Limestone Country Project: Economic Research

Upland limestone grassland areas in the Yorkshire Dales have traditionally been maintained through mixed livestock farming systems, including hardy upland cattle breeds. The recent move to specialised sheep enterprises, modern commercial cattle breeds and increased stocking rates has had a detrimental impact on the conservation status of these areas. The Limestone Country Project aimed to encourage farmers to reintroduce mixed farming using hardy cattle breeds to restore this grassland habitat to a favourable condition. The project ran for six years from 2002–2008. It was led by a partnership of nature conservation and farming interests including Natural England, the Yorkshire Dales National Park Authority, the National Trust, European Union LIFE fund, Grazing Animals Project, Rare Breeds Survival Trust, National Beef Association and the area’s farmers.

The project provided grants to 17 farmers to convert farms to mixed grazing systems involving traditional hardy cattle breeds. This paid for the increased cost to farmers, including the purchase of cattle.

The scheme used only native hardy upland cattle breeds that were adapted to the project area and appropriate for the habitat and land types. The project funded a programme of research and CCRI, with Askham Bryan College, were commissioned to identify the economic impact of the project on participating farm businesses.

The economic research gathered information from four sources: farm accounts data from 15 project farms, Yorkshire Farm Business Survey, a literature review and interviews with key experts. Three farm models based on selected farms in the project were developed to estimate changes in gross margins for individual farm enterprises under two different scenarios.

These scenarios reflected different sheep and cattle numbers and anticipated premium prices achieved for the hardy cattle. The results of the enterprise gross margins were fed into a partial budget analysis, which considered the capital invested in the new livestock and depreciation and interest on any capital items required to accommodate the cattle, such as buildings and water supply and any additional grazing land or forage required to maintain stocking densities.
As drivers other than market prices might affect the economics of introducing hardy breeds to hill and upland farms, a review of the short- to medium-term policy implications for beef enterprises and hill and upland farms was undertaken. This was achieved through a review of the literature and augmented with telephone interviews with key personnel.

The results showed that it was possible to maintain, or even increase, farm gross margins by switching from sheep to hardy cattle production, but only if premium prices were achieved and financial support was provided for initial livestock purchases and infrastructure costs. However, a large proportion of these hill farm incomes are based on the single payment, which is set to decrease. Furthermore, market forces over the short, medium and long term are, on their own, unlikely to create favourable conditions for the widespread adoption of hardy beef systems in the hills and uplands.

**CONCLUSION**

The research concluded that as hardy cattle are able to sustain body condition on rough bio diverse pasture, farmers are more willing to graze them on this type of land. If the environmental impact of hardy breeds is proven in the project, then grazing systems with hardy breeds in areas like this would be a suitable objective for agri-environment schemes and CAP Pillar II funding.

An appropriate package would support hardy cattle grazing systems with tailored agri-environment management plans based on site conditions and sward structure. Such a package would also help farmers to plan and develop linked marketing strategies to capture a higher return from a differentiated product, on the basis of biodiversity benefits. Thus the research makes the case for continued financial support for such systems and recommends further research on the environmental and management benefits of grazing with hardy breeds compared to commercial breeds.