



# *Medium term outlook and future challenges facing Irish agriculture*

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# ***Outline***

- **The economic importance of the agri-food and wider bio-sector**
- **The medium-term outlook for Irish agriculture**
- **The GHGs challenge**
- **The Water Framework Directive challenge**
- **The challenge of ‘motivating the next generation’**
- **Concluding remarks**

# ***Economic significance of the bio-economy***

- **An unnecessary tendency to be defensive about the economic importance of the agri-food sector**
- **There is no need for this prevalent attitude as ...**
- **The sector, while diminishing in significance, is still of enormous economic importance and ...**
- **Given the global food and energy scarcities this importance is likely to be enhanced and ...**
- **In a time of general economic downturn the bio-sector bucks the trend ...**

# ***Nailing an important misperception***

- **New estimates by Brendan Riordan show that the bio-sector is of greater economic significance than previously thought**
- **Conventional metrics inappropriate, e.g., % exports, GNP, etc.**
- **Correct focus should be on the contribution of sector to 'net export earnings'**
- **Bio-sector advantages ... low import content of exports ... low rate of profit repatriation ... CAP inflows**

# Bio-sector gross exports, € m., 2005

<b>agr, for &amp; fish</b>	<b>580</b>
<b>meat and meat products</b>	<b>1857</b>
<b>fish and fish products</b>	<b>202</b>
<b>processed fruit &amp; veg, etc</b>	<b>36</b>
<b>dairy products</b>	<b>1137</b>
<b>grain products</b>	<b>16</b>
<b>prepared animal feeds</b>	<b>151</b>
<b>other food products</b>	<b>9489</b>
<b>beverages &amp; tobacco</b>	<b>830</b>
<b>Total bio-sector</b>	<b>14298</b>

Source: Riordan, 2008

# ***Economic significance of the bio-sector, € m., 2005***

	Gross exports	GNP
Total bio-sector	14298	6863
pulp and products, recorded media, software, etc	12601	2394
chemicals, incl. pharmaceuticals	29657	5635
electrical goods, incl. computers	29052	5520
Other non-bio	6320	1201
Total all sectors	91928	21613
Bio-sector % total	16	32

***Source: adapted from Riordan, 2008***

# ***Outlook for agriculture to 2020***

- **Outlook for agriculture under current policies is fairly positive**
- **Better than thought possible even two years ago**
  - Dairy product prices unlikely to dip much further but volatile
  - Beef prices to hold up well given EU deficit
  - Suckler cow welfare scheme will aid profitability
  - Cereal prices back considerably (due to good harvest internationally) but are still above intervention levels
  - Higher output prices are important for farmers, given the escalation in many input prices

# *Dairy outlook*

- **EU dairy product prices are projected to decrease by 2020:**
  - But are projected in general to be higher than the levels observed in 2006
  - Remember prices recently have been very high
- **Milk Price in 2020**
  - EU milk price is projected to be 30 cent per litre
  - IRL milk price of 28 cent per litre

# ***Beef outlook***

- **Short term outlook the best for some time**
  - New Suckler Cow Welfare Scheme (SCWS) payment
  - Higher beef prices (Brazilian beef ban)
- **But EU beef tariffs are only partially effective**
  - Beef imports into EU are likely to resume at some point
- **EU beef imports increase out to 2020**
  - up over 20 percent (to 800 thousand tonnes)
- **Cattle reference price in 2020**
  - EU 11 percent higher
  - IRL almost 8 percent higher

# *Outlook for other sectors*

## ■ **IRL sheep production to continue to fall**

- But rate of decline is slowing
- Positive price outlook as EU sheep market tightens
- Export supplies from third countries may be limited

## ■ **IRL cereals outlook positive**

- Elevated price levels over the medium term
- Prospects are good (under right weather conditions and favourable input prices)

## ■ **IRL pig sector to face difficult conditions**

- Animal welfare and environmental issues
- Set to impact on production costs

# ***Inputs: Baseline Outlook***

- **Sharp rise in expenditure in 2007 and 2008**
  - High energy prices driving inflation in many input items
- **Input prices set to remain at elevated levels**
  - Unless energy prices drop back
- **Considerable uncertainty about the medium term prospects for energy prices**
  - Oil price projections average anything from \$70 to \$130 per barrel from various sources
  - Creates uncertainty about feed, fertiliser and fuel costs

# *The GHGs challenge*

- **Range of measures could be used to achieve targets**
  - Teagasc active in examining way to reduce emissions though changing farm practices such as animal diet, nutrient management etc.
  - But these methods alone are unlikely to deliver the target level of reduction
- **Agriculture may come under pressure to find other solutions, e.g. reduction in cattle numbers**
  - Important to know what the cost of these strategies might be for the sector

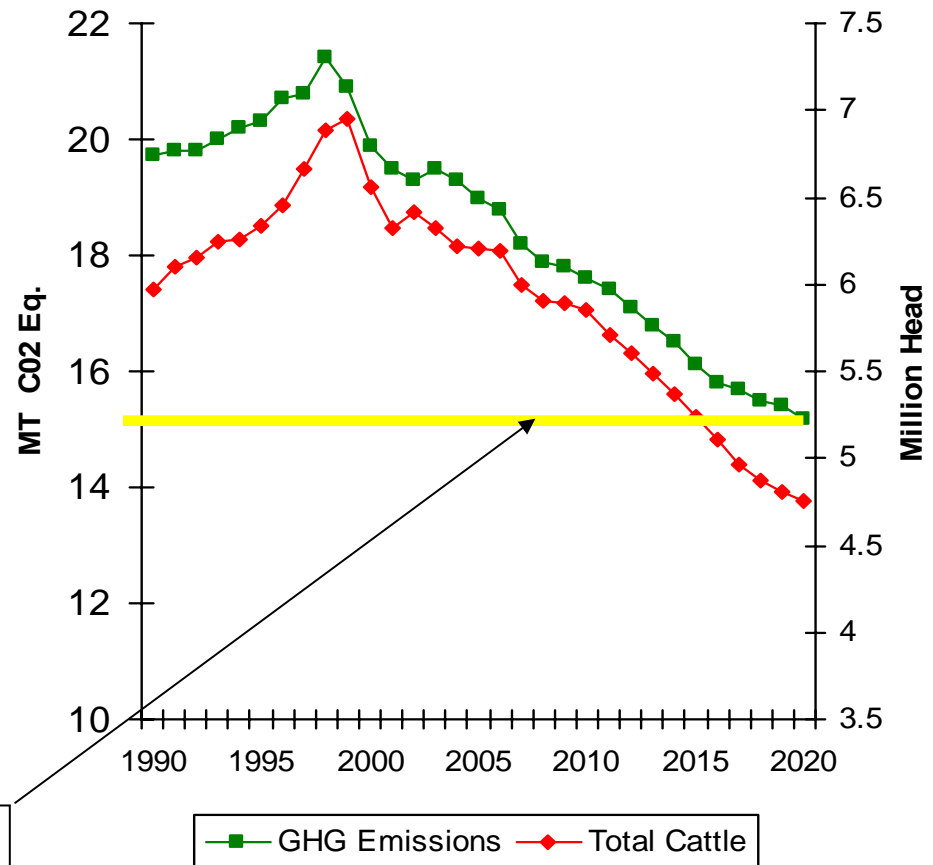
# ***Analysis of GHGs reduction***

- **Agriculture GHGs of 18.99Mt CO<sub>2</sub> Equivalent (in 2005)**
- **About 28% of total emissions**
- **Required reduction could be -20% or -30%**
- **Reductions are assumed to be phased in over the period 2011 to 2020**
- **Adjustment assumed to fall on the suckler herd**
  - If the adjustment were spread across all of agriculture the impact on beef output would be smaller
  - No similar changes assumed in other EU or international markets

# -20% Scenario Results

vs. 2005

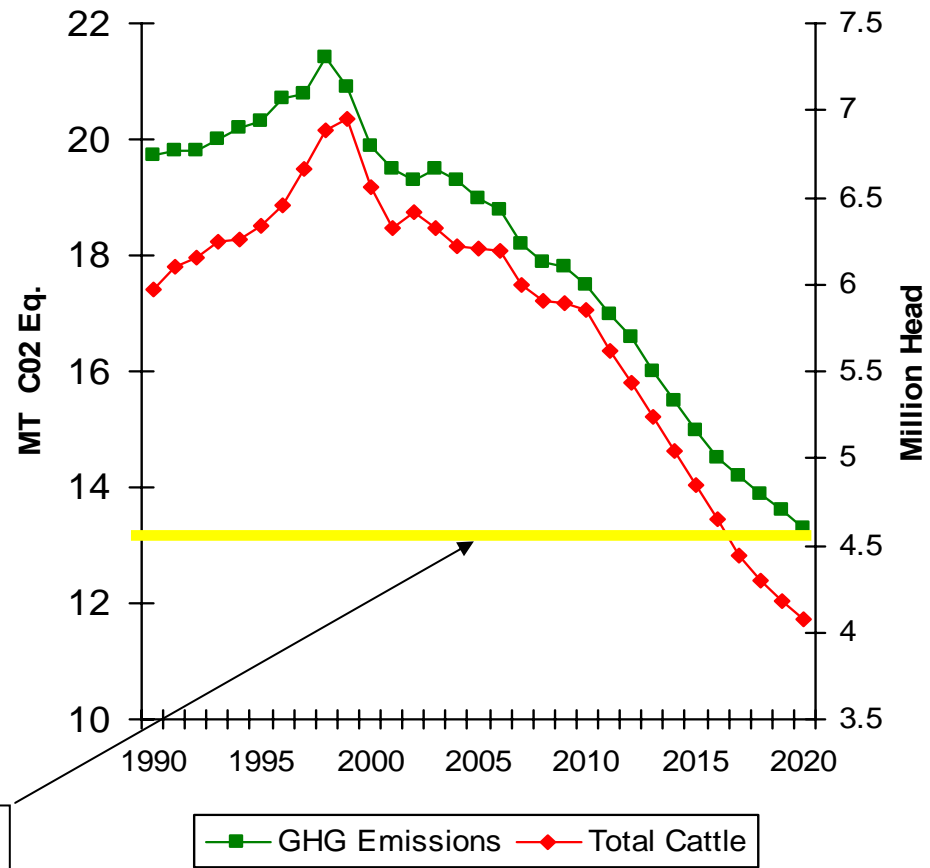
- Total cattle population
- ↓ 25%
- Suckler cow inventory
- ↓ 55%



GHG target 15.19

# -30% Scenario Results vs. 2005

- Total cattle population
- ↓ 37%
- Suckler cow inventory
- ↓ 84%



GHG target 13.29

# ***Reductions in GHGs: conclusions***

- **GHG reduction targets could have major negative implications for Irish agriculture**
- **Agricultural production would have to contract substantially**
- **Unilateral action would be most expensive route**
- **Multilateral action would lift prices**
- **Reductions in Irish GHGs would be more than offset by increases in competitor countries (e.g. Latin America)**

# ***The Water Framework Directive (WFD) challenge***

- **Water standards to be more demanding ... shift to ecological criteria ... not a 'drinking quality' standard**
- **Draft plan for 8 River Basin Districts (RBDs) to be produced by year end**
- **Very challenging targets likely for Surface, Ground and Estuarine waters**
- **Potential adverse economic implications for our most progressive farming areas**
- **Teagasc to present analysis of economic impact of WFD at special conference on November 12<sup>th</sup>**

# *Overall objectives of WFD*

- **Maintain “high status” where it exists – pristine sites .**
- **No deterioration in existing status - biological/ecological, physico-chemical and hydromorphological status.**
- **Achieve at least “good status” by 2015.**



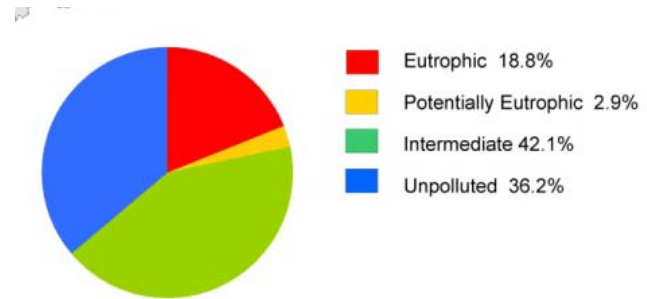
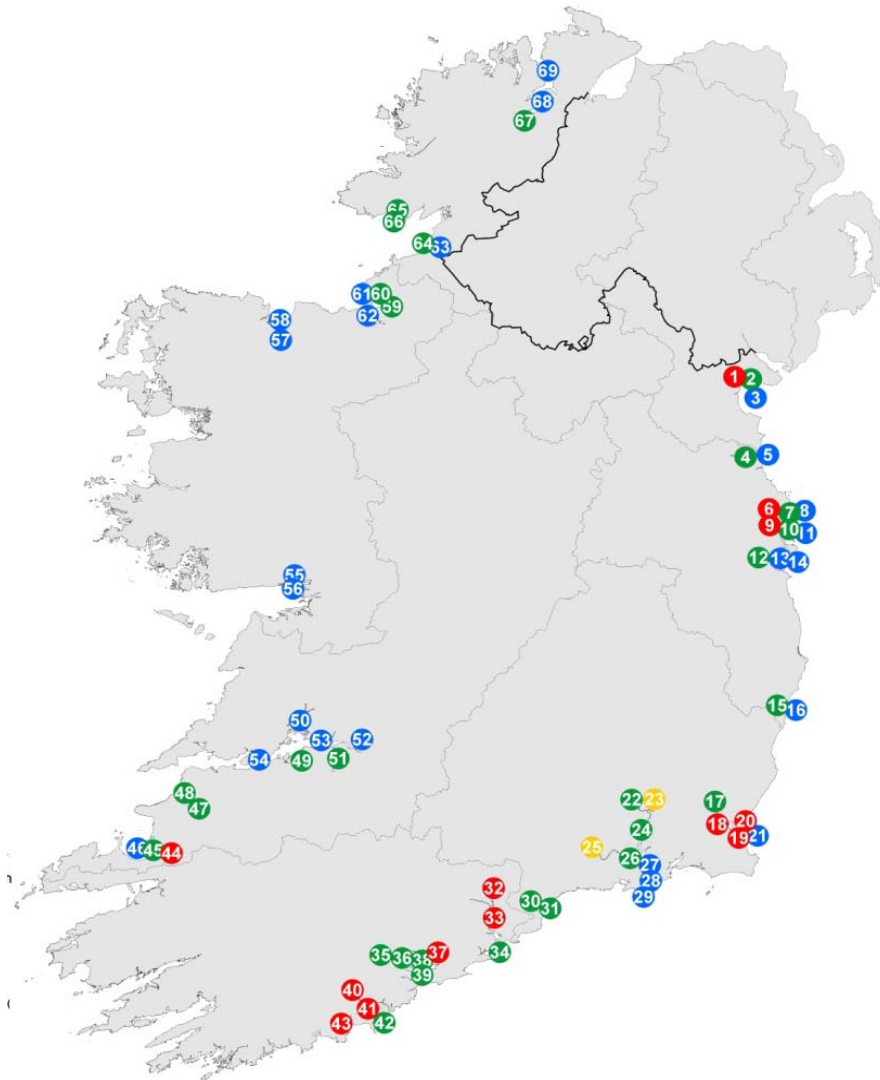
# *River Basin Districts (RBDs)*

## ■ **Comprises**

- river catchments (including lakes)
- groundwater,
- estuaries & coastal waters associated with all these areas.



# Estuarine and Coastal WQ



# ***The challenge of motivating the next generation ...***

- ***Proposition: the next generation will only want to participate in the potential offered by the exploitation of our bio-resources if the returns to all factors employed at least match that available from alternative uses ...***
- **A key concern for the next generation will be the returns likely to accrue to their own human capital**
- **Farmers sons and daughters have the highest participation rate in 3<sup>rd</sup> level education (87%) – the returns to this investment will increasingly be the benchmark against which farm returns will be compared**
- **It's important that we're realistic about what that benchmark is likely to be ...**

# ***Benchmarking farm income for the farmer of the future ...***

- **What we can say is that it will not be the average level of male industrial earnings which equals about €35,000 at present**
- **Research suggests that the expected annual gross earnings of a male working permanently in a professional/managerial grade in the Irish public sector, aged say 45, who has a degree and who has experienced a relatively long tenure of employment is about €110,000.**
- **The comparable private-sector would be about 85% of this level ...**

# ***Benchmark income ...***

- **This benchmark would need to be adjusted for the net advantages associated with the farming way of life ...**
- **Assume this is 20%, then the benchmark gross annual income would be about €88,000 or about 2.5 times average industrial earnings ...**
- **We could call this the “adjusted benchmark income” (ABI)**
- **Illustrative only – no allowance for greater volatility of farm income, pensions etc.**
- **But allows focus on the requirements for the individual to be competitive ...**

# ***What will it take to achieve the ABI?***

- **A focus on entrepreneurship and innovation – “farmerpreneurs”**
- **Aim to achieve optimum return on *all* resources**
- **An emphasis on resource management rather than labour input**
- **Farmer will have to be highly educated ... both in technical and business disciplines**
- **Complete openness to new business models, e.g. partnerships, etc. will be needed *and* ...**
- **Sufficient scale of land, animal and labour resources ...**

# ***Achieving the ABI – some insights from the Teagasc Roadmaps***

<b><u>Dairying</u></b>	Low performance	High performance
<b>Required land (ha)</b>	<b>81</b>	<b>28</b>
<b>Required cows</b>	<b>154</b>	<b>78</b>
<b><u>Suckler beef</u></b>		
<b>Required land (ha)</b>	<b>284</b>	<b>140</b>
<b>Required animals (LUs)</b>	<b>454</b>	<b>307</b>
<b><u>Dairy beef</u></b>		
<b>Required land (ha)</b>	<b>202</b>	<b>95</b>
<b>Required animals (LUs)</b>	<b>405</b>	<b>266</b>

***Source: Teagasc Roadmaps***

# ***Concluding remarks***

- **A relatively benign outlook for the agri-food and wider bio-sector**
- **But vigilance in recognizing the challenges ahead & in dealing with them ...**
- **GHGs ... WFD ... 'Motivating the next generation'**
- **A key message: surmounting challenges requires us to harness the power of knowledge**

Thank you

