



**LINCOLN
UNIVERSITY**
Library, Teaching
& Learning

Agriculture Careers



What is Agriculture?

Agricultural and horticultural land make up over 40%¹ of New Zealand's land: this places land-based commercial operations at the heart of the New Zealand economy. New Zealand's rural places are populated with farms and businesses which supply products, services and knowledge to New Zealand and the world. To do this, the rural sector is supported by public and private sector enterprises, all of which need trained employees to operate. This makes agriculture the sector to realise any number of careers. Lincoln University students graduate ready for careers along the agricultural value chain - from farming to marketing, education to ecology, or science to finance.

Students of agriculture at Lincoln University can build on their interest of farming systems and the environment by tailoring their study of agriculture to commerce, science or agribusiness. The focus the degrees have on both commerce and technology is relevant to New Zealand's agricultural practices, the real-world application of which keeps the primary production sector both globally competitive and sustainable.

¹Ministry for the Environment (2013), Environment Aotearoa 2015, retrieved from <http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/environment-aotearoa.pdf>



Agriculture in New Zealand and the world

Both local and global demand for and production of food is expected to grow². To provide for the needs of increasing populations, particularly in developing countries, agricultural and horticultural leaders with technical expertise are sought-after on the world stage. With appropriate levels of training and industry experience, many graduates direct their career towards consultancy, management, production, research or strategic operations- all of which can start local, or take graduates global.

Agricultural and horticultural systems are becoming increasingly large scale, and sophisticated. Technology and professionalism are transforming the industries and driving change at a rapid pace³. From farming software systems to autonomous vehicles, more and more farming operations will see technology as a way to improve efficiency and sustainability. The uptake of technology requires both scientific data as the basis for sound decision-making, and professionals who can manage and facilitate the on-farm application of technology based practices.

Graduate recruitment has not kept pace with natural attrition rates (due to retirement), so the sector is expected to need many newly-trained employees with innovative ideas and a passion for the land. Lincoln University graduates are sought after for their ability to see the 'big picture'- from the specifics of production, to global trends. Presently there is demand for highly-skilled roles such as agricultural scientists, and for supervisory and management roles. Post-graduate study can further enable specialisation in a field of interest, and give graduates a head-start in the employment market.

Skills and knowledge developed by studying agriculture

The types of skills gained from studying agriculture are highly valued in the industry. Students develop agricultural knowledge around an area of focus, such as, agricultural science, agricultural commerce or agribusiness. The degrees are underpinned by a broad foundation of subjects giving students a range of knowledge areas to draw from in their careers. With farms now increasingly operating as businesses, many students are incorporating a commercial aspect into their degrees.

The applied nature of the coursework at Lincoln University gives graduates a range of practical skills that are transferable directly to the workplace. Lincoln University staff work directly with industry employers to provide students work experience with potential employers during the course of their study. Employers in the sector appreciate that Lincoln graduates come equipped with sector-specific skills and knowledge, as well as experience in agriculture and agribusiness practices.

Employers seek well-rounded, engaged graduates with a strong work ethic. As in any sector, employers typically value those who have a professional attitude to their work. This includes good communication (including the ability to communicate to groups, as well as effective interpersonal and written communication), respect, self-motivation, initiative, time management and flexibility. The importance of these basic skills cannot be underestimated, even in voluntary roles, as future job opportunities often arise from a good reputation and a varied network of contacts.

Skills and knowledge valued in agriculture roles:

Effective communication skills

Pastoral management skills

Knowledge of Resource Management Act and other legislation affecting farming

Interpersonal skills and the ability to interact professionally with a range of people

Knowledge of data collection and storage systems

Knowledge of water cycles, irrigation and reticulation systems

Skilled in 'big picture' thinking

IT skills

Knowledge of environmental systems

Knowledge of integrated farming systems and operations

Mathematical and analytic skills for experimentation

Presenting research findings

² Food and Agriculture Organization of the United Nations, retrieved from <http://www.fao.org>

³ Farming Industry News, retrieved from <http://farmindustrynews.com/farm-equipment/20-technologies-changing-agriculture>

Where can agriculture graduates find work?

Potential places of employment for agriculture graduates extend far and wide. Careers are available in cropping, horticulture, sheep and beef, wool, meat and dairy sectors.

- Consultancy services (e.g., Franklin Group, Nimmo-Bell Ltd., The Agribusiness Group, FarmRight, Compass Agribusiness, DairyNZ Ltd.)
- Government (e.g., Ministry for Primary Industries (MPI), AsureQuality, Landcorp Farming)
- Finance and insurance (e.g., Rabobank, BNZ, ANZ, Westpac, FMG, Heartland Bank, NZX Agri)
- Exporting and marketing (e.g., Export NZ, NZ Trade and Enterprise, Miraka, New Zealand Shipping Federation, Fonterra, ANZCO Foods, Blue Sky Meats, Oceania Dairy)
- Self-employment or contracting (e.g., silage, baleage or vineyard services)
- Plant, equipment, and machinery (e.g., ICS Manufacturing Ltd., Holdem Cattle Handling Equipment Ltd., Agtrac 2020 Ltd., Carrfields)
- Weed and pest control (e.g., NZ Biosecurity Institute Inc., Target Pest Enterprises)
- Fertiliser and chemical industry (e.g., Ravensdown, Nutritech International Ltd.)
- Horticulture and viticulture industries (e.g., Zespri International, Southern Paprika Ltd., Delegat's Wine Estate)
- Grain and seed industry (e.g., NZ Seedlab, PGG Wrightson, Seedlands, Cropmark Seeds, Agriseeds, New Zealand Grain and Seed Trade Association)
- Meat, cattle, wool (e.g., Blue Sky Meats, Beef and Lamb, ANZCO Foods, Segard Masurel, Miraka)
- Education, training and recruitment (e.g., Lincoln University, NZ Qualifications Authority)
- Research (e.g., New Zealand Crown Research Institutes such as AgResearch, Plant and Food Research, or Landcare Research; Dow AgroSciences, Livestock Improvement (LIC))
- Processor and manufacturers (e.g., Fonterra, Talleys, Synlait Milk, Heinz Wattie's, Silver Fern Farms, Tegel Foods)
- Farm Management (e.g., Dairy Holdings Ltd., Canterbury Holdings)
- Farmer and industry organisations (e.g., Federated Farmers, Horticulture New Zealand)
- Farmer Cooperatives (e.g., Farmlands, Ashburton Trading Society)
- Livestock Management (e.g., NZ Agribusiness Centre, Rural Solutions)
- Environmental and biological production organisations (e.g., Department of Conservation (DOC), BioGro New Zealand, Environmental Protection Authority)

Agriculture job titles

Account Manager -
Agribusiness Sales

Advisor- Plant Exports

Agri Manager

Agribusiness Consultant

Agricultural Consultant

Agricultural Contractor

Agricultural Technician

Agricultural/Horticultural
Scientist

Agri-tourism Operator

Agronomist/Research
Agronomist

Animal Health/
Nutrition Specialist

Area Manager -
Agribusiness Sales

Assistant Production Specialist

Auditor – Food and Dairy

Breeder

Business Analyst

Client Manager (Rural Finance)

Communications Officer

Consulting Officer

Customs Officer

Environmental Consultant

Extension Manager

Farm Accountant

Farm Consultant

Farm Manager

Farm Operations Manager

Farm Technician/Hand

Fertiliser Representative

Field Services Representative
(e.g., grains or chemicals)

Finance Officer

Geneticist

Grower Liaison

Head Shepherd

Horticulture Exporter

Human Resources Manager

Irrigation Consultant/
Designer/Engineer

Journalist

Laboratory Technician

Lecturer

Livestock Agent/Representative

Livestock Identification and
Business Support Specialist

Marketing and Sales
Assistant/Manager

Media Spokesperson

Nutrient Specialist

Pastoral Manager

Plant Breeding Technician/
Plant Breeder

Policy Advisor/Analyst

Production Manager

Productivity Officer/Manager

Project Manager/Officer

Research Assistant/
Technologist/Manager

Researcher

Rural Banker

Rural Manager- Insurance

Rural Property Valuer

Sales Representative

Seed Production Technician

Sharemilker

Soil Nutrition Consultant

Soil Scientist

Stock Manager

Sustainability Developer

Sustainability Services Manager

Technical Representative

Territory Manager

Viticulturist

Wool Buyer

Wool Classer

Pay rate indications: full time equivalent (FTE) \$NZ per annum⁴

Most starting salaries for graduates of bachelor degrees fall between 40,000 - 55,000 per annum. Entry level jobs are stepping stones to roles with increased responsibilities and remuneration. Your employability is affected by all of your life experiences, be they employment related, or the transferrable skills and competencies gained from community involvement, volunteer work, or previous work or study- all of which can grow competency, expand networks, and demonstrate enthusiasm to future employers.

In some cases roles offer remuneration extras such as bonuses or other incentives, medical or health insurance, and the use of a company vehicle or smart phone.

⁴ <https://careerhub.lincoln.ac.nz/students/jobs/search>; <http://www.getahead.co.nz/the-real-world/careers/agri-business/#52>; <https://www.seek.co.nz/jobs>; http://www.payscale.com/research/NZ/Employer=PGG_Wrightson/Salary; <http://www.mbie.govt.nz/info-services/employment>; <https://www.careers.govt.nz/jobs-database>; <http://www.universitiesnz.ac.nz/files/University%20Staff%20Academic%20Salaries%20and%20Remuneration%20-%20Final.pdf>; <http://www.otago.ac.nz/humanresources>; <http://www.canterbury.ac.nz/hr>

Job title	Indicative pay
Area Manager- Agribusiness Sales	50,000 – 80,000
Farm Technician/Agricultural Technician (early career)	40,000 – 65,000
Farm Technician/Agricultural Technician (late career)	55,000 – 85,000
Fish Farm Technician (early career)	38,000 – 70,000
Sheep/Beef/Grain Farm Manager	50,000 – 80,000
Dairy Farm Manager	60,000 – 75,000
Customer Services Representative	34,187 – 49,890
Territory Manager	54,676 – 96,886
Regional Sales Manager	58,645 – 109,009
Agricultural Consultant (early career)	45,000 – 80,000
Agricultural Consultant (late career)	80,000 – 150,000
Irrigation Engineer (early career)	45,000 – 50,000
Irrigation Engineer (late career)	70,000 – 100,000
Field Services Representative (often includes use of vehicle)	45,000 – 70,000
Environmental Consultant	50,000 – 90,000
Rural Banker (early career)	45,000 – 60,000
Rural Banker (late career)	75,000 – 120,000



Agriculture tasks

Professionals working in the agriculture sector are expected to wear many hats in their day to day work. The following lists indicate tasks one might encounter as a consultant, banker, and agronomist.

a) Agricultural/Farm Consultant tasks

Early career farm consultants benefit from a broad knowledge of farming and environment systems. As careers in this field progress, developing a specialisation enables later-career consultants to hone technical skills in one particular area. The following table includes the types of tasks undertaken by farm consultants.

Understand and describe to clients the financial ramifications of farming decisions

Research and advise clients on farming operations

Assist clients with business and strategic planning

Research factors that affect crop production, pasture growth and animal breeding

Prepare feasibility studies and reports

Provide legislative advice, e.g. Resource Management Act

Design and implement risk minimisation strategies e.g., preparing for natural disasters, droughts, or pests and diseases

Prepare property management reports

Assess and report on farm viability

b) Rural Banker

Rural Bankers are recruited directly from university and have the support of mentors while they learn credit and banking systems. Once working directly with a portfolio of clients, Rural Bankers may undertake the following tasks.

Support rural customers with banking and finance needs

Develop and maintain good relationships with clients

Provide tailored financial advice to clients

Tailor-make complex lending packages for clients

Visit farms and/or rural businesses

Advise clients on meeting regulatory requirements

Meet sales targets

Prepare financial reports for clients, and for management

Calculate value of assets

Calculate and impose lending limits

Develop proposals for buying/selling farming businesses

Provide business formation advice

c) Agronomist

During the course of their work, agronomists research and develop strategies to improve crop yields. The ultimate goal is to work scientifically to produce the finest crops, on the most consistent basis, for any situation. Agronomists may undertake the following tasks.

Research and develop strategies to improve crop yields

Conduct personal and telephone consultations with farmers

Examine and report on pest and disease issues affecting crops

Develop plans to combat crop or soil pests and disease

Make improvements to next generation crops

Crop budgeting, rotating and planning

Running trial programmes

Soil sampling

Make recommendations regarding fertiliser, seed and chemical applications

Irrigation scheduling

Study a farms crop production

Discern best ways to plant, harvest, and cultivate plants

Job tasks are role-specific, so the above is an indication only. For more information on roles, registered Lincoln University students can search Lincoln CareerHub (including expired jobs) for job titles similar to those they are interested in. Job descriptions, including tasks and skills required, are often available.

Graduate profiles



Lachie Boleyn
Bachelor of
Agricultural Science

Arable Representative,
PGG Wrightson Seeds



Charlotte Field
Bachelor of Commerce
(Agriculture)

Nutrient Specialist, Ballance
Agri-Nutrients



James Dixon
Bachelor of
Agricultural Science

Technical Tour Manager,
Farm To Farm Tours

Industry bodies

Membership of an industry specific body enhances the professional status of students and employees. By joining a professional body, members can research career options, access training and events, and network and collaborate with industry colleagues at all levels.

Examples of agriculture industry bodies include:

Federated Farmers
www.fedfarm.org.nz

Horticulture New Zealand
www.hortnz.co.nz

Royal New Zealand Institute of Horticulture
www.rnzih.org.nz

New Zealand Grasslands Association
www.grassland.org.nz

New Zealand Agricultural and Resource Economics Society
www.nzares.org.nz

The New Zealand Institute of Agricultural & Horticultural Science
www.agscience.org.nz

Irrigation New Zealand
www.irrigationnz.co.nz

New Zealand Grain and Seed Trade Association
www.nzgsta.co.nz

New Zealand Institute of Forestry
www.nzif.org.nz

National Beekeepers Association of New Zealand
www.bpsc.org.nz

New Zealand Society of Soil Sciences
www.nzsss.science.org.nz

Beef and Lamb New Zealand
www.beeflambnz.com

NZ Institute of Primary Industry Management
www.nzipim.co.nz



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