of only one participant per conference or meeting and only where the participant is a principal speaker and the subject of the conference is of direct relevance to the grant opportunity.

Consultations were held with officials and potential collaborators regarding the possibility of some of the costs of future collaboration between the Australian red meat processing industry represented by AMPC and researchers in Brazil and Argentina, following from AMPC Project 2017-1062, being paid for by a COALAR grant.

AMPC has had a number of discussions with officials in Australia, and MAC Consultant Dr Selwyn Heilbron has had discussions with officials in Buenos Aires and Sao Paulo, as well as with potential collaborators in those countries, about the possibility of a CAOLAR grant.

Initial consultations by AMPC in October 2018 produced the following conclusions:

- Next round is due to open February 2019 with applications closing 6-8 weeks thereafter.
- Funds are available after the Budget delivery (as of 1 July 2019) upon approval by the Board.
- Funding will be supported where there are mutual benefits including some support for economy class travel each way to countries.
- Each grant can range between \$15k-\$30k and can be created by relationship/country.
- Guidelines for the 2018-19 grants and Results, reporting and acquittal guide were provided.
- Subsequent consultations by AMPC produced the following conclusions:
- The Assistant Director on the DFAT Latin Desk (Aileen Croghan) confirmed earlier advice re dates for the 2019-20 COALAR grants
- The guidelines for 2019-20 grants have not been uploaded, but the 2018-19 document will not change much.
- DFAT is happy to talk through the proposal with AMPC once it has been developed.

Consultations by Dr Heilbron with Australian Government (Austrade) staff in Sao Paulo and Buenos Aires were undertaken during international investigations in December 2018. Dr Heilbron outlined the general concept of a potential collaboration between Australian, Brazilian and Argentinian researchers (who were actually identified originally by the Austrade staff during the Consultant's earlier 2018 investigations to obtain international processing costs data, so they are well known to the Austrade staff). The potential first step in such collaboration would be the holding of a workshop and study tour in Australia with participation by the Argentina and Brazilian researchers. This workshop would aim to discuss and analyse cost data in the countries concerned and also identify the potential for further research and engagement by the collaborators.

Key conclusions were:

- Both Sao Paulo and Buenos Aires considered the concept would fit within the current COALAR guidelines and would have a chance of success
- Both offered to provide consular assistance in relation to securing necessary visas for workshop participants
- Buenos Aires (Ms Ramiro) reviews applications for the grants and offered to review a draft application and provide comments.

Ms Ramiro provided invaluable guidance on how an application should be structured. In particular she noted that:

- COALAR prefers proposals that are regional in nature as distinct from a focus on one country. Therefore, any application for a grant should be for a regional project covering Brazil and Argentina but with two separate workshops given the sensitive nature of the subject matter of the proposed workshops/study tours
- The longer-term vision for collaboration should be included in the application – that is, the initial research collaboration is part of a longer-term process of deeper engagement between Australia and the other two countries encompassing trade, investment, technology and commercial relationships to access global markets
- The key arguments for the grant should be sent to Ms. Ramiro in advance of the application being submitted highlighting these key arguments and asking for any comments.

Consultations were also held with the potential research collaborators in Brazil (CEPEA) and Argentina (Victor Tonelli/Argentine Beef Consortium). The possibility of a CAOLAR grant to pay some of their costs for a workshop/study tour as above was discussed, and they were all supportive of such an approach.

### **Suggested Strategy and Timing**

The strategy for making a COALR grant needs to be integrated with the other necessary steps flowing from the current project.

- Milestone 9 – this report, to be submitted by Wednesday 16 January 2018 - will consist of a stand-alone final report for the South American component of 2019-1011, which will form the basis of AMPC decision making for long term collaboration
- Thereafter a proposal will be made by SG Heilbron to AMPC for collaborative project. The proposal should include the costs for all components of the project including the component that will be the subject of the CAOLAR grant application. AMPC will consider follow on proposals once the final report and recommendations have been considered. It is anticipated that the proposal to AMPC will be made by 31 January 2019.
- Then a COALAR grant application will be made, with recommendations on COALAR grant application to be included in the final report as above.

In terms of the strategy for the COALAR grant application, it is suggested that:

1. A draft application be prepared by the Consultant for review by AMPC – 14 February 2019
2. The draft should reflect the suggestions made by Ms. Ramiro above i.e. one application for a regional grant covering two countries with initial collaboration taking the form of two separate



- workshops and study tours, with the longer-term vision being outlined in the application. An outline of the suggested workshops/study tours will be provided in the Milestone 9 report.
3. The draft application be provided to Ms. Ramiro for comment – by 21 February for comments back by 28 February 2019
  4. The request for comments from Ms. Ramiro should be phrased in terms of the key arguments for the grant being sent to Ms. Ramiro highlighting these key arguments and asking for any comments.
  5. The draft application be provided to DFAT for comment – by 3 March for comments by 14 March 2019
  6. This was offered to AMPC by DFAT Latin Desk and the offer should be taken up, but only after input has been obtained from Ms. Ramiro.
  7. Application be submitted by AMPC 31 March 2019.
  8. The application should identify both the funds to be sought from COALAR and also identify the funds to be provided by AMPC. This suggests a decision will need to be made on the proposal to AMPC by mid-March for funding of the collaborative research project as a whole as discussed above, a proposal which will be made by January 31, 2019, to enable any adjustments to be made to the final COALAR grants application.

### **c) Other means of collaboration**

As noted above, there is potential for the collaboration initiated by the workshops and field visits to evolve into a longer term and more formal research relationship.

Initially, the proposed workshops and field trips would be managed and funded by AMPC (with a funding contribution potentially from the Federal Government in the form of COALAR).

Assuming the workshops identify a future path for collaboration on the basis of research on the drivers of the cost differences or other topics, then it would be desirable for the workshops to also discuss a future basis for conducting the collaboration, including funding and institutional structure.

It is possible that the researchers in Brazil and Argentina will be able to access funds for research – e.g. the Brazilian researcher through CEPEA, University, Government and/or commercial parties; and the Argentinian researcher through ABC, Government or commercial parties. At that stage it would be desirable to explore the establishment of a formal structure, ranging from establishing an informal Committee to manage the activities, with funds being held and managed by each party, to creation of an international collaborative research entity which would receive and manage the funds from the various parties (along the lines of the Cooperative Research Centres operating in Australia). Clearly in this instance issues relating to for instance, organisational strategy, governance, management, and ownership of intellectual property would need to be addressed,

### **d) Collaboration risks**

The risks associated with the proposed collaboration are as follows:

- The COALAR grant application might not be approved by the Federal Government, and AMPC would then need to fill the gap in costs for the workshops to proceed. However, the amount involved totals \$31,600 which is considered relatively manageable.

- Processors may not be interested in participating in the workshop or facilitating study tour visits. However, promotion of the event should mitigate this, and the study tour being limited to one day suggests only one plant is required for each visit.

More broadly, there is a risk that the collaboration will not be seen as valuable for the industry. This is discussed below.

### **5.3 Future collaboration benefits**

The project will deliver value for Australian red meat processors in the following ways:

1. Information will be provided on costs of processing in Brazil and Argentina that will augment that produced under 2017-1062 and provide additional insights into the cost disadvantages faced by Australian processing. The international investigations have already produced additional information (discussed above) which has added perspectives about the dimensions and urgency of the competitive challenges posed by the Argentine and Brazil processing industries. The proposed workshops will augment this significantly.
2. Broader information on processing in the two countries will be provided by experts that will enable the Australian processing industry to better deal with the challenge posed by those countries processing industries. The information proposed to be provided in the workshops will broaden the knowledge base of the Australian industry and help it develop actions, (including in the economic and policy spheres) that will benefit the industry.
3. The project will set the scene for deeper research that will help the Australian industry understand the productivity differences and drivers in all three countries, and hence help improve processing costs economics and competitiveness in Australia. Already the research on project 2017-1062 has been used to make representations to Governments at Federal and State levels and by individual processors in their operations to improve cost competitiveness. A deeper understanding of cost drivers will augment this process.
4. The project will provide the foundation for longer term collaboration, with the imprimatur of the Australian Government through the COALAR process, that will facilitate closer trade, investment and technology relationships. South America not only provides competition in trade for Australia but also investment in Australian processing. There is potential for a deeper engagement on areas of research, technology, policy and commercial relationships, which can develop from the small initial step proposed.

For the broader red meat supply chain, the project will increase the understanding of the challenges and opportunities facing red meat processing and hence to the other segments of the supply chain through flow-on effects, posed by the costs and broader economics of red meat processing industry in the countries concerned.

The project would deliver value for the Australian Government in the following ways:

1. It will strengthen bilateral relationships in the key area of mutual interest being red meat processing with the Mercosur region, specifically with Brazil and Argentina
2. It will build an international network, collaboration and connection between institutions (in this case AMPC, ABC and CAPEA) and communities to build understanding, trust and influence

3. It will enhance Australian international reputation and reach through the promotion of our economic, innovation and knowledge assets, and
4. It will increase understanding of Australians of the economic and commercial opportunities in each of these countries.

## **6. CONCLUSIONS AND RECOMMENDATIONS**

The conclusion of this project is that there is a viable pathway for collaboration on processing costs economics between Australia, Argentina and Brazil. In the first instance this is based on workshop with each country with which will review current information and plan for subsequent and deeper research on the drivers and productivity of processing in the countries concerned, and associated field trips.

There is a pressing need for such collaboration. The South American countries are able to produce red meat protein at extremely low cost. To illustrate this, the 2017-1062 CTO Report indicated that Argentina could produce beef for around 25 per cent lower cost than Australia. Information obtained in the course of research for this project suggests that a larger scale, more efficient export plant could produce beef with a further reduction of around 30 per cent in cost. And so-called informal processors who avoid taxes and other regulatory costs can produce at 40-60 per cent below formal regulated plants. The red meat industries of the countries investigated in this project have aggressive trade enhancement and market access strategies aimed at markets traditionally supplied by Australia.

Having a deeper understanding of the processing cost economics of the countries concerned and their drivers, through collaborative research would provide the Australian industry with invaluable information and intelligence on the nature of the challenges and opportunities generated by this new era.

Accordingly, it is recommended that:

1. AMPC consider a proposal for the conduct of the international collaborative research workshops and associated activities with representatives from Argentina and Brazil, and
2. AMPC make an application for a COALAR grant covering the travel costs of one representative from each country to participate in the events.

## **7. STAGE SUMMARY**

This constitutes the report for Milestone 9 of the project. It is the final report for the project. A Snapshot of the project is also provided.

## **8. OVERALL PROGRESS OF THE PROJECT**

The project has been completed successfully.

## **APPENDIX – COLLABORATOR INFORMATION**

### **CEPEA**

Cepea is the economic research center at Esalq (“Luiz de Queiroz” College of Agriculture), USP (University of São Paulo), in Piracicaba. The Center undertakes research on economic, financial, social and environmental aspects of about 30 agribusiness supply chains. Cepea is a group formed by part of Esalq’s Economic and Management Department faculty working together with a team of roughly 150 people, including PhD and MS researchers in Economics, Management, Agronomy, Communications, Information Technology plus graduate and undergraduate intern students from several universities. Cepea’s team interacts with approximately 6,000 agents of every segment of the agribusiness sector. These “Cepea collaborators” constitute a “community” designed for daily information exchange. Agribusiness Price Indexes, costs estimates and risk evaluations plus in depth domestic and global markets information are continuously produced by Cepea. The quantitative and qualitative information generated by Cepea are used for the elaboration of sector analyses, released daily in Portuguese and English. Analyses are released nationally and globally by Cepea’s partners, such as Agência Estado, Bloomberg and Thomson Reuters, and by several other types of news media.

Cepea has realized several studies in the beef sector, from economic feasibility in the construction of slaughterhouse, elaboration of business plan with some companies and studies of concentration and market power. Daily Cepea maintains contact with the decision makers of these companies for the construction of the daily indicator of cattle Cepea/B3. The most recent processor study was realized from October/2017 to April/2108, in partnership with TNC (The Nature Conservancy) and Bain Consulting, when 3 companies of the beef sector were analyzed. Data of production, commercialization, finances and human resources were collected, and a benchmark was subsequently carried out.

### **Dr Thiago Carvalho**

PhD in Business Administration, Faculty of Economics, Administration and Accounting, FEA/USP.  
Thesis: Growth strategy of beef cattle in Brazil;  
MBA in Agribusiness of Pecege - Continuing Education Program in Economics and Business  
Project Manager at Center for Advanced Study in Applied Economics - CEPEA/ESALQ/USP.

### **Victor Tonelli**

Víctor Tonelli is a graduate of the Universidad Católica Argentina (UCA) with a degree in Agricultural Sciences. He specialized further by attending training courses at Northwestern University (Kellogg’s), Andersen Consulting and the IAE Graduate school. He speaks Spanish and English fluently. He is a consultant to farming groups, processors, exporters, distributors, suppliers, servicers and the public sector in the area of cattle, cattle feed and beef. He is the technical coordinator of the Argentina Meat Roundtable and founder of the Argentine Roundtable Sustainable Beef. His is the founder and Ex-President of Nutryte SA, the refrigerated meat processing company that launched the first meat with the brand "Cabaña Las Lilas" to the Argentine market.

He has also been President on two occasions of the Argentine Meat Industry Association, Vice President of the Argentine Association of Animal Production, Founding Director of the Argentine Association of Brangus, the Chamber of Artificial Insemination, and other entities of production. He has provided consulting services in all areas of the cattle and meat sector, from investment analysis and management, reorganization of livestock enterprises, training, management control and administration.

He has given numerous presentations at conferences in Argentina, Uruguay, Chile, Paraguay, Brazil, Mexico, Colombia, USA, Australia, New Zealand and China.

Mr. Tonelli is also associated with the Argentine Beef Consortium, an industry association that has as its members the largest beef processing companies in Argentina. Through this association he has access to the study prepared for ABC on beef processing costs in Argentina. He also has his own data on processing costs.