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20 August 2007

### **Royal Society of Edinburgh Inquiry into The Future of Scotland's Hill and Island Areas**

This paper will comment only on issues relating directly to the livestock sector within the hill and island areas.

The farming activities of the hill and island areas of Scotland are dominated by livestock production. Production from these regions makes up a significant part of the foundation upon which Scotland's red meat industry is founded. They provide not only slaughter stock, but also store and breeding livestock used by producers in other parts of Scotland, and England and Wales, for rearing and breeding to produce meat. Any diminution of livestock rearing in these areas reduces the potential to supply high quality meat products for the UK and European market. Significant volumes of meat and livestock are exported from Scotland to the rest of the UK and Europe and Scotland has a significantly positive balance of trade in red meat. Reduction in livestock production in the Hill and Island areas of Scotland would therefore have far reaching impacts not only for the local farming community but also on the wider population including food processors, hauliers, other support services and Scotland's balance of trade.

#### ***What are the drivers for change?***

Changes in livestock numbers in those regions hill and island communities have been well documented. For example total cattle and sheep numbers in the North West region, that is Highland region and the western and northern Isles, have declined by 5% and 20% respectively since 2000. The number of occupiers of farmland in the North West region has also declined, by 6%, and the number of workers, of any capacity, i.e. including occupiers, spouses and employed labour whether full time, part time or casual, has declined by 3%. In 2006 less than half the occupiers in the North West region were under 55 years of age.

These changes have resulted from a number challenges, or drivers, the main of which are:

- the demographic profile of the farming community and its impact on available labour;
- profitability levels among livestock enterprises;
- the decoupling of support payments from production; and

- the legislative burden.

### *Demographic profile*

In 2006 less than half the occupiers in the North West region were under 55 years of age. An aging workforce can have significant impacts on the number of livestock kept and the way in which they are managed. For example, an aging farmer may be less willing to move livestock over considerable distances and thus reduce the number of livestock he has and concentrate them on a smaller area of land closer to his home, with consequent environmental impacts.

In some areas the issue of gender balance is a concern. The aging demographic may be a consequence of the number of employment opportunities for young people of either gender and the rates of pay on offer.

To reverse the impact of this driver, mechanisms to encourage young new entrants to agricultural activities are needed. These mechanisms could be in a wide range of areas from skills training through business start up funds to mechanisms to facilitate retirement of older farmers.

### *Profitability levels among livestock enterprises*

Profitability levels among the main livestock enterprises offer little or no return on capital employed in, and labour expended on, them. The results of a survey carried out by Quality Meat Scotland into the profitability of the 2004 and 2005 sheep and cattle production cycles are shown below. They clearly illustrate the vulnerable nature of agricultural activity in the hill and island areas, and the encouragement that decoupling support payments gives to destocking.

	Hill sheep production	Hill cattle production
	£ per head net margin excluding support payments	
2004 livestock cycle	(-) 15	(-) 188
2005 livestock cycle	(-) 18	(-) 226

Source: Cattle and Sheep enterprise profitability in Scotland, QMS, 2006

Many of the drivers of low profitability among livestock enterprises are not unique to the hills and islands of Scotland, for example low market returns, input cost inflation, and lack of capital for re-investment. However, they are aggravated in the hills and islands by a range of circumstances from distance from market to the constraints of land capability and geography. Changes to, and lack of, agricultural support infrastructure, e.g. agricultural suppliers, veterinary services, markets, processing facilities etc. add to the challenge of cost reduction or product value enhancement.

Nevertheless, there are many actions and measures that could offer some opportunities for increasing livestock enterprise returns. These include:

- Support for livestock genetic improvement;
- training in livestock selection, both of incoming breeding stock and selection of stock for sale;
- support for small scale food processing facilities;
- support for local and national marketing initiatives;
- support for resource sharing and co-operative action; and
- support for transport, particularly island travel.

### *Decoupling of support payments from production*

The potential for decoupling of support payments to impact through the agricultural sector infrastructure is considerable. The previous paragraphs highlighted enterprise profitability levels. However, consequences of reduced stock numbers will multiply through the production and marketing chain including closure of veterinary services, fewer agricultural supply businesses and markets.

Changing livestock numbers will impact on the environment through land abandonment, changing grazing densities and changes to the balance between large and small ruminants. Impacts on grassland biodiversity through a reduction in cattle grazing on the Western Isles are well documented. The impacts of under grazing on the environment can be as great as the consequences of over grazing, for example bracken encroachment, blocking of water courses, increased fire risk etc.

### *The legislative burden*

Complying with an increasing legislative burden can add cost, irrespective of location, but among already economically vulnerable businesses this can be the trigger that drives the decision to stop the business. While in most cases there are justified reasons for legislation, ways of mitigating the cost should be considered. Examples include:

- Potential changes to sheep identification and traceability;
- driver's hours in relation to livestock transport etc.; and
- pollution control and disposal of wastes.

### *What are the main sources of income generation?*

Whilst this paper concentrates on livestock as an income generator it must be recognised that many agricultural businesses in the hill and island areas are part-time and, as a consequence, are equally, or more dependent, on other sources of income to sustain their lifestyle. For example although the census data records over 10,000 occupiers of farm land in the North West, only 20% of them consider themselves to be full-time, and the number of full time occupiers has declined by 17% since 2000. Thus, the inter-relationship between employment in the service sector, tourism and other commercial activities and agricultural decisions cannot be ignored.

Equally, it must be recognised that for many of those employed full time in agricultural activity the returns from farming may be insufficient to support and maintain a household. Many of those working full time in agriculture may have partners, spouses or family members bringing income into the household from other sources. The presence of these supporting incomes can play a significant part in economic decisions made by the farming community.

The decoupling of support payments removing the need to keep animals may be particularly advantageous to those in part-time employment, both on or off the farm, as it increases their flexibility, but may be detrimental to the overall red meat industry economy of Scotland. In this regard, while primary producers income and welfare is maintained the same cannot be said for others in the supply chain.

***What are the implications of climate change on agriculture?***

We would not choose to comment on the production system implications of climate change on farming practices in the hill and island areas of Scotland. Nevertheless, there will be consequences for feeding regimes, livestock accommodation and husbandry practices from changes to rainfall, sunshine hours, temperatures and wind speeds and direction.

However, it is possible to make reference to some of the potential economic consequences. It is already apparent during 2007 that the impact of weather changes and climate change mitigation policies, for example renewable energy use, has the potential to have a major impact on the availability and cost of animal feedstuffs with European grain yields badly affected by weather and prices increasing considerably. Raw material prices and indeed primary product prices could face much greater volatility in the future as global trade patterns may shift. Policies to reduce carbon emissions through a carbon tax regime have potential to impact on prices of carbon based inputs, for example fertilisers and power. Such occurrences would inevitable impact on enterprise profitability's.

Climate change may equally offer market and promotional opportunities for hill and island livestock products. The debate has already commenced on the use and abuse of carbon footprint as a marketing tool. Extensive hill and island production systems have the potential to yield low carbon footprint product although the transport of raw materials and final product could add considerably to the carbon footprint of hill and island produce on retail shelves. However, considerably more research is need on the subject before conclusions can be drawn on this aspect of climate change.

Yours sincerely



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