

Rural Economy
& Development
Programme



Teagasc Organic Farm Walk
on the farm of
Kenneth Keavney,
Greenearth Organic Farm,
Caherlea, Coraundulla, Co Galway
Wednesday 30th September 2015
www.teagasc.ie/organics





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Introduction

Welcome to today's farm walk

The topics that we are be discussing at today's farm walk are:

- Polytunnel growing
- Green manures
- Fieldscale vegetable production
- Organic weed control
- Nature on organic farms
- Undersowing crop experiment
- Routes to market
- Organic certification
- DAFM organic sector supports

Farming Background

In 2005, Kenneth Keavey and his wife Jenny returned from working abroad with the idea of setting up their own organic - horticulture business. The business started by growing vegetables on a small plot on the family farm. After a 2 year in-conversion period which began in 2004, full organic status was achieved in 2006. By then, there was 0.25 acre of organic fieldscale vegetables which increased to 1 acre and 100m² of polytunnels in 2007.

The production area has continued to grow with 5 acres of fieldscale vegetables and 3 polytunnels added in 2009. Another 3 acres and 2 more tunnels were added in 2010. Today, approx. 18 acres are used for fieldscale vegetable and polytunnel production, including 2.5 acres which is under green manure (red clover).



Acearge for all crop types

Table 1- Crop Acerages

Crop type	Area (acerage)
Fieldscale Veg	13 acres
Polytunnels	1 acre (6 tunnels)
Fruit Area/orchard	0.25 acre
Green Manure area	2.5 acres
Other areas	5.5 acres (including 1 acre buildings, 2.75 acres habitat, 1.8 acres woodland.)
TOTAL	22.3 acres

General Rotation Design

*Table 2 – Rotation Design **

Polytunnels	Fieldscale
Tomatoes	Green Manure
Salad/lettuce	Potatoes
Scallions	Carrots/parsnip/celeriac (umbelliferae)
Celery	Brassicas
Cucumbers	Alliums/other

* Kenneth endeavours to stick with the above rotation. There is no exact blueprint and the rotation can vary depending on various factors, especially market demand. Tomatoes and cucumbers are never gorwn in the same space for two years in a row.



List of Fieldscale Vegetables, Agerage and Varieties

Table 3 - Fieldscale Vegetable Types

Vegetable	Agerage	Varieties
Field 1		
Red Clover	2.5 acres	Red Clover (Merriot) Perennial Ryegrass
Field 2		
Alliums	2.5 acres	Krypton (Sept-Oct Harvest) Belton (Oct-Dec) Kenton (Dec-Apr) Triton (small,late leeks for Apr – June harvest) Caraflex
Field 3		
Brassicas Carrots	3.0 Acres (only 1.5 acres currently under cultivation)	Kale Red Green Black Napoli (early)
Perpetual spinach Beetroot		Boro F1 and Pablo F1

Table 3 - Fieldscale Vegetable Types

Vegetable	Acerage	Varieties
Field 4		
Brassicas	4.0 acres	Famossa Cantessa Paressa Wintessa Duncan Calabrese Partnenon and Monaco Romanesco Sprouting Brocoli Swede, Magres
Spring cabbage	0.5 acres (cleared at present)	Duncan F1
Field 5		
Parsnip	0.5 acres	Javelin F1 (main crop) Polar (early)
Carrot	1.5 acres	
Beetroot/salad/lettuce Celeriac	1.0 acres	
Potato	1.5 acres	Orla

Table 4 - Fruit Tree Acreage and Varieties

Apple trees sown in 2014	
C.S Cavan Sugarcane	Dessert x 3 trees
B.B Bloody Butcher	Dual x 2
K.C. - Keegan's Crab	Dual x 1
G.B. - Gibbon's Russet	Dessert x 3
R.N.P.- Ross Non Pareil	Dessert x 3
E. - Elstar	Dessert x 4
D. - Discovery	Dessert x 2
K. - Katja	Dessert x 3

Table 5 - Polytunnel Crops

Vegetable type	Varieties
Tomatoes	Sakura F1
Cucumber	Styx F1
Celery	Victoria
Lettuce	Analena Brighton Lunix Sadawi Hardy
Wild Rocket	----
Flat Parsley	----

Weed Control Techniques on the Farm

- Mechanical – steerage-hoe, intra-rotovator, hydraulic disc-weeder, “magic weeder”.
- Flame-weeder
- Hand-weeding
- Swing-hoes

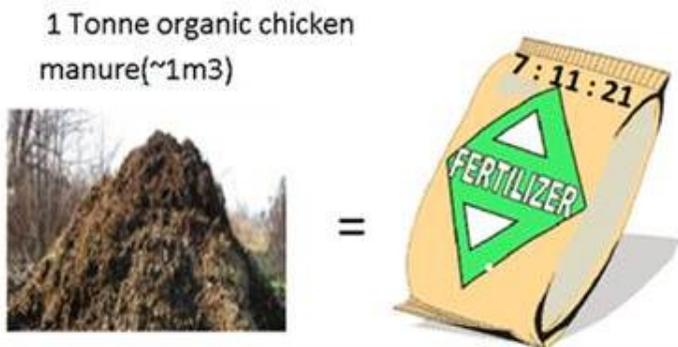
Nutrients for Crop Growth on the Farm

- Compost from waste vegetables from the farm.
- Chicken manure from certified organic chicken houses, 90t used in 2014. Also 90t was used in 2015.
- Commercial products: Law's high N, Activit, Greenvale - for N.P.K., Vinasse foliar feed - for N.P.K., seaweed foliar feed, solubor - for Boron, epsoms salts-for Magnesium.
- Nitrogen (N) from red clover green manure and from clover under sown at brassicas.

Organic Chicken Manure

Fig 1 – The value of Organic Chicken Manure

1 tonne organic chicken manure (~1m³) = 1 bag of 7:11:21 fertilizer





Pest Control Techniques on the Farm

Fleece for cabbage root fly, carrot fly, caterpillars and pigeons, Pyrethrum insecticide polytunnel use only.

Serenade fungicide for blight and rusts, bluestone and washing soda for blight.

Description of the Business

Labour

Number of full time employees	6
Number of part time employees	6
Number of Job bridge interns	1

Routes to Market

Greeneath Organics have four main market outlets:

A home delivery ‘box scheme’ service to 300 home delivery customers in Galway, Mayo, Clare and Limerick every week and an increasing proportion of national deliveries. Go to www.greeneathorganics.ie to choose one of the 10 pre packed boxes that are available to purchase online.

The retail Sector:Greeneath Organics supply 13 supermarkets with fully bar-coded pre-packed produce. Also, Greeneath Organics supply many of Galway’s best restaurants and other independent retailers.

Farmers’ Market: Moycullen Market,Co Galway every Friday 12pm to 7pm (Summer) and 12pm to 6pm (Winter).

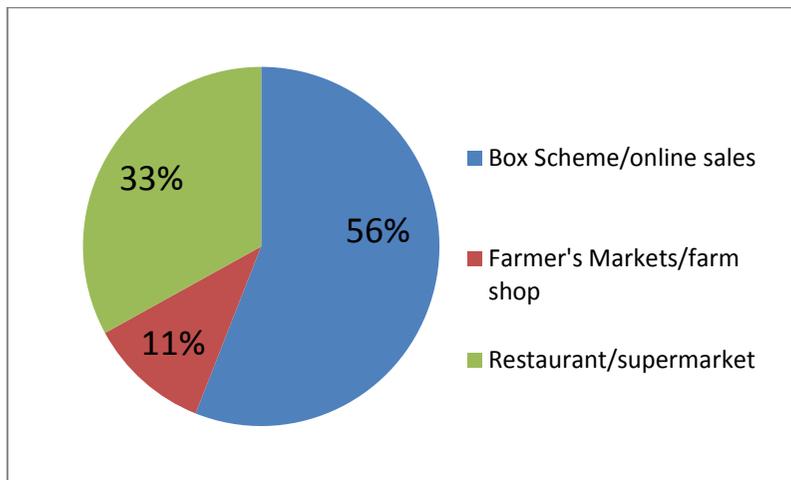
On-Farm Shop: There is a farm shop on the premises every Wednesday 2pm to 7pm.

Market Challenges Addressed

During 2010, Greenearth Organics saw a 21% fall in sales and were close to becoming an unviable business. A variety of actions were taken to turn the business around. These included: working on getting fresher, quality produce to customers, improving on customer service and supplying supermarkets. As a result, sales grew by 25% in 2011 and 47% in 2012. Sales for 2015 are currently predicted to increase 25% compared to 2014.

Market Value Sales Breakdown

Fig 2 – Market Sales Breakdown



Turnover of Greenearth Organics

Turnover from sales of produce grown, from the farm alone, in 2014 was in excess of €220, 000.



Awards

Shortlisted: ‘Best Direct Organic Retailer’, (Bord Bia National Organic Awards 2014).

Finalist: ‘JFC/Teagasc/Farmers’ Journal,’ (Entrepreneur Awards 2014).

Overall winner: SCCUL 2013 (Enterprise and Innovation Award, chosen out of over 200 companies).

Category winner agriculture and food: (SCCUL 2013).

Received : ‘One to watch award’ (SCCUL 2012).

Key Business Milestones

- Expanding the farm from 1 acre to nearly 8 acres and adding three further polytunnels in 2007.
- The hiring of a farm-manager to take over the day-to-day operation and running of the farm and the expansion of the farm to encompass all the available farm land in 2012.
- The design and implementation of a software system to track and organise all of the key information relating to our home delivery customers.
- The launch of a new second generation website in March 2013 which had an advanced online ordering system and allowed customers the option to customise the content of their boxes. It also allowed for the flexibility to charge different delivery rates and in so doing allowed the business to expand nationally.



Items for which organic grant-aid from DAFM has been granted:

- New refrigeration equipment (2014)
- Insulation and fit-out of a new van with refrigeration equipment (2014)
- Specialised weeding machine (2012)
- Thermal label printer (2012)
- 8 cabbage root fly fleeces (2011)
- Sprayer (2011)

Main Challenges for Greenearth Organics

Growing Mixed Vegetables: Growing mixed vegetables in the West of Ireland is a risk and challenge. Greenearth Organics minimises their risk by growing crops that thrive in wet, dull conditions. Their chances of success are improved by indoor production where weather conditions can be controlled. Weed and disease control can be a significant cost.

Having the available cash flow to address these issues is a requirement for the farm.

Labour: Because there is so much variety involved in the job, having employees who are willing to adapt is very important. Having the required number of people when you need them also presents a challenge, especially when the weather is good and there is pressure to get a lot done.

Sales do not happen by accident!

Kenneth says that unless you are operating in a “trust” market, i.e. selling at a market stall where customers know and trust you, then having a proper approach to marketing is critical.



Thought needs to be put into how to market and sell what is grown. This is a job in itself and requires time, thought and constant development.

Main Future Plans for Greenerth Organics

1. Increase production on the farm by 20% from the existing land area mainly by growing more productive crops including winter crops and polytunnel crops.
2. Add new crops to replace imports, especially during the off-season.
3. Develop further the green manure rotation to reduce farm inputs and to help reduce diseases and weed burden in the long-term.
4. Plant trees with bordering farms, to provide natural habitats for wild life.
5. Build a new 1000m² polytunnel during 2016.
6. Put in place collaborative agreements with other Irish farmers to supply the business with organic crops, not produced on the farm. Develop a contract of supply with established organic growers, giving them a guaranteed market and giving the business access to local fresh good quality organic produce.
7. Increase sales in the Galway/Mayo area by 15%-20%.
8. Build a custom designed packing facility on the farm by June 2016. This will handle all vegetable processing from the farm. Currently the business is operating out of two packing sheds and needs extra facilities to ensure efficient handling of produce, including a dedicated packing area.
9. Increase the sales three-fold on the Limerick run.

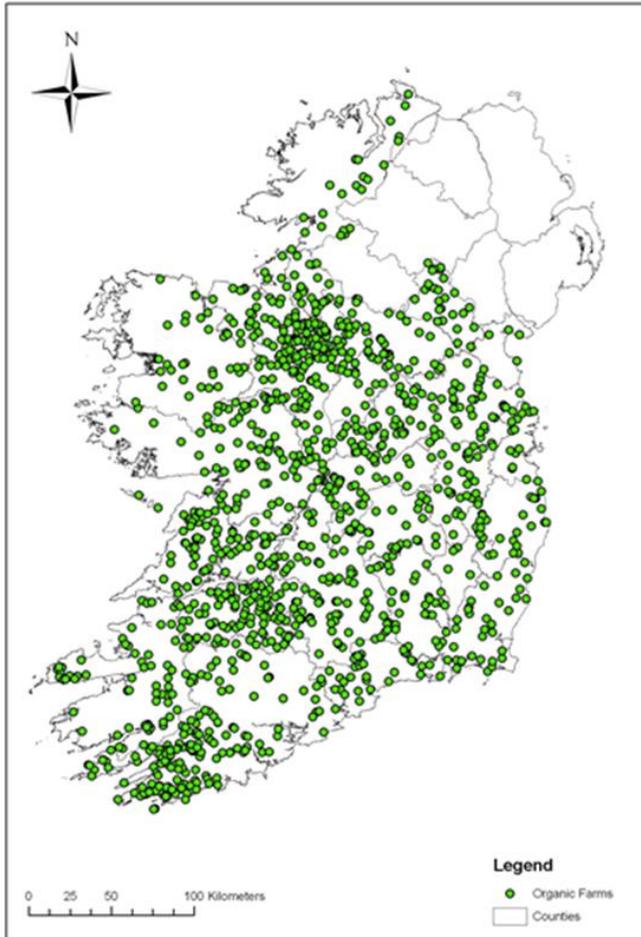
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10. Start the first franchise in Dublin city. All packing to be completed at Galway headquarters. Produce to be shipped to franchisee. Franchisee handles customers. Expected turnover from this venture after two years is €200,000.
 11. Constant addition of other products to the online shop and box scheme offering health related products and other dried goods etc.

Organic Farming in Ireland in 2012

- 58,556 hectares of land (1.3% of UAA) Av 38 ha. 1,346 producers.
- Mainly livestock production
Cattle – total herds 981, average size = 42 animals. No. suckler cows = 13,600.
- No. dairy farms = 27 with 1,539 cows.
- Sheep – 410 producers, average 80 breeding ewes
Pigs – 60 producers, Poultry ~160 producers (*approx.*).
- Cereals – total area 2,312 ha, 156 growers, with 62 growers of > than 10 ha.
- Horticulture ~300 growers approx., ~420 ha, with ~20 > 6 ha (*approx.*).
- Size of Irish Organic Market = €105m (Source: Bord Bia, August 2015).

The Distribution of Organic Farmers in Ireland 2010

Fig 3 – Organic Farmers in Ireland



* Figure 3 Reference - Apple and Cullinan ,J (2012)



Organic Capital Investment Scheme

New On Farm scheme

A standard rate of aid of 40% on investments up to a ceiling of €80,000 (ie. can generate a grant of €32,000 from an investment of €80,000). For **qualifying** young organic farmers who meet the specific eligibility criteria, the standard rate of aid is 60% on investments up to a ceiling of €80,000.

How to apply and closing date: Online applications only through www.agfood.ie facility. Closing date is towards end October 2015.

Full details and T&C:

<http://www.agriculture.gov.ie/farmingsectors/organicfarming/organicsscheme/organiccapitalinvestmentschemeocis/>

Queries: DAFM Organic Unit, Johnstown Castle: 053 9163400.

New Organic Processing Scheme

Grant aid of up to 40% on €1.25 million (ie. can generate a grant of €500,000 for an investment of €1.25 million) in facilities for the processing, preparation, grading, packing and storage of organic products with minimum level of investment in excess of €3,000.



How to apply: Copies of the terms and conditions of the new Grant Scheme, together with application forms, are available from the Organic Farming Unit, Department of Agriculture, Food and the Marine, Johnstown Castle, Wexford. Email: organicunit@agriculture.gov.ie

More details:

<http://www.agriculture.gov.ie/press/pressreleases/2015/august/title,84203,en.html>

Queries: DAFM Organic Unit, Johnstown Castle: 053-91634

Steps to successful organic conversion

1. Get acquainted with the adjustments required by attending farm walk(s), talking to other organic farmers and or contacting a local advisor.
2. Choose an Organic Certification Body (OCB) and get an information pack.
3. Prepare a conversion plan and submit to OCB.
4. All entrants to the Organic Farming Scheme (OFS) must enter for an initial five year plus term.
5. Please consult DAFM website: www.agriculture.gov.ie for updates on a new Organic Farming Scheme.
6. A 25 hour 'Introduction to Organic Production' course. has to be completed by all new applicants before acceptance into the Organic Farming Scheme.



Organic Demonstration Farm Walks 2015 - 2016

A nationwide series of national organic farming open days will take place from Summer 2015 to Spring 2016.

Teagasc, the Department of Agriculture, Food and the Marine and organic organisations invite all farmers and members of the public to see organic farming in practice and to meet and speak with the producers and sector's experts.

AUGUST

Tue, 25 August | 7pm
Mark Gillanders, Ballinagall,
Monaghan
Beef & Cereals

SEPTEMBER

Tue, 1 September | 2pm
Eugene Kirrane, Cullane,
Claremorris, Co. Mayo
Suckler to Beef

Fri, 11 September | 6pm
George Stanley, Castlefleming,
Errill, Portlaoise, Co. Laois
Sheep & Cereals

Wed, 16 September | 6pm
Oliver Kelly, Ballinroan,
Kiltegan, Co. Wicklow
Fieldscale Vegetables & Sheep

Wed, 30 September | 2pm
Kenneth Keavey, Greenearth
Organic Farm, Caherlea,
Carrandulla, Co. Galway
Horticulture & Direct Sales

OCTOBER

Tue, 20 October | 2pm
John Curran, Moyreghan,
Fordstown, Navan, Co. Meath
Beef & Sheep

NOVEMBER

Wed, 4 November | 2pm
Joe Menton, Menton's Organic
Farm, Banagher, Co. Offaly
**Poultry, Pigs, Cattle, Sheep &
Direct Sales**

Wed, 11 November | 2pm
Grennan's Organic Farm,
Lismoyney, Clara, Co. Offaly
Dairying

JANUARY 2016

Wed, 20 January 2016 | 2pm
Ken Gill, Ballydermot House,
Clonbullogue, Co. Offaly
Suckler to Beef

MARCH 2016

Thur, 10 March 2016 | 11am
John Purcell, Ross, Golden,
Co. Tipperary
Beef

APRIL 2016

Tue, 26 April 2016 | 2pm
Rory Magorrian, Kildinan
Farm, Ballyhooley, Co. Cork.
**Horticulture, Salads, Poultry
& Direct Sales**

MAY 2016

Tue, 3 May 2016 | 6pm
Stuart & Jean Kingston,
Upper Forrest Farm,
Farranes, Co. Cork
Cereals, Potatoes & Beef





Organic Certification in Ireland

A major factor that distinguishes organic farming from other approaches to sustainable farming is the existence of internationally acknowledged standards and certification procedures. The standards for organic production within the European Union are defined and enshrined in law by Council Regulation EC 834/2007 as amended.

In Ireland the Department of Agriculture, Food and the Marine is the competent authority (i.e. - the Department's Organic Unit is based at Johnstown Castle Estate Wexford) for regulating the organic sector and ensuring that the obligations and requirements of Council Regulation (EC) No. 834/2007 as amended and adhered to.

The Organic Unit of the Department of Agriculture, Food and the Marine have designated Official Certification Bodies whose role is to certify organic producers, farmers and processors through and inspection process of each individual's unit or farm. Further information can be sourced from these organic certification bodies:

IOFGA (Irish Organic Farmers and Growers Association)

16A InishCarraig, Golden Island, Athlone

Tel: 090 6433680 www.iofga.org

Organic Trust

2 Vernon Avenue, Clontarf, Dublin 3

Tel: 01 8530271 www.organic.trust.ie



Additional Organic certification bodies:

Demeter

40/11 Woodhall Rd, Edinburgh EH13 ODU Scotland
.UK. 00 44 131 4781201. www.demeter.net

Institute of Marketecology (IMO),

4 Lough Owel Village, Tullaghan, Mullingar, Co
Westmeath
Mob: (087) 2517291

Global Trust Certificate Ltd.

3rd floor, Block 3, Quayside Business Park, Mill Street,
Dundalk, Co Louth.
Phone no: (042) 9320912 Fax no: (042) 9386864
email info@gtcert.com

BDA Certification- Organic and Demeter

The Painswick Inn Project, Gloucester, Gloucestershire,
GLS 1QS, United Kingdom.
Phone: 0044 1453 766 296 Fax: 00441453 759501



Information on Organic Farming

Website: www.teagasc.ie/organics for further information.

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