

final report

Project code: P.PIP.5002

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NCMC

Date published: 10th April 2018

PUBLISHED BY
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NORTH SYDNEY NSW 2059

NCMC Collaborative Innovation Program

This is an MLA Donor Company funded project.

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

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Abstract

The Collaborative Innovation program (CIP) is an MLA initiative designed to increase the innovation capabilities of the red meat industry. To achieve this, MLA engages directly with key individual companies within the red meat value chain to assist them to develop their innovation strategies and systems and to build their innovation capability. Using a structured and customised process for each partner, MLA will develop in collaboration with the company a comprehensive, strategic innovation capability building program. The program can encompass the entire business (whole of enterprise program) or alternatively remain focused on a specific business area in which the client has identified a need to develop innovation capability (focused program)

The Northern Co-operative Meat Company Ltd (NCMC) is Australia's largest meat processing Co-operative, proudly 100% member owned. Since 1933, they have established themselves as an industry leader in meat processing, providing a unique opportunity to process livestock in world class processing facilities.

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1 Background

NCMC participated in a stage 1 collaborative innovation program which commenced in 2008 and concluded in 2011 (P.PSH.0332).

The scope of the NCMC-MLA Collaborative Innovation Program included innovation development initiatives in the areas of:

- Understanding the value of innovation to NCMC and what innovation can add to the bottom line
- Resourcing support that will enable embedding innovation in the way NCMC does business.
- Identifying and understanding the enablers that will assist in developing an innovation capability, including the training and support of internal innovation resources as indicated in the above point.
- The development and execution of a portfolio of projects that will assist in addressing the key innovation opportunities that have been identified in areas including:
 - Development and/or adoption of new processing technologies and production processes which reduce costs and increase efficiencies
 - New value added products and markets (e.g. veal)
 - Waste water plant and tannery treatment initiatives
 - Application of new science and knowledge in areas such as refrigeration technologies / processes
 - Application of knowledge in energy generation
 - Organisational culture and capability to support innovation

1.1 Northern Cooperative Meat Company (NCMC)

In September 2007, Meat & Livestock Australia (MLA) launched the Collaborative Innovation Strategies program (CISp). The program involves the co-development of comprehensive innovation strategies with individual enterprises which meet commercial imperatives in addition to focusing on the implementation of key industry and government innovation priorities.

MLA aims to continue to develop Collaborative Innovation Strategies Program throughout a broad range of companies throughout the Australian red meat industry and its supply chains.

The Collaborative Innovation Strategies Program is a flexible enterprise innovation capability building program that is customised for large and small enterprises throughout the red meat value chain. Enterprise innovation capability within the context of this program is defined as the underlying capacities that enable a firm to be innovative on a sustained basis, rather than producing one-off product innovations from time to time

In April 2012, a 3 year Collaborative Innovation Strategy Program partnership with NCMC commenced which transversed the entire organisation, along with the development of both the professional development plan for the innovation manager. The Collaborative Innovation Strategy Program was delivered through two contractual schedules:

- Schedule 1: Collaborative Innovation System
- Schedule 2: Innovation Manager's Professional Development

2 Projective Objectives

2.1 Review of the Innovation Strategy Goals

The innovation strategy is integrated into the company's overall business strategy and includes measurable performance indicators which identify the contribution of innovation to the bottom line and achievement of key business objectives. Ultimately the innovation strategy will contribute to the enterprise's long-term profitability, competitiveness and sustainability.

This phase includes the application of a number of innovation tools and enablers such as:

- Innovation diagnostics.
- Development of innovation metrics linked to NCMC's business drivers and objectives.
- Trial of new innovation management systems; and
- The design of an effective changed management approach to support implementation of key innovation priorities.

Ultimately, the goal is to integrate innovation into the way that NCMC operates by developing a well-managed innovation system that can contribute to the business's profitability and sustainability.

The project is completely aligned with the MLA key initiative under 3.2. to deliver the Collaborative Innovation Strategies program to Improving industry capability, knowledge and adoption of new technologies to increase productivity.

2.2 The Scope of the Project

The scope of this project is the development and implementation of a second phase Collaborative Innovation Strategy program between Northern Cooperative Meat Company and Meat and Livestock Australia.

It is anticipated that the scope of the NCMC-MLA Collaborative Innovation Program will include (but not be limited to) initiatives in the areas of:

- Understanding the value of innovation to NCMC and what innovation can add to the bottom line (with appropriate baseline metrics developed for monitoring throughout the program).
- Identifying the resources that will be required to assist in embedding innovation in the way NCMC does business.
- Identifying the enablers that will assist in developing an innovation capability, including the training and support of internal innovation resources as indicated in the above point.
- Identifying a portfolio of projects that will assist in addressing the key innovation opportunities that have been identified, in areas such as:
 - Development and/or adoption of new processing technologies and production processes which reduce costs and increase efficiencies
 - New value added products and markets (e.g. veal)
 - Waste water plant and tannery treatment initiatives
 - Application of new science and knowledge in areas such as refrigeration technologies / processes
 - Application of knowledge in energy generation

Organisational culture and capability to support innovation.

3 Innovation Achievements

Enterprise innovation capability within the context of this program is defined as the underlying capacities that enable a firm to be innovative on a sustained basis, rather than producing one-off product innovations from time to time. Measureable performance indicators identify the contribution of innovation capability to NCMC's's achievement of key business objectives. NCMC's innovation journey has included both collaborative project in the form of PIPs and PSHs as well as a significant number of company initiated and run projects, a list of which can be seen below. Ultimately the innovation capability building program is expected to contribute to NCMC's long term profitability, competiveness and sustainability.

To ensure the successful implementation of NCMC's Innovation Strategy a dedicated Innovation Manager (IM) was employed. The main focus of the IM was to implement and manage NCMC's Innovation Strategies across the business. The IM was also responsible for coordinating the process and product focus areas of organisations Innovation Strategy. The success of the Innovation Strategy and the dedicated IM can easily be see through the number of projects undertaken and the return on investment to NCMC.

P.PIP.0436 – NCMC Developing Organisational Culture to drive innovation, growth and profitability.

Northern Co-operative Meat Company is committed to developing innovation within the business. At an early stage of the collaborative innovation strategies program they conducted a baseline study of the organisational culture in terms of the current state of engagement of the workforce which will inform strategies to build the desired culture in developing the business' innovation capability from an organizational cultural perspective. In this project research and innovation around the culture and people in regards to the development of innovation capability within the business. This included measuring current desire, employee engagement and implementing strategies that develop engaged staff and continually engage staff on innovation.

P.PIP.0434 NCMC: Planning for Commercial Sustainability

This project reports on the best and most appropriate strategies and actions that can be implemented by NCMC in order to meet the current and future needs of its members, customers and communities in which they reside. The introduction of effective strategies of engaging members will ensure the sustainability of the organisation as well as its members and contribute to regional development.

The research method consists of a literature review to identify world's best practice amongst cooperatives, especially agricultural cooperatives, interviews with managers from a range of successful cooperatives, focus groups with members throughout the Cooperative's footprint,

a survey of all members and a series of workshops with members throughout the Cooperative's footprint.

P.PIP.0518 IFFA Technology Exhibition, Study Program and Global IP scanning

This syndicated project involves a study program commencing in Frankfurt, Germany, to examine technologies both under development and/or applied on plants to address processing efficiency, yield and labour challenges. This included attendance at the IFFA event to examine the range of exhibits covering slaughtering, carcase breakdown, trimming, measurement, processing, weighing, filling / packaging, conveying, cooling, storing, transporting and selling, as well as value-adding processes. Direct examination of selected automation opportunities by Australian processors, visits to EU processing works, and participation in a range of technology stakeholder meetings to further examine international developments in this area that will inform the development of a revised technology and process automation strategy for MLA and AMPC. Determination of what might be applicable and/or that could be further developed as projects integrated into the current technology strategy of MLA or AMPC, or that could apply to Australian processing companies, notwithstanding the recognition of commercial decision making for any specific uptake.

P.PIP.0380 - Development and Implementation of Collaborative Innovation Strategies program for Northern Cooperative Meat Company

A second phase three year long Collaborative Innovation strategy program between Northern Cooperative Meat Company and Meat and Livestock Australia. The phase is to include the application of a number of innovation tools and enablers such as innovation diagnostics. Development of innovation metrics linked to NCMC's business drivers and objectives. Trial of new innovation management systems and the design of an effective change management approach to support implementation of key innovation priorities.

The goal of this project was to integrate innovation into the way that NCMC operates by developing a well-managed innovation system that can contribute to the business's profitability and sustainability.

P.PIP.0494 - Identification of suitable crops for sustainable bio-remediation of wastewater from a bovine service abattoir

This project was exploring new ways to 'polish' waste water from abattoirs using 'Phytoremediation' (the use of plants to clean up polluted soils) as a more sustainable measure towards wastewater management. The project conducted a replicated field trial using small plots to determine the performance of a range of potential phytoremediation crops which included plants such as hemp, bamboo, tea tree and sorghum.

P.PIP.0498 - NCMC grazing management pilot program

Competitive pressures are affecting agricultural co-operatives globally, resulting in many traditional co-operatives transforming themselves in order to meet these pressures and future challenges. Modern organisations need to be adaptive in relation to the increasingly turbulent markets. There is a need to ensure organisations continually meet the needs of their members and customers. NCMC is committed to enhancing member benefits in order to meet their needs to encourage on-going involvement in the future success of the NCMC. Northern Co-operative Meat Company (NCMC) is committed to growing the beef industry in the Northern Rivers through encouraging improved practices on farm. Declining agricultural extension services to local Beef Producers coupled with a focus of research and development only on the northern or southern production systems has resulted in a service gap to sub-tropical beef producers in the Northern Rivers region of NSW.

P.PIP.0542 - NCMC Development and Implementation of Retail Veal Category Growth Strategies

Supporting the development of Coles' veal growth initiative and NCMC's supply chain capability to grow veal production and sales for the longer term. This project was completed through the development of analytics that identified demand side opportunities including production through to retail category profit. NCMC then integrated these insights with their supply chain producer networking and procurement strategies. The project contained detailed requirements and delivered a tool which develops the insights and supports development of resultant carcase utilisation and category profitability strategies as well as support reporting of KPI's and continuous improvement activities to improve performance.

P.PIP.0566 - NCMC energy and wastewater options assessment for energy self-sufficiency

The project was the first step towards NCMC's long term objective of being self-sufficient in terms of energy supply. The investigation was lead to specification of the most beneficial solution(s) to allow prescriptive business case development and implementation. The project involved an investigation into the most optimal wastewater treatment and energy solution(s) available to NCMC's processing and tannery operations at Casino.

P.PIP.0558 - Northern Co-operative Meat Company China value chain design partner selection and feasibility model development

This project develops both due diligence frameworks and processing efficiency models to investigate and evaluate specific commercial opportunities for value adding red meat in China. This included frameworks to conduct partner due diligence on identified in-market partners and the development of a dynamic processing feasibility model to assess the commercial viability of in-market manufacturing opportunities through in market joint venturing activities.

4 Review of Focus Areas

Throughout the last three years NCMC has successfully integrated innovation into its overall business strategy to increase operational excellence (specifically processing efficiency, environmental sustainability and value chain integration (membership engagement and customer development business models).

During this period a significant focus has been on increasing operational performance across the group's facilities. To facilitate this, an extensive capital works program has been undertaken to achieve industry best practice. Significant achievement have been made in these identified focus areas since the program commenced. The initial innovation program strategic plan provided the foundation for sustainable practices and plant performance.

The main benefits to NCMC arising out of CISP program have included:

- Reduction in costs and increased production efficiencies
- Greater confidence in implementing new technologies
- Ability to adapt to a changing business environment
- Better engagement with supply chain through producer member business model designs

5 Discussion

5.1 Review and Refine Ongoing Program Structure

"Together, we remain focused on quality, innovation and sustainability to ensure we continue to meet and exceed our customer's expectations"

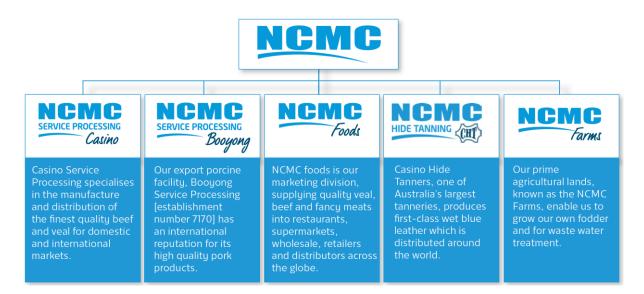
The Northern Co-operative Meat Company Ltd (NCMC) is Australia's largest meat processing Co-operative, proudly 100% member owned.

Our members are Australian farmers and businesses excelling in the paddock to plate philosophy.

Since 1933, we have established ourselves as an industry leader in meat processing, providing a unique opportunity to process livestock in world class processing facilities.

Whilst we have grown and changed over the decades, our core values remain – respect, fairness and compassion. It is these values that translate into our quality service and products.

Our people and our community are our underlying strength and are at the core of our business. Today, NCMC has over 1000 highly trained and skilled employees, working across our five core business divisions.



At NCMC, we have evolved to application of a systematic approach to innovation. This is done through governance process systems that are now in place to ensure cohesion with Board set Strategic Objectives.

Committees, from strategy setting, governance management through to working groups for project implementation have been developed to gain engagement of relevant stakeholders for greater success of change management. This approach has created a culture of inclusion, breaking historical mythologies of "top down ruling".

We are a sustainable, profitable and diversified end-to-end meat processing business. This is achieved through our approach to quality; our fast flexible and responsive service offerings, the scale our operation and our value-adding services. It is this combination that drives our market reach across both Australia and the globe. The NCMC culture is to focus on our customer's needs. Most importantly, we maintain a workforce that is willing, skilled and ready to respond quickly and professionally to unique and specialised requests for orders large and small.

"We will continue to be commercially focused and sustainable Co-operative. We will invest in our people, our state of the art facilities and technology, ensuring our business best serves our customers and responds to growth and opportunity"

Chairman, NCMC (NCMC Coporate Profile)

6 Conclusions/Recommendations

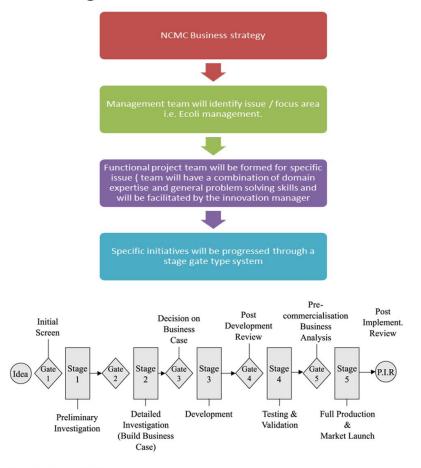
6.1 CISP Stage 2

It is recommended that NCMC continue with the third stage of the CISP program with the following plan:

- Significant broadening of scope and footprint of the program including the piloting of an integrated CISP, Strategic marketing and industry insights program.
- Need to ensure adequate time and support is allocated to achieve desired outcomes in key high risk areas (e.g. environmental management and automation).
- Develop organisational capability in regard to supply chain engagement, providing MLA the opportunity to influence on farm activity through the collaborative development of producer engagement strategies.

The overall objective for NCMC during Stage 2 of the CISP was on building capability, strengthening innovation through strategic direction of innovation investments. This was enabled by the formalising the management of innovation at NCMC as shown below:

Management of Innovation within NCMC



Source: Cooper (1994)

6.2 Focus areas for NCMC for Stage 3 of the CISP program will be:

- The development and implementation of an integrated plan to build NCMC's internal capability to support the execution of the Stategic Initiatives derived from the Board set Strategic Objectives.
- The development, implementation and measurement of accurate innovation metrics.
 - o measure NCMC's innovation capability inclusive of ongoing monitoring.
- Continued integration of innovation into business processes and systems to ensure innovation is sustainable and autonomous.
- Continued development of innovation strengths, including idea generation (sourcing) and execution (application) of new ideas.
- Continue in the implementation of cultural change initiatives across the core business divisions.
- Producer engagement strategy development (development of a differentiated offering both supply and demand side
- Food Safety E-coli management strategies
- Processing efficiency / processing automation
- Environmental sustainability management (on and off farm)
- People, Culture & Capability
- Strategic marketing & product innovation

6.2.1 Program Management

The Collaborative Innovation Strategy Program will be overseen by NCMCs Group Engineering Manager with the support of NCMC Senior Executive Management and MLA Business Development Managers and Senior Management.