Opportunities and challenges of EU sheep production

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Land Economy, Environment and Society Research Group

First reflection workshop on the future of the sheep sector in the EU
DG Agri, Brussels
12th November 2015
Structure

• Changes to breeding flock
• Prices and Delivery for Slaughter
• Consumption
• Trade
• Economics – Example from Scotland
• CAP – Example from Scotland
• Opportunities
Sheep in decline?

Breeding Flock (December) '000 head

Source: Eurostat

1999-2014
Ireland -42%
Greece 1%
Spain -39%
France -26%
Italy -25%
Portugal -34%
Romania 32%
UK -28%
EU Sheepmeat - UK and Spain still dominate

Source of EU Slaughtered Sheep

Source: Eurostat
Sheep decline

• France has seen long term declines due to lower costs of production from importers (UK, NZ, Ireland, Spain)
• Decline not really surprising given (partial) decoupling of
  – (a) LFA support
  – (b) Direct support
• Economic downturn impacted on demand
  – e.g. tighter budgets and unemployment in Spain
• Despite significant restructuring Spain & UK still major players
• What will the future bring?
  – Decline bottomed out?
  – Demand increasing in EU as economies gradually recover?
  – Regionalisation of CAP direct support may ease pressure
  – Signs of increase in e.g. England
EU Meat Producer Price
(2000 EUR/t carcase weight equivalent)

Note: wholesale prices for poultry meat and producer prices for other meats
Source: Gira GMC Dec 12
Two tier market in EU
Scotland – reduction in small sheep (headage) not reflected in slaughter weights
Heavy Lamb Price

Source: EU Commission
- Declining real expenditure on lamb whilst other meats growing
- Particularly noticeable from economic downturn

Note: wholesale prices for poultrymeat and producer prices for other meats
Source: Gira GMC Dec 12
Sheepmeat consumption & predictions

Sheepmeat Consumption
kg / capita

Source: OECD

Australia
China
Iran
Kazakhstan
EU28
World
Russia
Saudi Arabia
Turkey
Sheepmeat Consumption, 1999-2013

Source: Gira Meat Club
Sheepmeat Exporters

Sheepmeat Exports (tonnes)

Source: FAOSTAT

EU (exc. Intra trade)  Australia  New Zealand  UK  Spain

Sheepmeat Exports


EU (exc. Intra trade)  Australia  New Zealand  UK  Spain

Sheepmeat Exports


EU (exc. Intra trade)  Australia  New Zealand  UK  Spain

Sheepmeat Exports


EU (exc. Intra trade)  Australia  New Zealand  UK  Spain
Opportunities - China

• "I would never have imagined just how strongly the sheep meat market has grown in these short three years."

• “There is a huge gap between supply and demand, at least 100 billion yuan, and I expect that to grow due to a lack of large-scale sheep meat producers”
Opportunities – Aussie perspective

• “I think the demand will continue for some time, particularly in the Middle East and China”

• "tug of war" between the rebuilding of the flock versus the strong demand for sheep for meat and live export

• “What we do have is improved performance, better reproduction, better marking rates, survival, and we are growing the sheep more to get better carcase weights, which is leading to increased meat production and meat export”

Kimbal Curtis - Department of Agriculture and Food
Finances of Scottish Sheep & the role of CAP
CAP Reform: Scottish Sheep – post decoupling

http://blog.scotweb.co.uk

<table>
<thead>
<tr>
<th>Flock Size</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Businesses</td>
</tr>
<tr>
<td>&lt;20</td>
<td>2,915</td>
</tr>
<tr>
<td>20 to 50</td>
<td>2,440</td>
</tr>
<tr>
<td>50 to 100</td>
<td>1,676</td>
</tr>
<tr>
<td>100 to 250</td>
<td>2,044</td>
</tr>
<tr>
<td>250 to 500</td>
<td>1,456</td>
</tr>
<tr>
<td>500 to 1,000</td>
<td>1,090</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>530</td>
</tr>
<tr>
<td>Total</td>
<td>12,156</td>
</tr>
</tbody>
</table>

Breeding Ewes (Index) Lambs (Index)
Breeding Ewes (Annual %) Lambs (Annual %)
Scottish Sheep – post decoupling

- Rationalise the business – no longer headage
- shepherds
- skills
- lone working

Change in Number of Ewes

-45% <
-44.9% -27%
-26.9% -16%
-15.9% -9%
-8.9% -3%
-2.9% -3%
3.1% -10%
10.1% -20%
> 20%

Only parishes containing 5 or more holdings with breeding ewes have been included to meet disclosure requirements. Data Source: June Agriculture and Horticulture Census of Scotland provided by The Scottish Government’s Rural and Environment Science and Analytical Service Division.

1997-04
2004-07
2007-10

Produced by Steven Thomson
© SAC, 2011
Scottish Sheep Enterprise Profitability

- LFA Hill Sheep (per 10 ewes)
- LFA Upland Sheep (per 10 ewes)
- Lowground Sheep (per 10 ewes)
- Lamb finishing (per 10 lambs)
Margins - Adjust for family labour: 2010

Data from QMS - Quality Meat Scotland
Margins - Adjust for labour, SFP & LFASS: 2010

Net Margin adjusted for unpaid labour and SFP & LFASS

Gross Margin

Data from QMS
Coupled payments – a necessary evil?

- Sheep farmers tend to be price takers with low profitability
- Coupled payments stopped many farmers from innovating and reacting to market signals.
- **Since decoupling**
  - Changes in breeds (more cross bred)
  - Reduced use of high hill grazing (HNV!)
  - Increased interest
    - disease management
    - EBVs
    - Handling systems
    - Grassland management
    - Wintering costs
    - Niche marketing
**CAP 2019 – partial recoupling?**

<table>
<thead>
<tr>
<th>Coupled Sheep Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Austria</strong>  €2-9</td>
</tr>
<tr>
<td><strong>Belgium</strong>  € 27</td>
</tr>
<tr>
<td><strong>Bulgaria</strong> €6-31</td>
</tr>
<tr>
<td><strong>Croatia</strong>  € 4</td>
</tr>
<tr>
<td><strong>Cyprus</strong>  € 10</td>
</tr>
<tr>
<td><strong>Czech Rep</strong> € 21</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
</tr>
<tr>
<td><strong>Estonia</strong>  € 15</td>
</tr>
<tr>
<td><strong>Finland</strong>  € 28</td>
</tr>
<tr>
<td><strong>France</strong>  €16-27</td>
</tr>
<tr>
<td><strong>Greece</strong>  € 5-7</td>
</tr>
<tr>
<td><strong>Hungary</strong>  € 23</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
</tr>
<tr>
<td><strong>Italy</strong>  € 6</td>
</tr>
</tbody>
</table>

Sheep €486m: 12% of VCS Ceiling  
Source: Irish Farmers Journal

- **England**: R1&R2: €244  
  R2 (moorland) €70
- **Scotland**: R1:€220  
  R2 (rough grazing): €35  
  R3 (rough grazing):€10 + €100 per ewe hogg
Opportunities to make improvements
• Differing markets prefer lambs with different carcase classification
• To ensure the highest possible return it is vital for farmers to know which market they are producing their lambs for

Source: Hybu Cig Cymru – Meat Promotion Wales
Lambs meeting target Specification

Source: AHDB Beef & Lamb: UK Yearbook 2015 Sheep
Improve farmer share of retail price

UK Lamb: Farm Retail Price Spread

Average farm price  Average retail price  Per cent to farmer

Data Source: http://beefandlamb.ahdb.org.uk/markets/industry-reports/uk-statistics/
EID - Regulatory or Management Tool?

- Improved use of EID
  - more easily identify those sheep which are profitable and those that are costing money
  - Improving the selection of stock for breeding
  - Improving the selection of stock for slaughter
  - Effective use of veterinary medicines, eventually leading to improved flock health
  - Animal handling/labour savings – with properly calibrated weigher/shedder nearly 500 animals per hour can be weighed/sorted so farm labour is more efficiently used and is major benefit for extensive farmers

http://www.sruc.ac.uk/info/120580/smarter_livestock_farming/1338/project_electronic_identification_as_a_tool_for_precision_livestock_management
Improve Benchmarking

Do you know all your costs?

<table>
<thead>
<tr>
<th>Labour – how much paid labour is used on each enterprise?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock – what are your production costs?</td>
</tr>
<tr>
<td>Machinery – can you divide the costs between the different farm enterprises?</td>
</tr>
<tr>
<td>Buildings – are they earning their keep?</td>
</tr>
<tr>
<td>Feed – do you know how much you are using?</td>
</tr>
<tr>
<td>Management – have you accounted for your time?</td>
</tr>
<tr>
<td>Farm house – what costs do you allocate?</td>
</tr>
</tbody>
</table>

To calculate the true cost of your enterprise, consider all the bills that have to be paid from your returns.

### Benchmarks of physical performance

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Typical English Lowland Flock</th>
<th>Current</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average flock size</td>
<td>460 ewes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stocking density (LSU/ha)</td>
<td>1.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of lambs born alive</td>
<td>156 per 100 ewes mated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamb mortality</td>
<td>16 per 100 ewes mated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lambs sold/retained for breeding</td>
<td>140 per 100 ewes mated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average lamb carcase weight</td>
<td>19.2kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamb sold/kg ewe</td>
<td>28.0kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcasses hitting premium conformation class (EUR)</td>
<td>85%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcases hitting premium fat grade (2, 3L)</td>
<td>78%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days to slaughter</td>
<td>150 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewe longevity</td>
<td>3.5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewe mortality</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Opportunities from Climate Change?

- Warming for the rest of this century with wetter winters, drier summers and more days of very heavy rainfall
- Potential increase in annual grass yield (20-50%)
  - more distributed over winter months and less in summer.
- Adaption of current feeding systems for sheep to utilise winter grass growth?

<table>
<thead>
<tr>
<th>Feed component</th>
<th>MJ</th>
<th>Pence /MJ</th>
<th>£/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Concentrate (50 kg)</td>
<td>600</td>
<td>1.92</td>
<td>11.5</td>
</tr>
<tr>
<td>Silage dry matter 100 kg (Jan –March)</td>
<td>1,050</td>
<td>0.95</td>
<td>10.0</td>
</tr>
<tr>
<td>Grass (580 kg grass DM from grazing)</td>
<td>2,600</td>
<td>0.36</td>
<td>9.60</td>
</tr>
<tr>
<td>Annual ewe requirement</td>
<td>4,250</td>
<td>0.73</td>
<td>31.10</td>
</tr>
</tbody>
</table>

Replacing annual requirements with grass 4250MJ @ 0.36Pence/MJ = £15.30

**Potential cost saving £31.10-£15.30 = £15.80**

All Grass Wintering for Breeding Ewes: Results from two Years Farm Trials
JE Vipond, R Jones, P Frater and E Genever
www.sruc.ac.uk/download/downloads/id/2027/306-309_vipond_et_al
Conclusions

• Shepmeat sector has restructured following decoupling
• Economic downturn in EU has affected EU demand
• Growth markets in China and Middle East
• Limited opportunity for direct sales (remoteness)
• Uptake of easy-care and grassland management may improve labour productivity and technical efficiency
• Improved use of technological opportunities could improve profitability and success of sector
Conclusions – a two tier system?

• Forward thinking
  – use all technology provided
  – not recognised breeds but genes
  – genomics
  – CT scanning
  – EID drones etc
  – precision farming
  – longer growing season
  – internationally competitive and innovative
  – supported by professional breeding companies
  – Most sheep but relatively few, large sheep businesses

• Traditional
  – shows
  – auction markets
  – non commercial traits
  – hobby farmers
  – traditional lifestyle
  – most farmers but not most sheep
  – some direct marketing
  – organic
  – sell the view type
  – pastoral based
Thank You
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Steven Thomson
http://www.sruc.ac.uk/sthomson

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http://www.gov.scot/Topics/Research/About/EBAR/StrategicResearch

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