Evaluating food-feed competition in Ireland’s dairy sector

Introduction

✓ Feed-food competition occurs when land suited for human food is used for animal feed that is lower yielding
✓ The Land Use Ratio examines if a livestock system contributes to feed-food competition

Feed conversion efficiency of Ireland’s dairy

<table>
<thead>
<tr>
<th>Location</th>
<th>Human edible protein conversion ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global grass based dairy</td>
<td>1 : 2.6</td>
</tr>
<tr>
<td>Global maize based dairy</td>
<td>1 : 1</td>
</tr>
<tr>
<td>Irish grass based dairy</td>
<td>1 : 4.9</td>
</tr>
</tbody>
</table>

Purpose of the land use ratio

✓ Feed Conversion Efficiency doesn’t consider potential protein foregone
✓ LUR compares the current animal protein against the potential plant protein production from that land area
✓ Including both local and international land areas

Take home messages

✓ Ireland’s dairy system does not cause feed-food competition
✓ Ireland’s current dairy sector is more protein efficient than its global competitors