Agribusiness body of knowledge and matrix of outcomes

Agribusiness combines all facets of business operations, and associated organisations that make up the primary sector. In a small, remote economy such as New Zealand, successful agribusiness relies on the ability to understand the operation of competitive global markets, international marketing and the management of complex and extended supply chains. Agribusiness builds knowledge and business skills across the range of management capabilities that are relevant to the primary sector. Below is the agribusiness indicators for Level 7 and 8 for each of the four strands. Indicators are examples of behaviours and capabilities that a teacher might expect to observe in a student who is achieving at the appropriate level.

Innovation Strand

The innovation strand develops knowledge and understanding of future proofing the primary industries in current and/or future issues that affect the viability of an identified business such as food safety, climate change, loss of biodiversity, global economic trends, over exploitation of natural resources, food losses and waste, the social importance of transforming individual poverty to community wealth, the power of social media to spread knowledge and ideas rapidly, and the globalisation of trade. Students will understand what external factors affect agribusinesses such as economic, physical / climatic, political, environmental, technological, historical, social, ethical, and cultural. Students will provide innovative solutions and strategies for future proofing the primary industries from these external factors. The impact of external factors on agribusinesses need to be predicted, prevented, limited, minimised, or corrected to ensure that they meet present needs, remain viable, protect the environment without compromising the ability of future generations to meet their needs, and maintain New Zealand's reputation.

Overarching description:

Develop knowledge and understanding of the impact of future proofing influences on agribusinesses and analyse innovative solutions and strategies for mitigation of current and/or future issues.

Level 7

Examine the impact of influences on agribusinesses to meet present and future needs, viability, and protection of the environment

Level 8

Critically examine innovative solutions and strategies for future proofing agribusinesses to meet current and/or future needs

Innovation indicators – level 7

Innovation indicators – level 8

Students can:

Communicate:

- Identify, examine and predict (current and potential) influences on an agribusiness
- Evolving attitudes and values in an agribusiness context

Evaluate:

- Costs and benefits of primary industry development on environments and communities
- Short and long term impacts on production and profitability

Students can:

Communicate:

- Understand and explain how influences can be mitigated, prevented, limited, minimised and corrected to ensure agribusinesses meet current and future needs and protect reputation
- Use creative thinking and apply this to adopting new innovations, ideas and techniques in the production and future of agribusinesses focusing on sustainable practices

- The impact of influences in traditional and new management practices and associated technologies in an agribusiness
- Develop and critically examine strategies and solutions for future proofing agribusiness challenges to meet current and future needs
- Inquire and evaluate examples of innovations and evaluate future proofing outcomes
- Examine and critique the role of technology, commerce and/or science as an intervention and explain the impacts and implications

Evaluate:

- Inquire and evaluate examples of innovations and evaluate future proofing outcomes
- Identify, justify and analyse future proofing solutions and influences and the effects this has on an agribusiness production and profitability
- Critically examine future proofing solutions and understand which has a bigger role/impact on the business
- Deliberate how an agribusiness operates in a global context and responds strategically to future proofing influences

Science and Technology Strand

New Zealand is a country whose economy depends predominantly on the use of organisms derived from its primary production. For New Zealand to remain competitive in local and / or international markets, the industry needs to be able to make use of new organisms, develop new products, alter production and processing methods and use new technologies with existing organisms to meet future needs. The science and technology strand develops understanding of the importance of new organisms and their continual development through scientific and technological concepts, skills and knowledge of the primary industry. Students will recognise the need to apply these to agribusinesses to meet consumer and producer future and current needs, resolve their issues, develop new markets and provide consumers with safe, convenient and / or nutritious end products.

Overarching description

Develops and understand scientific concepts, skills and knowledge of the primary industries and their value chain to meet consumer and producer future and current needs, resolve issues, develop new markets and provide consumers with safe, convenient and/or nutritious end products.

Level 7

Examine how scientific principles, concepts and knowledge are applied in agribusinesses to ensure present and future primary and secondary production.

Level 8

Critically examine how scientific principles, concepts and knowledge in agribusinesses are used to meet consumer and producer needs, resolve their issues and develop new agri-technological advances.

Science and Technology indicators – level 7

Science and Technology indicators – level 8

Students can:

Communicate:

- The development of scientific ideas and adaptations to explore the potential of current or future crop / stock species and their use in food products or production; for example classification, morphology, development and responses to the environment.
- Identifies composition and nutritive value of food products produced and marketed by agribusinesses to grow their value e.g. health, convenience, gourmet / niche market and sustainability.
- Understand that for New Zealand to remain competitive in local and international markets, 'new' products must continually be developed.
- Scientific knowledge or processes to answer socio-economic questions on an agribusiness.

Evaluate:

 The role of science to develop new ideas, processes and techniques to alleviate potential influences.

Students can: Communicate:

- Discusses the impact that new end products have on consumption, market acceptability, market value, how they meet consumer and producer needs and wants and add value to agribusinesses.
- Presents a scientific solution to a future proofing issue in an agribusiness.
- Distinguishes the scientific, ethical and/or social implications when decision making in an agribusiness.
- Scientific evidence to formulate and make informed decisions in an agribusiness.

Evaluate:

 Critically examine decisions that enhance and sustain end product production in an agribusiness, including meeting needs and wants, resolve their issues and develop new markets and/or agritechnologies.

- Science knowledge, principles and concepts and understands their impact on production in an agribusiness.
- Changing market demands of current and/or future plant/animal species or cultivars in an agribusiness.
- Understand the importance and possible uses of 'new' organisms in primary and secondary production; for example entomology and microorganisms

Act:

 Develop tools, techniques, products, systems or services to meet needs, increase yield, minimise inputs, reduce environmental impacts or ensure sustainability of agribusinesses.

Management and Finance Strand

The primary industry is affected by its cyclic nature of production due to physical and biological factors and price instability caused by changes within the markets for primary products and the actual physical primary product. Agribusinesses need to have an understanding of the cause and effect relationship for them to succeed such as consumer demand and supply, exchange rates on cash flow forecasting and be aware of revenue and expenditure and how they interrelate as it affects profit and viability of the business. The management and finance strand examines the decision-making by agribusinesses in the primary industry, such as their chosen business structure, predicting cash flow forecasting and analysing capital strategic expenditure. It is concerned with the future rather than the past, attempting to predict and mitigate what will happen if external factors come into play and what action could be taken.

Overarching description

Examine the decision-making by agribusinesses in the primary industries in relation to the management and finance in order to meet their strategic needs and keep their businesses viable.

Level 7

Examine decision-making by agribusinesses in the primary industries in determining their business structure and carrying out cash flow forecasting to meet their strategic needs or keeping their businesses viable.

Level 8

Critically examine strategic decision making by agribusinesses when making strategic capital expenditure decisions to meet their strategic needs or keeping their businesses viable.

Management and Finance Indicators – level 7

Management and Finance Indicators - level 8

Students can:

Communicate

- Identify the effect of, and responses to an external factor on the cash flow forecasting
- Identify and examine a range of organisational and ownership structures of agribusinesses including succession planning
- Identify and examine evolving attitudes and social tensions of different ownership and management models for agribusinesses in New Zealand.

Evaluate

- Effective response(s) to an external factor on the cash flow forecast
- Organisational and ownership structures of agribusinesses including succession planning
- Evolving attitudes and social tensions of different ownership and management models for agribusinesses in New Zealand.

Students can:

Communicate

- Critically examine the consequences of agribusiness decisions on society
- Critically examine the operations of agribusinesses that operate in a local, regional, national and/or global context and their responses to external factors

Evaluate

- Financial and non-financial information for agribusiness for strategic decision-making purposes.
- Strategic decision-making within a primary industry organisation or an agribusiness, including economic, ethical, environmental, social, and cultural, and justify outcomes

Marketing Strand

The marketing strand explores the concepts of marketing and growing value within the primary industry, the ability to be able to make informed decisions that enhance and add value to any primary products and secondary products or services derived from primary products. Having an understanding of the whole value chain ensures present and future agribusinesses being able to sell products or services for higher return. Capturing more value and marketing the product is important to agribusinesses to ensure their survival, their global, national or regional importance and growing New Zealand's economy. Students will develop understanding of the effects that market needs have on an agribusiness in the short and long term and how current and future focussed innovation within the value chain provides greater value to the business.

Overarching description:

Capturing more value in products and meeting the market needs is important to agribusinesses to ensure their survival, their global, national or regional importance and growing New Zealand's economy. Understanding the value chain ensures present and future agribusinesses being able to sell products or services for higher return.

evel 7

Examine decisions in agribusinesses that enhance and sustain local and/or national production and enterprise

Level 8

Critically examine how agribusinesses capitalise on opportunities to grow the value and sustainability of their products globally

Marketing Indicators – level 7

Marketing Indicators - level 8

Students can:

Communicate:

- Current and future-focused importance of agrimarketing and its national or regional importance
- Inquire into the impact of an agribusiness event and its marketing strategy
- Explore traditional agricultural, pastoral and industrial marketing opportunities and their evolving role
- Identify and examine an agribusiness that is exploring a new marketing opportunity
- Undertake a cost benefit and statistical analysis of a marketing opportunity

Act:

 Develop a marketing plan for an agribusiness product or service

Evaluate:

 Short and long term effects including sales and growth of an agri-marketing opportunity in an agribusiness context

Students can: Communicate:

Current and future-focused importance of agrimarketing and its national regional and global

- marketing and its national, regional and global importance
- Examine ways in which an agribusiness can add value to their product or business and/or increase their market share
- Critically examine the strategies and features of marketing for different types of agribusiness organisations

Act:

• Plan the launch of a product for a global market **Evaluate:**

 Evaluate and justify alternative marketing strategies for an agribusiness in response to fulfilling customer needs