Project number: 5396
Funding source: Teagasc & Dairy Levy
Date: August, 2010
Project dates: Jan 2005 – Dec 2009

Participative on-farm research for the Border Midland West (BMW) region

Key external stakeholders:

BMW region dairy farmers; local milk processors – Lakeland Dairies, Town of Monaghan, Donegal and Connacht Gold; AI companies; consultancy agencies

Practical implications for stakeholders:

Highest profitability was achieved with high EBI animals, higher milk protein percentage, a more fertile herd with a compact breeding period, lower concentrate supplementation and higher stocking rates on the grazing platform.

Main results:

- Average milk production was 5,976 kg/cow with concentrate supplementation of 1,148 kg/cow at a stocking rate 2.32 cows/ha and a calving date of March 8th
- Reproductive performance was highly variable on the study farms with the average breeding period length of 18 weeks, a 42-day pregnancy rate of 53% (range 28 to 85%) and calving interval of 401 days (372 to 432 days)
- The economic performance data collected shows average profit of €1,051 per hectare (and ranging from €71 to €2,111). Average gross output and common costs in cent per litre (c/l) for the study farms were 27.2 and 15.9, respectfully while average common profit was 11.4 c/l. The range in profitability within the study farms over the three year project was considerable as average common costs ranged from 10.4 to 23.2 c/l and average common profit from 3.5 to 18.2 c/l.

Opportunity / Benefit:

The range in profitability within the study farms over the three year project was considerable and this variability in both productive and economic performance indicates that high profit dairy production can be achieved within the BMW region.

Collaborating Institutions:

UCD, Lakeland Dairies, Donegal Co-operative Society, Town of Monaghan Co-operative Society, Connacht Gold Co-operative Society

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1. Project background:

The phased abolition of EU milk quotas is now well advanced and will require Irish dairy farmers to revisit the very fundamentals of their production systems to remain competitive on world markets. In future years, more variable farm gate milk prices will necessitate the development of lower cost production systems so that Irish farmers can remain profitable in low milk price years. While grazed grass will continue to be the cheapest feed available on most dairy farms, its utilization is reduced in the West, Northwest and Northeast regions of Ireland due to such limitations as shorter grass-growing season, impeded land drainage, topography, high rainfall and northerly aspect. The objectives of this project were to observe the variation in farm financial performance on 16 commercial dairy farms in the BMW region.

2. Questions addressed by the project:

What is the variation in farm financial performance on 16 commercial dairy farms in the BMW region?

3. The experimental studies:

Data recording was conducted on 16 commercial dairy farms during 2005, 2006 and 2007 to assess the animal and grassland management practices in the region. Each farm in the study completed detailed financial accounts using the Teagasc profit monitor during the years 2005, 2006 and 2007 and this data was merged to a biological database on farm biological performance (including details on milk production, stocking density, feed supplementation, herd genetics and fertility).

4. Main results:

- Average milk production was 5,976 kg/cow with concentrate supplementation of 1,148 kg/cow at a stocking rate 2.32 cows/ha and a calving date of March 8th
- Reproductive performance was highly variable on the study farms with the average breeding period length of 18 weeks, a 42-day pregnancy rate of 53% (range 28 to 85%) and calving interval of 401 days (372 to 432 days).
- The economic performance data collected shows average profit of €1,051 per hectare (and ranging from €71 to €2,111). Average gross output and common costs in cent per litre (c/l) for the study farms were 27.2 and 15.9, respectively, while average common profit was 11.4 c/l. The range in profitability within the study farms over the three year project was considerable as average common costs ranged from 10.4 to 23.2 c/l and average common profit from 3.5 to 18.2 c/l.

5. Opportunity/Benefit:

- The variability in both productive and economic performance indicates that high profit dairy production can be achieved within the region and large potential exists to substantially increase profitability on the dairy farms analysed.
- Higher profitability was achieved through higher EBI animals, a higher milk protein percentage, a more fertile and compact breeding period, reduced concentrate supplementation and increased stocking rates.

6. Dissemination:

Three open day events were held during the project (April 6th, 2006; April 19th, 2007 and March 5th 2009) to provide local dairy farmers and industry representatives in the region with locally generated research information and system development technology. At these events research technologies to increase farm

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profitability post milk quotas by instigating management practices that grow and utilise higher quantities of superior quality grass and achieve high animal performance over a long grazing season were highlighted.
(http://www.agresearch.teagasc.ie/moorepark/Publications/pdfs/MPK%20Dairy%20Levy%20Update%20Series%2010.pdf)

In addition to open day events, individual discussion groups frequently visited the experiment during the project. Topics covered at these events by research and advisory staff included grassland management best practice advice, animal breeding and health recommendations and economic implications of research results.

Main publications:

B. Horan 2006. In: National Dairy Conference, Belturbet, Co. Cavan, 17- Nov-2006

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