



Republic of the Philippines
UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato

COLLEGE OF AGRICULTURE
Division of Soil Science

**Thematic Short Term Training Course – Sustainable, Resilient and Productive
Agri-Food Systems**

April 15, 2026 – May 14, 2026

Purpose: The Short-Term Training Course – Sustainable, Resilient and Productive Agri-Food Systems is conducted to provide skills training and work experience in order to contribute to the social and economic development of the country upon returning to the homeland.

Participants: The participants of this course consisted of 15 delegates from 9 ASEAN countries, namely Brunei Darussalam (1 person), Malaysia (1 person), Vietnam (1 person), Laos (2 people), Cambodia (2 people), Myanmar (2 people), Philippines (2 people), Timor Leste (2 people) and Indonesia (2 people).

Objectives and outcomes of the project/program/initiative.

Agriculture Value Chain Strengthening and Innovation

Objective: Identify opportunities for improvement in the agriculture value chain by leveraging management approaches and technological innovation.

Outcome: Participants are able to design strategies to respond to changing customer preferences, address challenges along the value chain and strengthen the food system chain based on experience

Application of Climate-Smart Agriculture (CSA)

Objective: Learn about a variety of sustainable climate-smart agriculture approaches and assess the suitability of their implementation in the home country.

Outcome: Participants are able to identify opportunities to modify local agricultural practices to be more resilient to climate change, increase productivity, reduce greenhouse gas emissions and preserve environmental sustainability.

Analysis of Market Systems and Agro-Food Value Chains

Objective: Understand, evaluate and map the structure, organization and performance of various types of market systems and value chains in the agro-business industry.

Outcome: Participants in the training course are able to use relevant tools and frameworks to define value chains in their own country and identify market coordination mechanisms, regulatory institutions and strategic relationships.



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Background and context of the training program.

This course is specifically designed for professionals in the agri-food sector to improve their knowledge of food systems, particularly in the crop, fisheries and livestock sectors. This advantage can indirectly improve the efficiency and effectiveness of agri-food sector management in the home country.

This program lasts for four (4) weeks and is centered at the Manawatu Campus, Massey University, Palmerston North, New Zealand and ends with a closing session at the Wellington Campus, Massey University. To further enhance the learning experience, this course also includes a series of field trips to various agricultural and agribusiness premises in the North Island, New Zealand.

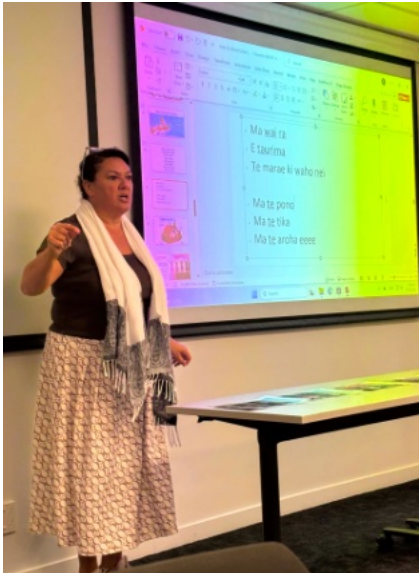
3.1 Training program schedule and training program titles/sub-titles followed.
Details of the program schedule as in Appendix 1.

DATE	SESSION AND ACTIVITIES
April 15, 2026	Arrival  A photograph of three people (two men and one woman) smiling and holding a white sign that reads "MANAAKI NEW ZEALAND SCHOLARSHIPS WELCOME!". The sign also features the New Zealand coat of arms. They are standing in front of a large map of New Zealand.
16 April – 19 2026 (Thursday- Saturday)	(i) Initial orientation and briefing



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	 (ii) Introduction in Maori Culture and Campus tour   (iii) Palmerston North City Orientation



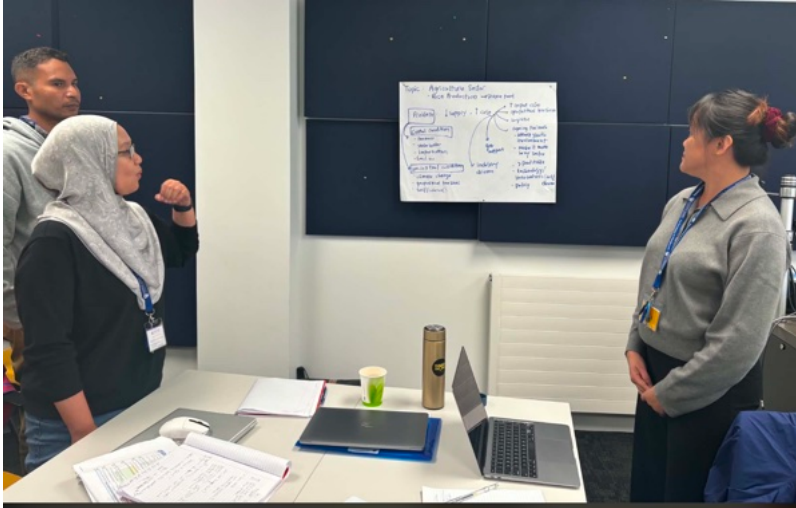
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20 April 2026 (Monday)	Introduction to group project By: Dr. Ramilan Thiagarajah, Associate Professor – Agribusiness, School of Agriculture and Environment, Massey University 
21 April 2026 (Tuesday)	Serious Games as a Tool in Research and Decision Making By: Dr. Wei Yang



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	 (a) Serious games are specialized tools designed with a primary purpose other than pure entertainment, serving instead to educate, train, simulate or support decision-making in complex systems like agriculture and natural resource management. (b) Coined by Clark Abt in the 1970s, these games incorporate fun as a feature rather than the ultimate goal, acting as vehicles to explore trade-offs, gather revealed preferences and foster social learning among interdependent stakeholders. Building an effective serious game requires a structured five-step design process namely performing a real-world systems analysis, establishing a clear single-sentence goal, creating a macro-blueprint (rounds, roles, and win conditions), defining detailed micro-mechanics (payoff tables and rules) and engaging in early, iterative user testing. Ultimately, developers must strictly fit the game's mechanics to its intended purpose, subject matter, audience and cultural context to ensure meaningful engagement. (c) The practical application of these principles is demonstrated across various digital and physical models evaluated by Massey University and National Institute of Water and Atmospheric Research (NIWA). Digital single-player options like <i>My Coastal Futures</i> focus on individual climate adaptation awareness under a budget, while multiplayer digital platforms like <i>Future Coasts</i>



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	<i>Aotearoa</i> model collective community actions and multi-hazard complexities to feed real policy research. (d) Alternatively, physical board games like <i>Wetland Restoration Game</i> utilize six simulation rounds, climate scenarios, and seven distinct stakeholder roles ranging from dairy farmers to regional councils, to elicit non-market valuations and observe spatial interdependencies through land allocation choices. To ground these concepts, interactive training sessions prompt participants to design our own sector-specific game plans by defining a core resource conflict, mapping 4–6 distinct stakeholder roles, incorporating realistic external shocks like weather or market price fluctuations and establishing clear individual or collective win conditions.
22 April 2026 (Wednesday)	Market Systems and Agri-Value Chain Analysis By: Dr. Ramilan Thiagarajah, Associate Professor – Agribusiness, School of Agriculture and Environment, Massey University (a) This lecture explains what competitive advantage is, how it appears in a value chain and practical ways businesses (especially in food/agrifood systems) capture and sustain advantage. The speaker uses multiple examples (vegetables, fish, eggs, Starbucks, Intel, MD2 pineapple) and guides students



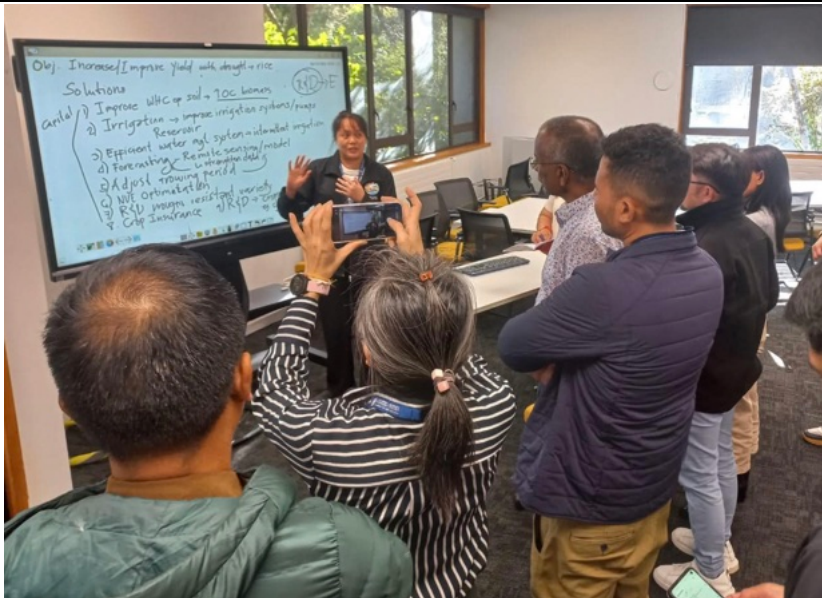
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	on a group project to map a value chain and select a focal product/company. (b) It explores how businesses particularly within the food and agri-food industries can capture and sustain competitive advantage through strategic value chain management. Competitive advantage is defined as a unique edge that sets a business apart from its competitors. It is built upon four (4) core building blocks namely innovation, quality, customer responsiveness and efficiency, each impacting consumers and businesses differently. (c) Strategically, companies must choose between cost leadership, which requires large-scale operations and low-cost inputs to compete on volume or differentiation, which is better suited for small-scale players who can leverage attributes like freshness, quality and branding to command premium prices. . (d) Seven step process were in the value chain analysis, which involves selecting a focal product or company, setting manageable boundaries, mapping activities and flows, identifying key players and their relationships, determining a competitive strategy, listing risks and recommending positioning to capture value. Businesses must navigate distinct risks and concerns across the chain, including scale limitations for small producers, supplier bargaining power, the threat of substitutes like plant milks, and the threat of new entrants. (e) Furthermore, downstream supermarkets present pressures through private labels that can displace local processors, alongside strict traceability and quality standards that small growers may struggle to meet.
22 April 2026 (Wednesday)	(i) Agri-Value Chain Performance (ii) Agri-Value Chain Concepts By: Dr. Ramilan Thiagarajah, Associate Professor – Agribusiness, School of Agriculture and Environment, Massey University



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	 (a) An agricultural value chain encompasses the full spectrum of value-adding activities required to bring a farm product from input supply, through processing and essential services, to the end consumer. Unlike a supply chain, which is producer-driven and heavily focused on the efficiency of moving raw materials, a value chain operates as a consumer-focused, tail-end driven network that prioritizes delivering specific value to stakeholders. (b) These chains are supported by Business Development Services (BDS) such as finance, logistics, IT and government policy, which are supplied by a mix of private firms, governments, and NGOs. In practice, real-world value chains generally fall into three types: price-driven commodity chains with high volumes and low margins, consumer-driven innovative or niche chains focused on quality and trust, and equity-driven inclusive chains aimed at fairly distributing benefits to marginalized producers. (c) Real-world case studies demonstrate that value can be successfully captured through multiple mechanisms, including quality, safety, processing, packaging and branding. For instance, New Zealand's kiwifruit industry utilized product innovation and



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	branding of gold and red varieties to boost its market value share from 30% by volume to 51% by value. In the dairy sector, Fonterra generated value through time efficiency by aligning logistics, which drastically reduced the farm-to-table time of UHT milk to China from over 100 days to just 34 days. Similarly, premium aromatic rice varieties capture higher per-hectare value through branding and storytelling despite yielding slightly lower crop outputs. Conversely, manual processing of fish into fish powder by small rural groups creates a highly transportable product, though it introduces strategic trade-offs against consumer preferences for fresh fish. (d) To execute a proper value chain analysis, the lecture details a practical six-step process. This begins with mapping actors from input suppliers to consumers, followed by identifying supporting business development services. Next, practitioners must assess where value is added, diagnose and design two-way information flows between producers and consumers and select appropriate technologies that match local agro-ecological and labour conditions. Finally, they must evaluate the fair distribution of benefits to ensure the inclusion of marginalized stakeholders. (e) This systematic approach helps navigate prominent industry risks, such as the concentration of power by large firms that can squeeze smallholder margins, regulatory export complexities and consumer demands regarding greenhouse gas intensity. It also addresses technological failures, such as importing machinery like transplanters without adapting them to local soil and planting densities.
23 April 2026 (Thursday)	Field Trip to Horowhenua Agribusiness (i) NZ Egg Group (ii) Ohau Gourmet Mushrooms (Mycobio) (iii) Woodhaven Gardens (iv) Lewis Farms



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24 April 2026 (Friday)	Field Trip to Fielding Saleyards and Farmers Market (a) Livestock auctions, in Fielding Saleyards, serve as a critical physical node in the agricultural value chain, acting as a real-time mechanism for price discovery, supply coordination and quality standardization. (b) At the sheep pens, the auction process plays a vital role in determining livestock value based on age, breed and reproductive status. Buyers assess specific characteristics such as the low-maintenance traits of the Wiltshire breed or the hardiness of Perendales to match their farm's specific management system. (c) Inside the indoor cattle auction rooms, the market system shifts to a high-speed, high-value operating framework. Because cattle represent a significantly larger capital investment per animal compared to sheep, the auction process is highly strategic and legalistic. The bidding environment relies heavily on intense human social dynamics, body language and trust-building between the auctioneer and buyers. 
24 April 2026 (Friday)	Corporate Social Responsibility (CSR) By: Professor Nicola Shadbolt



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	(a) Food choices are evaluated based on experience attributes, which are discovered after eating and credence qualities, such as organic or ethical claims, which consumers cannot visually verify on their own. Because milk consumption has become lesser nowadays, agribusinesses must implement strict social and ethical accountability and adopt sustainable practices like using environmentally friendly packaging to influence people to buy to create a strategic advantage. (b) This alignment with sustainability is increasingly demanded by global finance, investors are moving from traditional Corporate Environmental Responsibility (CER) to comprehensive Environmental, Social, and Governance (ESG) metrics. Under this framework, BlackRock's Larry Fink has pushed to incorporate business-relevant sustainability issues into investment research, portfolio construction and stewardship processes, which is validated by data from the IFC showing an 11% higher return from companies with high environmental and social standards. (c) A practical reflection of these integrated ethical and economic standards is Fair Trade, a specialized trade arrangement designed to help producers in developing countries achieve sustainable and equitable conditions. (d) To transparently communicate these efforts, businesses compile sustainability reporting categorized into areas like supply chain relationships, corporate governance, labour, sustainable products or services and community development. Adhering to these strict reporting lines can achieve elite industry recognition, for instance, the New Zealand dairy cooperative Fonterra was named a finalist in the CR Reporting Awards in 2019, demonstrating the commercial and reputational value of embedding sustainability directly into corporate stewardship.
25 April 2026 (Saturday)	An Introduction to Negotiation By: Dr. Carel Bezuldenhout



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	(a) This negotiation workshop between agricultural growers and millers covered essential contract terms, logistical structures and strategic negotiation tactics. Most participating groups agreed on long-term contracts spanning 20 to 30 years, though the facilitator cautioned that frequent 3-year contract review clauses risk destabilizing millers and encouraging parties to leave. To manage grower cash-flow requirements, at least one group implemented a payment split structure consisting of 30% upfront upon delivery and 70% deferred until after subsequent sugar sales. Other commonly negotiated items included labor priority, a 5% crop insurance clause, and laboratory cane quality testing, which several groups agreed should be fully paid for by the miller to keep prices reasonable and responsibilities clear. (b) A central theme of the workshop was managing strategic risks and maintaining agency during the contract process. The facilitator explicitly advised growers to prioritize cash payments over in-kind infrastructural offers such as mills building schools or hospitals warning that in-kind services often result in poor quality control and a loss of grower agency. Additionally, participants were warned to keep strategic information confidential, particularly their walk-away points, as revealing the lowest acceptable deal position undermines future negotiations. Negotiators were also told to beware of nibbles, which are small, late-stage requests introduced after a deal appears settled. To counter this tactic, the conceding party should treat the request deliberately by either refusing it outright, offsetting it with a reciprocal concession, or applying a price adjustment. (c) Finally, the workshop offers guidance on team composition, advising organizations to avoid sending purely legalistic or detail-oriented advisers like lawyers and accountants. Instead, preferred negotiators include individuals with strong social skills and business acumen, such as teachers or psychologists, who excel at relationship-building, understanding cash-flow dynamics and utilizing timing or non-monetary concessions to optimize deals.



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28 April 2026 (Tuesday)	Climate Smart Agriculture By: Dr. David Pacheco, Ag Emissions Centre (a) Climate-Smart Agriculture (CSA) is a framework that combines farm productivity, climate adaptation and the reduction of greenhouse gases into a single goal. Livestock farming is a major focus because animal digestion, manure, and related land use release large amounts of methane, nitrous oxide and carbon dioxide. (b) To put these goals into practice, countries are using localized methods to make farming more sustainable. For example, New Zealand operates efficient, year-round outdoor pastures and has set strict laws to cut biogenic methane gas, while major supply chain companies are demanding net-zero carbon targets. (c) In Southeast Asia, traditional flooded rice paddies are a big source of methane. To fix this, countries like Vietnam are using digital mapping tools like RiceMoRe to roll out Alternate Wetting and Drying (AWD), a method of periodically draining rice fields to stop methane-producing microbes. Regional efforts are also encouraging farmers to stop burning left-over rice straw and instead recycle it into nutritious animal feed to boost farm efficiency.



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	(d) New Zealand government through Global Research Alliance is actively funding regional measurement hubs and providing high-tech equipment such as animal headboxes and GreenFeed monitors to Vietnam, the Philippines, Cambodia, Laos and Indonesia. This hands-on equipment helps local scientists accurately measure emissions and create effective, data-driven agricultural policies. 
	Field Trip: Dairy Farm No. 4 And GhG Measurement And Analysis By: Dr. Amelia De Almeida (a) The farm tour hosted by animal scientist, Dr. Amelia to the Massey University farm enterprise, which spans 2,000 hectares of diverse, profit-making units used for research, teaching and commercial sales. These closely situated co-located units include Dairy 1, which utilizes a low-input, once-a-day milking system near a river



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	and Dairy 4, a high-input, twice-a-day operation milking 500 to 700 cows. Additional facilities encompass a sheep unit where animals occasionally graze in an adjacent apple-picking area, a hill country breeding farm, an internationally recognized poultry research facility and a plant growth unit dedicated to regenerative practices and pasture diversity. (b) The primary technical focus of the tour involves explaining and demonstrating methods for measuring livestock greenhouse gases (GHGs), primarily methane, nitrous oxide and carbon dioxide. Measuring farm emissions requires transitioning from parts per million (PPM) concentration readings reported by sensors to mass-based fluxes using chamber geometry and measured air flow rates. 
29 April 2026 (Wednesday)	Conservation / Regenerative Agriculture By: Professor Danny Donaghy and Dr. Amelia Almeida Trip to Dairy Farm No 1



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	 (a) Agricultural greenhouse gas (GHG) tracking relies on scientifically backed estimations rather than individual testing. These inventories utilize three different tiers of methodological complexity, increasing in accuracy from standard international baselines (Tier 1) to highly detailed national tracking metrics (Tiers 2 and 3). (b) Modernized metrics are critical because by 2050, the sector must produce roughly 70% more food to meet a soaring global demand for animal products while using fewer resources and cutting absolute emissions. In New Zealand, agriculture drives over 53% of national emissions, primarily via enteric methane from dairy cattle and sheep.



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	(c) Soil-based gas fluxes are measured using distinct small-scale and automated chambers. Small-scale tracking relies on manual static chambers placed over localized soil environments, such as animal urine patches, to accumulate gas over 30 to 60 minutes for laboratory analysis. Alternatively, automated chambers open and close independently to provide high-frequency monitoring directly to connected analysers.
30 April 2026 – 2 May 2026 (Thursday-Saturday)	Field Trip – Taranaki (i) Dairy Trust Taranaki - Kavanagh Farm  (ii) Little Liberty Creamery



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	 (iii) Venture Taranaki  (iv) Barton Holdings (Manuka Honey production)



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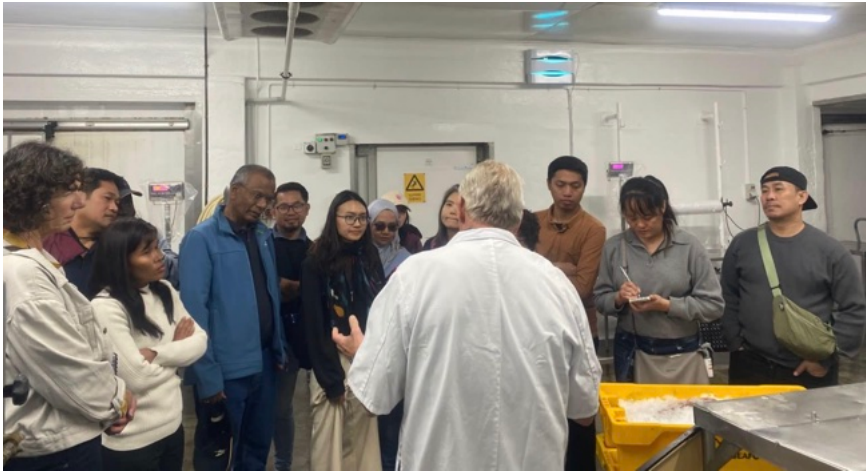
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	 (v) Regenerative 9 Streams Farm  (vi) Egmont Seafoods



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	 (vii) Juno Gin Distillery  (viii) Roebuck Farms



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4 May 2026 (Monday)	KoboToolBox By: Diana. (a) KoboToolbox is highly effective for field data collection because it works seamlessly both online and offline. It divides tasks into two primary workflows, administrators build and deploy forms via a web browser, while enumerators collect data in the field using the <i>KoboCollect</i> Android application. (b) To maintain high data quality, the platform supports advanced features like skip logic (jumping past irrelevant questions) and validation rules (setting constraints, such as limiting acceptable age inputs). When creating an account, users should select either the general or humanitarian server, activate the account via email, and register a lowercase username without special characters to begin practice exercises.



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	 A group of approximately 15 people, including students and faculty, are posing for a group photo in a classroom. They are standing and kneeling in front of a whiteboard and a chalkboard. The room has a clock on the wall and a desk with a computer monitor.
	Innovation and Food Promotion By: Dr. Ramilan Thiagarajah (a) Agrifood innovation is driven by a need to improve operational efficiency and respond to shifting consumer and regulatory demands. Innovations are categorized into product, process, marketing, and organizational changes, with the majority being incremental due to narrow margins on high-volume commodities and natural consumer conservatism. (b) Continuous innovations act as a firm's lifeblood, examples include Fonterra reducing UHT milk delivery times to China from over 100 days to 34 days by aligning production with shipping schedules to maximize freshness and processors deploying Dual Energy X-Ray Absorptiometry (DEXA) to automatically scan up to 30 carcasses per minute for optimized meat yield pricing and deboning room schedules. (c) This lectures also explains how understanding consumer preferences shapes marketing strategies and how agricultural value chains can drive climate-smart farming. Consumer demand is fragmented by age, gender, culture and health anxieties, as seen in Germany, where meat consumption has dropped due to animal welfare and food safety concerns. To counter these declines, the industry uses value-adding strategies like pre-



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	packaged, portion-controlled cuts for cooking convenience, which command premium prices. (d) Companies also target highly profitable niche markets through functional foods such as Fonterra's Symbio yoghurt containing scientifically proven DR10 probiotics. Because health and sustainability benefits represent credence goods that consumers cannot visually verify, brands rely on emotional storytelling and celebrity endorsements, such as using beauty queen Lorraine Downes or New Zealand cricket stars, to build trust and market loyalty.
	Value Chain and Ministry of Primary Industries (MPI) Overview By: Dr.Garry Udy (a) To secure critical international market access, agricultural systems must enforce strict food hygiene and robust biosecurity controls while establishing traceability frameworks that track products from paddock to plate. Historically, as seen in New Zealand, the structural removal of subsidies forces a dramatic shift in farm economics, pushing primary producers to form cooperatives to pool resources and focus strictly on operational efficiency rather than sheer volume. (b) By forming these entities, smallholders gain the collective bargaining power needed to maintain a competitive price at the international market while protecting themselves from being squeezed by massive downstream retail chains. Additionally, these integrated supply chains allow producers to execute advanced branching out strategies, moving away from volatile raw commodities and transitioning into high-value, differentiated functional foods. (c) In the commercial processing sector, different organizational structures dictate how companies handle international price volatility. Large-scale dairy processors like Fonterra focus heavily on high-volume manufacturing tightly aligned with global supply chains, where pay-out figures are deeply susceptible to the fluctuations of the Global Dairy Trade index.



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	(d) In contrast, specialized processors like Tatua focus on ultra-premium, specialized ingredient niches to capture more stable, high-margin revenues. Ultimately, whether utilizing a volume or a niche strategy, agribusinesses must continually innovate their product and process standards to meet strict import laws, respond to shifting consumer values and keep production costs low.
5 May 2026 (Tuesday)	Collective Action / Producer Groups By: Dr. Elena Garnevskia (a) This lecture focuses on the foundational concepts of collective action, agricultural cooperatives, value chain sustainability and circularity, drawing on a comparative perspective between European and New Zealand agri-food networks. Arriving in New Zealand with a background in European and post-socialist institutional frameworks where agricultural cooperatives historically collapsed, the lecturer observed a highly resilient, privately trained and commercially successful cooperative model. To investigate these unique drivers, she integrated traditional value chain theory with technical frameworks like Material Flow Analysis and Life Cycle Assessment, using practical storytelling. (b) It is also captures an interactive snapshot of international participants from countries including Malaysia, Timor-Leste, Indonesia, Myanmar, Laos and Cambodia. These professionals shared their observations of New Zealand's agricultural infrastructure, noting its well-established market systems, distinct lack of highly fragmented smallholder blocks and robust private sector-led farmer training compared to government-managed models back home. A primary takeaway of the discussion is that the evolution of food networks from linear streams to sustainable, circular setups relies heavily on matching social coordination with incentives. However, structural constraints down the line such as fragmented smallholder farmlands and the lack of a detailed, stepwise policy chronology in modern literature present clear, ongoing adaptation challenges for participants looking to replicate these large-scale cooperative systems locally.



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6 May 2026 (Wednesday)	Field Trip to Fonterra Palmerston North By: Dr.Garry Udy 
	Field Trip to Animal Science Teaching Unit (ASTU). Sheep practical activities and forage study By: Dr. Penny Back (a) Graham Thompson, the Site Manager has explained on the operationalisation of Lactalis. New Zealand's dairy processing sector is experiencing significant operational and structural shifts, as demonstrated by the recent acquisition of the former Fonterra consumer-brand processing plant by the French family-owned



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	multinational, Lactalis. Under this new structure, the facility operates by procuring raw farm milk directly via Fonterra. Once received, the milk is held in specialized cool rooms to maintain stability prior to processing. The facility focuses primarily on liquid consumer goods, executing a strict multi-step processing line that includes raw reception, cooling, pasteurization which is a mandatory legal compliance directive for all supermarket milk sales in New Zealand and composition standardization to adjust fat and protein metrics across various bottled formats and brands. (b) At the primary production level, pasture-based sheep farming requires strategic forage conservation techniques to balance seasonal supply deficits and high weather volatility. Farmers utilize three primary conserved feed structures: dry field hay, which is low-cost but bulky and lower in nutrient density, plastic-wrapped bailage and chopped maize silage. For both bailage and silage, creating strict anaerobic fermentation conditions by heavily compressing the forage to exclude oxygen is entirely critical to prevent toxic mold growth that can cause stock illnesses and livestock abortions. To complement these stored feeds, farms are increasingly planting multi-functional native shrubs and trees such as <i>Griselinia</i>, <i>Coprosma</i> and <i>karaka</i>. When selected for high palatability, these plantings provide direct browse options on hillsides, vital shade and shelter to protect flocks from climate stress and long-term land-use benefits like erosion control, reduced nitrogen leaching and carbon credit generation.



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	 (c) Finally, maintaining stringent national supply chain integrity requires precise farm-level identification and animal biosecurity tracking. Every individual property is issued a unique farm identification number that links all livestock back to their geographic origin. National biosecurity protocols utilize physical ear tags applied via specific handheld applicators that correspond directly to different tag designs. Squeezing the applicator firmly punctures the tag assembly through the ear with a brief sensation compared to a standard ear piercing. (d) Consequently, many commercial sheep farmers limit extensive microchipping to stud breeders maintaining high-value pedigree stock, while species with different processing requirements, such as deer, operate under distinct tracking frameworks.
	Walking Tour to Massey Research Orchards
7 May 2026	Field trip to Hawke's Bay Agribusinesses



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(Thursday)	By: Dr. Ramilan Thiagarajah (i) Arataki Honey (ii) T&G Global
	Workshop on Food Quality By: Professor Dave Rogers, Honorary Fellow Senior Scientist, Plant and Food Research in the Temperate Fruit Crops Entomology team. (a) An introductory workshop led by the Bioeconomy Science Institute (BSI), formerly known as Food Research, emphasized that robust food quality and safety frameworks are essential for establishing consumer trust, securing international retail partnerships, and maintaining global market access. To illustrate these concepts and build initial rapport, the session utilized an interactive Jenga-style round-robin icebreaker where cross-disciplinary participants mapped out their core learning goals. These technical objectives spanned value-chain optimization across horticulture, arable crops, livestock, fisheries and beverages, alongside structural concerns such as balancing immediate smallholder financial needs with long-term environmental sustainability. Through an initial group brainstorming session, quality was identified as the central metrics-driven concept supported by farm-level inputs, processing checks, packaging standards, and post-harvest cold chains. Ultimately, facilitators highlighted that strict regulatory policy alignment with international Codex standards serves as the baseline gateway to global market opportunities.
8 May 2026 (Friday)	Workshop on Food Safety By: Professor Dave Rogers (b) The practical application of these values is demonstrated by the restructuring of New Zealand's apple sector, which transitioned away from indiscriminate, calendar-based chemical spraying toward holistic Integrated Pest Management (IPM) systems. This transformation was initially driven by severe export market rejections and quarantine restrictions regarding the codling moth, a high-risk larvae that bores into fruit and is heavily barred by



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	importing nations like Taiwan, Korea and Japan. In response, the industry redesigned its orchards by replacing scheduled organophosphate spraying with intensive pest population monitoring, selective chemistries that conserve natural biological predators, and non-toxic controls. (c) To accelerate the widespread adoption of these complex eco-friendly behaviours, New Zealand utilized streamlined communication tools, clear, highly accessible orchard growth wall charts proved significantly more effective at altering grower behaviour than thick instructional manuals. This integrated horticultural system is further reinforced by strict regulatory infrastructure and compliance auditing. (d) While organic production makes up roughly 7% to 8% of the domestic apple industry and mandates non-detectable chemical levels, standard export commodities undergo random multi-residue screening by private testing laboratories to ensure chemical traces remain well below international Maximum Residue Limits (MRLs), frequently targeting less than 10% of strict European Union thresholds. Under this system, MPI functions as the central food safety reference authority, overseeing system approvals, national sampling programs and strict standard enforcement to safeguard trading integrity.
	Hawke's Bay Agribusinesses By: Dr. Ramilan Thiagarajah (i) Rockit Global Group – global apple business (ii) Mission Estate Winery
11 May 2026 (Monday)	Group Project Presentation The project is implemented by 3 groups, where each group consists of 5 participants, with the project titles as follows: (a) Group I: Optimizing the Tomato Value Chain in the Philippines. Group members consist of: Joseph Manicad (Philippines), Dr. Mel Chrisel Sales (Philippines), Dr. Ifrah Harun (Malaysia), Virasith



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	Phomsouvanh (Laos) and Francisco dos Santos Silva (Timor-Leste).  The presentation screen displays the following data: DOMESTIC TOMATO PRODUCTION: 240,000 METRIC TONNES (Estimated annual production) PRODUCTION SHORTFALL: 280,000 METRIC TONNES (Total annual household requirement) TOMATO PASTE IMPORTATION: 20,000 METRIC TONNES (Annual importation) (b) Group II: Low Carbon Rice Value Chain Analysis in Southeast Asia Regions, with group members consisting of Dr. Hoang Thi Hue (Vietnam), Dr. Endar Purnawan (Indonesia), Vouchsim Kong (Cambodia), Kinnalone Phommasack (Laos) and Htet Shwe Sin Lin (Myanmar). (c) Group III: Analysis of Timor-Leste Tilapia Value Chain, where the group members consist of Agustina Duarte (Timor-Leste), Nasrul Arifin bin Mohammed Asli (Brunei), Kyi Nyein Chan (Myanmar), Ridwan Ilham Wicaksono (Indonesia) and Srey Mom Noeurn (Cambodia). This is the final group presentation for Group 1, to which the participant is assigned.
12 May 2026 (Tuesday)	(i) Briefing by the Ministry of Foreign Affairs and Trade, New Zealand
13 May 2026 (Wednesday)	(i) Course Validation (ii) Farewell Ceremony and Certificate Presentation



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	A photograph of four people standing in front of a blue banner. From left to right: a man in a light blue blazer and dark trousers, a woman in a black and white patterned top and black skirt, a woman in a black blazer and a long orange and black patterned skirt holding a certificate, and a man in a dark blazer and dark trousers holding a small object. The banner behind them has the text "MANAAKI NEW ZEALAND SCHOLARSHIPS" and "Development Committee for the New Zealand Scholarship".

Learning outcomes

- Expanding knowledge in managing a more efficient, productive and sustainable food system to address the challenges of food security;
- Ability to map the value chain flow from upstream to downstream, identify key players, and choose a strategy whether cost leadership for large scale or differentiation such as freshness and quality aspects for small producers;
- Learning practical approaches to building climate-proof, resilient agricultural systems that increase yields, while at the same time reducing carbon emissions;
- Building professional relationships with international experts and participants from other countries for the exchange of ideas and technology.



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- Identify the best potential in integrating climate-smart agriculture practices into projects supervised by the ministry or agency under it.
- Use the learned value chain framework to analyze the local market, assess the bargaining power of suppliers, and reduce the impact of market monopoly on small farmers.
- Facilitate agricultural expansion programs so that local farmers and breeders shift from price (cost) competition to differentiation strategies such as improving quality standards, branding and traceability assurance.
- Connect various chains from input suppliers, production, processors to retailers to ensure the country's agro-food ecosystem is more resilient to any global crisis.

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