DORSET COUNTY FARMS ECONOMIC IMPACT ASSESSMENT

February 2018

Anne Gray, 6th February 2018

Policy and Research Dorset County Council County Hall Dorchester Dorset DT1 1XJ

Tel 01305 224575

a.e.gray@dorsetcc.gov.uk

CONTENTS

	Page
Introduction	1
Assumptions and further information	2
Findings:	3
Summary of impacts	4

DORSET COUNTY FARMS ECONOMIC IMPACT REPORT: FEBRUARY 2018

Introduction

This impact analysis is modelled using the Dorset AMORE Economic Impact Tool¹. The contents and findings of the report do not necessarily reflect the views of Dorset County Council.

The model is based on a set of economic and social accounts that allows analysis of the structure of and relationships within the economy. Economic impact analysis using this model takes into account not only the direct impact of a change on a particular industry, but also the indirect effects which occur through changes in purchases by that industry from domestic suppliers, and also the induced effects arising from changes in household incomes and consumption expenditures. The sum of these changes results in a net effect across the whole Dorset LEP area economy, (Bournemouth, Dorset and Poole), that can be expressed in terms of change in demand for GVA² and full-time equivalent worker numbers, (including the self-employed).

The model also provides a sectoral analysis allowing identification of those sectors that are most affected by a particular change or shock to the economy. The model allows for leakage as firms make purchases of goods and services from outside the Dorset economy.

The Dorset County Farms estate comprises 46 farms covering a total of 2,600 across the county. The first farm was acquired in 1911 and the whole estate is now managed by the Coast & Countryside team. The aims of the estate are to:

- Provide a 'gateway' into agriculture for persons to farm on their own account whilst ensuring a financial return to the county council – small starter units allow a point of entry whilst career progression can be achieved through larger 'promotion' units;
- Provide the county council with a direct interest in the land management of the county, promoting the integration of good environmental and farming practices as well as best practice and innovation in estate management and agriculture;
- Sustain rural communities whilst providing opportunities for greater public access and understanding of agriculture and the countryside.

The farms are predominantly livestock with both dairy farms (about 60%) and stock farms (40%, sheep and beef).

Modelling of the value to the local economy of the County Farms is based on two aspects:

- A. Employment directly with the County Farms;
- B. Supply chain activities.

¹ Advanced Modelling of Regional Economies 2017 update, designed for Dorset County Council by Dr Stephen Brand

² GVA for an industry is its gross output at basic prices, less purchases of goods and services, less net spending taxes (ECON|I).

Assumptions and further information

A business survey of the County Farms was carried out by Dorset County Council in order to assess employment and purchasing behaviour. 13% of tenants responded to the survey. However, this is only six out of the 46 farms so the results should be treated with caution.

The findings have been grossed up to represent the estate and assess its economic impact.

A number of other issues also need to be considered to give a net, rather than a gross, impact.

- a) Deadweight: would any of the outputs occur without the presence of the County Farms? If the original farms had not been acquired as part of the County Estate, they could potentially have continued as private farms or, in some cases, sites may have been suitable for residential purposes. Disposal of any of the County Farms Estate could mean that they become private farms, perhaps amalgamated by larger neighbours. This would mean the loss of beneficial starter units allowing budding farmers to get a foot on the ladder. In addition, economies of scale could lead to net job losses.
- **b) Displacement:** what proportion of the outputs is accounted for by reduced outputs elsewhere in the area? When the farms were acquired, there was unlikely to be displacement from other organisations as the county units were likely to support the same net number of jobs or even more as smaller units may have offered more job opportunities.
- c) Leakage: is a proportion of the economic outputs arising likely to leak outside the area?

This may occur, for example,

- when firms outside the area benefit from the impact:
 - an allowance for geographical leakage outside Dorset is built into the AMORE
 economic impact analysis model this assessment is focused more on the 'local'
 economy rather than solely Dorset, but there may be some further leakage
 where suppliers are based beyond the local area. No further adjustment has
 been made as the location of suppliers is not known;
- or if commuters live outside the area and may therefore spend a proportion of their income outside the area having an impact there instead:
 - Due to the rural location of the County Farms and the nature of their tenancy, the number of commuters is likely to be negligible, therefore no adjustment has been made for the impact of leakage through commuting.
- **d) Substitution:** has an affected organisation substituted one activity for another and, for example, redeployed staff from one function to another rather than created new posts? The substitution effect is not applicable.

FINDINGS

This assessment of economic impact was assessed through employment numbers and purchasing spend based on information acquired through the County Farms business survey.

Employment

There is an estimated total of 115 full time equivalent jobs (FTEs) on the farms, based on the following assumptions:

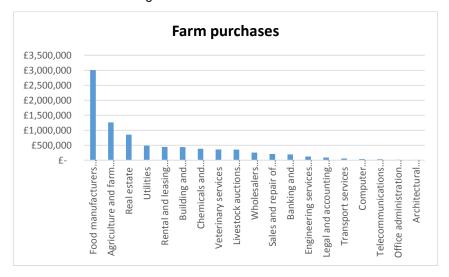
- One part-time post is treated as 0.5 FTE;
- Based on median hours data for agricultural workers³, it is assumed that 1,809.6 hours of casual worker time is equivalent to one FTE.

Purchasing

Additional employment is supported in the supply chain with purchase of various items to run the farm businesses. With turnover estimated as £13.3 million for the County Farms, purchases total £8.6 million. Note: the location of these suppliers is not known and some of these benefits may therefore be felt outside the local area.

Half of purchases were in just two sectors:

- Agriculture and farm related services (contractors, cattle purchases, etc);
- Food manufacturers including animal feeds.



The impact of employment directly at the farms and sectoral purchases is increased demand for the goods and services of local businesses resulting in greater output. This adds to the value of the local economy (Gross Value Added or GVA).

Impact on GVA

The contribution of the County Farms to the local economy is shown in the table below. The farms spend around £8.6 million in the local economy. This spend contributes a total of about £6.9 million in GVA to the economy (ie after deductions for purchases and adjustments for indirect taxes etc)⁴.

The multiplier effect shows that for every £1 million of GVA injected into the Dorset economy arising from spend via the County Farms, £1.53 million of demand is generated within the wider economy (including the initial £1 million).

³ Annual Survey of Hours and Earnings 2017 (prov), Office for National Statistics, table 4.10a, UK data only for sector level data on hours

⁴ For reference, total GVA in the Bournemouth, Dorset and Poole area is about £16.76 billion in current prices (Office for National Statistics, 2015). Agriculture contributes about £121 million to this.

The table below also shows the intermediary effects that take place within the economy as a result of the initial injection.

The <u>direct effect</u> consists of the initial change plus the impact on the first round of suppliers. The direct effect therefore would be £5.4 million⁵.

The <u>indirect effect</u> is that experienced by other suppliers as they accommodate the change in purchases in other sectors.

The <u>income effect</u> is the change in demand arising through changes in household expenditure on local goods and services. These occur through changes in net employment and self-employment income caused by the changes in demand between local suppliers.

Initial	Direct suppliers	Indirect suppliers	Income effects	TOTAL (GVA)
£m	£m	£m	£m	£m
4.5	0.9	0.3	1.2	6.9
				Multiplier: 1.53

Impact on full time equivalent jobs

In terms of jobs, with about 180 full time equivalent posts (FTEs) directly with the farms and immediate suppliers, a further 79 are supported in the economy through supply chain activities⁶ and household spending. 215 of the jobs are seen as a direct effect.

Initial	Direct suppliers	Indirect suppliers	Income effects	TOTAL (FTEs)
FTEs	FTEs	FTEs	FTEs	FTEs
180	35	11	34	259
				Multiplier: 1.44

SUMMARY OF IMPACTS

The presence of the County Farms with their associated spend in the economy, supports about 260 FTE jobs in total and contributes £6.9 million GVA to the economy.

Looking at the **direct impact** alone, 215 FTEs are supported with a contribution of £5.4 million GVA.

Increased demand for local	Initial	Direct	Indirect	Income	TOTAL	DIRECT
goods and services per		suppliers	suppliers	effects		
annum via County Farms:						
GVA pa £m	4.5	0.9	0.3	1.2	6.9	5.4
Full time equivalent jobs	180	35	11	34	259	215

Anne Gray
Policy and Research, Dorset County Council
Tel 01305 224575
<u>a.e.gray@dorsetcc.gov.uk</u>
6th February 2018

⁶ Including immediate suppliers (first round effects)

⁵ Note: figures may not sum due to rounding.