Farms Selling Direct to Consumer

Adding value - farm to consumer direct sales, short food chains

A report for

NUFFIELD IRELAND

Farming Scholarships

by Ailbhe Gerrard

2016 Nuffield Scholar

November 2017

Scholar Contact Details

Ailbhe Gerrard

Brookfield Farm, Coolbawn, Nenagh, Co. Tipperary

Phone 086 8551309

Email: ailbhe@brookfield.farm

NUFFIELD IRELAND Contact Details

John Tyrrell

Executive Secretary, Nuffield Ireland Phone: 00 353 87 256 3501

Email: exec@nuffield.ie

Executive Summary

Key findings

- 'Farm to consumer' examples exist in every country visited and every farm type
- Disruptive, innovative and adapted technology now gives farmers opportunities to cooperate and organise, connect with customers and sell produce
- Consumers are not only receptive to 'farm to consumer' but are also seeking closer relationships to farmers
- Excellence of produce and service sells
- Farm to consumer can be characterised into three models or sales channels:
    - Online and mail order
    - Diversification and value add on farm
    - Co-operative farm to consumer

Background

The report is targeted at farmers interested in reaching consumers directly and gaining a share of the margin between farm gate and consumer. This research is important in the Irish context as farmers struggle to maintain income and profitability. The Department of Agriculture, Food and Marine (DAFM) has identified other weaknesses in Irish agriculture: farmers' older age profile, income volatility due to commodities market, and environmental challenges.

This research aims to address these weaknesses in Irish agriculture by identifying alternative and more profitable farm income streams which provide farm-related employment opportunities for younger rural dwellers thus reducing the age profile and reduce farms' environmentally damaging impacts.

Objectives:

- Develop model examples of farm to consumer sales for analysis (Chapter 1: **Farm to consumer direct selling models**)
- Select applicable and inspiring case studies which exemplify these models from the scholar's travels and research (Chapter 2: **Research and travel**)
- Reflect on and rationalise the lessons from case studies examined and identify relevance for farming and business in Ireland (Chapter 3: **Research applied**)
- Reach conclusions from the research (Chapter 4: **Conclusions**)
- Develop recommendations for farms to consumer sales for implementation (Chapter 5: **Recommendations**)

Methods used

Nuffield scholarship part funded research travel around the world (Singapore, Indonesia, Japan, Israel, Netherlands, USA) followed by personal research travel to South Korea and UK. Worldwide similar key economic drivers for farm direct selling produce were identified: to access retail margin and reduce exposure to volatile prices.

Inspiring examples, models and practices applicable in the Irish farming context are covered in the following chapters. A range of produce from familiar (lamb, beef, dairy, eggs) to exotic (smoked eels, lavender, asparagus, melons and popcorn) is covered. Case studies are categorised into sales channel, diversification and co-operative models.

Sales channel models include online *multi farm websites* Farm Direct UK and LaRuchequiditoui, France. *Ecommerce and catalogue sales* channels include the Japanese Furano Melon Farm.

Diversification models include catering and retail diversification such as the Ishida lamb farm Japan, Aveling asparagus farm UK, Ten Farmers' farm Korea and Maeda popcorn farm, Japan.

Co-operative models include *Community Supported Agriculture* as developed in USA and *Co-operative farm to retail* like HansSalim in Korea which includes farmers, processors and retail shops under the same co-operative umbrella and delivers 76% of the retail price to the farmer.

Each example selected is relevant to Irish agriculture in that it has:

- Potential to scale
- Typically higher turnover than similar size and type farms
- Concern for sustainability/agro-ecology
- Practical examples how to access retail margin and reduce exposure to volatile prices

Conclusions and recommendations

- The overall objective of this research is to find appropriate and economically viable ways to link local producers and consumers. These examples are selected for their applicability to the Irish farming context.
- Farm to consumer direct sales can provide the following outcomes:
    - better income for farmers,
    - farmers income potential no longer tied to the size of the farm
    - greater employment in rural areas,
    - improved environmental public goods (as consumers demand this)

Irish farmers have diverse knowledge already existing through extension practice and skill-share.

The next steps are to identify gaps in routes to markets for producers and suppliers, and identify points of access for consumers and civil society (hospitals, schools, colleges etc.).

Recommend:

- Catalogue examples of Irish farmers selling directly to consumers in order to gauge the current scale of the online and alternative market.
- Highlight good examples of successful farmer to consumer models.
- Identify leaders in this field and use existing networks to share this knowledge.
- Identify gaps in routes to market
- Extend the existing TAMS grants to encourage linking producers to consumers.
- Develop farm entrepreneur / business streams in educations courses.
- Enterprise Ireland research clusters to develop direct selling models for farmers.
- Create guidelines that highlight the key stages in the process of establishing a regional or local food system.

Contents

Table of Figures

Foreword

About Brookfield Farm

Ailbhe Gerrard grew up on the shores of Lough Derg in Co. Tipperary. Although she left to pursue a successful construction project management career, she always felt a pull home.

Inspired by her late mother, Ailbhe had a vision to reconnect agriculture to people, and studied sustainable development in University College London, and organic farming at the Scottish Agricultural College (SRUC).

In 2010, she returned home and bought Brookfield Farm beside her home in Coolbawn, near Nenagh.

Once she bought Brookfield, she began transforming the tillage farm into a biodiverse, sustainable farm. To support this aim, Brookfield Farm Hiveshare and Hivegifts were launched in December 2014.

Brookfield Farm Hiveshare allows people to buy shares in the farm's hives to enjoy honey from their own hives. Members get a gift pack delivered to their door, which includes honey, lip balm and hand crafted beeswax candles. Hivesharers receive seasonal updates, and invitations to the annual 'Honey Celebration', connecting them to the hive and farm life. Brookfield Farm honey quality has been recognised as national Finalists in the 2017 Blas na hEireann food awards.

Ailbhe also lectures at Gurteen Agricultural College, and as a Nuffield Scholar, has travelled the globe to research her report, and presented at the 2017 Nuffield Conference. In 2015 Ailbhe completed the IFOAM Organic Agriculture Global Leaders' programme, and in 2017 she was funded to attend the IFOAM Masterclass in Korea.

Completing the competitive Department of Agriculture, Food and Marine (DAFM) 2016 programme for rural entrepreneurs, ACORNS, Ailbhe has been featured in national and international media including the Irish Farmers Journal, the Sunday Independent, RTE, Image Interiors and Living Magazine and Town and Country Magazine USA.

Ailbhe's hand crafted beeswax candles have won many fans, including Design Ireland and US Vogue Magazine. She has successfully secured a stand at Showcase RDS through DCCOI and Tipperary LEO in January 2018 and is finalising plans to export Brookfield Farm's beeswax candles.

Ailbhe contributes to a number of food, rural and agriculture networks including: EU Rural

Network, DAFM/Dept. Jobs, Enterprise and Innovation Skills workshop, ACORNS rural entrepreneurs, Native Woodlands and Continuous Cover Forestry, Tipperary Food Producers' Network, Tipperary Green Business Network, Design Council and local community development.

See profile on Brookfield Farm on **https://www.brookfield.farm/**

Why forward selling from farm direct to consumer is of interest

For Irish farmers, producing excellent food and produce, the commodity rate offered by wholesalers means only a small proportion of the retail price reaches the farmer. Much of the frustration voiced by farmers is in relation to the relatively low price they receive relative to the processors and retailers. One example to illustrate this; lamb farmers in November 2017 received €4.81 per kg wholesale, a drop of 2% on 2016 (Bia 2017). A supermarket retailer in the same period is charging consumers between €8 and €32 per kg for lamb depending on cut. This supermarket chain is highly profitable with profits of €857 million on sales of €1.23bn in the first six months of 2017 (Bia 2017, Mulligan 2017, Tesco 2017).

There is a place in Irish agriculture for alternative food networks, direct selling excellent farm produce to the consumer. Direct selling can potentially share the margin between farm gate and consumer, releasing cash to the farmer, allowing planning and reducing credit requirements.

This research examines what methods in other countries successfully link farms straight to the consumer. A variety of marketing, communication and distribution methods is described – sharing the story of farm production with modified CSA models and farm direct models such as FarmDirect in the UK and Hansalim co-operative farm to consumer business in South Korea.

Potential impact on similar farms

The examples in this research and report illustrate existing farm-to-consumer businesses such as www.brookfield.farm and models from other countries which will be of value to Irish agriculture and rural development (O'Donoghue, Kilgarriff et al. 2017).

Thank sponsor

I would like to thank Nuffield Ireland for awarding me the Nuffield Farming Scholarship. I am grateful for the opportunities to travel and see farms and inspiring agriculturalists and their research.

Acknowledgements

I would like to acknowledge the time and expertise of all the farmers and agri-business people who gave generously of their time and knowledge. Particular thanks to my mentor, John Fagan who was very generous with his time, suggestions and excellent advice.

The Nuffield country hosts during the Global Focus Programme put together an extraordinarily varied programme of briefings, farm visits in a whirlwind global tour. I learned a lot, and am very grateful for their organisational skills and generosity.

My father, Peter has been a great help and support. In particular, managing the farm and household while I was travelling, researching and writing. Thank you.

Abbreviations

AFN	alternative food networks
CSA	Community Supported Agriculture
DAFM	Department Agriculture Food and Marine (Ireland)
EU	European Union
FD	farm diversification
FDS	farm direct selling
FTC	farm to consumer
GFP	Global Focus Programme
ICOS	I.C.O.S (umbrella group for the cooperative movement)
IFJ	Irish Farmers Journal
LFN	local food networks
SFSC	Short Food Supply Chains
SVC and SVSC	short value chain and short value supply chain

Objectives

The **objectives** of this research are to:

- Examine farm to consumer direct selling examples, to develop sales channel models for analysis (Chapter 1: **Farm to consumer direct selling models**)
- Select case studies and examples that may be applicable or inspiring in the Irish context (Chapter 2: **Research and travel**)
- Reflect and rationalise on the lessons from case studies examined (Chapter 3: R**esearch applied**)
- Identify relevance for farming and business in Ireland (Chapter 4: **Conclusions**)
- Recommendations for activities and steps to further develop, disseminate and to exploit commercially the results of the project (Chapter 5: **Recommendations**)

Introduction

Background

This Nuffield research looks at how farmers can get a larger share of the price consumers pay. This project started on a wet and cold winter Saturday in London 2008, a few years before I started farming. I was at a weekly farmer's market in an Islington school yard buying cheese, milk, vegetables, meat and fruit from the farmers on their stalls and loading bags of farmers' produce onto my bike.

I was approached by a man promoting a startup business website called *Farm Direct*. The concept was online shopping from this farmer's market with free delivery. My shopping list of produce could be conveniently bought online through the Farm Direct website and delivered to the doorstep.

I thought it was a great idea, getting quality farm produce, fresh and from local farmers, but avoiding travelling through the rain and trekking home with heavy bags. I could also see scaling potential – more farmers than could fit in the school yard and more customers than could physically get to the existing Saturday only market. As part of researching this report I subsequently found that 60% of the Farm Direct retail price returns to the farmers, and their produce is collected from their farms, which is a considerable improvement on conventional retailer relations.

The idea of farm produce direct to the consumer stuck with me, as I bought a farm in Tipperary in late 2010 and went through the steep learning curve from construction project management to farming arable crops, broadleaf forestry, sheep and bees. Beginning with an initial twenty hectare tillage farm and six hectares of trees, I felt that a farm income strategy based on scale or productivity would not succeed.

Therefore, I focused instead on produce (lamb, honey, hive-gifts, rapeseed oil, apple juice, firewood etc) that I could sell directly to customers. My aim was simple, a successful farm with excellent produce, contributing to a thriving rural area, through selling directly to the consumer. Using ecommerce (***www.brookfield.farm)***, fairs, shows and social media to reach customers, means that more of the retail price goes to the farmer.

This report examines the opportunities for primary producers to get higher prices for their products and maintain real income. Of course, this means that other skills beyond crop and livestock production have to be developed, and other costs are incurred in processing, packaging and marketing. This farm to consumer system, which is often producer led, is in contrast to the global agriculture system which will be reviewed next.

Global agriculture system

Agriculture as a global industry has invested in complex supply chains, from producer to processor, from distributors to importers, wholesalers and retailers. This has allowed billions of euros worth of food products to be made, shipped, bought and enjoyed in all corners of the world.

Global agribusiness as it is currently structured, is a productionist model, however it has several flaws, including its impact on climate change and irreplaceable resources, including soil, water and biodiversity. Apart from climate change, soil degradation and hunger/obesity in populations; the issues this report will address include **biodiversity loss and pollution**,

challenges to rural life, **vulnerability to variability of supply of labour**.

Biodiversity loss and pollution statistics

There are challenges for conventional agriculture with regards to biodiversity and pollution. The majority of Ireland's habitats listed under the Habitats Directive were reported in 2013 to be of inadequate or bad conservation status. Only 9 per cent of listed habitats are considered to be in a favourable state (EPA 2017).

The EU target to halt biodiversity loss by 2010 was not met. For example, in the last 40 years, the grey partridge species has declined by 88%. Therefore the EU is strengthening its policy framework and commitment to halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them (Teagasc 2011). This is a matter of considerable concern to farmers, as CAP payments will be increasingly related to farmers providing environmental goods (also termed ‘public goods’) as well as food.

Rural life

Ireland, in contrast to many countries, has one of the highest proportions of people living in rural areas among EU states, with 42 per cent of Irish people living in rural areas compared to an EU average of 27 per cent. Although there is a long-term decline in rural populations, this is offset by a rise in rural towns populations.

Agri-food and Tourism – both crucial to rural economies – between them employ in excess of 363,000 people or 18% of the workforce in Ireland (Department of Arts 2017). Other countries, particularly in the EU do not have this pool of vibrant rural population, and in this, Ireland has opportunity to lead the way in rural regeneration.

Labour requirements and vulnerability

The problem of shortage of agricultural labour is acute in the US, with 1.5 to 2 million people working in agriculture. Up to 1 million of these agricultural workers, (50% to 70% of the total) are undocumented immigrants. Farming enterprises in Ireland also suffer from lack of agricultural labour. Dairy is a notable example, along with horticultural enterprises such as mushroom and strawberry producers. According to the IFA 2017, employers may need permits to hire non-EU workers, particularly with Brexit derived agricultural price pressures.

Labour costs are a critical element in horticulture, accounting for 48 percent of the variable production costs for fresh fruits and 35 percent of variable costs for fresh vegetables (O’Brien, Kruse et al. 2014). Greater employment possibilities in farm-to-consumer sales in rural areas would attract population back to rural areas and assist with labour requirements.

Irish Agriculture in context

Irish agriculture is by many measures; socially, economically and environmentally in crisis. 2015 average farm incomes in the Republic were €26,526, according to Teagasc (Hennessy and Moran 2016). Taking out the generally higher dairy farm incomes, this leaves the average farm with incomes of below €20,000 (cattle, sheep) and approximately €33,000 for tillage farmers. When inflation is taken into account, the real value of farm income has reduced significantly, and is now at approximately 70% of the 2000 level (Dwyer 2016).

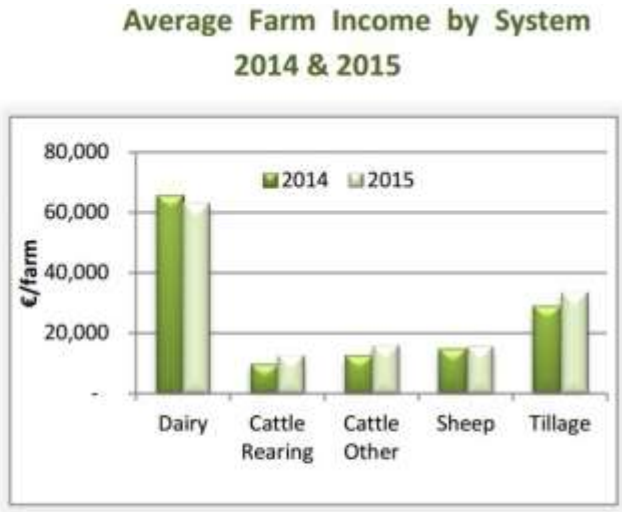

Figure 1 Average farm incomes by system – Dairy, Cattle rearing, Cattle other, Sheep, Tillage (Moran 2016)

The bigger picture of weaknesses in Irish agriculture identified by DAFM (Department Agriculture 2015) include:

- *‘Farm viability: many farms experience low profitability and are over reliant on direct payments.*
- *Age profile of farmers, which is high and increasing.*
- *Income volatility: the cyclical nature of commodities markets, with agriculture being mostly price takers on export markets.*
- *Environmental challenges, including water quality and biodiversity’*

There is a place in Irish agriculture for specialising in the productionist model (wholesaling and exporting bulk farm produce), but there is also opportunity for alternative food networks, including direct selling a variety of farm produce direct to the consumer. The key to rural sustainability is to have a range of farm types and diversification models.

New disruptive possibilities

Direct selling is not mainstream agri-business, but neither is it negligible. In the USA in 2016, 167,000 farms sold edible food directly to consumers, retailers, institutions, and local distributors to the value of $8.7 billion ($52,000 per farm) (USDA 2016). By comparison, the gross agricultural producer output in 2015 for ALL Irish farms was €53,000 per farm (DAFM 2016). Therefore the direct-to-consumer sales per farm in the USA is large by comparison.

In recent times, consumer buying patterns and the power of the Internet has unleashed a movement that could rapidly disrupt the complex agri-business model. An example of this shift in relation to food purchasing is the recent $13.7 billion acquisition of Wholefoods by Amazon (Rennison, Wigglesworth et al. 2017).

Amazon is an example of an on-line platform, a highly efficient mechanism to perfectly match individuals that need something, (consumers need nutritious food and produce) and people with something to offer (farmers) (Goodwin 2015).

Farm to consumer sales in this background

Farm to consumer direct sales can be also characterized as an element in Short Food Supply Chains (SFSC). SFSC is where: ‘The foods involved are identified by, and traceable to, a farmer. The number of intermediaries between farmer and consumer should be 'minimal' or ideally nil.

The ideal is a direct contact between the producer and the consumer. (Moya Kneafsey, Bálint Balázs et al. 2013). SFSC and local food are linked to rural sustainability and farm diversification.

Agroecology claims that agricultural practices and food systems are intimately linked as part of the same natural and socio-economic context. Farm direct to consumer, according to French researchers Hatt et al, from this perspective supports the transition of conventional food systems towards more sustainable ones. (Hatt, Artru et al. 2016)

As this research shows in Chapters 2 and 3, farm to consumer can support farm incomes and make average sized farms economically viable. Farm family members can be also employed in processing of the farm crops and direct marketing (e.g. cheesemaking and sales).

Farm to consumer sales could thus give farmers a real alternative to the productionist model (an ultimate aim of which is zero profit on farmgate produce prices) and could have a positive effect on rural life, the rural economy and environment.

Chapter 1 – Farm to consumer direct selling models

There are a number of phrases and vocabularies which broadly explain the same concept of farmers reaching consumers either directly or through few intermediaries. Farmers reaching consumers sales channels can be either consumer led or farmer led, or a mixture of both. Farmers clearly have a critical role in alternative food networks (AFN), as they are key actors in the relocalisation of food provisioning, as Goodman and Goodman point out (Goodman and Goodman 2009).

Descriptors used in this report include:

- local food networks (LFN)
- short value chain (SVC) and short value supply chain (SVSC)
- alternative food networks (AFN)
- farm direct selling (FDS)
- farm to consumer (FTC)
- farm diversification (FD)
- community supported agriculture (CSA)

The farmer can use a variety of sales channels or methods, as alternatives to selling wholesale to the global market. These farm to consumer methods can be as simple as an honesty box at a farm gate with produce sold to passers by, or as complex as a multi million euro farm to customer co-operative.

Methodology

The methodology used to research this report included travel, interviews with farmers and agri-business agents, and desk study. The Nuffield Global Focus Programme (GFP) funded travel to learn about:

- Southeast Asia agribusiness context and background in Singapore
- Large scale integrated pineapple/cattle farms, prawn farms and smallholdings of 1 ha in Indonesia
- Japanese support for agriculture, family farms and their co-operative and diversification models
- Israeli range of farms from vineyards to pollinator bees to banana plantations to a ‘pick your own fruit’ farm on the Syrian border
- Netherlands for consumer facing microleaves, pig, eel, poultry and egg farms, nose to tail restaurant menus
- USA for a Washington briefing on policy, USDA and Chicago to learn about crop futures. Illinois finished the GFP with visits to large scale maize and soy arable farms

Personal travel included visits to the USA, Korea and the UK. Travel to the USA was to see the Washington State consumer-facing farms. There, inspiring farms included a lavender farmer (producing dried lavender, lavender honey, distilled lavender oil), and a pick your own fruit farm (Skipley Farms)

Korea – April 2017 was another personal trip funded by the Korean government to learn about Korean support for organic and consumer facing agriculture. The large scale co-operative farm to consumer model there services 30% of the total multibillion euro agri-food business.

UK – closer to home and a local context, was a visit to the London based Farm Direct 'farm to consumer' box scheme which shows how to reach scale. Also a high value asparagus crop on the Aveling farm showed how to successfully manage sales channels from market stalls, to restaurant to supermarket supply.

Farm to consumer sales models characterised

From the travel and farm visit, interview and desk study research undertaken, a number of sales channels or models were identified where farmers successfully reached consumers directly, see Figure 2 below. These include **Sales channel models** such as farmer's markets, single and multi-farm websites, catalogue sales. **Diversification models** were another major category – where the farmer has a direct relationship with external restaurants, caterers; or establishes restaurants or processing units on their farm to capture the value add of processing farm produce. A final category was **Co-operative models** such as Community Supported Agriculture and Co-operatives farm to retail outlet. These models are all described further below. Examples of each model are examined in the next chapter.

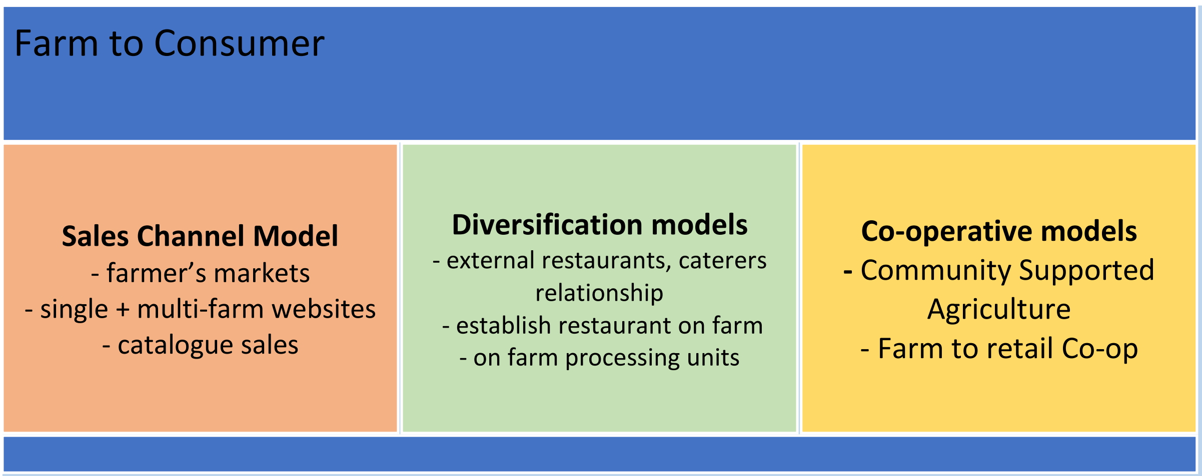

Figure 2: Farm to consumer sales models and types

Sales Channel models

Farmers' markets/ Country markets

Farmers' markets in Ireland are derived from the US 1980s movement, whereas Country Markets, in Ireland, was founded in 1947 is a co-operative organization affiliated to ICOS. Country Markets has 56 affiliated branch markets nationwide, with over one thousand members. The members of Country Markets are of local producers bringing fresh farm produce, fresh locally grown fruit and vegetables, homemade breads and cakes and homemade jams, honey and locally made hand produced crafts including handmade jewellery, hand knitwear and crochet.

With both types of markets (farmers markets & Country Markets), farmers and makers take a stall and sell produce directly to customers usually on a selected day per week.

From the perspective of the farmer, farmers' markets (and box schemes and farm shops) offer a number of advantages as a route to market. The supply chain is shorter and there is a more informal approach to marketing. Transport requirements are generally far simpler than the more conventional routes to market and, in many cases, there are no intermediaries involved. This shorter supply chain also allows the producer to remain in direct control of the product.

As the producer has, for the most part, direct links to the customer, instant feedback is available. This assists in developing market research and in allowing the farmer to make informed decisions on supplying what the customer wants (Bia 2007). This report does not specify particular examples of farmers markets however, as this method is relatively common and well understood.

Farmers and farmer's markets can, using adaptation and online marketing skills, reach considerable scale, leading to the second type, **single and multi farmer websites**. Single farmer website is the sales method currently used by the author's Brookfield.Farm (www.brookfield.farm). There are numerous, but uncatalogued Irish and international examples of farmers selling meat and other farm products directly from websites, including http://caoracla.ie/, http://comeraghmountainlamb.ie/, http://www.jameswhelanbutchers.com/info/beef-bonds/ etc.

An example of a multi-farmer website which emerged from a farmer's market is the London based **Farm Direct** food business, which is further examined in Chapter 2 (Barker 2017).

Online and Mail order

Food purchasing through online and catalogue mail order models has had a recent shake up with the $13.7 billion acquisition of Whole Foods by Amazon. Predictions in the US also see consumers spending upwards of $100 billion on food-at-home items by 2025 (Institute 2017).

In the Irish context, online shopping in the Irish market is currently valued at €170 million for grocery sales and is still relatively underdeveloped at 1.2% of overall sales. This figure is expected to rise rapidly over the next few years to reach 4.5% by 2021 according to Bord Bia. (Bia 2017).

However, the mail order example which will be examined further in Chapter 2 relies on what may be considered a less technologically developed *mail order catalogue* model. The Furano melon farm, despite a 1980's style mail order catalogue, has an impressive turnover from its telephone and online sales, with income around €1 million per annum.(Furano 2017)

Diversification models

Examples of farm diversification in Ireland include: agri-services, tourism, manufacturing, retail, food, energy, services and alternative land uses. Teagasc Options courses in farm diversification cover topics including farm shops, cheese making, selling on-line websites, hedge laying, boat marinas, care of the elderly, cut foliage, growing vegetables, converting redundant buildings and many more business ideas for rural Ireland. (Teagasc 2017)

Farm diversification was once seen in Ireland as a diversion from 'real farming', the productionist approach, however Teagasc is now encouraging farmers in Ireland to consider the many diversification opportunities through their Options courses. A decline in off-farm income in rural areas, and average farm income as per the 2015 Teagasc Farm Census around €25,000 has driven interest in and support for diversifying. Rates of farm diversification though rising, are still very low, for instance less than 5%, or 5,000 Irish farmers diversify, whereas in the UK, perhaps due to larger population or policy support, the figure is 51% (Teagasc 2014).

Three types of diversification are to be distinguished in farming, and farm to consumer sales models researched below include all these variations:

- **horizontal diversification** is an extension of the existing range of activities, e.g. starting a new farming activity like potato production.
- **lateral diversification** is related with the entrance into new product-market-areas, without a physical relationship with the former activities. This can be agro-tourism, catering or the production of renewable energies.
- Finally, **vertical diversification** (vertical integration) refers to pre– or post–agricultural production activities like on-farm processing or direct marketing. (Zander 2008)

Catering/Retail Diversification

Catering and retail lateral diversification, is an example where the farmer enters new product-market-areas, without a physical relationship with former activities. This is, for example, where the farmer diversifies into a restaurant/ shop/ retail relationship on or related to the farm. There are numerous examples of this form of diversification including:

- A well established farm owned by the JCB family, incorporating a small chain of shops - UK Daylesford Organic (Farms 2017)
- Netherlands – Egg(Eel Farm 2017) farm/eel farm (GFP) (Eggfarm 2017) (Eel Farm 2017)
- USA – Lavender farm, Seattle (Farm 2017)
- USA pick your own fruit farm – Skipley Farm (Farm 2017)
- Israel pick your own fruit farm (GFP) (manager 2016)

Particular examples of interest for this research include in Japan's Hokkaido province the Ishida lamb farm which sells directly half and whole lambs to restaurants. This is an example of **external restaurant relationship diversification**. (Ishida 2017). Likewise the Aveling asparagus farm in the UK supplies a high value crop to well known restaurants and retailers (Aveling 2017).

On farm catering diversification example includes Ten Farmers' farm in Korea with an on-site restaurant with one million visitors a year (Farmer 2017).

On farm processing diversification example is the Maeda popcorn farm, a tillage farmer in Japan reaching customers directly with farm grown, farm packed microwave popcorn.

These examples will be examined further in Chapter 2, as they cover a range of possibilities for farm lateral diversification.

Cooperative farm to consumer

Of the methods for farm to direct sell, community supported agriculture (CSA) is probably the best known. The partnership between farmers and consumers means the responsibilities, risks and rewards of farming are shared. CSA arose in the 1980's in USA and Europe, and is based on a forward payment to the farmer from the consumer, who receives a weekly delivery or pick up of seasonal vegetable/meat/dairy or other farm produce. Participants in CSA are often motivated by environmental and social values. This is demonstrated by participants' commitment to procuring at least some of their daily food requirements from a known and sustainable source, and in taking a stake (UK 2017).

CSAs fall into four main types:

- Producer-led (subscription) initiatives

This are the more common CSA, with farmer produced vegetable, meat, dairy box schemes where the consumer subscribes for a certain amount of food.

- Community-led (co-operative) initiatives, Examples include the Cloughjordan Eco-village CSA in Ireland (Farm 2017)..
- Producer-community partnerships such as the Farm to Retail Co-operative Hansalim model in Korea.
- Community-owned farm enterprises

Community Supported Agriculture can deal with a wide range of farm goods. Any '*food, fuel or fibre producing initiative where the community shares the risks and rewards of production, whether through ownership, investment, sharing the costs of production, or provision of labour.' (Saltmarsh, Meldrum et al. 2011)*. The CSA can also provide synergy between growers and producers in an integrated food system - with grain produced for local bakers and milk for cheese-makers. Sustainability for local food producers requires a balance of supply (from producers) with demand (from consumers) in the face of volatile weather and prices.

The advantage for the farmer with a CSA model is receiving cash in advance, and knowing exactly how much crop/animal to produce, as the customer base is predetermined. This avoids waste and surpluses. The customer benefits as the price is generally lower than the equivalent in shops. The consumer pays for high quality food, but also intangibles such as transparency, environmental stewardship, producer relationships, etc. and can visit the farm and see the vegetables/livestock. This gives a sense of connection and confidence in the quality of the grower.

Disadvantages include a disappointed buyer, if the harvest is not sufficient in quantity or quality. As the harvest is presold, this can put pressure on the farmer. It can be difficult to get consumers to commit for an entire growing season, and in community led initiatives, the relationship between farmer and consumers can be complicated. Additionally, not all consumers wish to commit to the responsibilities of the CSA, which can include buyer inputs such as agricultural labour, selling produce and administration assistance.

Chapter 2 – Research and travel

Types of farm direct selling models this chapter examines were identified in research and travel;

1. Farmers markets expanded into On-line/mail order,
2. Catering and retail diversification;
3. Co-operative farm to retail including Community Supported Agriculture.

See Figure 4 below for the farm examples chosen and the sales model they fit.

Sales channel models

Farmers' Markets Expanded, Catalogue + Online

- Farm Direct UK
- LaRuchequiditoui France
- Furano Melon Farm Japan

Diversification models

Catering, Retail, Restaurant, on farm processing

- Aveling Asparagus Farm UK
- Ishida Lamb Farm Japan
- Ten Farmers' Farm South Korea
- Maeda Popcorn Farm Japan

Co-operative Models

- Hansalim South Korea

Figure 4: Types of Farm to Consumer sales models and research examples

Farmers markets - Farm Direct (expanded farmer's market, click + deliver model)

The London based *Farm Direct* emerged from a farmer's market in Islington in 2008. This researcher was one of the first customers, and was encouraged by this example of innovative farm to consumer sales to set up Brookfield Farm following similar direct sales methods.

Farm Direct was set up by Robert Barker in Islington, who saw an opportunity to expand an existing farmers market turnover through putting the farm produce on an online platform. This food ordering service connects the north London consumer to local English farms and food producers, allowing them to buy their choice of a wide range of seasonal, English food each week. Farm Direct range is extensive, it covers fish, meat and game, fruit and vegetables, dairy, eggs, pies, bakery items, juices, sauces and preserves all grown or produced in England and most producers are located within 100 miles of London.

Farm Direct input includes website management, Robert updates produce and recipes weekly, (see Figure 5). The business also coordinates collection of produce from the forty plus farms contributing to Farm Direct, which is a great logistical convenience to the farmers. Farm Direct additionally manages the collation of individual orders in boxes in a packing facility in North London and has a team of delivery vans to drop off the produce boxes at customers' houses on Thursdays, Fridays or Saturdays within an agreed time window. This is classified as a 'click and deliver' farm box model, and is the most accepted version in the UK. (Robert 2017)

Figure 5: Farm Direct website with summer 2017 offers

Farm Direct's core aim is to connect customers with food producers, in a more direct way. The aim is to provide great quality, regional produce at reasonable prices, as well as a real understanding of where food comes from and also who actually produces it. Farm Direct responds to their customers concern for animal welfare and environment, meat is free range or organically reared. Fish is sustainably caught using lines or static nets.

Economics: By connecting the consumer directly with food producers, Food Direct provide value for money. For equivalent products, it is difficult to find lower prices as the producers all pick, process or butcher their own produce, giving low transport and overheads costs. The turnover is about £350,000, and customers are extremely retentive, reordering for years.

Farmer share: In the conventional supermarket system, it is typical that farmers receive around 20% of the consumer spend, with the remaining 80% going to a range of intermediaries such as pack-houses. processors, wholesalers and retailers. Farm Direct farmers in contrast receive a majority share (around 60%) of the consumer spend. The farmers are generally not dependent on Farm Direct as their only customer, they have other customers and outlets, but they say the Farm Direct relationship makes a good contribution to their turnover.

Nicola Bulgin from Beatbush Farm, for example, is one of the farmers supplying Farm Direct. Beatbush Farm produces beef, lamb and poultry in Norfolk, and supplies three farm shops and four farmers markets in London. Beatbush Farm sells online from their own website directly, as well as to intermediate websites such as Farm Direct and FarmDrop. On the Beatbush farm website, lamb prices vary from a high of £22 per kg for rack of lamb down to £4.49 per kg for breast on bone.

These prices are in line with Farm Direct website prices. Nicola finds flexibility in the various direct to consumer sales options, which include selling at markets, selling from their own website and selling through ‘click and deliver’ websites such as Farm Direct. Farm Direct relationship, giving 60% of the retail price to the farmer, makes a good contribution to the Beatbush Farm turnover (Bulgin 2017).

Farm Direct is a no frills operation; keeping their overheads low with no stores (just a depot in Tottenham); they hold minimal stock, since produce comes to order, so have very little waste; no unnecessary packaging; consumers order produce online, and collect or have delivery.

Competitors and similar businesses. There are other well established UK companies offering certified organic farm produce, such as ‘click and deliver’ defined box schemes, Riverford delivering 47,000 boxes a week, valued from £12 per box (Riverford 2017) and Able + Cole, (Cole 2017) with turnovers of £10’s of millions p.a.. Start-up London based competitors such as *FarmDrop* and *Food Assembly* have a ‘click and drop’ model where producers drop to a café/shop and customers collect. The ‘click and drop’ models in the UK, according to Robert are culturally and logistically more difficult to manage (Barker 2017).

It is not just the UK that this model of collaborative online purchasing of farm produce exists. In France, LaRuchequiditoui, the French owner of *Food Assembly* had 450,000 members and a turnover of €17m according to their published information in October 2014. To open this farm food buying system in an area, a volunteer takes responsibility to set up the coordination, find and inform consumers, and act as contact with the business.

This coordinating role can be passed on when the system is established (LaRuchequiditoui 2017). As part of the research for this report, French farm voluntary workers from Bordeaux consulted by this researcher are aware of LaRuchequiditoui. It is a familiar way to purchase farm food directly in France (Bosson 2017).

On-line/mail order - Terasaka farmer Furano melon

Furano melons are famous in Japan and reach high prices. This particular melon farm, 3.5 hectare area is owned and run by Mr. Terasaka was visited as part of the Nuffield GFP in June 2016 (Terasaka 2016).

Figure 6: Visit to Terasaka Melon Farm June 2016

Melon crop

Mr Terasaka explained that a typical polytunnel will grow one thousand melons - each valued in direct sales at 2,600 to 3,000¥, which is about €20 each. Melons are sampled for sugar content, the aim is for 15%. A sample melon was tested and produced 16.3% sugar content - very sweet.

Sales channels

Mr Terasaka also has a retail outlet, a rural shop which specializes in melons, which was also visited as part of the GFP. The farm sells both to middlemen (shops) and directly, but no crops are sold to the Japanese Agricultural Co-operative (JA) as the value to him for direct sales is considerably higher.

For example, the JA melon rate is 500¥, or €4.00. In contrast, Terasaka's direct sales price for one melon starts at 2,600¥ or about €20. He is the only farmer in the area not a member of JA, which is not popular locally with other farmers.

The crops available on mail order are Furano Melon, Green Asparagus and White Asparagus from the Terasaka farm. Additionally, maize (sweet corn), pumpkin, potato, carrot, onion by other farmers. Customers can buy speciality crops in season – melons from Terasaka farm, sweetcorn from another farm. The concept is that customers can have a special, seasonal fruit or vegetable delivery every month, providing a regular cashflow for the business (Furano 2017).

Figure 7: Furano Melon website screenshot

Economics

The Terasaka farm staff consists of three people full time, 30 people part time in summer. The business strategy is to focus on one variety (melon) to build his brand. The Lanchester business strategy is what Mr. Terasaka employs - to do one thing very well, thereby keeping out competition. Mr Terasaka has no plans to expand his growing area, instead he wants to concentrate on improved profits.

Facebook is an important marketing tool, 47,000 people like and follow his page. Another important sales channel is the mail order catalogue which is delivered to thousands of subscribers. Turnover for this catalogue is about €300,000.

The farm also receives ten thousand orders online for 20,000 melons, which yields around €400,000. Melons are all delivered by courier which guarantees perfect delivery, returns are low at a rate of 0.04%. Total sales are around €675,000, including the mail order catalogue.

Catering and retail diversification

Farmers have not only reached consumers directly through online and catalogue sales. They have also diversified into *on-farm restaurants* and supply *restaurant chefs* exclusively with a high value product. This following section analyses three farms to identify lessons that other farmers could apply in *catering and retail diversification*.

The farms chosen are the UK based Aveling asparagus farm, Ishida lamb farm in Japan, Ten Farmers Farm in South Korea. These all work with high value produce in their local contexts. The farmers developed alternative marketing and income solutions which are worth examining.

These lessons could be applied in the local context relative to Ireland, the mix of sales channels from restaurants to supermarkets and the high value crops and products, asparagus, lamb and salad leaves.

Aveling asparagus Farm

The Aveling asparagus farm, visited by this researcher in April 2017, is a 40 ha farm on the Cambridgeshire/Norfolk border close to the sea. There is one full time employee, Will Aveling, who manages cultivations, seasonal staff to pick and pack asparagus, and the contracts with restaurants, markets and retailers.

This is a second generation asparagus farm, Will’s father decided to turn his tillage farm to perennial asparagus over forty years ago. The farm, soil and environment is well suited to the asparagus crop, a native of Italian coastal regions, which can tolerate salt and wind.

Figure 8: Asparagus harvesting on Aveling Farm

Will's father established the UK Asparagus Grower's Association, and is a fount of knowledge about establishing and growing asparagus. He grew the Aveling asparagus business through supplying large retailers. Will recently developed a niche market supplying well regarded restaurant chefs, and this sales channel now comprises about a third of the turnover, at a better price per kilo than the wholesale price for the supermarkets.

As a high value, seasonal, niche UK grown asparagus crop, the entire crop is all pre-booked, and goes to well-known restaurants, including Ottolenghi, chefs and craft gin makers. A small proportion of the crop goes to a local market stall. However, two thirds of their output goes to large supermarket retailers through a distributor (Aveling 2017).

Growing notes

As a perennial crop, asparagus crowns are bought in from the Netherlands, where there is a 41 year relationship with the grower. The crop can last 10 years, but cropping is dependent on climate and stress to plants. The farm typically has two thirds area cropping, and one third of the area in maiden asparagus which will crop in two years. In the third year after planting the field will crop for three weeks. Crop harvesting is April to June with forty five seasonal staff on contract for maximum twelve weeks. One hectare produces 3.8 tonnes produce per year at a planting rate of twenty two thousand plants per hectare.

The only full time farm employee, Will Aveling, carries out farm work on the deep stone free silt soil.

Activities in the fields are carried out with adapted equipment for a perennial crop and include:

- tractor cultivations & moulding up & dessicating ferns
- Cultivate between rows, mould up drills in one pass
- residual contract spraying to eliminate weeds. One nettle variety is resistant to Glycosphate, so this herbicide is of limited use.
- End of season cultivate again - drainage and anti-compaction works
- Pulverised ferns are incorporated for fertilisation in February

Marketing and sales

Harvest sales: 100% of the Aveling crop is presold at pre-agreed price without contract, therefore a form of forward-selling. No further discussion takes place during harvest on price or volume etc. At beginning and end of season buyers come out better in relation to competitors' price. In the middle season the Avelings do better. Distributors for supermarkets take 63% of the crop, and the remainder, 27% goes to high end restaurants in London and local market stalls.

Figure 9: Asparagus packed for delivery

Quantity of crop is agreed first with the customer, then price. Price varies with volume and product differentiation. A supply date for first harvest is not given to the customer, as it is difficult to predict, despite pressure from purchasers for a dedicated date. The first harvesting date is weather dependent and varies from 9th April (2014) to 10th May (2016). Harvesting always continues until 21st June and then stops to allow the plant crown to recover for next year.

One hectare produces 3.8 metric tonnes, with one third non-producing. This leaves the Aveling asparagus farm growing about thirty ha in any given year. Asparagus farms have barriers to entry with capital costs of £12,000 per hectare to establish and a three to four year wait for harvesting. Turnover is calculated therefore on thirty ha x 3,800 kg per ha x an average retail price of £4.50 per kg. This produces a turnover of about £500,000.

The secret to the Aveling farm success, or the USP, is excellent produce, a fixed harvest price and returning customers according to Will Aveling (Aveling 2017).

Ishida lamb farm

The Japanese Ishida lamb farm supplies half and whole lambs to restaurants, (Ishida 2017). When this researcher visited, the farmer had seven hundred head, with three hundred head for meat and the rest for milking; wool is not good quality and goes for futon fillings. The interesting aspect to this farm is that sheep are a relatively rare animal for Japanese farms. There are only 18,000 sheep in Japan, and 8,000 of these are pets. Mr. Ishida is the only lamb farmer in his area, and had to learn how to manage sheep. The breed of sheep that he chose was the South Down cross, a good breed for eating, he buys all over Japan and imports as well, see Figure 10 below.

Figure 10: Ishida Lambs, South Down cross

There is a well organised process where a restaurant orders lambs, usually one or two a month. Mr. Ishida sends the ordered lambs to slaughter, typically in batches of five or six a week. The carcass is sent back for butchery and delivery by himself to the restaurants as fresh meat, which needs special permissions. The restaurants have to buy an entire half or whole lamb, including the brain, heart and other offal. The skin is the only part that Mr. Ishida keeps.

Mr. Ishida had to make a market for his sheep meat, as a pioneer when he entered farming. His method was to approach expensive restaurants directly in Sapporo and tell his story. Now, sixteen years later, he has built up a niche market, receiving ¥3,500 per kilo, which calculates as €540 per twenty kilo lamb, giving a turnover for lamb meat of €160,000.

His social media and farm story are very important he says in gaining and keeping customers. The key social media angles valued by his restaurant customers is the rarity of lamb in Japan, and the fact that Mr. Ishida can explain the cooking process for different cuts and ages of lamb.

Mr. Ishida has a good life as a farmer, welcoming tourists to the farm, and travels to see sheep and learn more. In 2015 he visited France for this purpose (Ishida 2016).

Figure 11: Farmer Ishida	Figure 12: Ishida lamb house

Korea, the Ten Farmers farm

There is a long tradition of farming in this vegetable farming family. An ancestor wrote a book on vegetables in 1851, which is in the farm museum. The six hectare farm is run by a father and son team, and the group this researcher travelled with were welcomed by the son who explained the farm strategy and enterprises. Along with a number of employees, Ten Farmers grows three hundred varieties of leaves, most protected cropping, and produce a well-known soy sauce which is fermented the traditional way in large earthen urns outside in the fields over three and more years.

Figure 13: Employees working in the polytunnels	Figure 14: Ten Farmers Soy sauce urns fermenting in the fields, with IFOAM group

The Ten Farmers six hectare vegetable farm is acknowledged to grow best salads and vegetables, so part of their crops are reserved for the temple. This USP, a great reputation for quality produce has helped this farm make a large turnover from a small area. They keep a small herd of milking cows specifically in order to provide fertility for the vegetable growing. Maintaining soil fertility for organic growing is a major issue in Korea, as very few animals are kept in this predominantly rice growing country. Geopolitical factors mean organic fertility cannot be easily imported, so Korean farmers are working on solutions to provide their own, hence the cows, making a mixed vegetable and livestock farm.

One unusual feature of the Ten Farmers' enterprise is that the owners participate in on-farm experiments. While this researcher visited, a music experiment was ongoing, playing different types of music to the cows to see if any yield improvement/disimprovement could be attributed to music heard by the cows. The music ranged from classical to pop to heavy metal.

A turnover of €13m is achieved from six hectares growing organic vegetables. The income is generated partly from vegetable and salad sales, but the majority comes from the recently built on-farm restaurant with one million visitors a year, each of whom take the set lunch for €13 and tour the farm.

The Ten Farmers offer a traditional, typical Korean lunch meal with rice, fermented paste, vegetables and salad leaves. The leaves are used to make a roll with the paste and rice and vegetables, and make a healthy and much loved lunch. The vegetarian, organic restaurant (recently built on the farm) where this meal is served was the farmer's father's life dream, and was finally achieved in recent years. The figure below shows the farm and restaurant logo, where the 'Ten Farmer's' name is derived (Farmer 2017).

Figure 16: Lunch at the Ten Farmers restaurant Figure 15: Ten Farmers' logo in restaurant

All vegetables and fruit not eaten in the restaurant are sold to supermarkets in city. 'Ugly' or out of specification organic vegetables are given to local people for free.

Maeda Popcorn Farm

Shigeo Maeda's farm in Japan was visited as part of the 2016 Nuffield GFP. This very engaging and outward looking farmer has a young family and wanted to gain a greater share of the retail price (Maeda 2016). Mr. Maeda grows conventional popcorn at five tons to the hectare under biodegradable film. The diversification aspect of the Maeda farm is the on-farm popcorn processing factory. The corn is harvested in October/November and dried on farm to under 14% moisture. See Figures 17 and 18 showing Maeda farm popcorn and factory.

Figure 17: Popcorn being dried with wheat on Maeda Popcorn Farm

Figure 18: Mr. Maeda explaining popcorn farm to Japanese visitors

The popcorn factory has sophisticated machinery to pack popcorn with oil & salt in a special package for microwaving. Of the 40 tonnes of corn stored in the farm warehouse, 4 tonnes was sold in this season. The funding for this factory was provided through a government scheme which provides 0% interest for innovative farm diversification. The packed popcorn sells at 230¥ or €1.75 for a 70g package with palm oil & salt. The package costs approximately 25% of the retail price. Maeda popcorn sells through a variety of sales channels, online with Amazon.com, in supermarkets, and coffee shops.

Co-operative farm to retail - Hansalim, Korea

The Netherlands, as would be expected with consumer facing farmers and high urban populations have developed numerous CSA examples including http://foodcoopnoord.nl and www.vitatas.nl.

However the most interesting example encountered in travel and research for this report was found in South Korea. Co-operative producer/retail movements are mainstream in South Korea, altogether about four and a half million consumers (about ten percent of the population) are serviced by food co-operatives. Korean agricultural co-operatives collectively have a membership of over 2 million farmers (90% of all farmers), and an output of US$11 billion.

Korean society has traditionally been organized around co-operatives. The social economy sector in Korea is seen as the answer to economic crisis, and co-operatives are an integral part of the social economy.

Hansalim Co-operative

Hansalim Co-op is examined below as an interesting example, with lessons for farmers in Ireland. Hansalim is one of the oldest and most established co-operatives in Korea, and is an example of CSAs reaching scale. Hansalim is a producer initiated co-operative with consumers as an integral element linking the entire food system from farm to gut – farmer, processor, retail outlets and consumer; but has also high ethical and agricultural standards which the consumer responds to.

Hansalim has a turnover of about €300m annually, and is a particularly outstanding example of co-operation all the way from field to consumer. Hansalim guiding statement is *'farmers shoulder the responsibility of the health of the consumers while consumers shoulder the livelihoods of the farmers',* refers to the interconnection between farmer and consumer and sustainable diets. Farmers sell directly to Hansalim through contract farming and get back 76% from the sales price as sales do not go through any middlemen.

Farm sizes in Korea are small – one to one and a half hectares is normal, four hectares is large, however farmers in the Hansalim co-operative can make a reasonable income from full or part time farming. For example, a one hectare rice farm can produce 7,500 kg organic rice which gives an income of twenty thousand dollars annually.

History

In 1986, Hansalim was a humble grain store selling organic grain to consumers in Seoul, South Korea. Using the direct sales model and linking rural and urban areas Hansalim grew rapidly. Today it has developed into a federation of organic and non-pesticide farmers, processors and consumers with annual sales approaching €300 million arising from the sale of organic food at its shops and through internet sales. It has grown into the largest organic consumer cooperative in South Korea and serves over 1.2 million individual consumers. Consumers regularly visit the farms and the food that they get on the table "comes with a face"- that of the farmers who produce them. Hansalim only deal with their farmer members crops - South Korean, local, including non-pesticide and organically certified food. Their shops have no imports apart from sugar cane from Philippines (Chang 2013).

Tofu is a key product to encourage consumers to join the co-operative. Tofu is a staple food in Korean society, and Hansalim developed an excellent organic tofu which they sell at a considerable discount to other brands. Tofu acts as the 'consumer gateway product' and is one of the elements that contributed to Hansalim success.

	
Figure 19: Hansalim publicity images, consumers helping plant rice	Figure 20: Hanslim publicity images, consumers visiting rice farm

Like many creative and successful solutions, Hansalim came out of a crisis in the 1980's. The elements of this crisis according to researchers included a decline in local markets and rural communities caused by trade liberalisation policies; urbanisation and the environmental degradation resulting from conventional farming. (Chang 2013)

Hansalim was not immediately successful. In fact it failed in the early days, and was reset up. After several setbacks it then took off. One of the elements in the success was the first farmer producer cooperative for tofu. Farmers worked at night together making tofu after farm work during the day.

It was these prolonged conversations in the factory that helped build trust and mutual assistance and was the groundwork for the structure that works well today. Hansalim is not oriented around a leader or founder, which workers in the co-operative feel allow the organisation to grow and adapt, while staying true to the founder farmers' principles.

Visits and interviews 2017

This case study research involved context and background desk study, visiting a Hansalim Goesan Province farm/consumer hub (Chang and farmer 2017) a Hansalim factory (manager 2017) and a Hansalim consumer retail hub in Seoul. (Chou zhe 2017)

The Hansalim farm/consumer hub visited by this researcher comprised nine hundred consumer households and the main products were potatoes, cabbage, broccoli, pears, organic eggs. It included two farmers' communities for livestock - antibiotic free pork and chickens; and two farmers' communities for processed food such as sausage, hams, rice and other grains.

Figure 21: Hansalim rice packed in warehouse for distribution

Figure 22: Hansalim Consumer + Retailer representatives met April 2017

Prices are decided by farmers, consumer, staff annually in negotiation based on price of production, then not changed for the year (Chang and farmer 2017). Consumers are required to become members (thirty dollar fee and sensitisation/briefing) before they can buy Hansalim produce.

Consumer forums, part of the consumer co-operative taste and give opinions on new products and processed food. Consumers are regularly invited to visit farms to learn and if wished can help with farm work (weeding, harvesting etc).

Issues for Hansalim

Farmer age profile, like many countries is of growing concern. Hansalim farmers are getting older, consumers are getting younger. The retail manager is concerned how to make linkages between these two groups.

Subsidies are provided for all new farmers in local governments. This is however not considered sufficient to attract young farmers - usually inheriting farmers are in their forties, returning to their family farms from urban careers.

With over two hundred and eighty consumer households in this hub in Seoul (over one million consumers), there is also less opportunity for consumers to be involved with the co-operative. (Chang 2013)

Production balance

Another issue is that of success, it is hard to maintain production balance between farmers & consumers. Consumer demand is growing faster than farmer numbers - so sometimes there is not enough farm produce. The organisation guesstimates production based on consumer growth. In the case of surplus, as recently occurred with part of the potato crop, the hub promotes the surplus crop to consumers & remainder goes to processed food and institutional meals such as school lunches through a special catering centre which uses Hansalim produce as ingredients.

Chapter 3 – Research Applied

This chapter will reflect on and rationalise the lessons from case studies examined and identify relevance for farming and business in Ireland.

The farm to consumer examples detailed in Chapter 2 above were chosen for the following reasons:

- These examples show potential to scale
- Impressive turnover, and profitable farms
- Potential for these examples/models to work in the Irish agricultural context
- Concern for the socio/environmental context – sustainability/agroecology etc.

See Figure 22 below with the farm to consumer models identified as horizontal, lateral or vertical diversification.

- **Direct Selling model/** - **Diversification type**	**Farmers market expanded Online/mail order**	**Catering + retail diversification**	**Co-op farm to retail (incl CSA)**
Horizontal diversification **(extension of existing range)**	Farm Direct	10 Farmers Farm	Hansalim
Lateral diversification **new product-market-areas e.g agri-tourism**	Farm Direct Furano Melon Farm	Ishida Lamb Farm 10 Farmers Farm	Hansalim
Vertical diversification **On farm processing/ direct marketing**	Furano Melon Farm	Aveling Asparagus Farm Maeda Popcorn Farm 10 Farmers Farm	Hansalim

Figure 22: Farm Direct selling models by diversification type

Lessons learnt

Farmers markets

Despite the ubiquity of farmers in Ireland, consumers have not taken to farmers markets as in France or box schemes like the UK. The reason may be the current dominance of supermarkets. However, there are some indications this dominance may alter soon, if Commissioner Hogan's draft legislation to protect farm income from supermarket dominance is passed (Morrissey 2017). There are a few on-line options for specialist grocery shopping similar to the Farm Direct model in London. One example is The Organic Supermarket, with over one hundred suppliers of well-known Irish organic produce. There is also a retail shop, based in Blackrock, Dublin (Supermarket 2017).

On-line/mail order

There are numerous examples (found using internet search) of farms in Ireland selling produce on-line on a subscription or forward sales basis, however these are not categorised, nor is their economic, environmental and social impact assessed.

Lessons learnt from research and business experience

- Excellence of produce and service sells – sweetness of melons and delivery logistics (Terasaka 2016)
- Make one's own farm produce a niche – if lamb is common, find aspects (hill lamb, entirely grass finished etc) which appeal to the customer.

Catering and retail diversification

Consumers must respond to the produce, for example Aveling asparagus comes out best in taste tests. The Ten Farmers' farm grows the acknowledged best salads and vegetables, so part of their crops are reserved for the temple. Ishada lamb is chosen by the best Japanese restaurant chefs. The relationship is based on trust & performance, which makes client relationships calm and easy.

The Aveling example has barriers to entry with capital costs of £12,000 per hectare to establish and a three to four year wait for harvesting. The Ishada lamb farm had barriers to entry in that there was no market for lamb, it had to be created.

This form of diversification works for a niche product, however would it be applicable for more mainstream crops, for instance potatoes? Pick an early crop/niche crop – in the case of asparagus in the UK and lamb in Japan, there is no other luxury crop in competition.

Most farmers are price takers - they produce a commodity & sell through established wholesale channels. If a farmer wants to get into the direct sales/forward selling area, they must find a customer. Advice from farmers is to physically walk into stores and try restaurants until good produce is found. In simple terms:

- decide who you want to work with
- treat your customers well and find out what they want

Co-operative farm to retail Community Supported Agriculture

The crisis that led to the establishment of Hansalim had similar aspects to that faced by farmers globally and in Ireland. However, what are the particular attributes of Korean society and agriculture that made Hansalim and other co-operatives possible and successful to the extent of providing 30% of food value in the country?

The Irish co-operative movement was extremely successful, especially for dairy processing, but did not extend into retail, unlike the Korean situation. Could a similar system be set up outside South Korea? The advice of the Hansalim retail manager is: ‘Hansalim cannot be necessarily replicated in other social contexts. Make your own model to suit your own conditions in other countries’ (manager 2017). However, with policy and logistical support and consumer demand, a co-operative system adapted from the Hansalim model could be made work in the Irish context.

One possibility might be to identify a compelling tofu substitute in the local market, perhaps a dairy or bread product, and develop a farm to consumer co-operative based around this.

It is clear that not every farmer can engage in forward selling. It requires additional skill sets beyond crop production. Additionally not all farm produce is suitable for direct sales.

Sustainable diets

The next section will look at what consumers choose to buy and eat. According to the FAO, sustainable diets have an enormous impact on how farmers farm, and an impact on the environment on which we all depend.

> *“Sustainable diets are those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources”* (FAO, 2012)

In order to reshape our food systems towards sustainability for both farmer and consumer we need the following:

- Sustainable diets, which are key to both farming and consumer health. As Figure 20 below shows, there is considerable interaction between consumer food choices and agricultural systems.
- The importance of the position of the farmer in the food chain to be recognised.

Figure 23: Sustainable Diets interaction with Food + Farming systems

Large scale agri-business logistic and other systems however are currently not designed or established for new forms of sustainable regional agriculture like CSAs, local food systems, small cooperatives.

Farmer in the food chain – EU policy

The importance of the position of the farmer in the food chain was recognised in a Eurobarometer survey in October 2015, in which it was identified as one of the two highest priorities for citizens concerning the CAP. In the recent public consultation on the modernisation and simplification of the CAP, 96 per cent of respondents said that improving the position of farmers in the value chain should be an objective of the CAP. More recently, Commissioner Hogan has stated that the farmer's position in the food chain is the highest priority for CAP and consumers. (Eurobarometer 2015 + Task Force + Commissioner Hogan, 2017)

The Agricultural Markets Task Force Report 2016 (EU) enabling farm direct to consumer also gives an opportunity to set up farm to consumer sales channels, supported by consumer demand and a renegotiated CAP system.

However, as argued in the Introduction, in the final analysis, it is urgent that our food system changes in order to meet the twin challenges of climate change and world nutrition. As the 2016 FAO Food and Agriculture Report states:

'What is needed is a reorientation of agricultural and rural development policies that resets incentives and lowers the barriers to the transformation of food and agricultural systems. Particular attention should be given to supporting low-income smallholder farmers in strengthening their capacity to manage risks' P.xii (Nations. 2016).

Commissioner Hogan agrees in a recent statement reported in the Farmers Journal:

> '*Farming, food processing, retail and food service represent over 44m jobs in 14m businesses across the EU. This is one of our biggest employment sectors.*
>
> *Primary producers can only do their vital work if they receive a fair buck for their work…a well-functioning food supply chain is essential for our society…our consumers can only be guaranteed a reliable food supply if farmers are guaranteed a reliable income and a fair share of the pie.'* (Morrissey 2017)

The farm to consumer food systems examined in this research have potential to help with these challenges. Farmers will individually respond to market signals, if there is better income available from changing a farm system. What is needed now is consumer demand to be heard, and policy and agriculture education changes to support farmers in reworking the system to provide better incomes and a more sustainable environment.

The following chapters will conclude and give recommendations on how these changes can be brought about.

Chapter 4 – Conclusions

As discussed in the previous chapters, the findings from the research detailed above are as follows:

- Farm to consumer can be characterised into three models or sales channels:
    - Online and mail order
    - Diversification and value add on farm
    - Co-operative farm to consumer
- 'Farm to consumer' examples exist in every country visited and every farm type
- Disruptive, innovative and adapted technology now gives farmers opportunities to cooperate and organise, connect with customers and sell produce
- Consumers are not only receptive to 'farm to consumer' but are also seeking out closer relationships with farmers
- Excellent produce and service sells

Farm direct sales

The overall objectives of this research were to find examples of appropriate and economically viable ways to link farmers and consumers.

It has been established that farm to consumer sales using methods such as online selling; diversifying and value adding on the farm and a cooperation system with processors and retail outlets can provide the following outcomes:

- better income for farmers,
- farmers income potential no longer tied to the size of the farm
- greater employment in rural areas,
- improved environmental public goods (as consumers demand this).

All the examples could work in in Ireland, providing practical solutions to existing logistical problems for alternative food networks to challenge the existing supermarket-dominated system.

The following chapter will give recommendations on next steps. Specifically, assessing the current size and reach of the Irish farm to consumer market and publicising this information and exemplars. Suggested changes in agricultural education policy and supports for farmers could also change food production and purchasing options for farmers, rural dwellers and consumers.

Chapter 5 – Recommendations

Based on the conclusions in the chapter foregoing, the author has a number of recommendations. These are activities and other steps that may be taken to further develop and disseminate the results of the project.

Research and information dissemination

Further work and research needs to be carried out a comprehensive survey of existing farm to consumer businesses in Ireland, which was beyond the scope of this report. This work could be undertaken by Teagasc researchers and there is potential to have this financed through EU rural development funds.

- Survey and catalogue examples of Irish farmers selling directly farm products from websites and other methods to get a sense of the size of the online and alternative market.
- Publicise good examples to disseminate information about successful farm to consumer models and experiences
- Irish farmers have diverse knowledge already and this is diffused through extension practice and skill-share. Identify leaders in the farm to consumer field and use existing networks to share this new area of knowledge.
- Identify gaps in routes to markets for producers and suppliers, and,
- Identify points of access for consumers and members of civil society.

Institutional supports

In order to enable linking between small scale producers and consumers/processors/retail the following must be addressed:

- Financial supports such as:
    - 0% finance for innovative farm diversification projects (following the successful Japanese model illustrated by the Maeda popcorn farm)
    - Grant system, extending the existing TAMS grants, with 40% grants for necessary equipment etc (60% for young trained farmers)
- Education
    - Develop farm entrepreneur/ business streams for existing agricultural education courses. This could fit, for example, as an addition or amendment to the current Teagasc ‘Farm Business Planning and Management’ module.
    - Other colleges with agriculture related (UCD/LIT/AIT) etc. should be encouraged to do the same.
    - Teagasc ‘Options’ courses, already exist and are well thought out. These need to be run more often, better funded and linked with a mentor system and LEO to help develop farmers with diversification ideas.
    - Enterprise Ireland research clusters to develop appropriate and economically viable models for farmers and to improve their capacity to implement their own solutions.

Policy Supports

- DAFM to champion *farm to consumer* as an alternative to wholesaling Irish food on the global market
- Create guidelines that highlight the key stages in the process of establishing a regional or local food system.
- Ballymaloe, Tipperary Food Producers, Taste of Cork and other experienced local food network development people could advise DAFM on this.

Parties: Enterprise Ireland/Bord Bia/DAFM/Teagasc/ Private Sector

Finally, for consumers, the question is; given opportunities to purchase directly and conveniently (e.g online), from diversified farms; why would you not get more of your food direct from a farmer?

This is especially pertinent given ongoing food scandals and food safety scares (horsemeat scandal, UK supermarket chicken processing scandal etc) and obesity problems from eating over-processed food.

The question for farmers is, given the economic, environmental and social challenges to continue operating within the current system, why would farmers not try farm to consumer direct sales as an alternative?

References

Aveling, W. (2017). Aveling Asparagus Farm. A. Gerrard, Nuffield.

Barker, R. (2017). "Farm Direct website." Retrieved February 2017, from https://farm-direct.com.

Bia, B. (2007). Guide to selling Through Farmers markets Farm Shops and Box Schemes, Bord Bia.

Bia, B. (2017). "Kantar Worldpanel Ireland Market report." Bord Bia Vantage...online resource for small food businesses. Retrieved June 2017.

Bia, B. (2017). Sheep Trade + Prices. Dublin, Bord Bia.

Bosson, E. (2017). LaRuchequiditoui conversation. A. Gerrard.

Bulgin, N. (2017). "Beatbush Farm."

Chang, J. (2013) Hansalim Organic Cooperative – A Best Practice Model of Direct Sales between Farmers and Consumers.

Chang, x. and H. L. h. farmer (2017). Hansalim Interview with local hub farmer. IFOAM Masterclass. A. Gerrard.

Chou zhe, K. (2017). Interview with Kim Chou zhe - Hansalim retail manager. IFOAM Korea Masterclass. A. Gerrard.

Cole, A. a. (2017). "Abel and Cole Vegetable box scheme." Retrieved 7 June, 2017, from https://www.abelandcole.co.uk.

DAFM (2016). Annual Review and Outlook 2015/6. DAFM.

Department Agriculture, F. a. F. (2015). Statement Strategy 2015-2107. http://www.agriculture.gov.ie/media/migration/publications/2015/StatementStrategy201517230415.pdf. Dublin

Department of Arts, H. R., Rural and Gaeltacht Affairs (2017). Action Plan for Rural Development. H. R. Department of Arts, Rural and Gaeltacht Affairs. Dublin.

Dwyer, R. (2016). FARM INCOME REVIEW 2016. Dublin Irish Farmers Association.

Eel Farm, P. (2017). "https://www.palingkopen.nl/." Retrieved November 01, 2017, from https://www.palingkopen.nl/.

Eggfarm, R. (2017). "Rondeel Egg Farm." from http://www.rondeeleieren.nl/.

EPA (2017). "Ireland Environmental Indicators." Retrieved June 2017, 2017, from http://www.epa.ie/irelandsenvironment/environmentalindicators/.

Farm, C. C. (2017). "Cloughjordan Community Farm." Retrieved June, 2017, from http://www.cloughjordancommunityfarm.ie/

Farm, L. W. (2017). "Lavender Wind Farm, Whidbey Island." Retrieved November 2, 2017, from https://www.lavenderwind.com.

Farm, S. (2017). "Skipley Pick Fruit farm." from https://skipleyfarm.com.

Farmer, T. F. (2017). Ten Farmers Farm. A. Gerrard, Nuffield.

Farms, D. O. (2017). "Daylesford Organic Farms." Retrieved November 01, 2017, from https://daylesford.com/.

Furano (2017). Retrieved April 2017, from www.furano-melon.jp.

Goodman, D. and M. K. Goodman (2009). Alternative Food Networks. London UK, Elsevie

Goodwin, T. (2015). "Something interesting is happening."

Hatt, S., et al. (2016). "Towards sustainable food systems: the concept of agroecology and how it questions current research practices." Biotechnol. Agron. Soc. Environ. **20**((S1),): 215-224.

Hennessy, T. and B. Moran (2016). Teagasc National Farm Survey 2015 Results. R. E. D. P. Agricultural Economics and Farm Surveys Department. Athenry, Teagasc.

Institute, F. M. (2017). The Digitally Engaged Shopper, Food Marketing Institute.

Ishida (2016). "Ishida Lamb Farm." Retrieved May 2017, from http://www.ishida-sheep-farm.com/about.

Ishida (2017). Ishida Sheep Farm. Hokkaido Ishida sheep farm at Ashoro. **2017**.

LaRuchequiditoui (2017). "Food Assembly UK, French Hive system." Retrieved June 2017, 2017, from https://thefoodassembly.com.

Maeda, S. (2016). Visit to Maeda Popcorn Farm. A. Gerrard.

Manager, A. H. f. (2017). Visit to Asan Hans Salim factory for Soy bean milk / tofu & onion juice & pear juice. IFOAM Masterclass 2017. A. Gerrard.

Manager, G. H. F. F. (2016). Meeting with Golan Heights fruit farm manager. A. Gerrard.

Moran, C. (2016). Here's what the average farm family income was in 2015. Agriland. Dublin Agriland.

Morrissey, C. (2017). Supermarkets have 'super power' over farmers – Commissioner Phil Hogan. Irish Farmers Journal.

FSAI Safeguarding The Food Chain conference

Moya Kneafsey, L. V., Ulrich Schmutz,, et al. (2013). Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics. S. G. y. P. Fabien Santini, European Commission Joint Research Centre Institute for Prospective Technological Studies

Mulligan, J. (2017). Tesco shares dip as sales hit €1.2bn in Ireland. Irish Independent. Dublin

Nations., F. a. A. O. o. t. U. (2016). THE STATE OF FOOD AND AGRICULTURE CLIMATE CHANGE, AGRICULTURE AND FOOD SECURITY, FAO.

O'Brien, P., et al. (2014). Gauging the Farm Sector's Sensitivity to Immigration Reform via Changes in Labor Costs and Availability. A. F. B. Federation.

O'Donoghue, C., et al. (2017). The Local Impact of the Economic Recovery, Teagasc Rural Economy and Development Programme.

Rennison, J., et al. (2017) Amazon swoop on Whole Foods rattles supermarket shares. Financial Times

Riverford (2017, 2017). "Riverford Organic Farms." Retrieved 10 June, 2017, from https://www.riverford.co.uk.

Robert Barker (2017). Farm Direct - Farmer's market scaled. A. Gerrard.

Saltmarsh, N., et al. (2011). The impact of community supported agriculture: final report

Supermarket, O. (2017). "Organic Supermarket." Retrieved June 2017, from www.organicsupermarket.ie.

Teagasc (2011). Conserving Farmland Biodiversity Lessons learned & future prospects. Conserving Farmland Biodiversity Lessons learned & future prospects, Dublin Teagasc.

Teagasc (2014). Teagasc Diversification Options 159.

Teagasc (2017). "Teagasc Options Programme." Retrieved October, 2017, from https://www.teagasc.ie/rural-economy/rural-development/options-programme/about/.

Terasaka, M. (2016). Furano Melon Farm. Nuffield GFP. A. Gerrard.

Tesco (2017). "Lamb Prices." Retrieved Nov 3, 2017, from https://www.tesco.ie/groceries/product/browse/default.aspx?N=4294887818.

UK, C. (2017). "What is a CSA?". from https://communitysupportedagriculture.org.uk/what-is-csa/.

USDA (2016). Direct Farm Sales of Food Results from the 2015 Local Food Marketing Practices Survey. USDA.

Zander, K. (2008). Diversification and specialisation as development strategies in organic farms. 16th IFOAM Organic World Congress, Modena, Italy, June 16-20, 2008.

Plain English Compendium Summary

This report is targeted at farmers interested in reaching consumers directly and gaining a share of the margin between farm gate and consumer. This research is important in the Irish context as farmers struggle to maintain income and profitability.

This research aims to address these weaknesses in Irish agriculture by identifying alternative and more profitable farm income streams which provide farm-related employment opportunities for younger rural dwellers thus reducing the age profile and reduce farms' environmentally damaging impacts.

Aims/ Objectives:

- Develop model examples of farm to consumer sales for analysis (Chapter 1: Farm to consumer direct selling models)
- Select applicable and inspiring case studies which exemplify these models from the scholar's travels and research (Chapter 2: Research and Travel)
- Reflect on and rationalise the lessons from case studies examined and identify relevance for farming and business in Ireland (Chapter 3: Research applied)
- Reach conclusions from the research (Chapter 4: Conclusions)
- Develop recommendations for farms to consumer sales for implementation (Chapter 5: Recommendations)

Methods used

Nuffield scholarship part funded research travel around the world (Singapore, Indonesia, Japan, Israel, Netherlands, USA) followed by personal research travel to South Korea and UK. Worldwide similar key economic drivers for farm direct selling produce were identified: to access retail margin and reduce exposure to volatile prices.

Inspiring examples, models and practices applicable in the Irish farming context are covered in the following chapters.

The overall objective of this research is to find appropriate and economically viable ways to link local producers and consumers.

Findings:

- Irish farmers have diverse knowledge already existing through extension practice and skill-share.
- The next steps are to identify gaps in routes to markets for producers and suppliers, and identify points of access for consumers and civil society (hospitals, schools, colleges etc.).

Appendix 1: Brookfield Farm Enterprises

See figure below illustrating Brookfield farm products, initial farm enterprises, and progress. Existing market and products produced in 2011 were *wholesale grain sales* and *lamb sales*. The figure also illustrates new market strategy and diversification into new products – organic and direct sales.

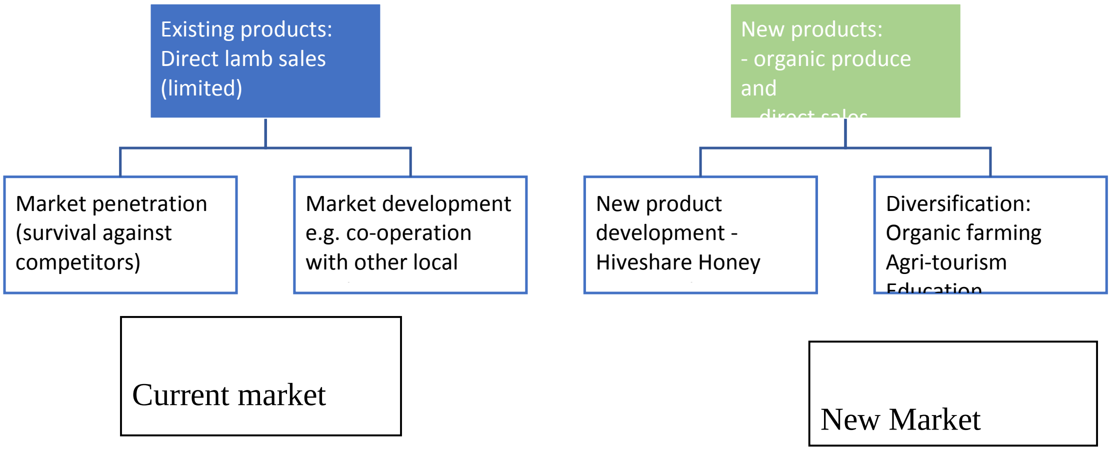

Figure 24: Ansoff's matrix aids planning current and new product development in a strategic manner.

By 2017 the existing products – lamb and grain crops have been retained, however the lamb enterprise is now converted to organic and will be expanded. The new products (organic produce and direct sales) are growing. New market products - organic farming, agri-tourism and education are being developed.

Background research undertaken and value

I think the key to rural sustainability is to have a range of farm types and diversification models.

Brookfield Farm could make a good demonstration model for farm diversification and creating direct selling models to develop opportunities in the local area and nationally. Building from this research, family farms, using diversification and entrepreneurial skills along with policy and institutional supports could achieve agricultural and environmental sustainability and through cooperation, a long term goal of a rural renaissance.

Appendix 2: CSA sample agreement 1

Skipley Farm CSA Membership -2017

SKIPLEY ROAD, SNOHOMISH

We are an organic fruit farm & nursery-

with the mission to inspire the growing of food by creating a resource of knowledge and materials for the village to succeed in this endeavor.

We provide the food and resources vital for a healthy today

Retainer-style:

Prepayment assures the crop is sold and kick-starts the season.

A Retainer account is created and is applied to purchases of goods or services at the farm, farm markets, or landscaping services at your site. Hundreds of varieties of fruit, as you or we pick, with vegetables, garden starts, nursery crops, animal products, growing supplies, classes, consultation creating your garden, or delivery too

Names____

Address____

City____Zip__________

Phone(s)____

Email____

Prepayment in the winter months is encouraged-5% discount before March 21st, 8% <Jan.1st

Value of Retainer:

Tiny Share $200________

Family Share $1200________/$600 deposit________

Small Share $500________

Village Share $3500________/$1750 deposit________

Regular Share $900________

Community Builder $7500________/$3750 deposit________

Deposits of ½ accepted only on Family, Village and Community shares. Balance paid by July 1st.

Mail completed form & payment in full/deposit to Skipley Farm 7228 Skipley Rd. Snohomish, 98290; In exchange for my share of the 2017 Skipley Farm CSA, I agree to pay $___________ (total share amount).

Sign Here ____

Thank you for your Community Supported Agriculture-"CSA" membership

Contact: Gil Schieber 206-679-6576, Gil@Skipleyfarm.com and

www.skipleyfarm.com

Crops grown vary, especially vegetables. We concentrate our efforts on our fruit! June: Raspberry, Currants, Serviceberry, Gooseberry, Strawberry, Arugula Beet Greens Broccoli Cabbage Baby Carrots Cauliflower Fava Beans Garlic Scapes Lettuce Mustard Greens Radish Snap Peas Spinach Rhubarb **July:june+Blackberry, Apples, Aronia, Blueberries** Green Onions New Potatoes Beets Carrots Herbs-Basil Parsley Sage Thyme Chives, Marjoram Scallions Garlic Yellow Wax/Green Beans Summer Squash Chard Kale Bulb Fennel Cilantro Snap Peas Lettuce **August:july+ more apples, Grapes, Plums, Elderberry, Autumn Olive,** Tomatoes Peppers Shallots Tomatillos **September: august+ Main crop apples, many more grapes, pear** July/August+ Winter Squash Leeks Broccoli Raab Tatsoi and Bok Choi Celery Sweet Corn **October:Apples to sample-100 varieties.** -THIS IS THE TIME TO YOU-PICK as we get swamped with maturing crops! **Through winter`till March:Apples!, jams, cider, dried apples**,Potatoes, Daikon, Sunchokes, Brussel Sprouts, Onions, Beets, Carrots, Parsnips, hardy greens.

CSA sample agreement 2

https://www.farmfreshtoyou.com/product/detail/2

MIXED FRUIT AND VEGGIE $26 - $58 Weekly

Our most popular service, this box offers a well-rounded variety of fresh, organic fruit and vegetables. It's a great choice for families and people who like fresh fruit and enjoy cooking a few times a week.

Appendix 3 Beatbush Farm

Lamb prices per kg

LAMB

Mince	£8.99
Leg	£11.29
Rolled Loin	£22.49
Boned Leg	£12.99
Chump End	£7.99
Liver	£10.99
Half Shoulder	£8.99
Neck Fillet	£17.29
Boned Shoulder	£10.99
Loin Chop	£17.29
Kidneys	£12.99
Shoulder	£8.99
Rack	£22.59
Chump Chop	£17.29
Neck Chops	£8.99
Breast-on-Bone	£4.49
Half Leg	£11.29