



## IRISH CATTLE BREEDING FEDERATION & SHEEP IRELAND

# The new infrastructure for cattle and sheep breeding in Ireland.

Brian Wickham  
Chief Executive  
ICBF & Sheep Ireland



# Content

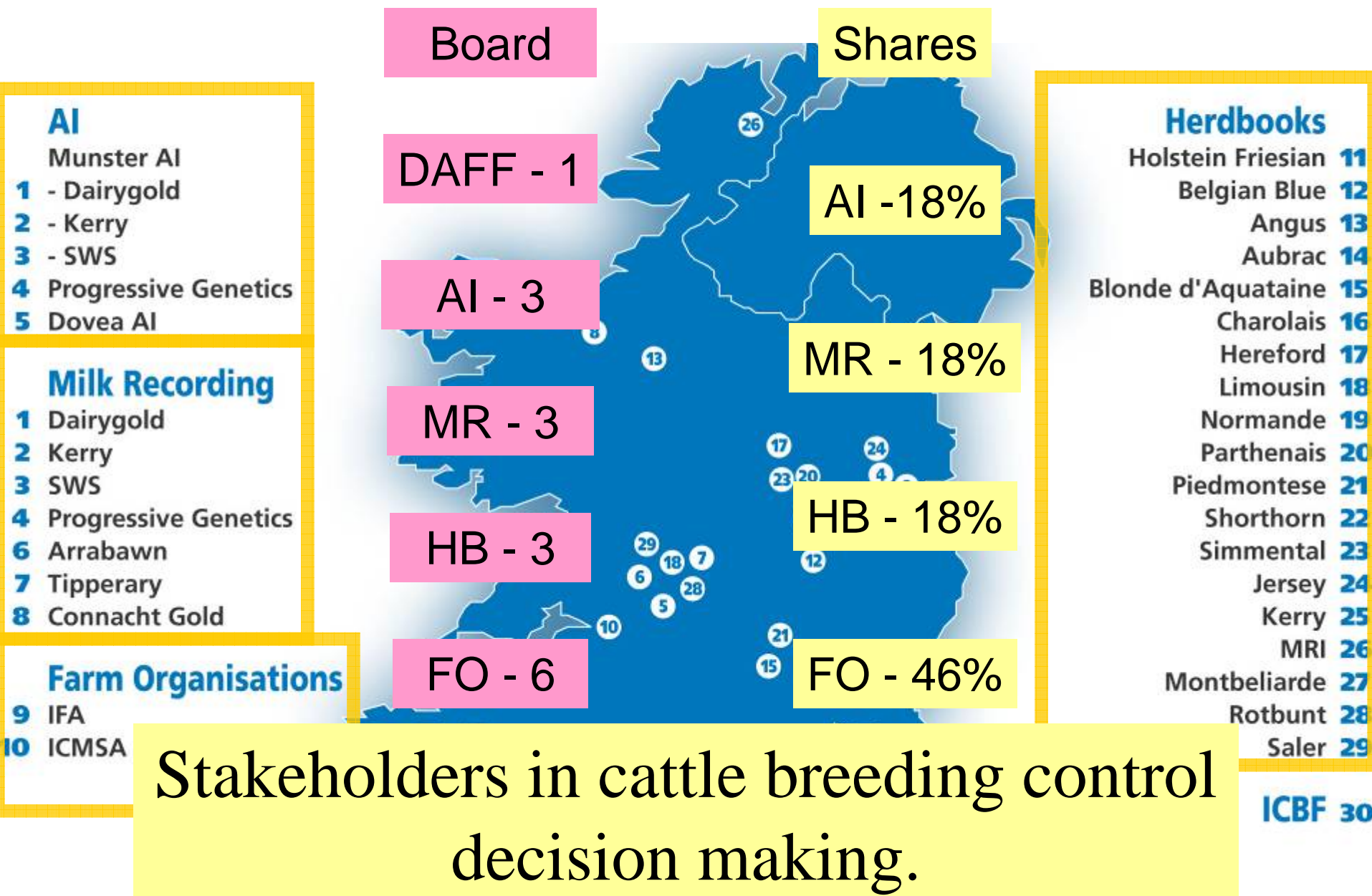
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- Background
- Data & Information Sharing
- ICBF's National Database
- Genetic Evaluation System
- Funding
- Benefits

# Irish Cattle Breeding Federation Society Limited (ICBF)

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- *Established with interim Board in 1997*
  - *Commenced operations in 1998*
  - *Current structure in 2000*
  - *Mission: achieving the greatest possible genetic improvement in the national cattle herd - Dairy and Beef*

# MEMBERS, BOARD & SHARES - ICBF



- AI**
- Munster AI
  - 1 - Dairygold
  - 2 - Kerry
  - 3 - SWS
  - 4 Progressive Genetics
  - 5 Dovea AI

- Milk Recording**
- 1 Dairygold
  - 2 Kerry
  - 3 SWS
  - 4 Progressive Genetics
  - 6 Arrabawn
  - 7 Tipperary
  - 8 Connacht Gold

- Farm Organisations**
- 9 IFA
  - 10 ICMSA

Stakeholders in cattle breeding control decision making.

# Data & Information Sharing Agreement

- Contributors retain ownership
- Farm data through “Animal Events”
- Electronic sharing of data collected
- Data for research
- Integrated genetic evaluations
- Herd owner controls access
- Information for service providers
- HerdPlus® - information of herd owner
- User-pays & full cost recovery

# Database – single source – without duplication

Source of data	Type of data
Farms	Animal events – birth, calving, weights, docility,
DAFF – official system	Registrations, movements, deaths, exports ...
Meat Factories	Slaughter (date, weight, grade ...), Images
Marts	Sale (date, weight, price ...)
AI	Insemination (date, sire)
Milk Recording	Milk weight
Laboratories & Milk Processors	Milk composition, disease test results, genotypes
Linear scoring	Weights, scores – beef & dairy
Genetic evaluations	Breeding values, reliabilities, indexes ...

# Database Information

## - single source - to many users

Users	Type of Information
<b>Service providers:</b> <ul style="list-style-type: none"> <li>- Milk recording</li> <li>- Herd Book</li> <li>- AI Stud &amp; Field</li> <li>- Advisory</li> <li>- Veterinarians</li> <li>- Milk processors</li> <li>- Researchers</li> </ul>	<ul style="list-style-type: none"> <li>· Customer profiles</li> <li>· Service details</li> <li>· Genetic evaluations</li> <li>· Herd Books</li> <li>· Discussion Groups &amp; Farmer Reports</li> <li>· Elite animals</li> <li>· Research results</li> <li>· Active AI bull lists</li> <li>· Raw data files for research</li> </ul>
<b>Farmers direct</b>	<ul style="list-style-type: none"> <li>· HerdPlus®- genetic evaluations, reports</li> <li>· GROW®- reports</li> <li>· GENIRELAND®- progeny test</li> </ul>
<b>General public:</b> <a href="http://www.icbf.com">www.icbf.com</a>	<ul style="list-style-type: none"> <li>· Statistics, Reports, Publications ...</li> <li>· Genetic Evaluations</li> </ul>

# Beef Genetic Evaluations

- [Cattle Statistics](#)
- [Annual Reports](#)
- [Academic Papers](#)
- [Glossary](#)

## [Learn more about ICBF](#)

- [Contact Information](#)
- [Costs and Benefits](#)
- [The Database](#)
- [Members](#)
- [Structure](#)
- [International Representation](#)
- [Legal and Privacy](#)

ICBF Website

[www.icbf.com](http://www.icbf.com)

Any comments on the new icbf website can be submitted [here](#)

bull search

## Online Services

User name

Password

[Where do I get my username and password?](#)

[Experiencing problems - Click Here](#)

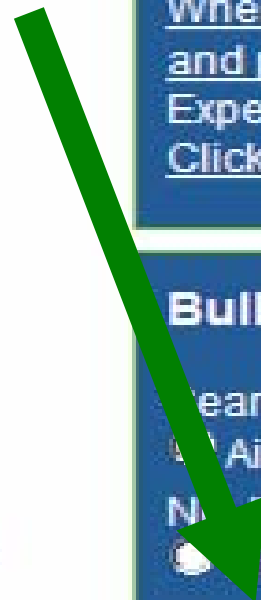
## Bull Search

Search by:

Ai Code, Tag, Herd Book

NMTT

Name or part of name





# Beef Bull Euro-Star Evaluation



## €uro-Star Rating (ICBF, April 2010)

AI Code:	CF52	Breed:	CH (100%)	Sire:	<a href="#">HERMES / HME</a>	
Animal Name:	DOONALLY NEW	Owner:	NATIONAL CATTLE BREEDING CNTR	Dam:	INTRUSE / 7193100567	
Date of Birth:	18-JAN-1997	Date of Evaluation:	April 2010	MGS:	<a href="#">CAMPAGNARD / 1887109836</a>	
National ID:		€uro-star Index	Calving Traits	Weanling	Beef Carcass	Milk
International ID:	CHLFRAM007197126709	Linear Type	Pedigree			

% Rank	Star Rating (within breed)	Index and Traits	€uro-Value	% Rank
94%	★★★★★	Suckler Beef Value (SBV)	€131	94%
98%	★★★★★	Weanling Export	€108	99%
99%	★★★★★	Beef Carcass	€176	99%
1%	★	Daughter Fertility	€-81	1%
1%	★	Daughter Milk	€-121	1%
Other Key Traits				
11%	★	Calving Difficulty (% 3 or 4)	11.28%	5%
99%	★★★★★	Gestation Length (Days)	.79 Day(s)	78%
92%	★★★★★	Docility (1-5 score)	0.14	93%

Overall Index –  
SBV in €

Sub Indexes –in  
€

Key traits  
phenotype units

Data Reliability: 40% - 60% = Average

20 - 40% = Below Average

< 20% = Poor

# Dairy Genetic Evaluations

- [Cattle Statistics](#)
- [Annual Reports](#)
- [Academic Papers](#)
- [Glossary](#)

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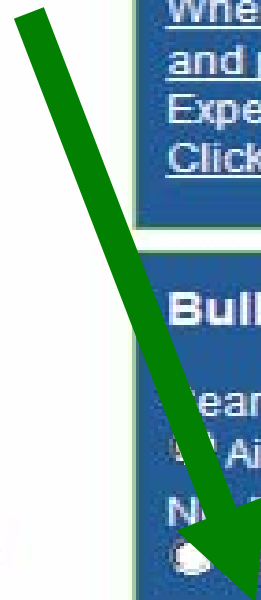
## Bull Search

Search by:

Ai Code, Tag, Herd Book

NIBTT

Name or part of name



# Dairy Bull EBI Evaluation

Code:

Animal Name:

Date of Birth: 01-SEP-1992

Date of Evaluation: April 2010

MGS: [SIR C VALOR / 6501811754](#)

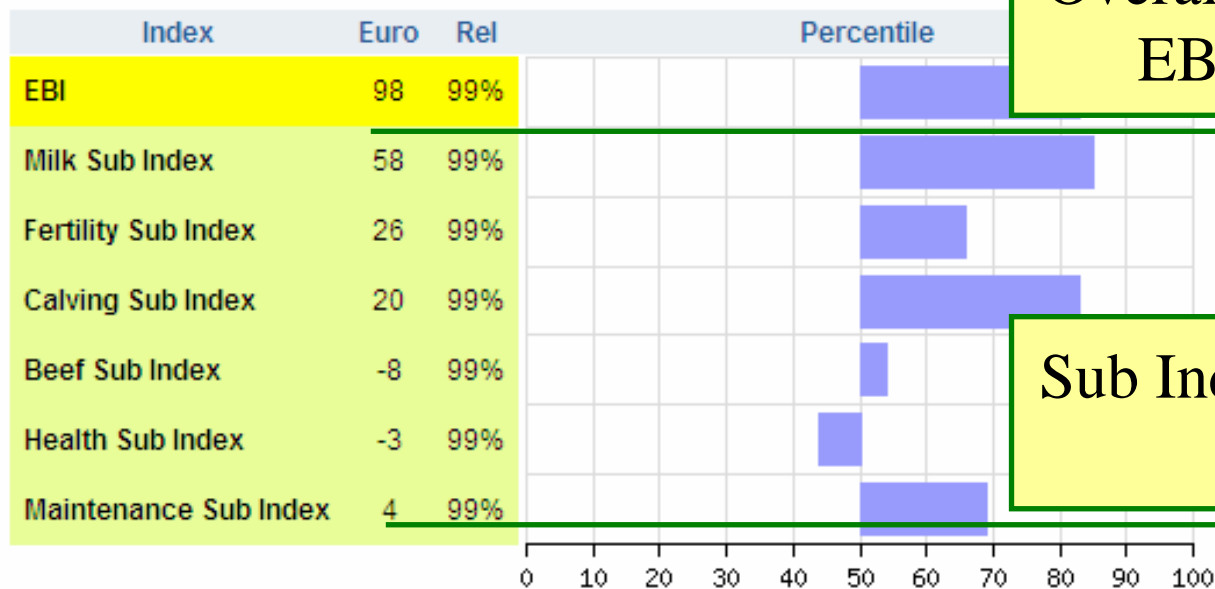
Animal ID:

International ID: HOLDEUM001021231601

EBI Summary	Milk	Fertility	Calving	Beef
Health	Type	Pedigree	Prev Eval	

For more understanding EBI, PTA's and Breeding Values - [Click Here](#)

Overall Index –  
EBI in €



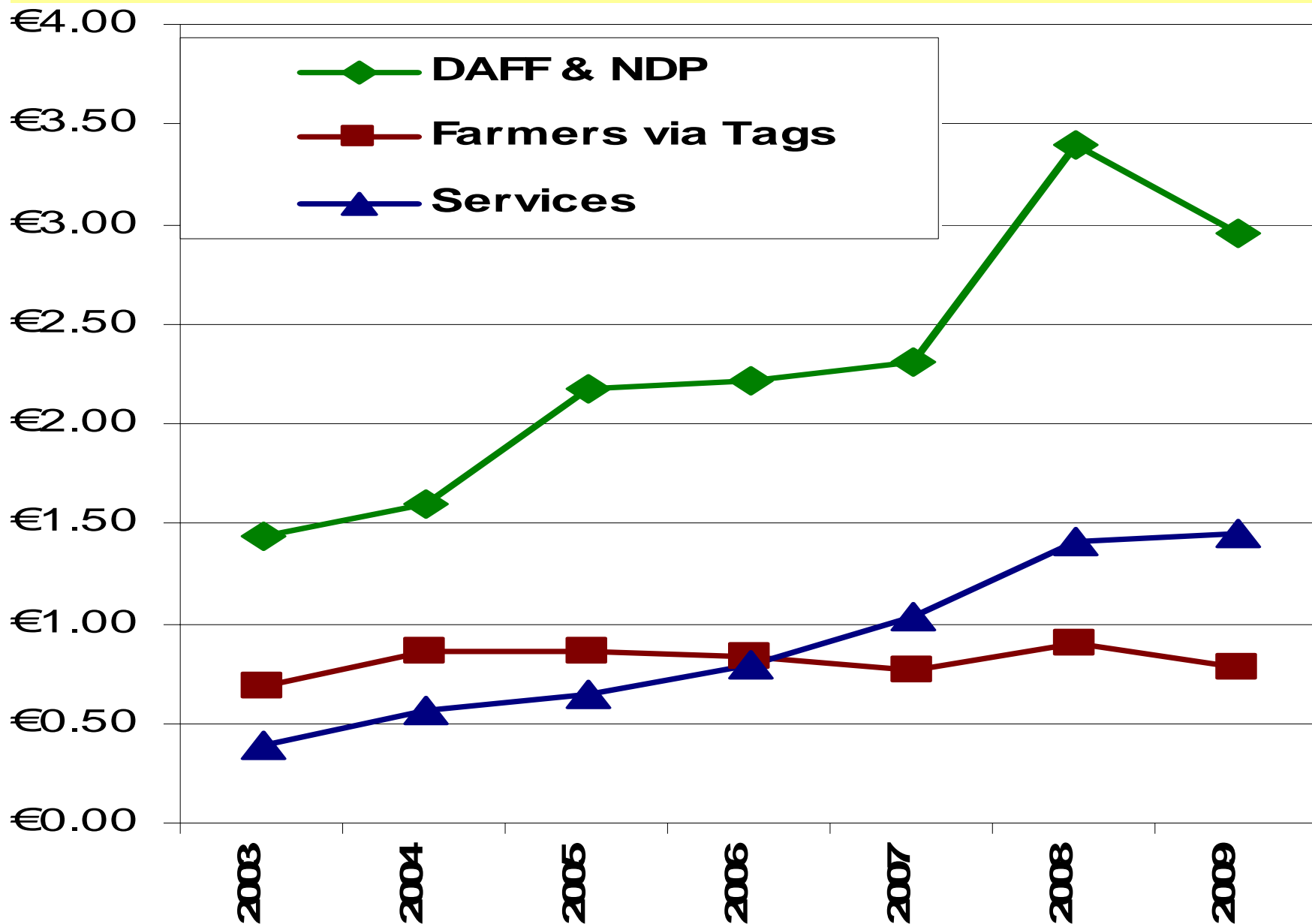
Sub Indexes –in  
€

Index	PTA	Rel	Percentile
173	99%		~15
11	99%		~35
10	99%		~35
0.08	99%		~45

Trait	PTA	Rel	Percentile
Dir. Calv Diff. (%)	3.32	99%	~95
Mat. Calv Diff (%)	10.02	99%	~95
Gest Len (Days)	-2.14	99%	~95
Calf Mort (%)	-0.65	99%	~95

Key traits  
phenotype units

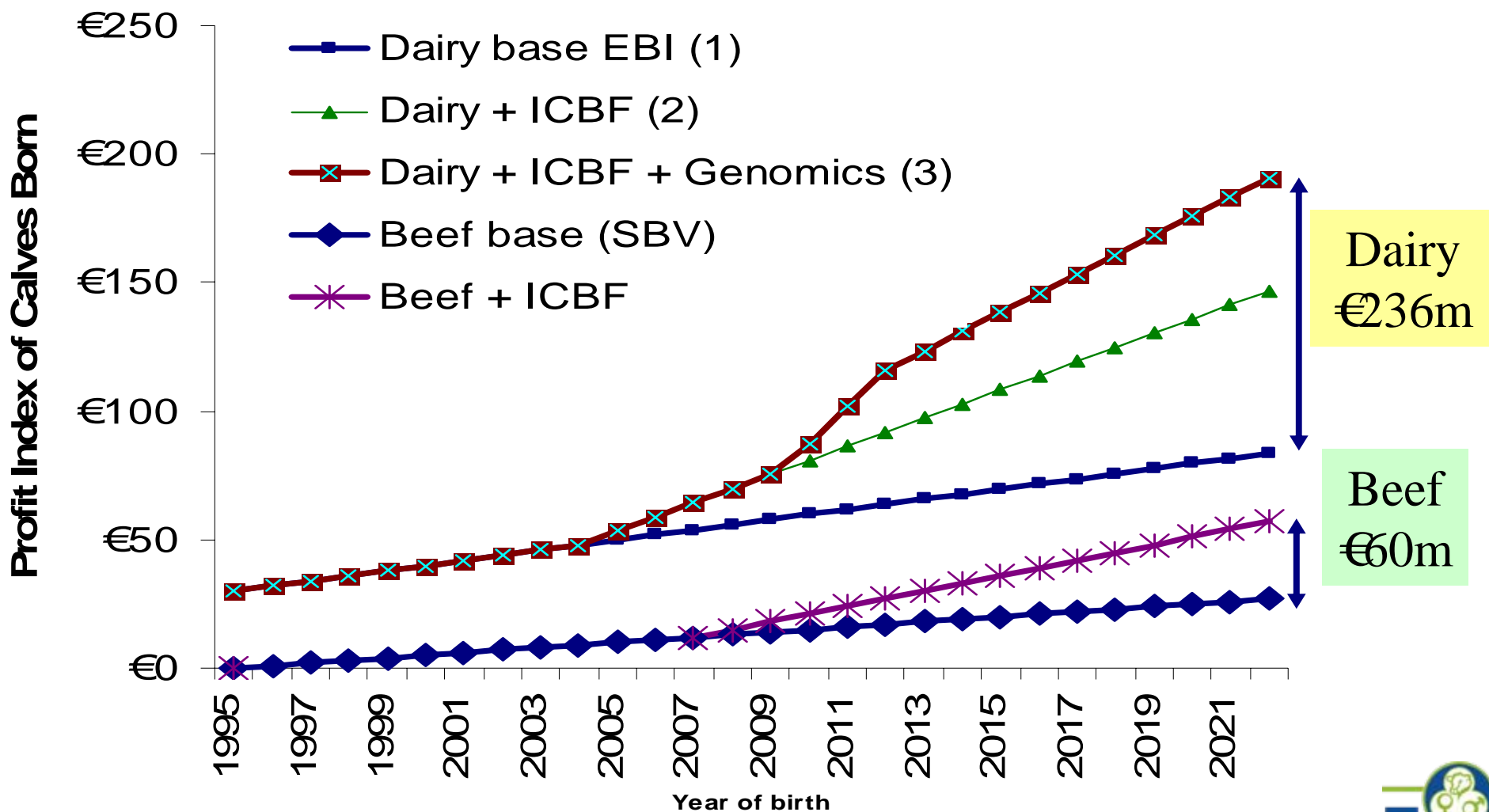
# ICBF INCOME SOURCES (million)



# Benefits to Stakeholders

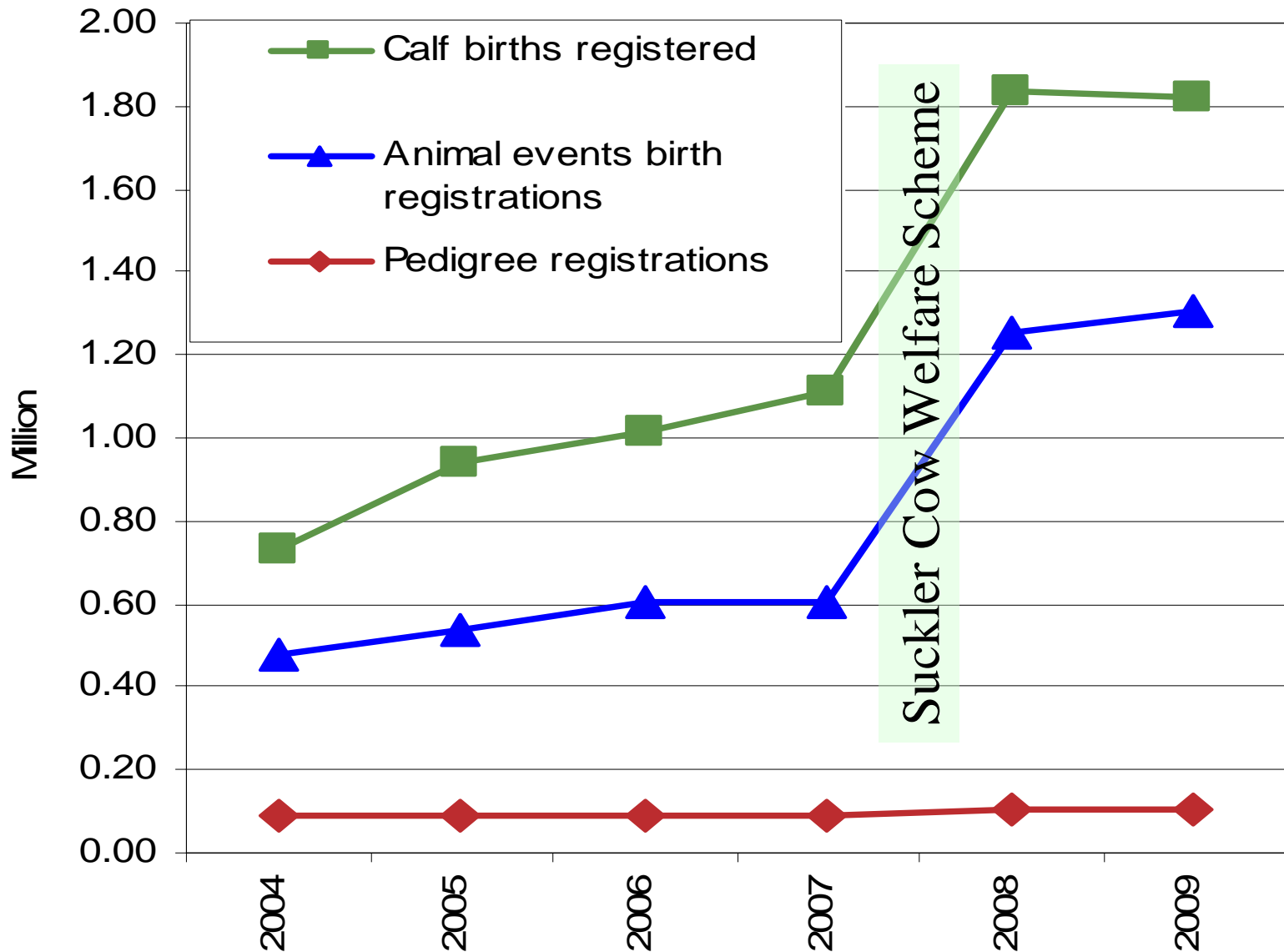
- State
  - cost savings (€1.35m)
  - taxation (€2.27m)
  - research, education, knowledge transfer
- Community
  - Industry – processors, suppliers
  - Consumers
  - Society
- Farmers
  - Service users – now & future
  - Non users of services - now & future
- Breeding Industry

# Projected Impact of ICBF on Genetic Gain of Dairy & Beef Calves Born in Ireland.



# Growth of Participation

– 90% of calves born in 2009



# Conclusions

- Animal breeding is a unique and powerful tool for improving the profitability of cattle and sheep farming in Ireland.
- Irish animal breeding has been transformed through a unique partnership between farmers, the breeding industry and DAFF.
- New technologies, market imperatives and economic pressures are providing the motivation for this transformation to be continued.
- Continued investment will give excellent returns.
- The model established for animal breeding has potential to achieve substantial progress areas such as plant breeding, animal health and product quality.



# ICAR 2012 CONFERENCE

**CORK  
IRELAND**

Mon 28<sup>th</sup> May  
- Fri 1<sup>st</sup> June 2012



[www.icar2012.ie](http://www.icar2012.ie)