



# **Cusgarne Organics Local Money Flows**

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**Plugging The Leaks**

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## **Cusgarne Organics Local Money Flows**

### **Plugging the Leaks and the New Economics Foundation – A Note on Methodology**

This project was carried out as a pilot under the New Economics Foundation’s “Plugging the Leaks” programme, funded by the Countryside Agency. Plugging the Leaks is all about finding out how money leaks out of communities and creating strategies to keep money within communities for longer. The purpose of the Plugging The Leaks programme is to show that local economies can be aided not just by pumping money in, but keeping it there and not letting it ‘leak’ out. As part of this programme of work, the New Economics Foundation is currently piloting tools that allow communities to measure *for themselves* the effect of various initiatives such as local food schemes and community enterprises on their communities’ local money flows.

Participation and local involvement is at the heart of the Plugging the Leaks programme – therefore the methodology used here is designed to primarily be accessible and balance the needs for simplicity and accuracy. The methodology used is based on more traditional input-output multiplier analysis – however, it has been adapted to create NEF’s new ‘Local Economy Multiplier’ – which is designed to be simple, easy and fun! However, it is important to stress that this method is new, currently at pilot stage and still evolving. NEF, therefore, welcomes all comments on the method used in this pilot study.

The knowledge gained through this and subsequent pilots will provide the basis for a series of workbooks that will outline how to undertake the various calculations involved in estimating the local economy multiplier effect of an initiative.

For up-to-date information on the Plugging the Leaks programme please contact Caroline Hill at NEF, Cinnamon House, 6-8 Cole Street, London, SE1 4YH or e-mail her at [caroline.hill@neweconomics.org](mailto:caroline.hill@neweconomics.org)

## **Cusgarne Organics Local Money Flows**

### **Why measure the money flows of organic box scheme?**

Our aim was to show the benefit of buying local to the whole community at large, and to show how we all have it within our grasp to make a difference. We felt that by measuring the effect of the box scheme, we would be able to produce accurate data that actually quantified the effect of the box scheme for the local community.

### **Cusgarne Organics**

In order to obtain sufficient and accurate data, a large element of co-operation was needed from the business that was to be the subject of the pilot. A huge amount of thanks must go to Greg and Theresa Pascoe of Cusgarne, and their staff, for assisting in the data collection, plus the many suppliers that were also questioned during the project.

### **What was the plan?**

The intention was to follow the trail of the farm box scheme income, to monitor exactly where all the money was spent, how much of it was 'local' expenditure, and then to track that money to the next layer of spending. Local was defined as being within a 15 mile radius of Cusgarne Farm. Whilst there were changes along the way and not all the information we needed was easily come by, enough good data was collected in order to make accurate estimations to fill in the gaps. From here we could show the impact to the local economy compared to, say, spending at supermarkets. It's not a vast leap from there to get a good idea of what a difference could be made to the local economy if everybody could be persuaded to make just a slight change to their spending patterns.

## Cusgarne Organics Local Money Flows

### How did we do it?

The analysis used in this study is based upon an economic measurement tool called the ‘multiplier’. The following table illustrates the workings of the multiplier.

<i>80% of money stays locally</i>		<i>20% of money stays locally</i>	
Enters	Remains	Enters	Remains
100	80	100	20
80	64	20	4
64	51	4	1
51	41	1	.....
41	33		
33	.....		
<b>Total: 500</b>		<b>Total: 125</b>	

The starting point in each situation is that £100 enters the local economy. If 80% of each £1 spent stays in the local economy, the total amount of spending that that £100 will generate is about £500 - a multiplier of **5** (500 divided by 100). If only 20% of each £1 spent stays in the local economy, the total spending is only £125. This gives a multiplier of only **1.25** (125 divided by 100).

## **Cusgarne Organics Local Money Flows**

### **Methodology**

In order to work out Cusgarne Organics local multiplier effect, it was necessary to calculate the direct, indirect and induced effects of the box scheme on the local economy.

#### **1. Direct Effect**

The direct effect of Cusgarne Organics contribution to the local economy is the total amount of money coming into the scheme, including any grants or subsidies, i.e. the turnover of the business.

#### **2. Indirect Effect**

The indirect effect is the next stage of local expenditure, i.e. how much of the money coming into Cusgarne is then re-spent on local salaries, profits to local owners and payments to local suppliers, and how much the local suppliers then also re-spend locally. An estimate was then used to calculate the subsequent rounds of local spending created.

#### **3. Induced Effect**

The induced effect is the amount of local spending generated from the salaries of Cusgarne staff and the local spending out of Cusgarne's profits. As for the indirect effect, an estimate was then used to calculate the subsequent rounds of local spending created.

#### **4. The Multiplier**

An estimate of the total value to the local economy from each pound spent at Cusgarne Organics, i.e. the local economy multiplier, was then calculated by taking the total of the direct, indirect and induced effects; and dividing the result by the direct effect.

## Cusgarne Organics Local Money Flows

### 1. The Direct Effect (i.e. money into Cusgarne)

The calculations have been based on the last full financial figures available for Cusgarne Organics, Year ending 31 March 2000. These show an annual income of:

**£157,000**

### 2. The Indirect Effect

Local Staff Wages and Profits	41,660	<b>41,660</b>
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Local Suppliers:

Legal & Professional	1,100
Motor repairs and maintenance	3,638
Admin	1,740
Repairs and renewals	10,400
Contract Haulage	28,500
Feed, seed, manure	6,250
Sundries	4,000
	<b>55,628</b>

Supplier local spending	34,000
Estimate of subsequent spending	52,780
	<b>86,780</b>

(Figures taken from attached schedule of Supplier Local Spending).

**Indirect Effect total** **£184,068**

**Indirect Multiplier (i.e. indirect total/direct total)** **= 1.172**

## Cusgarne Organics Local Money Flows

### Note on Estimate of Subsequent Spending

The estimate of subsequent spending was calculated by assuming that if Cusgarne's suppliers spent, on average, 61% of their money in other local businesses, then the local businesses receiving this money would also spend on average 61% of their money in other local businesses and so on.

61% of £34,000 equals £20,740  
61% of £20,740 equals £12,651  
61% of £12,651 equals £7,717  
61% of £7,717 equals £4,708  
61% of £4,708 equals £2,872  
61% of £2,872 equals £1,752  
and so on.

### A helpful shortcut....

Rather than having to work out the above, the estimate of subsequent spending can be calculated by using the following formula:

$$M = \frac{1}{1-X} - 1$$

Where X is the proportion of turnover that Cusgarne's suppliers spent locally, i.e. 61% in this case.

So if X was 0.61, M would equal 1.56.

And if M was 1.56, you could multiply 1.56 by £55,628 to work out the subsequent rounds plus the initial local spending by Cusgarne's suppliers, i.e. £86,780.

## Cusgarne Organics Local Money Flows

### 3. Induced Effect.

Annual wages to Cusgarne Staff and Owners	<b>£41,660</b>
Staff Wages and Profits Mid-Feb to Mid-March	<b>£3,878.50</b>
Local expenditure Mid-Feb to Mid-March	<b>£2,378.68</b>

Figures taken from the attached Employee Expenditure Profile Summary.

Local expenditure is the sum of rows 1, 2, 5, 6, 7, plus 16% of row 3.

Row 3 is the supermarket expenditure, this figure was discounted to only 16% of its original value because only 16% or less of supermarket turnover translates into local wages, purchases and services (including business rates). See section on supermarkets for further explanation.

Percentage of salaries spent locally = 61%

Therefore, one can assume that 61% of annual wages to Cusgarne staff and owners is spent locally, i.e. 61% of £41,660 = **£25,412.60**

It was also assumed that if Cusgarne staff spent, on average, 61% of their wages locally, then the local people receiving this money would also spend on average 61% of their wages locally and so on. As for the indirect effect, this figure can be easily calculated using the following formula:

$$M = \frac{1}{1-X} - 1$$

Where X is the proportion of salary that Cusgarne staff spent locally, i.e. 61% in this case.

So if X was 0.61, M would equal 1.56.

And if M was 1.56, you could multiply 1.56 by £41,660 to work out the total amount of local spending generated from wages and profits, i.e. £64,989.60.

<b>Induced Effect total</b>	<b>£64,989.60</b>
<b>Induced Multiplier (i.e. induced total/direct total)</b>	<b>= 0.414</b>

## Cusgarne Organics Local Money Flows

### 4. The Multiplier

The Multiplier, or the total value to the local economy of each pound spent with Cusgarne Organics, is the total of all three effects.

The Direct effect is £157,000

The Indirect effect £184,068

The Induced Effect £ 64,989.60

Giving a total of **£406,057.60**

Divided by the turnover of £157,000

Gives a multiplier figure of **2.59**

**This means that for every £1 spent at Cusgarne Organics £2.59 is generated for the local economy.**



## Cusgarne Organics Local Money Flows

<b>Employees Expenditure Mid Feb – Mid March</b>	<b>A.</b>	<b>B.</b>	<b>C.</b>	<b>D.</b>	<b>E.</b>	<b>Total</b>
<b>1. Local items, bought locally</b>	<b>6.47</b>	<b>150.00</b>	<b>20.00</b>	<b>20.00</b>	<b>40.00</b>	<b>236.47</b>
<b>2. Non-local items, bought locally</b>	<b>30.24</b>	<b>160.00</b>	<b>188.00</b>	<b>168.00</b>	<b>280.00</b>	<b>826.24</b>
<b>3. Supermarket</b>	<b>77.31</b>	<b>160.00</b>	<b>100.00</b>	<b>120.00</b>	<b>240.00</b>	<b>697.31</b>
<b>4. Mortgage or rent, services, insurance etc Non local</b>	<b>145.56</b>	<b>100.00</b>	<b>40.00</b>	<b>50.00</b>	<b>350.00</b>	<b>685.56</b>
<b>5. Local rent and insurance Company</b>		<b>100.00</b>	<b>160.00</b>	<b>180.00</b>		<b>440.00</b>
<b>6. Council tax</b>	<b>25.88</b>	<b>80.00</b>	<b>36.00</b>	<b>44.00</b>	<b>70.00</b>	<b>255.88</b>
<b>7. Other local expenditure</b>	<b>48.52</b>	<b>300.00</b>	<b>80.00</b>	<b>40.00</b>	<b>40.00</b>	<b>508.52</b>
<b>8. Other non local expenditure</b>	<b>48.52</b>	<b>100.00</b>			<b>80.00</b>	<b>228.52</b>
<b>Totals</b>	<b>382.50</b>	<b>1,150.00</b>	<b>624.00</b>	<b>622.00</b>	<b>1,100.00</b>	<b>3,878.50</b>

## **Cusgarne Organics Local Money Flows**

### **Notes re Employees expenditure Profile**

1. Items and services, including such things as swimming and tennis clubs, language lessons, Guitar and piano lessons
2. Includes car running costs, insurance and taxes, and local garage services
3. All supermarket purchases
4. Includes electricity, phone, etc, insurance, mortgage and rent to non local organisations
5. Rent to local landlords, and local insurance companies inc. Cornish Mutual
6. Council Tax – deemed local expenditure
7. Includes entertainment, clothing, and in this case, local purchases through newspaper ads and charity shops  
E.g. Fridge, bath, freezer, food mixer and so on.
8. Includes such items as holidays, money spent when out of county, mail order, etc.

## **Cusgarne Organics Local Money Flows**

### **Cusgarne Organics – Supplier Local Spending**

#### **Feed, Seed and Manure**

Total of £6,250.00

Local spend £1,000

#### **Contract Haulage**

Total of £28,500.00

Local spend £20,000

#### **Sundries**

Total of £4,000.00

Local spend £2,000

#### **Repairs and renewals**

Total of £10,400.00

Local spend £7,000

#### **Admin plus Legal and Professional**

Total of £2,840

Local spend £2,000

#### **Motor repairs and maintenance**

Total of £3,638.00

Local spend £2,000

**Total local spend £34,000**

## Cusgarne Organics Local Money Flows

### The Supermarkets

In order to set in context the significance of Cusgarne Organics having a multiplier of 2.59, we decided to compare this result with the local economy effects of supermarket spending. We would like to thank both Tesco and Asda for their help with this study.

- Tesco confirmed that the national wages figure (from their accounts) of around 7% of turnover did not vary much by location, while local purchases were no more than 'about 1%' of turnover.
- Asda were keen to provide information on their local purchasing strategies. Since opening the store in Penryn, Asda have become more committed to the use of local products where possible. Despite being a part of the giant Wal-Mart conglomerate, the process is growing and they now source 80% of all fresh fish locally (farmed salmon making up the majority of the remainder), where 4 years ago it all came from Grimsby. Fresh vegetable and other products are sourced through Gabriels, an independent locally based local sourcing company, pasties and local bakery products from W C Rowe, Kelly's Ice Cream, Helsett Farm speciality ice creams and Trevarthens' hams and smoked/cured meats are joined on the shelves by Murray King Images post- and greetings cards and Cornish Spring water. Recently Asda negotiated a regional contract for Warrens' pasties across the whole of the South of England, which it is hoped may go national. As a result of this local success more than a million pounds was spent on local produce last year. A Local Sourcing Manager has been appointed at national level, and further growth is expected.

Despite this progress at Asda, the vast majority of the turnover at the till at both supermarkets goes straight out of the County. Based on generous estimates of local salaries being 8% of turnover, local rates being 6% of turnover and local suppliers receiving 2% of turnover, it is possible to estimate the local multiplier effects of supermarket spending.

Our results (explained overleaf) show that the local multiplier of supermarket spending is **1.4**

**This means that for every £1 spent at a supermarket £1.40 is generated for the local economy, compared to £2.59 at Cusgarne Organics.**

## **Cusgarne Organics Local Money Flows**

### **Methodology for Supermarket Estimate:**

Imagine that £100 is spent at a supermarket:

The direct multiplier will be £100 and the direct multiplier 1.

The indirect local multiplier will be 0.28, based on:

Local Salaries £8

Local Suppliers £8 (includes suppliers and rates)

Estimate of supplier local spending and subsequent spending £12.48 (based on 61% being re-spent – the same figure as for Cusgarne suppliers)

Indirect Effect Total £28.48

Indirect Multiplier (i.e. indirect total/direct total) = 0.28

The induced local multiplier will be 0.10, based on:

Local Salaries £8

Estimate of salaries spent locally = 61% (the same figure as for Cusgarne staff)

Induced Effect Total £12.48 (taking into account all subsequent rounds)

Induced Multiplier (i.e. induced total/direct total) = 0.12

Total Local Multiplier =  $1 + 0.28 + 0.12 = 1.4$

## Cusgarne Organics Local Money Flows

### How do we make the difference?

The figures demonstrate that the net effect of spending at Cusgarne Organics to the local economy is nearly double the effect of the same amount spent with out-of-county and national businesses.

The population of Cornwall is approaching half a million people, all spending money every week. Added to that figure there are millions of tourists visiting the county each year, and thousands of businesses, large, small and in between, from County and District Councils, the Ministry of Defence right down to the corner shop. A conservative estimate would be that as much as £100 million is spent by residents, businesses, and tourists in Cornwall, every week, on average (figures based on data from Cornwall County Council's website).

Consider this: if every person, tourist or business could switch just one percent of their current spending to local items or services, that would put £1million extra directly into the local economy every week. That's £52 million each year, more than Objective One (£48 million per year) and it is every year, not for a finite period like Objective One, and every single pound directly into the local economy, directly into the pockets of the people working and living in Cornwall. And that is just the direct effect. Using the multiplier we have calculated, 2.59, the total impact could be as much as £135 million pounds each year.

We can all make a difference. The Pascoes of Cusgarne already do more than most to support and promote the local economy, but having discussed the above point with them, I went back a couple of weeks later to find out that Teresa had taken it to heart and searched out a local organic cheese producer and has made her switch, of more than one percent.

So whether it is a matter of local organic cheese, or tourists buying real Cornish fudge to take back, or our shops and attractions not selling millions of biscuits made in Scotland (transport, environmental, and 'food miles' are even further problems we can help through buying local) or any one of a thousand or more choices we make the answer is a categorical **YES**, we can make the difference.