

# New Zealand Land Tenure is Holding Back the Success of Agriculture

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Kellogg Rural Leadership Programme

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Undertaking this Kellogg research project has given me the focus, scope and time to investigate an area of the interactions between primary industries and social issues that I find fascinating, and to make some contentious recommendations to encourage free thinking and open discussion.

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# **New Zealand Land Tenure is Holding Back the Success of Agriculture**

**Kellogg Rural Leadership Programme  
Course 36 Research Project**

**Allister Holmes, 2017**





## 1 Executive Summary

It is naïve and self-centered to even consider ourselves the owners of land. Land has existed for millennia before we “own” it, and will continue to exist for millennia after we no longer “own” it. We are simply occupiers, users and stewards of it for a fleeting time. Current land stewards should undertake succession planning, rather than attempt to leave a legacy on the land.

There is a fundamental flaw in the tenure of land in New Zealand, with the current model of farm ownership resulting in land ownership becoming concentrated in fewer hands, and increasing barriers to new entrants wanting to enter the industry.

Land tenure in New Zealand is largely based on United Kingdom freehold principles. There is a strong bias towards land tenure by people that inhabit and use the land, whether it be farming on their own account, or making it available as leasehold to others to farm it.

Our desire to own land is related to our fundamental desire to own where we live. For typical New Zealand farmers land tenure means solely the ownership or rental of land. This simple view of land tenure has become outdated. It is interesting to note that New Zealand already embraces a novel form of land tenure, being the global exemplar of share farming through the variable order share milking system.

We need to develop land tenure models to include various forms of joint ventures to enable new entrants and young farmers to climb onto the farming ladder. Using these different models will encourage innovation, entrepreneurship, expansion and acceptable succession within the industry, ensuring a sustainable future for the farmer and the next generation. New entrants and first-generation farmers are vital to the success of any country’s agricultural industry.

Māori entering farming in New Zealand also have the challenges of raising working capital on collectively owned Māori land; the need to rebuild sustainable Māori rural communities; and managing small blocks of land scattered throughout a region.

New Zealand farmers need to stop family land being sold from one generation to the next, continuously loading debt on the next generation and resulting in continual profit for off shore banks. As New Zealand matures, land sales will become less common, with families leasing land across generations, and tenant farming of this land will become more common.

State owned Landcorp farms are marginally profitable, and should be transferred to a land trust to be made available to new entrants to the industry. New Zealand should allow sales of farmland to overseas purchasers, providing there are strong controls around the management of the farmland after the sale.

A well-structured Capital Gains Tax should be implemented to attempt and reduce the continual trading of land, and encourage land to be valued on its productive capacity. This will help stop the situation facing South Island dairy farmers where they are attempting to be profitable on \$80,000 per hectare land while facing increasing environmental pressures.

By embracing change in New Zealand farmland tenure, the industry will future proof itself and make farming more accessible for new entrants to engage in, driving greater innovation and early adoption of techniques but also through providing a dynamism by an intensive striving for efficiency.

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## 5 Hypothesis

My hypothesis is that the traditional land ownership model practiced in New Zealand concentrates land ownership in the hands of a few owners, and generates too much profit for overseas banks. Implementing new and novel forms of land tenure will allow a range of new entrants to the industry, and reduce the dependence on bank finance.

## 6 Introduction

It is naïve and self-centered to even consider ourselves the owners of land. Land has existed for millennia before we “own” it, and will continue to exist for millennia after we no longer “own” it. We are simply occupiers, users and stewards of it for a fleeting time.

The current model of farm ownership in New Zealand is not working, with land ownership becoming concentrated in fewer hands, and increasing barriers to new entrants wanting to enter the industry.

Land tenure in New Zealand is largely based on United Kingdom freehold principles. There is a strong bias towards land tenure by people who inhabit and use the land, whether it be farming on their own account, or making it available as leasehold to others who use it.

To put the access of land in context for its use in agriculture, a Farm Business Fact Sheet produced by the Australian GRDC, 2016, provided an objective analysis of farm business structures, and stated that it is important to categorize a farm as a business, requiring several resources to operate, and these resources need to be valued correctly to allow the suppliers of these resources to be rewarded appropriately. The resources include:

- labour;
- machinery;
- water;
- fertiliser;
- seed;
- land.

I have deliberately placed land at the bottom of this list, because often land is held in higher regard than the other inputs. However, in reality it is just another resource that is required to undertake the business of farming.

## 7 Aims

The aims of this report are to:

- undertake an investigation into the social and agricultural implications of land tenure;
- outline the existing forms of land tenure in New Zealand, and elsewhere in the world;
- recommend new and novel forms of land tenure that will allow a range of new entrants to enter the industry.



## 8 Methodology

My methodology began with an in-depth literature review of numerous articles on the issue of land tenure worldwide. Sources ranged from reports from international governmental organisations; to rural newspaper articles; reports from Kellogg & Nuffield scholars; popular rural press articles and social commentary.

After reading widely, I began thematic analysis to group the issues raised in the various readings into general themes. Ultimately these formed the basis of the structure of this report.

Once I formed my hypothesis, I undertook interviews with three people to investigate specific areas of interest and relevance to land tenure in New Zealand. The first interview was undertaken with Simon Campbell and Matthew Hood from Rabobank Wairarapa, to discuss their experiences with transfer of farm tenure on North Island East Coast sheep and beef farms. The second interview was on 6 October 2017 with Kellogg graduate Steph O'Sullivan, CEO/Kaiurungi of Ngati Ranginui Iwi Society Incorporated. This interview was undertaken specially to understand the history of land tenure for Māori in New Zealand, and current issues facing Māori land tenure. I will also consider some completely different forms of land tenure, such as those practised by the New Zealand Māori, and the Australian Aborigine.

I also looked at the case of Landcorp farms, owned by the New Zealand government.

It is important to note there are limitations to the scope of this project. My recommendations are based on a theoretical level and do not include detailed financial and social analysis of the impact of each recommendation.

I have also concentrated my study of alternative land tenure systems on Western countries, as I believe alternative land tenure systems from these countries are more likely to be relevant for, and adopted in, the New Zealand context.

## 9 Introduction to Land Tenure

In their excellent outline of land tenure issues in Europe, Peters & Maunder, 1982, claimed that the theoretical distinction between owning and operating the land was important.

Land tenure is not a static characteristic, with Kuhnen, 1999, page 1, stating *“Man – land relations are constantly changing. Natural, economic, social, political and technological conditions must harmonize with the existing land tenure, and whenever they change – and this is taking place today with increasing speed – they result in poorly adjusted conditions and lead during time to changes in land tenure. The process of adjustment often lags the emergence of a new situation, and this causes problems with respect to the efficiency of land use, equity, social balance within the society and environmental acceptability.”*

Land tenure is also based around the users of the land having the social license to use the land, therefore land tenure includes formal control through laws and informal control through what society finds acceptable. In Norway, Forbord et al., 2014, page 18, proposed a *general model for looking at changes in farmland control (Figure 1 below)*. The model proposes three broad groups of factors affecting farmland control.

1. *First, techno-economic factors have overall contributed to both the need (due to increasingly large machinery and changing rural populations) and opportunity (to grow the business) for each farmer to manage an increasingly large area of farmland. Developments in the food markets and public expectations of reduced food prices have also generally pushed in this direction. Changes in other economic sectors leading to declining rural populations, a lower chance of succession and a lower attractiveness of agricultural employment also fall into this category;*
2. *Social norms play a role. In our case, social mechanisms and expectations related to farm properties and farmland are of special interest. Such social norms involve among things moral obligations to the land, the expectation of intergenerational continuity on a farm and social obligations to neighbouring farmers. By and large such social norms have led to holding back transfer of farm properties and upheld the existing farm property structure;*
3. *Agricultural policy exerts an important influence. In the Norwegian context, legal instruments have the effect of limiting the number of property transfers, whereas economic instruments have in general allowed farmers to remain profitable at what might elsewhere be considered uneconomically viable farm sizes (although changes in the design of subsidies in the 2000s have reduced the incitement to “stay small”).*

*A combined effect of the three factors can explain the change in the pattern of farmland control in Norway over the last fifty years.*

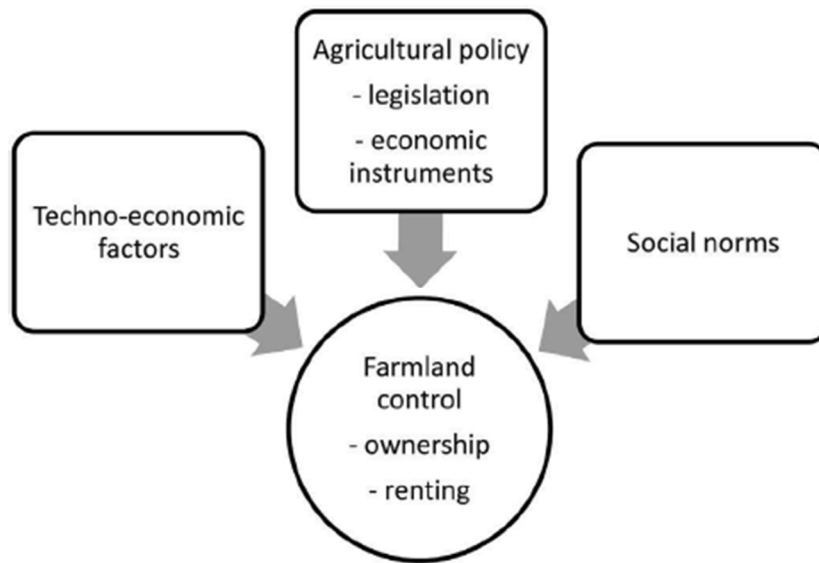


Figure 1 Factors affecting farmland control (Forbord et al., 2014)

This Social Licence to Farm is currently extremely relevant to the New Zealand dairy scene, with ongoing debate and media attention about the right of land users to use underground water for irrigation, and to add nutrients and sediment to water leaving the property.

It is also important to note that current agricultural success in many countries is built on the historic wrongs undertaken towards indigenous peoples: First Nations in Canada and the United States; the aborigines in Australia; Mapuche in Argentina and Chile; Indio in Brazil and obviously, in New Zealand, the Māori.

### 9.1. Definition of Land Tenure

Land tenure is defined by The Food and Agriculture Organization of the United Nations (FAO), 2017, as *"the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land"*

Land tenure systems are essentially rules defined by society to determine who can use land resources, under what conditions, and for how long. Kumar, 2017, provided the illustration below to explain the relationship between land, human beings and laws, rules and guideline that result in land tenure.

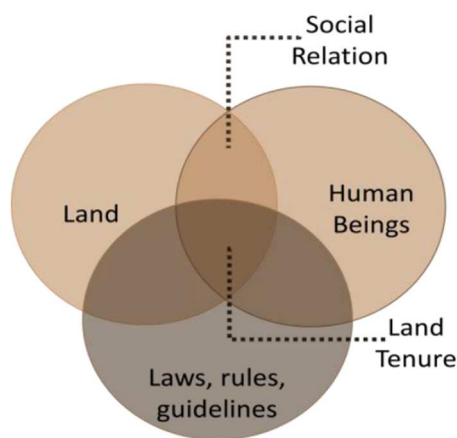


Figure 2 Land, human beings and legislation- relation (Kumar, 2017)

Land tenure exists on a continuum, with Figure 3 below shows the range of land rights worldwide as outlined by United Nations Habitat, 2008.

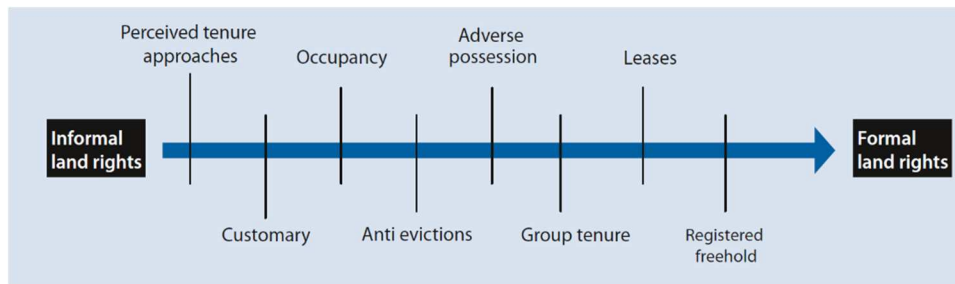


Figure 3 Continuum/range of land rights, UN Habitat, 2008

Land tenure is a fundamental human right, with United States Agency for International Development (USAID) (Tetra Tech, 2013) outlining *"Secure land tenure improves food security, economic growth, and natural resource management and reduces the impacts of conflict and climate change. An effective land governance and property rights system is fundamental to the broad process of economic and political development."*

The products produced from the tenure of agricultural land are essential for human survival, and agriculture is an industry that requires access to secure land tenure to produce food efficiently, at a reasonable price, and with minimal environmental impacts. This view is supported by Heubuch 2016, who claimed that *"Property is basically the backbone of the agricultural economy."*

Land tenure in New Zealand and most Western countries is legally defined and protected through several pieces of legislations and is formal, and therefore enforceable and contestable through a court of law, while land tenure in third-world and developing countries results in conflict and poor land utilisation.

Land tenure can be complicated by the fact that multiple persons or groups can have different property rights to the land (Deininger, 2003; Donkor & Owusu, 2014; FAO, 2017; Hawke & Lattimore, 1999). This list adapted from USAID, 2005, outlines different property rights providing certain rights on the use, control and occupation of land, including rights to:

- use the land for grazing, cropping etc.;
- exclude unauthorized people from using the land;
- control how land will be used – deciding how to benefit, rules of use etc.;
- derive income from the land – water and mineral rights;
- protection from illegal expropriation of the land;
- transmit the rights to the land to one's successors - right held by descendants to inherit the land, right to sell, transfer or mortgage the land;
- alienate all rights to the entire holding, or portion of the holding – sale or subdivision;
- alienate only a portion of the rights – lease;
- A residuary right to the land - when partially alienated rights lapse e.g. lease, those rights revert to the person who alienated them;
- enjoy the property rights for an indeterminate length of time - rights might not terminate at a specific date but can last in perpetuity.

USAID, 2005, also outlined that with land tenure rights, there also comes duties such as:

- not to use the land in a way that is harmful to other members of society - the right is held by society. This is the Social Licence to Farm that has recently become highly relevant in New Zealand;
- to surrender the rights to the land when they are taken away through a lawful action - insolvency where the right is held by the creditors, or in the case of default on tax payments where the right is held by the state.

These duties are also noted by Kuhnen, 1999, page 3, who claimed that *“it will probably require a transition from land tenure to a broader concept of resource tenure with the focus not only on including land, but also water, grazing land, forestry and the available or other potential means of existence and, last but not least, such aspects as the protection of biodiversity”*.

Land tenure is therefore a complex issue. The formalization of the administration of land rights is considered by some to be essential for economic development, however the flawed design of property right administration often puts property rights in the hands of a few, and creates grievances with many others. Heubuch, 2016, stated that *“the distribution of and access to land are socio-political issues that need to be determined by democratic decision-making processes, not by the stock market”*

Standard land tenure in New Zealand is freehold ownership, leasehold, or Māori ownership.

## 10 Consequences of Poor Land Tenure

We only have to look at the current and ongoing plight of the Rohingya people to see the effect of insecure land tenure. There are 1-2 million Rohingya people who have lived in Myanmar (formerly Burma) for several hundred years, but are not granted citizenship in Myanmar, and own no land (Henley, 2014). Since 2016 they have been systematically driven out of Myanmar under the rule of Aung San Suu Kyi in what is widely being called ethnic cleansing. They have no secure land tenure, and therefore add to the long list of stateless peoples in the world.

Current day land tenure in New Zealand is stable, except for outstanding Treaty of Waitangi claims. However, in the developing world, formal and secure tenancy is rare, with estimations of formal land tenure in Africa being as low as 2-10% (Deininger, 2003), as shown in **Error! Reference source not found.** below.

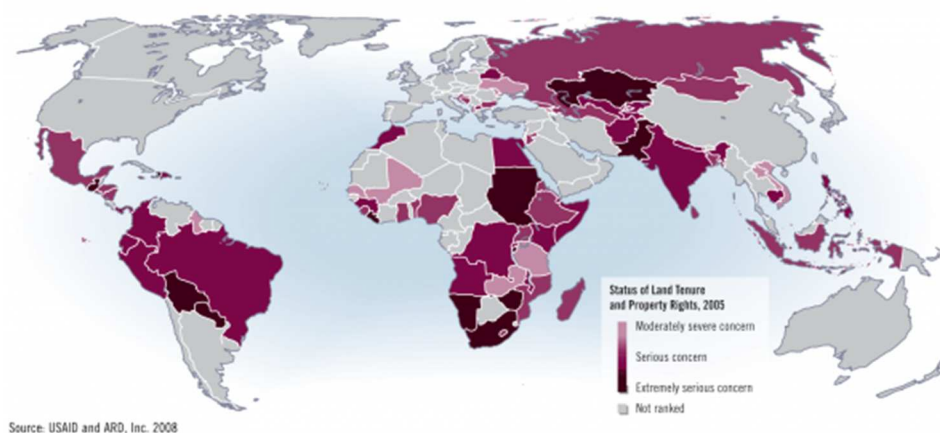


Figure 4 Status of land tenure and property rights, 2015



The FAO it was stated that *"Alternative Systems of land Tenure and Ownership... should be able to accommodate formal, informal and indigenous types of land tenure. Land institutions should be flexible enough to cover all types. It is questionable whether a single system should be used for all types of tenure or whether separate systems should be used. Different forms of land rights may be appropriate in different circumstances. It is essential to consider the social consequences of different types of tenure and to ensure that each provides adequate protection."* (IFC, 1995)

## 11 Private Ownership of Land

### 11.1. Why do we want to own land?

I believe our desire to own land is related to our fundamental human desire to own our home. "Tierra y Libertad" Land and liberty is the name of a movement of Mexican peasants who occupied urban land on the outskirts of the city of Monterrey, Mexico, and built their own type of society. Motto "A tierra e para quien la trabaja" "the land belongs to those who work it"

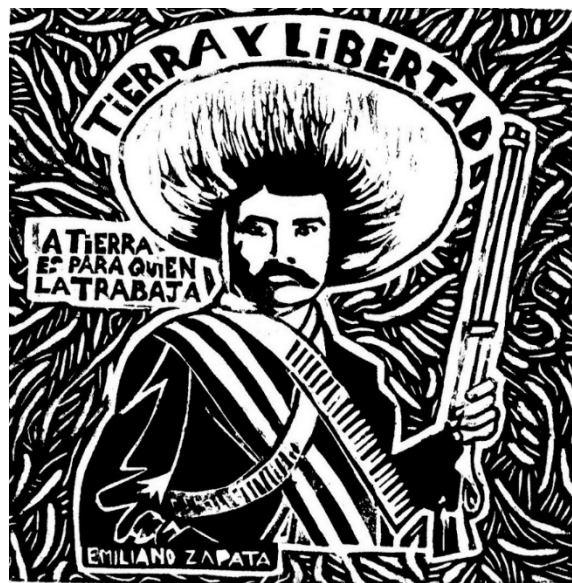


Figure 5 Land and Liberty - the land belongs to those who work it. Papeleria Xilografica, 2011

A Grattan Institute report (Kelly et al., 2013) cited several benefits of home ownership, and these benefits are largely similar for land ownership:

- achievement and psychological reassurance by being part of the cultural norm;
- reduced future housing costs through ownership (although this often ignores opportunity cost of funds tied up in houses);
- store of wealth for retirement and a safety net should they exhaust other wealth in retirement;
- security for borrowing, including for businesses. The cost of mortgages is usually much lower than for business borrowing;
- greater stability of tenure thus improving social cohesion and civic participation.

There are also many cultures world-wide that consider humans are made from the earth and return to the earth on our death. In Chinese mythology, Nu Wa is the goddess of order who made clay figurines by hand, until she tired and picked up a cane, dipped it into mud and kept slapping the cane on the ground. Mud splashed on the ground, and these mud spots immediately became live humans. Interestingly, it is believed that all the clay figurines made by Nu Wa's hands became the noblemen in human society.

However, those who were the descendants of the mud-splashed-men became the lower class, ruled by the hand-made men (Anon, no date).



Figure 6 Nu Wa creating mankind. <http://chinese-tales.blogspot.co.nz/2008/07/nuwa-mending-sky.html>

Māori place immense importance on their link with the land as *tūrangawaewae*, being a sense of identity and independence associated with having a home base. Goodwin, 2015, outlines this strong connection with the earth in several cultures *“Just as Māori moved with their ancestors’ bones in a waka iwi, and sometimes reinterred these in a hahunga ceremony, Joseph’s bones were brought back from Egypt by the Israelites and reinterred at Shechem on purchased land. Comparable ceremonies are still alive in African tradition today, where a handful of soil may still be returned to a home area from a grave on foreign soil in order to convince ancestral spirits that a child of the soil – mwana wevhu – has returned home”*.

Tichawangana, 2014, also discusses *“mwana wevhu”* as being *“The land is also the terrestrial link that connects the ancestral, present and future generations. On it the ancestors were buried, the present generation lives upon it and the future generations will be born to play and thrive upon it. This whole idea is highlighted by a traditional ritual known as “Kuchera Rukuvhute”, which loosely translates to “burying the umbilical cord. “According to this ritual when a child is born tradition requires that part of their umbilical cord which falls off must be interred into the earth to connect the child to their ancestors.”*

## 11.2. Change in farm size

Another important factor in the ownership of farms is the increasing size of economic farm units. Prior to mechanization in the 1930’s farm size was small, limited by what a man and horse drawn plough could manage. Now with ever larger tractor and implement sizes, the area a single farmer can cultivate is ever increasing. Townshend, 2016, stated that in their local area of New Zealand over the last 45 years the number of farms has gone from 125, averaging 40 hectares each; to 40 farms in 2016, averaging 130 hectares. Allen & Kloeten, 2016, found a similar trend, with the average New Zealand dairy herd size doubling in number from 1995 to 2015; and Heubuch, 2016, reported that the number of farmers in Germany had dropped from 1.4 million in 1949 to less than 300,000 in 2013. Inevitably, this has led to a significant increase in the price of an economic farm unit, with Peters & Maunder, 1983, stating that the way into farming had never been easy *“through parsimony, patrimony or matrimony”*. **Error! Reference source not found.** below illustrates the change in farm size over the last century.



Figure 7 Embracing technology – a family tradition. <http://www.nationalhogfarmer.com/blog/farming-not-faint-heart>

Table 1 below shows the intentions of sharemilkers on completion of their sharemilking career. Of concern is the fact that in the 20 years from 1996 to 2016, there is a decrease of a third in the numbers of sharemilkers that plan to buy their own farm, and an increase by 43% in the number of sharemilkers that plan to leave the industry, take another job in the industry, or do something else. We can surmise that these differences are due to the increase in the capital price of purchasing a dairy farm.

Table 1 Intentions of sharemilkers on completion of sharemilking career, Allen & Kloeten, 2016.

	1996	2011	2016
Purchase of dairy farm	70%	55%	47%
Retire	3%	4%	7%
Leave the dairy industry	15%	6%	14%
Take up another job in the dairy industry	4%	23%	13%
Other	8%	12%	19%
Total	100	100	100

Ownership of farmland is the norm in New Zealand, but is it essential? An issue raised by several authors, including Higby et al., 2004; Cornwall etc., is the fact that the change in farm ownership through gradual transfer of land and other assets is much easier to manage for new entrants than outright purchase.

Rapid changes in land tenure have been experienced in some countries. In Norway in 1959 87% of farm properties were owned by owner-farmers, however by 2011 this had dropped to 35% (Forbord et al., 2014).

Even in communist China controls on land ownership have changed in 2016. New laws allow villages with large numbers of small land holdings that had been leased to small farmers to sell the land to corporations in return for annual payments (Hornby, 2016). One of the drivers for the change in land ownership laws in China was the poor production efficiency and low yields from small land-holdings, often operated by old farmers slow to adopt technology. Silk, 2013, shows that in 1970 there were four-times as many

Chinese in rural areas as urban areas and since 2010 there have been more urban dwellers than rural. The Chinese government is cautious to change land ownership laws too drastically in case it leads to widespread sale of rural land. In the 1970's, China relaxed laws allowing families to take ownership of rural land, resulting in a 50% increase in agricultural production from 1978 to 1990.

The Land Administration Act in China had traditionally limited the use of land to residential plots for farmers, land for public facilities, and land used for towns or villages (Huang et al. 2017). Land tenure security can result in increased investment in rural development, and therefore productivity, and they concluded that China needed to improve their land use system.

### 11.3. Transfer of farm ownership

Hood & Campbell, 2017, claimed that a crucial factor to try and understand is why farmers exit the industry. They believed that dairy farmers often exited the industry because they had enough of the routine of milking. However, other farmers had parts of the operation they enjoyed, but generally did not want to undertake compliance paperwork, or were not motivated to embrace the latest technology.

Therefore, it is important to understand what the motivation for the farm sale is, and what considerations are involved in this. There are various resources to help farmers and land owners in making this decision Land for Good, 2012.

Salatin, 2013, page 237, pointed out that if new entrants can't enter the farm system, old farmers can't exit. *"For middle-aged independent-minded farmers petrified of collaborating with a young person, I have only one question: "Do you want to farm at age seventy...alone?" The farm that excites you at thirty will become burdensome at seventy. You won't be able to run the farm at seventy that you're running at thirty or forty. That's just a fact of life. Look in the mirror and ask yourself if you really want to farm alone at seventy years old. Now go out and embrace some young people."*

The United Kingdom farming industry identifies the lack of new entrants into farming as a potential risk that will fundamentally change the rural community (Ingram & Kirwan, 2011).

### 11.4. Communal tenure

Goodwin, 2015, outlines communal tenure *"it still accounts for the majority of land rights in the Pacific and for 90 - 98% of African land. Communal tenure is typically short on written law and long on custom, and there is remarkable congruence in tenure custom the world over."*

Higby et al., 2004, outlined a new ethic for landowners paving the way for new farmers to enter the industry by embracing joint ownership, and ultimately benefiting the community around the farmland by helping to provide employment and food security. They suggest a new ethic for agricultural land tenure would address:

- access;
- affordability;
- security;
- stewardship.

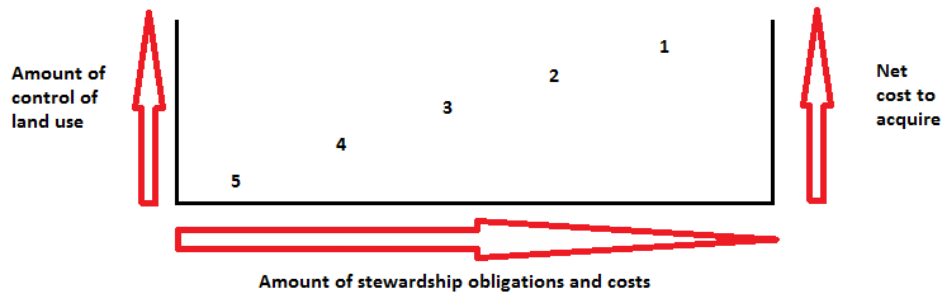


Figure 8 New ethic for landowners. Higby et al., 2004.

1. Own & operate farm
2. Own & manage in partnership
3. Own & lease farm (split management)
4. Own land with restrictions/sell improvements
5. Retain easement

Another who advocates a new ethic in land tenure is Goodwin, 2013, who stated that “Sometimes it seems that vital principles of our communal tenure could have been jettisoned as we moved to individualized private property, and it seems important to try to pin the core principles of communal tenure and consider carefully whether the Western land tenure model can even now be strengthened in any way. The following may be a starting point:

1. *A work principle. Everyone is expected to work, and a clear link exists between work and survival. In communal societies, there is a variety of work ranging from the work of food gathering – mahinga kai for Māori – to going into battle. To retire from active physical work is only to commence work in a less active but no less important capacity.*
2. *Self-worth. By contributing, every individual is aware how much they are needed and valued, which leads to opportunities for affirmation and self-esteem.*
3. *Land is not negotiable wealth. Land is a space to earn wealth by food gathering, planting or hunting but is not in itself wealth. Wealth applies to communities not individuals, and as a rule wealth does not in itself earn more wealth. Land is held in trust by the living, on behalf of those who have died, for the yet unborn. This principle is inseparable from an environmental ethic, since land should be passed on in good condition.*
4. *The principle of individual rights being subordinated to group rights is clearly linked with survival.*
5. *The principle of specific places existing that are well known and to which individuals can always return and be themselves. Places where returnees will be accepted and can dress in a way and speak a language with which they are comfortable. A place from which individuals can move beyond in the knowledge of a secure place to return to. Bound up with this principle are mechanisms for passing on language and culture, such as songs, poems and stories.*

With the exception of number three – land not being marketable – most of these principles have counterparts in Western individualized tenure though often with a different composition and application”



## 12 Novel Approaches to Land Transfer

### 12.1. Fresh Start Initiative, Cornwall, UK

The Fresh Start Initiative (FSI) was undertaken in Cornwall, UK, between 2005 and 2008 (Ingram & Kirwan, 2011). This initiative aimed to match farmers looking to step back from the day-to-day farming of their land, with new entrants to the industry, by creating a joint-venture arrangement. The initiative had three key aims:

1. encourage and help newcomers to the agricultural industry to ensure its long-term health and vitality;
2. encourage those within the industry to plan and explore new opportunities and options of land tenure;
3. provide an opportunity for those wishing to leave the industry to do so with dignity.

The scheme had a very clear outline of elements being Matchmaking, Business Support, Mentoring, Training, Retirement & Succession Planning, Rural Housing Provision and Financial Engineering.

Thirty-nine new entrants registered to use the services, and 16 existing farmers. There was limited success, with some obvious challenges being the lack of capital that many new entrants had available, and the inability of the farming business to provide additional income for the new entrant. Another challenge was suspicion by both parties of the other's motivation to enter any joint venture arrangement. While there are clear agreements outlining the joint venture arrangements, they see concern from established farmers about bringing new entrants into the farming business, and the potential for conflict during the joint management phase. The new entrants' main drivers to enter a joint venture was to go farming on their own account, while the existing farmer wanted to retain some control. The existing farmers believed that the new entrants had unrealistically lofty expectations of their return from the JV. The expectations of the new entrants are a critical factor in farm succession, with Hood & Campbell, 2017, stating that if young people prove their attitude and aptitude in farming, opportunities for them will materialize, especially in the New Zealand dairy industry.

There was only one successful joint venture formalized because of the FSI, where the new entrant had worked for the farmer while at college, and ultimately bought the farm.

A key recommendation was that any parties entering a joint venture should ensure that there are formal joint venture arrangements, and critically, formal ways outlined for both parties to exit the joint venture later. There was also the finding that many existing farmers genuinely want to help an interested and motivated new entrant into the industry, and that unconventional land tenure arrangements will be more common in the future.

A good example of progressive thinking with regards to share farming is from Scotland, with a 64-year-old sheep farming couple who no longer wished to manage their flock, but also did not want to leave their property yet (Mackenzie, 2013). None of their children had an interest in farming, so they asked a former employee of theirs if he would like to form a share-farming partnership, and buy into the farm over time. Initially, the owners held 100% of the shares, having provided all the assets to the farming operation, but the share farmer reinvested his profits from the sheep operation into a shareholding in the farm, at the rate of about 2% per annum. Based on a 2008 land value of \$9,000 per hectare (Bailey & Baxter, 2009) this equates to the sharecropper investing approximately \$75,000 in the farm each year, on top of being paid for his time in the operation.

In his book “Fields of Farmer – Interning, Mentoring, Partnering, Germinating” Salatin, 2013, outlined several ways that existing farmers can cultivate possible new entrants to the industry:

- internships;
- apprenticeships;
- leasing;
- share farming;
- caretaking - involves a new entrant to the industry partnering with an older landowner to undertake farming operations the landowner is beginning to find harder;
- stacking – involves adding a new business operation to an existing one. An example is adding a failed raised free-range chicken business to a mixed stock enterprise.

An inspirational and successful way of achieving family farm ownership has been practiced by the Hadfield family on the East Coast of the North Island. The extended family purchased one property in 2002 and farmed it together for seven years, until the success of that property was used to fund the purchase of another piece of land, until ultimately the family members owned four independent farms.

### 13 Barriers to Entry

While access to land or access to sufficient capital to purchase land are common barriers to entering the agricultural production sector, the EIP-AGRI (2016) listed the following as other main reasons given as barriers to entering the farming sector:

- high startup costs;
- access to markets;
- low profitability;
- low status associated with farming;
- limited access to information;
- high levels of bureaucracy & compliance;
- low access to off-farm employment;
- lack of farm diversification opportunities.

In her Nuffield report of 2015, Lewis reported that the main factors that impact on entry, expansion and exit also include:

- security of tenure;
- taxation;
- succession;
- Common Agricultural Policy;
- attraction of nine to five jobs;
- fear!

Salatin, 2013, had a similar list of the biggest risks faced by new entrants to the agricultural industry:

- lack of experience;
- lack of support;
- lack of market;
- lack of operating capital.

Barr, 2000, outlines the additional challenges facing Māori entering farming in New Zealand as well as the general challenges outlined above:

- raising working capital on collectively owned Māori land;
- need to rebuild sustainable Māori rural communities;
- small blocks of land scattered throughout a region.

I worked for Heinz Wattie's (HWL) around the year 2000 in Gisborne. We sourced raw material from growers in the Poverty Bay, Wairoa, Tolaga Bay areas. Much of this land was owned by Māori trusts, which faced the challenges outlined by Barr, 2000. To secure produce from this land, HWL entered numerous arrangements with Māori trusts to provide finance to develop their land, in return for the lease of the land or produce from it for a period of two-five seasons. At the end of this arrangement the land was returned to the trust with drains, access and fences installed, ready for them to continue to farm. HWL used this mechanism during the growth of their BIO-GRO certified. This development was documented and studied by Coombes et al., 1998, who recognized that the Gisborne / East Cape region had a large amount of land in multiple Māori ownership.

Barr, 2000, specifically discussed the Heinz-Wattie's development of Paripoupou Station north of Tolaga Bay in his work. The station is 120 hectares of land in Māori ownership with 11 owners in the 1860's, but now has over 1,000 owners.

### 13.1. Overcoming barriers to entry

Overcoming these potential barriers to entering the farming industry is critical to ensure motivated young entrants to the industry are not put off by barriers, with the EIP-AGRI (2016) suggested there were other ways to fund new entrants into primary industry, with opportunities for overcoming barriers including:

- career-ladder farming;
- contract farming;
- crowd sourcing & funding;
- community supported agriculture;
- equity partnership;
- incubator-supported start-up;
- junior-senior partnerships;
- land partnerships;
- share farming.

It is important to understand that this is not a new issue. George Henderson discussed the issue at depth in his 1944 book "The Farming Ladder".

The Welsh government has a comprehensive range of Rural Development Programs, including the Young Entrants' Support Scheme, that aids young farmers setting up as head of the holding for the first time. *"Young farmers represent a key factor in the sustainable development of the farming sector. This scheme supports the establishment of young farmers who possess adequate skills and competence and are setting up as head of the holding for the first time"* (YESS, 2017).

The scheme provides *"a one-off grant payment for capital investment for expenses incurred when a young entrant is setting up as head of holding for the first-time access to a dedicated Young Entrants' Business Enabler Service, which will advise on training, knowledge transfer and joint venture opportunities as well as matching young entrants with appropriate established farmers who wish to explore different working patterns access to funded mentoring services from established farmers."* This support includes support for novel forms of land tenure.

The Kansas Development Finance Authority (KDFA, [www.kdfa.org/](http://www.kdfa.org/)) offers a tax-exempt bond programme authorized by the federal tax code. The programme assists farmers who have not previously had, or who do not currently have, substantial ownership interest in farmland in financing their agricultural businesses to start or keep them in farming. KDFA assists farmers by making loans available at below-market interest rates through private lenders. The programme can be used by new entrant farmers for purchasing agricultural land, farm buildings, farm equipment, and breeding livestock, and new entrant farmers may borrow up to US\$501,000 under the programme limits, subject to lender approval.

Cook, 2009, outlined several options to overcome land ownership barriers and allow new entrants to come into the Scottish farming industry through a phased entry to farming as shown in Table 2 below.

Table 2 Options to overcome land ownership barriers and allow new entrants to come into the Scottish farming industry

	Situation	Best Options
Owner	Don't want to farm at all, want minimal day-to-day involvement and legal clarity	<ul style="list-style-type: none"> <li>Limited Duration Tenancies</li> </ul>
	Want to be actively involved in a growing farming business, but lack expertise or time or fitness	<ul style="list-style-type: none"> <li>Share farming</li> </ul>
	Want a level of control at farming policy level and a relatively fixed income, but don't want day to day involvement	<ul style="list-style-type: none"> <li>Contract Farming</li> <li>Agreement</li> </ul>
	Face short term decisions and uncertainty over policy direction, but want to maximize returns in meantime	<ul style="list-style-type: none"> <li>Annual lets</li> </ul>
	Farming actively, but need a motivated workforce to develop the business	<ul style="list-style-type: none"> <li>Incentivized employment</li> <li>Contracts</li> </ul>
	Want to expand or specialize, but need to bring in motivated management expertise, new skills and capital	<ul style="list-style-type: none"> <li>Equity arrangements</li> <li>Partnerships</li> <li>Limited Liability Partnerships</li> </ul>
Prospective Farmer	Little capital, experience or track record	<ul style="list-style-type: none"> <li>Employment and</li> <li>Incentivized employment</li> <li>Contracts</li> </ul>
	Some capital, but little experience and track record	<ul style="list-style-type: none"> <li>Annual lets</li> </ul>
	Good expertise in one area of farming, plus track record and machinery (e.g. through contracting) or access to buildings	<ul style="list-style-type: none"> <li>Contract Farming</li> <li>Agreements</li> <li>Contract Growing</li> </ul>
	Good technical and some business track record and experience, plus accumulated some capital	<ul style="list-style-type: none"> <li>Share farming</li> </ul>
	Well established track record and significant capital	<ul style="list-style-type: none"> <li>Formal tenancies</li> <li>Equity arrangements</li> <li>Partnerships</li> </ul>

Hood & Campbell, 2017, claimed that young farmers could become shareholders in a large business, with economies of scale etc. If they choose to leave the large business and buy their own property they will reduce the size of their operation and increase their risk; but at what cost to lifestyle?

## 14 Different Forms of Land Tenure

This section outlines the different forms of land tenure, other than outright ownership, that have been covered in detail above.

In the comprehensive "Holding Ground: A Guide to Northeast Farmland Tenure and Stewardship" Higby et al., 2004, discussed in depth the history of farmland tenure in the United States, which mirrors that of New Zealand. They stated that the third President of the US, Thomas Jefferson, fostered the idea of widely dispersed ownership of family farms in the late 1700's

### 14.1. Leasehold

Leasehold involves the land being owned by one party and being made available to another party to farm for a period, in return for monetary compensation. Peters & Maunder, 1982, stated that "*Any form of tenancy involves divergence between ownership and operation, and a multiplication of problems*" They outlined the possible stipulations of a lease being the duration, compensation for improvement, repair and upkeep of property, control on cropping practices and provision for rent review.

In the United States, over 140 million hectares of land is rented to cropping and pastoral farmers, with over 50% of crop production in the mid-West state Iowa undertaken on leased land (Varble et al., 2016). They reported that land rental costs had reduced from 2002 to 2012 as a percentage of both maize and soybean values.

With the drive to improve sustainability in world agriculture, many higher value buyers want to understand the production of their food, and the long-term sustainability of the production system. Therefore, annual leasing of land to produce these crops is frowned upon. In their review of organic cropping in the Gisborne District, Coombes et al., 1998, stated that the status of lease land with BIO-GRO provided challenges, as BIO-GRO certification is based on a combination of the property, person and product, so that a leaseholder must have secure long-term tenure of land for BIO-GRO to consider certifying it for organic production.

There are various resources available (WDATEP, 2003; Teagasc, 2017; Goeringer, 2014) outlining various forms of lease, including machinery and finance leases, livestock and building leases.

In a comprehensive study of the effect of land lease tenure on land quality characteristics, Myrra et al., 2007, studied agricultural land in Finland producing under a short-term lease or ownership. In Finland, leases with a duration of longer than ten years are forbidden by law. This contract design favours the lease of land in the short term to the highest bidder.

Myrra et al. 2007, studied the pH and phosphorus levels in soil on leased and farmer-owned land, and found that the levels of P fertilizer to be applied to maintain soil phosphorous status was 18 kg/ha/year, but on leased land the actual application rate is 10-11 kg/ha/year, dropping to 2 kg/ha/year near the end of the lease. The limited use of lime on Finland's acidic soils (similar pH to New Zealand soils) was assessed to reduce crop yields by 10% on leased land due to the decreased application of lime. Similar trends have been observed in other European countries by Peters & Maunder, 1982; and by some of the farmers studied in Norway by Forbord et al., 2014; as well as by Koirala et al., 2014, in the Philippines.



In a similar study, Sklenicka, 2016, studied the effect of different forms of land tenure on land degradation, and found that in the Czech Republic and Slovakia, land parcels are so small they cannot be efficiently farmed individually, resulting in leasing to the neighbouring farmer being wide-spread, with 80% of farmland leased. The result of this tenure insecurity is that land is suffering from erosion, compaction, and decreased fertility and organic matter.

Myyra et al., 2007, was particularly interested in this because the percentage of cultivated land in Finland increased by 83% from 1995 to 2003, and they concluded that land security problems had not been solved, and that the continuation of short term leases of cropping land were ultimately decreasing soil fertility, yields, and food security.

A similar trend was seen in Ghana, with the estimated technical efficiencies for the farms under owned, rented and sharecropping were 68.19%, 61.61% and 45.17% respectively, Donkor & Owusu, 2014.

The work of Sklenicka, 2016, shows that high land ownership fragmentation can be an underlying cause of tenure insecurity and the most frequently affected land degradation types.

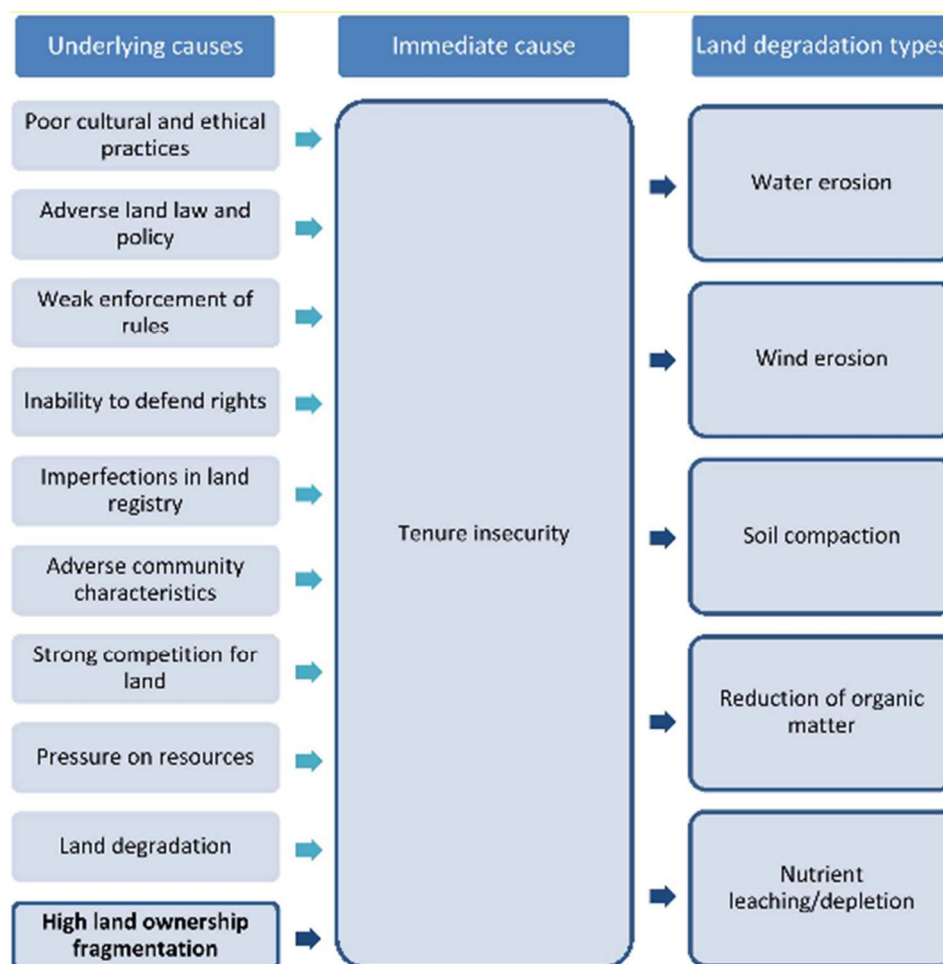


Figure 9 High land ownership fragmentation as an underlying cause of tenure insecurity and the most frequently affected land degradation types. Sklenicka, 2016.

There has been no long-term study on the effect of land tenure in the New Zealand cropping lease market. However, the driver is for the grower to obtain the use of the land for the lowest value possible, minimize the cost of inputs to the land, and maximize the value of outputs from the land. There are no long-term benefits of improving drainage, access, fertility etc.

Table 3 & 4 below from Higby, 2004, outline the advantages and disadvantages of different land tenure systems to the land owner and the tenant.

Table 3 *Advantages and disadvantages of long-term leases to the tenant*

<b>Advantages</b>	<b>Disadvantages</b>
Lengthens farmers planning horizon	Reduces net income without contributing to long-term accumulation of wealth in property
Allows for long-term business and resource stewardship planning	Prevents relying on land appreciation as a retirement fund
Allows the farmer to capture the long-term benefits of good stewardship and to enjoy the full useful life of investments made in the farms infrastructure	May entail complex legal documents and consequently higher legal costs
Can serve as legacy to the next generation if it is renewable and inheritable	Can make loans more difficult or impossible to get. The land is not available to serve as security for a loan. Consequently, getting credit to fund other assets may become more complicated
Can allow a family an intergenerational planning horizon if it is renewable and inheritable	
Gives a farm family a compelling incentive too fully participate in community life and community institutions	
May increase borrowing capacity when the value of the lease is used for security along with tenant-owned improvements on the property	

Table 4 *Advantages and disadvantages of long-term leases to the landowner*

<b>Advantages</b>	<b>Disadvantages</b>
Can result in better stewardship of the farm	Ties up land for a long time and prevents its being put to a higher economic use
Can provide income in retirement	Rental income has tax consequences
Can avoid tax consequences of a sale of the property	
Can result in reduction or real estate taxes	
Can allow the land to remain an inheritable asset in the family	

There is also the possibility that existing farmers can sell their farm to an investor and arrange to lease the rights to it back, as outlined by Heubuch, 2016, *“If the land is sold but then leased back this can be a lifesaver in a difficult situation or facilitate the financing of investments and expansions”*.

#### 14.1.1. Setting lease rates

Typically land rental prices in New Zealand are set based on what the market will bear, rather than on any productive capacity of the land. The concept of setting land rental prices based on the productive capacity of the land is discussed by Tímár, 2011, in his analysis of rural land tenure. Higby et al. 2004, gave an example of a lease rate based on the residential value of the farm house, if any, and the productive capacity based on gross farm revenue.

Lewis, 2015, outlined that land rentals across England & Wales were around £250-370/hectare, which represents 1.5% of land value per annum. There are several papers and guides from the United States regarding setting land rental rates (Fannin Central Appraisal District (FCAD), 2016; North Central Farm Management Extension Committee, 2011; Land for Good, 2012). FCAD, 2016, provided a detailed outline and set of equations to help landowners, sharecroppers and lessors place a value on the use of land.

Formal lease agreements are valuable, with Heubuch, 2016, Page 19, outlining that in France “the main improvements at the time was the introduction of a form of tenant protection for the leaseholders. The statutory minimum term for land leases currently is nine years. Renewal can only be denied if lessors or their children themselves cultivate the land. The proportion of lease holding has traditionally been one of the highest in the EU and today amounts to 85 percent. Leases are not freely negotiable, but have to fall within a range of certain minimum and maximum prices calculated by the authorities for various qualities, locations and usages. These are re-established in July of each year by a state-issued index that is not based on reference prices, but rather on the price development of agricultural produce and the inflation rate.”

Table 5 below shows the actual costs of owning land versus leasing land in three different countries, with land ownership being at least twice as expensive as land leasing.

Table 5 International land values, interest and rental rates effect on land costs. All values converted to NZ\$

Source	Country	Year	Land value	Rent per annum		Interest rate	Cost to own	
Salatin	US	2013	\$25,000	0.5%	\$122	4%	\$1,034	4.1%
Lewis	UK	2015	\$46,000	1.5%	\$690	3%	\$1,426	3.1%
NCRS	NZ	2016	\$62,500	3.2%	\$2,000	6%	\$3,813	6.1%

## 14.2. Landlordism

Landlordism is a hierarchical form of land leasing. Peters & Maunder, 1982, claim that landlordism evolved because small portions of large manors were leased to “peasant” farmers from the manor’s feudal lord. In 1875 most land in the United Kingdom was owned by a few hundred land owners, but since then estate duties payable on the death of the landowner have eroded these large manors, to the extent that while 88% of land in England & Wales was rented from manors in 1910; by 1950 this had reduced to 62%.

### 14.2.1. Tenant farming

Tenant farmers have traditionally been seen as a lower status of land tenure, with images such as **Error! Reference source not found.** depicting tenant farmers as living a frugal, subsistence existence. Peters & Maunder, 1982, even used the term “peasant farmer”. Land ownership has traditionally been linked to power, status and self-determination (Forbard et al., 2014)



Figure 10 Near Manteca, California. Formerly rehabilitation clients. Now operating own farm under Tenant Purchase Act. November 1938. From <https://goo.gl/images/osv2UH>

However, in some countries and cultures, tenant farming is prevalent. In the Philippines, for example, the law stipulates that private land owners can own no more than seven hectares, with the Comprehensive Agrarian Reform Programme of 1998 mandating all larger landholdings being sold to the government, who then made them available to small tenant farmers (Koirala et al., 2014). Lawry, 2015, reported on work reviewing twenty studies from around the world that measured the difference in productivity between leased and owned farmland. Ten studies from Asia and Latin America showed an increase in productivity of between 50-100% after tenure review which resulted in the farmers obtaining tenure recognition. Ten cases from Africa only found gains of less than 10%, and the authors believed this was because of the limited capital African farmers had to invest in their farms, compared to Asian and Latin American farmers.

Peters & Maunder, 1983, stated that "*tenancy can only operate efficiently if there are safeguards against arbitrary landowner action*" and making land available to the people to farm has been an issue for many hundreds of years, as shown in **Error! Reference source not found.** below.



Figure 11 England is not a free people until the poor that have no land, have a free allowance to dig and labour the commons. Woodcut. Gerard Winstanley, 1649.

Tenant farming systems that provide secure land tenure for the tenant are a valuable means for farmers to access land for farming without huge capital requirements. Denmark pioneered modern tenant farming regulations in 1786 (Kjærgaard, 1985), and tenant farming statutes in France have been altered to the benefit of the tenant, partly due to the strength of the farmer lobby. The minimum length of the lease is nine years, but leases with durations to match the tenants' expected retirement are also used (Merlet, 2008). There are clear requirements for the land owner to compensate the tenant for improvements made on the land during the lease, and the tenant has first option to purchase the land if it is sold. These rights are protected by law, but when similar statutes were proposed in Spain, the landowners protested by refusing to lease their land out, resulting in access to land being even more difficult for tenant farmers. Long-term leases (minimum 10 years) are also required under Norwegian Agricultural Act (Forbard et al., 2014). One large scale Southland agricultural business is in the process of increasing the duration of their farm leases to seven or more years, as this allows them to undertake capital improvements on the property, and reap the benefit during their lease.

Tenant farming is well established in Scotland, and the Scottish Tenant Farmers Association (STFA) is actively involved in *"enhancing the position of tenants within the Scottish landlord-tenant system"*. In 2017, they reported on their work to convert shorter term, insecure Limited Partnership tenancies to more secure tenancies, or even tenant farmers purchasing the land from the estate (STFA, 2017a)

Varble et al., 2016, also claimed that renters were more likely to obtain their technical information from industry experts such as National Resources Conservation Services (NRCS), than land owners, and are therefore more likely to adopt new practices.

In New Zealand LeaderBrand Produce (LBP) based in Gisborne experienced rapid growth from the 1990's until the current day. Part of this growth was based on securing land for production through LBP founder and visionary Murray McPhail who formed personal relationships with Māori landowners. However, Hood & Campbell, 2017, claimed that LBP was the exception rather than the rule, with owners of land leased for crop production generally concerned about the degradation of land they perceive as occurring from leasing it out.

In the excellent Land for Good, 2012, "Transferring the farm – Where do I start?" guide, the outline *"Other ways you can help a beginning farmer tenant include:*

- *Graduated rent is rent that is initially low but gradually increases. For instance, the rent might be reduced by 20 percent the first year, 15 percent the second year, and so forth until the tenant is paying full rent in the fifth year. Reducing the rent, at least initially, is an obvious way to help a new farmer who lacks capital;*
- *Consider leasing a small portion of your property. Some new farmers may want to rent only a few acres to establish a small operation. The remainder of your land can then be rented to another farmer or held for the possible future use of the new farmer as his or her operation expands."*

### 14.3. Share farming

Lewis, 2015, outlined share farming as an agreement between two parties whereby the parties involved do not form a partnership or company: each party continues to operate their own separate business. Each party involved makes separate contributions to the arrangement: for example, in the form of land, machinery, expertise or labour. Dependent on contributions to the arrangement each party takes a share in the profit, whilst also contributing to the costs of production. Each party prepares their own set of accounts and calculates their own profits as separate and independent businesses despite the businesses being closely linked. Share farming is usually detailed in a written agreement confirming:



- start and finish date;
- provision of assets by each party;
- income and cost sharing arrangements;
- responsibilities of each party.

The New Zealand dairy farming industry is considered to lead the world in the use of share-farming with variable rate share-farming options used; and there are different options for share farming ventures dependent on the capital and resources of the share farmer. There can be a 5% Share farmer who only had his or her own labour to bring to the table; 15 to 20% Share farmers who could bring labour, machinery and some livestock; up to 50% Share farmers who had labour, machinery, experience, capital and could usually bring half the dairy cows or more to an agreement.

Another form of possible share farming is by creating a separate business within the existing farm structure, such as raising chickens “stacking” on an existing livestock business (Salatin, 2013). In the seminal work “The One Straw Revolution” Fukuoka, 1978, outlined a traditional Japanese agricultural system where wetland rice, carp, ducks and water herbs were raised simultaneously in a paddy field.

Land for Good, 2012, suggest “*Sharing production expenses or sharing your equipment with the tenant can also help a new farmer.*”

#### 14.4. Gifting of land in perpetuity

Gifting of land does not have a strong tradition in New Zealand, but there have been some notable examples in recent years:

- 843 hectares’ coastal farmland valued at approximately \$10 million was given to Auckland Council to create a regional park (Light, 2010);
- the high-profile entry of 53,000 hectares of high country land into a QEII covenant by Robert "Mutt" Lange, former partner of country music singer Shania Twain (Kirkness, 2014). The QEII covenant will protect the land from futued development, and will transfer with the property title in perpetuity (QEII, 2017), although this gift was strategic with the gifting of the land conjunction with permission for Lange to undertake some development of his private adjoining land;
- gifting of 56ha of riverbed and adjoining land to the Hawkes Bay Regional Council (HBRC) in 2017;
- older examples include the Jeff Farm owned by the Salvation Army. This farm of 2,433 hectares was gifted from Edmund Jeff in the 1950’s to allow young trainees to learn on a working farm to enter New Zealand agriculture.

##### 14.4.1. Land trusts

In the United States, there are many land trusts. These generally conform to the Community Farm Land Trust model which is that the trust purchases farmland with the help of state, federal and private funding, then leases the land to farmers for 99 year terms which makes the farmers secure tenant farmers, with controls over how they can be managed.

Marin County is a wealthy area just north of San Francisco. In the 1960's the rural nature of the county began to change, and increased pressure from developers to sub-divide and create lifestyle blocks increased. Traditional foes, farmers and conservationists, saw the threat posed by increased development, and worked together to form the Marin Agricultural Land Trust (MALT), and now has agricultural conservation easements on over 20,000 hectares of land in Northern California, dating from 1983 (MALT, 2017).



The Genesse Land Trust protects around 2,000 hectares of productive land in perpetuity through a combination of gifting land, and placing Conservation Easements on productive land. This land can then be made available to businesses that meet the trusts aims.

There is currently a feasibility study being carried out in the Upper Waipa River Catchment (UWRC) in the Waikato to identify new revenue streams for the catchment, and possible models to deliver that land use. The goal is to improve water quality in the Waikato River catchment by 10% in 10 years, and the Waipa is deemed critical to this goal because it delivers a quarter of the sediment in the Waikato catchment. There is a total of 130,351 hectares of land in the UWRC, and livestock farming is attributed with generating 80% of the sediment in the UWRC (Stancu, 2017). New potential land uses include organic dairying, forestry and eco-tourism. The project is considering purchasing approximately \$27M worth of land and then controlling how it is farmed, with potential operating structures including land ownership, land leasing, or hybrid structures of land ownership and operating.

In Scotland, there is an increasing amount of land in community ownership, with the Scottish National Party's goal being to have 400,000 hectares in community ownership by 2020, with over half of that achieved by 2015 (Bath, 2015). Some NZ\$82 million has been spent since 1997 on community purchase of land by the Scottish Big Lottery Fund (Gray, 2015), including the 1997 community buyout of the Isle of Eigg.

In New Zealand, a significant example of a farm run as a land trust is Kereru Station in Hawkes Bay, a 2,114-hectare property owned by two charitable trusts, established by sisters Ruth Nelson and Gwen Maulden. The Trust was set up in 1968 and they are the granddaughters of the original owner JN Williams who brought the property in 1868. The profits from the station are distributed throughout the wider Hawke's Bay region to benefit education and the community.

In an article written by my Kellogg classmate, Taylor, 2015, outlined that Kereru Station is governed by an experienced and professional board made up of industry leaders who are committed to the long-term sustainability and performance of the business.

## 15 Private Debt

### 15.1. Consumers

Kittredge, 2012, outlined the experience of a small seed company in North-East US, needing high levels of capital to fund rapid expansion. They created a convertible debt offering, where investors would be paid six percent interest compounded on their investment, converted after five years as shares in the company, or a further five-year term. This is different to investors buying a shareholding in the company, because the debt was not secured. The arrangement had to be legally structured per The Securities and Exchange Commission guidelines. 100 other companies from around the United States investigated the details of the convertible debt offering for possible use in their businesses.

These novel financial arrangements work based on converting consumers to investors. This type of investment is particularly strong in the North-East United States with Slow Money Maine and the Vermont Flexible Capital Fund offering alternative debt structures to new and establishing businesses, including farms, that match the funds social criteria to support local, sustainable production of value-added food, while still maintaining logical financial criteria. Consumers investing in businesses are interested the “triple bottom line” of social, environmental and financial performance (Kitteredge, 2012).

We are beginning to see this type of investment in New Zealand, as seen by the Cultivate Christchurch crowd lending campaign being offered in October 2017. At a larger scale, this has been seen in the recent campaign by Rabobank in the New Zealand Herald Canvas magazine of 5 August 2017 *"You get a great return, and in return you help kiwi farmers"*

### 15.2. Vendor finance

If the vendor of the land is willing to defer payment for the entire property, they can retain a financial security in the land while the new owner builds capital to allow them to purchase the entire landholding. I used vendor finance to allow me to purchase a farm in two titles by purchasing the larger title outright, then leasing the second title from the vendor for three years before also purchasing it outright. I would have been unable to purchase the property without vendor finance.

## 16 Equity Partnerships

Equity Partnerships represent an innovative and popular means of combining investment capital to achieve a desired investment objective. An equity partnership is the grouping or combining of two or more peoples' equity for the common purpose of investment in a particular venture. The equity partnership can be in any area of business, and are common in the farming and commercial property sectors. The ANZ Bank, 2017, has a useful "Equity Partnerships in Farming" booklet.

The equity partners share the profit and losses of the venture in proportion to their capital input. Everyone shares in the pain and the gain, whether it is capital growth, operating profits or losses.

Although referred to as an Equity Partnership the legal form of these ventures is typically structured as a company, with each partner being a shareholder of this company in proportion to the capital contributed.

Sharemilkers have found Equity Partnerships attractive as with the high cost of land the traditional movement from Sharemilker to Farm Owner is no longer possible for many people. It has given Sharemilkers the opportunity to not only have an interest in their own stock values which can be volatile but an interest in the underlying dairy land.

Some land trusts have a special emphasis on helping new entrant farmers gain access to farm ownership. One tool they use is a shared equity mortgage. This arrangement allows a new entrant farmer to move into farm ownership without having to assume the full capital costs of farm financing all at once, and may sharply reduce or eliminate the need for a down payment. In a typical shared equity mortgage, a land trust will provide part of the farm purchase cost (using their own funds or the value of a donation from the retiring farmer), and will hold an equity share in the farm for that amount. This equity share is usually tied specifically to the land and not the farm buildings or home, so that all increases in value of these buildings will stay with the farmer. The new entrant farmer retains all farm management responsibilities, and obtains conventional mortgage financing for the remainder of the farm purchase. The land trust may work with the farmer's lender to subordinate their equity share in place of a down payment by the new entrant farmer. In establishing a shared equity agreement, the new entrant farmer and the land trust will negotiate specific provisions to allow the farmer to buy out part or all the equity share at some future date. This will include provisions on how to allocate any increase in land values if the farm is resold to another party, and an agreement to transfer part of the equity share to the farmer in exchange for establishing conservation easements on the farm (Wisconsin Department of Agriculture, Trade and Consumer Protection (WDATCP), 2003).

The reasons why Equity Partnerships can be a useful structure for securing land tenure include:

- high capital investment requirements of farm ownership by traditional methods has become more and more difficult due to the increase in value of farm assets over time;
- economies of scale can be obtained by larger, more efficient and sustainable properties than could have been purchased individually;
- leveraging a number of different skill sets by grouping people together with different skills, attributes, strengths and experience to achieve successful business outcomes. In some cases, it can bring youth, energy and new farming technologies and practices;
- risk can be spread between partners and investors. Equity investors can diversify business risk between different industries and climatic locations.

A good example of an organization based on equity partnerships is MyFarm. MyFarm claims to *"offer a fully managed, low hassle option and employs the best people to manage your investment. We provide a formal farm management system and career farmer managers. We identify, syndicate, improve, and*

*manage dairy & sheep and beef farms; it is the only thing we do. We deliver investments that address risk as well as returns. The assets we purchase are of high quality and debt structures in our business plans are conservative. MyFarm's scale allows United States to pass on significant cost savings to the farm businesses we manage through bulk buying. This includes a number of important farm inputs such as fertiliser, cull cows, insurance and even interest rates. We provide an 'experience' through participative ownership. As an investor, you can elect to become a board member and have close involvement in the governance of your business. We provide a service to sell your shareholding, should you wish to exit early."* ([www.myfarm.co.nz](http://www.myfarm.co.nz))

Hood & Campbell, 2017, claimed that while equity partnerships could work well, they generally needed to be at a scale where the shareholder would own 25-50%, and the size of the operation be large enough to carry the additional drawings. They also claimed that farmers struggled to see a difference between land ownership and farming, and that it was possible to have a successful business based around land ownership, separate to the role of running the farm. Woodford, 2014, also outlined that there are effectively two businesses running on a dairy farm – one being the cash business of production; and the second being the capital gain from owning, and possibly developing, the land.

## 17 Incentivized Employment Contracts

While not strictly a form of land tenure, some incentivized employment contracts include the allowance for the employee to receive a shareholding in the company as part of their remuneration package, or allow the employee to purchase shares in the company at subsidized rate. These arrangements are common in companies in industries with large, multi-national, listed companies. The aim of incentivized employment contracts is to try and motivate the employee to feel more of a part of the company, and that they will benefit from their efforts, rather than just receive a wage or salary.

There are some examples of incentivized employment contracts in New Zealand. The large kiwifruit orchard developer and manager, BAYGOLD, offers staff the opportunity to buy shares in the business. However, if the employment relationship sours, the shareholding of the employee can become "golden handcuffs", unless there is a clearly defined and documented exit process. Hood & Campbell, 2017, also raised the issue of staff shareholders having "golden handcuffs" if the relationship soured.

## 18 Land Tenure in New Zealand

In this section I outline the history of land tenure in New Zealand agriculture, and the unique form of land tenure that is Māori land ownership, as well as detail the State-owned farming business, Landcorp.

In their comprehensive outline of the history of agriculture in New Zealand, Hawke & Lattimore, 1999, describe three periods in the history of land tenure in the New Zealand agricultural industry:

- colonization until 1880, where European settlers drove for ownership of land;
- recolonization from 1880-1970, where farming was often subsidized and supplied the bulk of its produce to the UK;
- modern decolonization phase being from 1970 until now, especially the changes that occurred in 1984 with the removal of SMP's etc.

### 18.1. Traditional Māori agriculture and land ownership

There is a common misconception amongst current day New Zealanders that Māori agriculture prior to the land wars of the mid-nineteenth century was primitive, nomadic and relied on hunting & gathering. Kingi, 2008, claimed that Māori agriculture was strong, with large production of wheat and sheep on Māori land throughout the North Island, with 37 flour mills built for Māori owners in the Auckland region alone between 1846 and 1860.



Figure 12 Ngaruawahia flour mill, approximately 1880. Retrieved from <https://www.waikatodistrict.govt.nz/news/media-releases/article/2017/02/28/preserving-our-archaeological-heritage>

Hawke & Lattimore, 1999, stated that "*Misunderstanding of (Māori land use) contributed to conflict between Māori and Pakeha in the New Zealand wars of the nineteenth century. It posed legal challenges in the twentieth century*". They also outlined the means that the New Zealand Government used to essentially transfer land from the ownership of Māori to the free-market, to establish a "South Britain" in the Pacific.

It is important therefore to understand traditional Māori land tenure, which was communal, carrying obligations to the wider community that were lost under individualization.

O'Sullivan, 2017, claimed that before European arrival in New Zealand, Māori land tenure was not formalised, but that land tenure was intergenerational in a Hapu (many whanau) based on mana whenua (territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory - power associated with possession and occupation of tribal land). The scope of land tenure was associated with geographical features of the landscape - mountains, rivers, lakes etc. that form an essential part of Māori pepeha. This led to a sense of kaitiakitanga, or responsibilities for and rights over the land based around ahi kā, which the Māori dictionary ([www.Māoridictionary.co.nz](http://www.Māoridictionary.co.nz)) defines as

*“burning fires of occupation, continuous occupation - title to land through occupation by a group, generally over a long period of time. The group is able, through the use of whakapapa, to trace back to primary ancestors who lived on the land. They held influence over the land through their military strength and defended successfully against challenges, thereby keeping their fires burning”.*

It is critical to understand this tenure was completely different to formal European tenure systems based around owner/occupier systems, and because of the traditional hunter gatherer nature of Māori time was a factor Rāhui. This fundamental difference led to conflicts with Māori considered by the European settlers to not be occupying land, because they weren't always physically present on the land.

In the late 1800's there were three major ways Māori lost their land:

1. missionaries and churches “purchased” land using various transaction techniques;
2. land companies such as The New Zealand Company “purchased” large tracts of land;
3. The Public Works Act (1864) allowed privately owned land to be acquired for the State, and Māori land was acquired in preference to nearby European owned land.

There were other issues that complicated Māori land tenure. One or more of the multiple landowners may agree to sell the land, and pocket the proceeds, without the remaining multiple owners agreeing to the sale. Another issue was that Māori would agree to sell the land, without fully realizing that that would mean they could no longer access the land for hunting, supplies etc.

The 1953 Māori Affairs Act established the Land Court to help protect Māori land from alienation, by establishing formal succession rules, and requiring 75% of Māori landowners to agree on any major decision regarding the land. The Act also made Māori land rateable, which often led to large rates arrears accruing on Māori land that led to later issues.

In 1863 Parliament passed legislation for the confiscation (Raupatu) of Māori land to punish tribes deemed to have ‘engaged in open rebellion against Her Majesty’s authority’ in the early 1860s. Pakeha settlers would occupy the confiscated land. Those who refused were warned that they would ‘forfeit the right to the possession of their lands guaranteed to them by the Treaty of Waitangi’.

Easton, 1995, documented nineteen ways that the Raupatu had resulted in Ngāti Awa losing, rights including:

- capital and other productive resources;
- the ability to regulate the use of the resources, the welfare of the community, and the region;
- the ability to organize the use of the resources efficiently;
- the quality of life by other than material changes.

Because of the cumulative effects of the loss of Māori land since European colonization, current Māori landholdings tend to be a long way from cities, comprise less fertile and steep land, have poor access and are sometimes landlocked, and can have legacy issues such as rate arrears and low fertility.

Kingi, 2008, made specific claims that most Māori landowners are absentee owners. The physical separation of the owners from their ancestral lands has major consequences for the organisations that administer and control the lands. Most Māori landowners will never occupy the land they collectively own, nor obtain a livelihood from it. But ownership of Māori land plays a key role in cultural identity. Land provides owners with their tūrangawaewae (their place to stand, or sense of belonging). Because such land is precious, owners are often conservative and risk-averse, particularly when there is a chance that land might be lost. Landowners believe that organisations should place as much importance on their social and cultural objectives as on maintaining commercial viability. O’Sullivan, 2017, also stated that



multiple land owner structures place foremost importance on using profits from their land to fund social projects.

Kingi, 2008 outlines some key aspects of Māori agriculture that made it different to general agriculture. Māori land governance and management structures exist of a small number of large 'corporate' farms; about 130 incorporations; and a considerable number (5,000) of trusts, including more than 2000 small trusts administering less than five hectares of land. There are two main structures that manage Māori land, the first being Ahuwhenua trusts where individuals retain their interests as owners; and the second being Māori Incorporations where owners become shareholders, and receive dividends. However, there is still 280,000 hectares without structure, which is about 20% of all Māori land.

Māori consider that all living and inanimate objects are connected by a life force or 'mauri' (Kingi, 2008). People and the natural environment have a genealogy connection that results in:

- spiritual connection to place (ukaipotanga);
- cultural identity to land (turangawaewae);
- environmental guardianship/protection (kaitiakitanga);
- collective responsibility (whanaungatanga).

These differences lead to some fascinating implications for land use and food production from Māori owned land. The main difference is that land is retained in perpetuity, and therefore there is no potential for capital gain on sale, which results in time frames that are much longer. There are some fundamental differences; individual landowners forgo small individual financial return and prefer a greater benefit of identity and cultural attachment to land.

There have been some disaster stories with the attempt to develop of Māori land, one being at Tikitiki on the East Cape during the "Think Big" era of Robert Muldoon, when several hundred hectares of grapes were planted on Māori owned land in the 1980's with a view to develop a wine industry. Ultimately these plantings failed due to a lack of local knowledge, infrastructure and buy in by the local community.

It is also important to note that not all Māori subscribe to the joint ownership model. A recent episode of Country Calendar visited Torere run by Vanessa Hayes, who outlined her legal battle to separate the Torere 72 land parcel from the multiple land ownership at Torere, near Opotiki in the eastern Bay of Plenty. This occurred using the partition provisions of the Māori land court, but did involve over 30 years of legal wrangling.

Two examples of New Zealand companies embracing their Māori Heritage are:

#### 18.1.1. Wakatu Incorporation

Wakatu markets the brands Annie's, Aronui Wines, Tohu wines, Kiwa oysters and Tutu cider, and claims to be "*Actively involved in the lives of whanau whānui, the wider community, and business development, Wakatu has a big agenda.*

*Wakatu has approximately 4,000 shareholders who descend from the original Māori land owners of the Nelson, Tasman and Golden Bay Regions – Te Tau Ihu. Our purpose is to preserve and enhance our taonga for the benefit of current and future generations. We have grown from a \$11 million asset base in 1977 to a current value of over \$300 million.*

*Te Pae Tawhiti will ensure we align our common energy, working together to achieve common goals:*

- *To nurture and develop our taonga consistently with our tikanga;*
- *To harness the talents of our people to ensure the sustainable growth of our taonga;*
- *To ensure our people live well and are connected to our legacy and purpose;*
- *To create an inspiring and innovative place where talented people want to live and work.*

*Our guiding objectives are broad to give United States the freedom to create new and exciting ways of doing things, consistently with our values and tikanga. These two aspects are vital to our success – they underpin everything we do: Development and innovation; Identity and integrity.*

#### 18.1.2. Miraka Limited

*Miraka (Māori for milk) outlines their principle of Te Ara Miraka is our way of operating, the way we do things. Within Miraka and beyond we ensure that our activities are sustainable and have a minimal impact on the environment – our natural world. Our principles of sustainability are incorporated into all our business decisions to ensure a more efficient operation. Te Ara Miraka encapsulates our value of excellence ensuring we exceed expectations every day.*

*Te Ara Miraka also recognizes excellence through the Miraka supply chain – from the farm to the consumer. It is our way of acknowledging our team and suppliers when excellence is attained or exceeded in the manufacture of our products.*

Recently it was stated that most Chinese travellers visiting New Zealand are more interested in cultural experiences than shopping, showing the international interest in Māori heritage and culture. This interest could be exploited to develop export businesses.

#### 18.2. Landcorp

*Landcorp describes itself as "a state-owned enterprise established under the State-Owned Enterprises Act 1986 (the Act) and is a company registered under the Companies Act 1993. The shareholders are the Minister of State Owned Enterprises and the Minister of Finance." (Landcorp, 2016a)*

The numbers involved in the Landcorp business are staggering. Landcorp farms 385,503 hectares over 144 farms across New Zealand. Landcorp employs over 700 permanent employees, and turns over \$200 million+ per annum (Landcorp, 2016b). However, when the financial returns are studied, it becomes apparent that over the last five fiscal years, Landcorp has returned to its shareholders \$9.30 per hectare per year.

#### 18.3. Change in New Zealand farm ownership

In all rural sectors in New Zealand landowners are becoming older, with the average age being 48 in 2013, up from 46 in 2008 (Statistics New Zealand). This is not unique to New Zealand, with less than 8% of German farmers younger than 35 years old (FMI, 2012) and nearly 40% older than 55 (Heubuch, 2016). There is similar trend in the United States with more than 50% of land in Iowa owned by people 65 years old or older (Stalcup, 2010), and Lewis, 2015, claimed the average age of farmers in Wales is 58.

Table 6 below shows the change in the percentage of variable rate sharemilkers in the New Zealand dairy industry from 2006 to 2016. During this ten-year period, there has been a 15% decrease in the total number of herds managed by sharemilkers in the industry, while there has been a nearly 10% increase in the number of herds managed by owner-operators.

Table 6 Trend in the percentage of herds in each operating structure for the last ten seasons. LIC, 2016

Operating structure	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Owner-operators	63.4	63.1	63.6	65.1	65.4	65.8	64.6	65.5	67.3	69.8
Sharemilkers:										
less than 20%	0.8	1.0	1.5	1.3	2.0	2.0	1.9	1.7	1.5	1.3
20-29%	8.8	9.1	10.4	10.5	10.9	9.9	9.6	9.7	8.8	6.9
30-49%	1.8	1.7	1.8	1.7	2.3	1.6	1.4	1.5	1.4	1.5
50/50	22.3	21.7	20.5	19.7	19.2	18.8	18.7	18.5	17.1	16.8
over 50%	1.7	1.7	1.8	1.4	0.2	1.8	3.5	2.9	3.6	3.5
All sharemilkers	35.4	35.4	36.0	34.6	34.6	34.2	35.2	34.2	32.4	30.0
Other/Unknown	1.2	1.5	0.5	0.3	0.0	0.0	0.3	0.3	0.3	0.3

MyFarm chief executive Andrew Watters has been quoted as saying “Ten years ago it took the sale of 10–12 cows to buy a hectare of land but today it is on average more than 20 cows to buy a hectare.” Farm ownership is one of the “big questions of our time” in agriculture, and it is unclear how closely involved future owners would be with running their farms.

He believed New Zealand had been through a “golden period” of rising land values, but it had left the country with too much debt, environmental problems and prices too high for young people. Watters said farm ownership was a readily achievable goal for aspiring farmers up until about 10 years ago; one could shear or sharemilk one's way into buying a first farm. Hutching, 2017.

Salatin, 2013, claimed that “The imperatives of our day is (sic) to create multi-generational land-based enterprises of abundance” and explained that in 1961 his parents bought their farm for US\$90 per acre, and calves sold for US\$3/lb. (30:1 ratio), while in 2013 land is worth US\$6,000 per acre, and calves sell for US\$12/lb. (500:1 ratio). This change in ratio represents a 17-fold increase in land cost relative to production value from the land.

Another barrier to the sale of public land to private individuals is because of the legacy of the main New Zealand experience with tenure review is around the change in ownership of over 100,000 hectares of state owned high country land beginning in the late 1990's. Essentially, land that had been leased to farmers was sold to the lease holder, with some controls over how they could use that land. Some land was transferred to public ownership and Department of Conservation control, while many leaseholders (landowners after tenure review) on-sold all or part of the transferred land (Brower, 2008). The part that has caused great concern has been the discrepancy between the amount received by the Crown for the land, and the amount the new landowner on sold the land for. Brower et al., 2012, stated that 28 new freeholders paid the Crown \$6.9 million for freehold rights to 101,752ha, then sold 46% of that land for \$135.7 million.

#### 18.4. Capital Gains Tax

Capital Gains Tax (CGT) on farmland is widespread around the world (Parsche, 2001), and is often raised by opposition political parties as a way to equally tax income from salary and wages, and capital gain. New Zealand farmers typically see CGT as a socialist ideal (Stephenson, 2017), even though it is endorsed by leading economists such as Brian Easton, 2015.

On National Radio some years ago, economist Rod Oram said that New Zealand dairy farmers have been very good at turning increased commodity prices into increased land prices. Gawith, 2010, claimed that

worldwide, the value of farmland doubles in ten years, whereas the value of land in New Zealand doubles in seven years, representing an increase of around 7.5% per annum

CGT will encourage focus on the productive capacity and profitability of farmland, rather than using increased capital values to leverage the purchase of further farmland, and keep new entrants out.

Inevitably there are many opponents of CGT on any property, including the family home, investment property, and farmland.

The structure of any CGT would need to be carefully managed to ensure it was equitable, with some details of a proposed CGT on farmland including the follow points:

- the CGT would only affect properties purchased after the date on the CGT being announced – no retrospective taxation;
- the aim of the CGT is to tax all income the same, such as the plan of the Green Party to introduce “a comprehensive capital gains tax on inflation adjusted capital gains at the time the capital gains are realized” (Green Party, 2017);
- use the concept of “stepped-Up basis” (Kauppila, 2015) *“The basis of an inherited asset becomes fair market value on the date of death. This is called a “step-up in basis” or “stepped-up basis.” So, if the inheritor sells the asset on the next day, usually there would be no capital gains tax. This is because the basis would be equal to the sales price, if the sales price equals the fair market value. This “step-up in basis” can be a valuable planning tool for farm families. Why? Some farm families have assets that have appreciated a great deal over their basis. Land is a common example of this. It’s a good idea to know your basis in assets, or at least have a general idea about your basis. You may not need to know your basis now, but you or somebody you love will eventually be concerned about your basis. Why not do them a favor and make the basis in your assets easy for them to find.”*

### 18.5. Farm sales to overseas investors

The sale of farmland, and indeed housing, to overseas investor elicits an emotional response amongst many New Zealanders. This can be seen in the huge public objection to the overseas sale of the Crafar Farms to the New Zealand subsidiary of the Chinese company Shanghai Pengxin Group Co. Limited in 2012; and the potential sale of Lochinver Station to the same Chinese buyer, a sale which was not allowed by the New Zealand Overseas Investment Office in 2015.

There is irrational fear of overseas land ownership in New Zealand. If we export 90% of our agricultural produce, what is the concern? Overseas owners of the land do not want to own the land for any other reason than food security. On properties such as Crafar Farms, it is obvious that the overseas investors are not interested in the land itself, but the produce of the land.

Since the September general election and the New Zealand First promise, the forestry sector has stated that foreign investment in New Zealand plantations is \$25-30 billion (Brackebush, 2017). This investment allows New Zealand capital in the forestry industry to be targeted into other areas of the sector.

Nicks Head Station in Poverty Bay is a good example of a foreign purchaser buying the station despite protest from local and national parties. However, since it’s purchase in 2002 by New Yorker John Griffin, the station has had extensive native planting, wetland restoration and predator trapping undertaken on it, improving its ecosystem.

## 19 Conclusions

The standard ownership model of land tenure in the New Zealand agriculture and horticulture sector is flawed, with most of profit made from farming based on capital growth generated on sale. There are fewer landowners of farmland in New Zealand, but these landowners own larger tracts of land. In Scotland, about 50% of all land is owned by about 400 individuals (Bath, 2015). These landowners use the capital growth in their land to leverage purchase of further land, which helps push the price of land up, making it even harder for new entrants to purchase land.

*“Landowners yearn for the day when the land reform debate is about land use rather than simply ownership”* Richard Scott, 10<sup>th</sup> Duke of Buccleuch (Blackburn, 2015)

I have built my twelve conclusions below around the comprehensive and insightful conclusions of Lewis, 2015, in her Nuffield Farming Scholarships Trust Report on a similar topic “Sustainable Land Tenure for the farmer and the next generation”.

1. For typical New Zealand farmers land tenure means owning or renting land, although the New Zealand dairy industry is the global exemplar of share farming through variable order share milking.
2. This simple view of land tenure has become outdated.
3. Land tenure models need to be developed to include various forms of joint ventures that can be implemented by new entrants and young. (after Lewis, 2015)
4. Using different models will encourage innovation, entrepreneurship, expansion and acceptable succession within the industry. (after Lewis, 2015)
5. Understanding the people involved is critical. Any person who wishes to be part of any venture must be aware of who they are, what their strengths and weaknesses are, and be willing to compromise to ensure success. In any land tenure model, the biggest weakness and most common factor of failure is the relationship. (after Lewis, 2015)
6. Models such as contract farming, equity partnerships and innovative methods of lease can be used. (after Lewis, 2015)
7. It is important that a facility is provided to encourage the evolution of these arrangements. Federated Farmers can play a vital role in successfully facilitating both parties to get what they want out of the arrangement.
8. Using different land tenure models will encourage succession within the agricultural industry. Existing farmers with no successors, or successors who are not interested in agriculture, can ensure the farm continues. They could choose whether to have an active role in the farming of the family holding and could protect the capital asset for future successors as opposed to selling the farm. (after Lewis, 2015)
9. New entrant farmers are vital to the success of any country’s agricultural industry through providing greater innovation and early adoption of techniques but also through providing a dynamism by an intensive striving for efficiency. (after Blanche, 2011)
10. Land in New Zealand has huge culturally-fixed emotion and attitudes attached to it, detrimental to the farming ladder. (after Blanche, 2011)
11. Intensity of production - where land is restricted in its supply and high in its price - should be a target. Break the culture of wanting to farm 1000 acres at a loss, rather than 100 acres at a profit. (after Blanche, 2011)
12. Capital is essential to produce a return. Those with little, need to get access to capital in different, innovative ways or build slowly. (after Blanche, 2011)

Based on these conclusions I give recommendations in the next section.

## 20 Recommendations

Undertaking this study has shaped my thoughts around land tenure, and the commonly quoted saying "We do not inherit the earth from our ancestors; we borrow it from our children" that has been attributed to various sources.

### 20.1. Stop family land being sold from one generation to the next

Traditionally the family farm was given to the eldest son, who then carried on farming the property. Other siblings often felt aggrieved by this process. A seemingly fairer way of passing the farm down the family was to give all children a share of the farm, and have the child who wanted to carry on farming the farm purchase the remaining shares from their siblings at a market rate. While this created financial equality for all siblings, it loaded a large debt on the farming sibling. Therefore, my main recommendation is to stop selling land to one another and constantly ramping the price up.

Townshend, 2016, stated that as New Zealand matures, land sales will become less common, with families renting land across generations, and tenant farming of this land will become more common. Martin, 2017, interviewed a young, fifth generation farmer from Taranaki who made an insightful comment: "*Generation after generation they're simply having to buy the farm again and again and the only people who win over a 200-year period are pretty much the banks.*"

### 20.2. Gift Landcorp farms to a land trust

The Landcorp structure should be changed to a land trust, and the trust should then make the existing farms available to existing and new farmers to undertake sustainable agricultural production. In early September 2017, the National Party released its Policy 2017 - Primary Industry in the run up to the 23 September 2017 election, which stated:

*We're backing farming...*

*More young farmers*

- *National will direct Landcorp to sell some of its farms to young farming families and invest the proceeds towards developing world-leading innovative farming systems;*
- *the farms will be awarded on a ten year, lease-to-buy arrangement with the leasee being required to work the farm for the duration of the lease in order to buy it;*
- *the sales are expected to take over a decade to complete and at least 100 young families will benefit from the sales.*

This recommendation is supported by the work of Todhunter, 2007 "Integration of Conservation and Farm Production", claiming that the Labour Government of the time was alienating farmers leasing high country state owned land by the process of tenure review. He claimed that local community or private ownership of the land could be as successful in meeting conservation goals as government ownership. However, with the new Labour / New Zealand First / Green coalition government it is unlikely that these land sales will go ahead.



### 20.3. Allow farmland sales to overseas investors

New Zealand should allow the sale of farmland to overseas parties, but have strict controls on the sale and ongoing management of that land, with land leased back to New Zealand farmers. Overseas ownership of New Zealand land, and houses, for that matter, raises concerns amongst New Zealanders, but the overseas ownership of farm land which is then tenant farmed by New Zealanders can be a successful way to get young New Zealanders into farming.

### 20.4. Capital Gains Tax

CGT on farmland would help slow the rate of increase in the cost of farmland, and discourage rapid trading of farmland. There are also many farmers who have farmed for capital gain, rather than annual cash profit. With a proficient accountant, it is possible to largely match farm income to farm expenditure, make little or no profit, and add capital value which will be realized on planned sale of the property.

One of the leading objections to CGT is the short-term impact it will have on land sales. This is inevitable, but as was the case with the removal of Supplementary Minimum Prices and other farm subsidies in the 1980's, the New Zealand farming sector will ultimately be stronger for the addition of CGT.

### 20.5. Industry embrace change

The rural sector and farming organisations such as Federated Farmers, Dairy NZ, MPI and the Young Farmers Clubs need to embrace and promote other forms of land tenure to allow low-capital methods of entering farming. Kuhnen, 1999, claimed that *“there is no ideal land tenure system, but only one in line with the current economic, social, political and technological requirements, and whenever these change, the relations of man to land will also have to change.”*

The farming sector is typically conservative, and as such slow to change. I hope that visionary farmers see the danger of the current systems, and look to change the way their land changes hands, by enabling new entrants to enter the industry.

### 20.6. Develop New Zealand's unique Māori heritage

To date relatively few New Zealand businesses have developed on one aspect of New Zealand that is totally unique in the world – our Māori indigenous people. O'Sullivan, 2017, stated the Indigenous free trade agreements are becoming increasingly popular, and currently there is the likelihood of an indigenous Chapter in the North American Free Trade Agreement.

## 21 Acronyms

CARP	Comprehensive Agrarian Reform Programme (Philippines)
CGT	Capital Gains Tax
EFS	Economic Farm Surplus
EIP-AGRI	European Innovation Partnership - Agricultural Productivity and Sustainability
EU	European Union
FAO	Food & Agriculture Organization of the United Nations
FAR	Foundation for Arable Research (NZ)
FCAD	Fannin Central Appraisal District (US)
FMI	Federal Ministry of the Interior (Germany)
FSI	Fresh Start Initiative (UK)
GRDC	Grain Research & Development Corporation (Australia)
HBRC	Hawkes Bay Regional Council (NZ)
HWL	Heinz-Wattie's Limited (NZ)
IFC	International Federation of Surveyors
JV	Joint venture
KDFA	Kansas Development Finance Authority (US)
LBP	LeaderBrand Produce (NZ)
LIC	Livestock Improvement Corporation (NZ)
MALT	Marin Agricultural Land Trust (US)
MPI	Ministry of Primary Industries (NZ)
NCRS	Northern Crop Research Site (NZ)
NRCS	National Resources Conservation Service (US)
OIO	Overseas Investment Office (NZ)
QEII	Queen Elizabeth II National Trust (NZ)
SMP	Supplementary Minimum Price (NZ)
STFA	Scottish Tenant Farmers Association (UK)
UK	United Kingdom
USAID	United States Agency for International Development (US)
UWRC	Upper Waipa River Catchment (NZ)
WDATCP	Wisconsin Department of Agriculture, Trade and Consumer Protection (US)

## 22 Interviews

Hood, Matthew, Senior Rural Manager; and Campbell, Simon, Rural Banker. Rabobank Wairarapa. Phone interview. 24 July 2017.

O'Sullivan, Steph. CEO/Kaiurungi, Ngati Ranginui Iwi Society Incorporated. 6 October 2017.

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