

#### IRISH CATTLE BREEDING FEDERATION

Information system technology for integrated animal identification, traceability and breeding – the example of the Irish cattle sector.

Brian Wickham (PhD) Chief Executive, ICBF. Tuesday 6th December.

Workshop on "Animal identification and recording systems for traceability and livestock development in countries of Latin America and the Caribbean".

5-7 December 2011. Santiago (Chile).

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Transforming Ireland

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# **Our Cattle Industry**

- · 1 million dairy cows
  - Export of manufactured products
  - Good margins
  - 38% mated to beef bulls
- 0.9 million suckler cows
  - Many small herds (<10 cows) and few large herds
  - Calves:
    - · 22% replacements
    - · 16% live exports to mostly EU countries
    - · 62% slaughtered in Ireland mostly for export as cuts
  - Poor margins

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# ORGANISATION & STRUCTURES



# Organisation & Structure

Function		Organisation Responsible
1	Regulated Diseases (eg. BSE, TB, FMD)	Department of Agriculture Food & the Marine ( <b>DAF</b> )
2	Beef Quality Assurance	DAF
3	Other Diseases	Animal Health Ireland ( <b>AHI</b> )
4	Cattle Breeding	Irish Cattle Breeding Federation Soc. Ltd ( <b>ICBF</b> )

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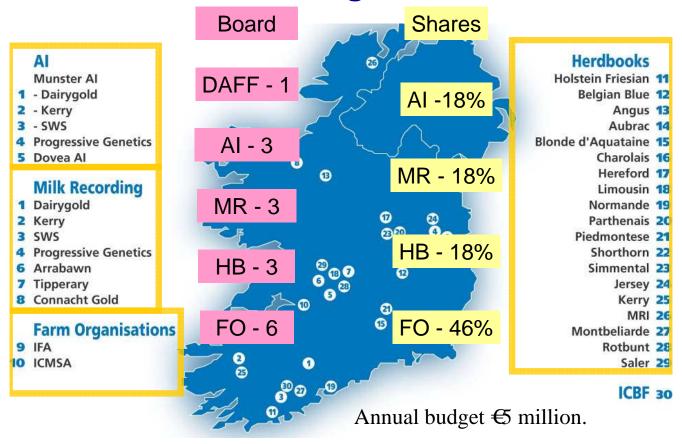
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# DAF (Department of Agriculture Food & the Marine)

- · Policy advice and development ...
- · Representation in international ... and national negotiations.
- **Development** and implementation of ... **schemes** in **support** of **Agriculture**, Food, Fisheries, Forestry and Rural Environment.
- Monitoring and controlling aspects of Food Safety.
- · Control and audit of public expenditure under its control.
- Regulation of the agriculture, fisheries, and food industries through national and EU legislation.
- Monitoring and controlling animal and plant health and animal welfare.
- Monitoring and direction of State Bodies engaged in research training and advice - market development and promotion- industry regulation and development- commercial activities.
- Direct provision of support services to Agriculture, Fisheries, Food and Forestry.
- Annual budget €3,000 million.

## Irish Cattle Breeding Federation (ICBF)



# Animal Health Ireland (AHI)

- AHI is an industry-led, not-for-profit partnership between livestock producers, processors, animal health advisors and government.
- Diseases and conditions of livestock that are endemic in Ireland but which are not currently subject to regulation.
- Information infrastructure provided by ICBF.
- BVD, Johnes, IBR, Mastitis, ...
- Annual budget €1 million.

Ref: http://www.animalhealthireland.ie/

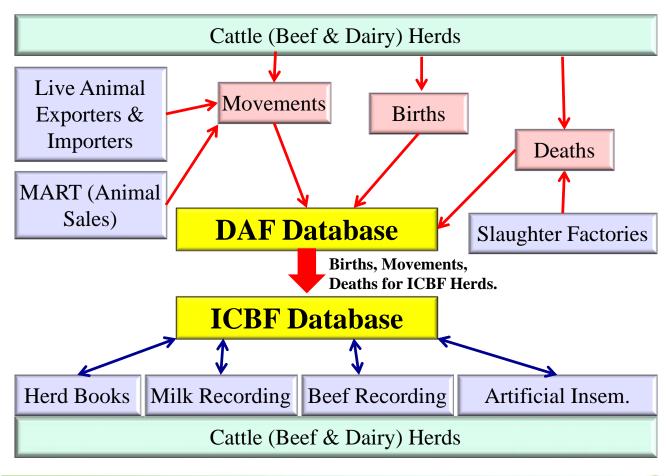


### **DATABASES**

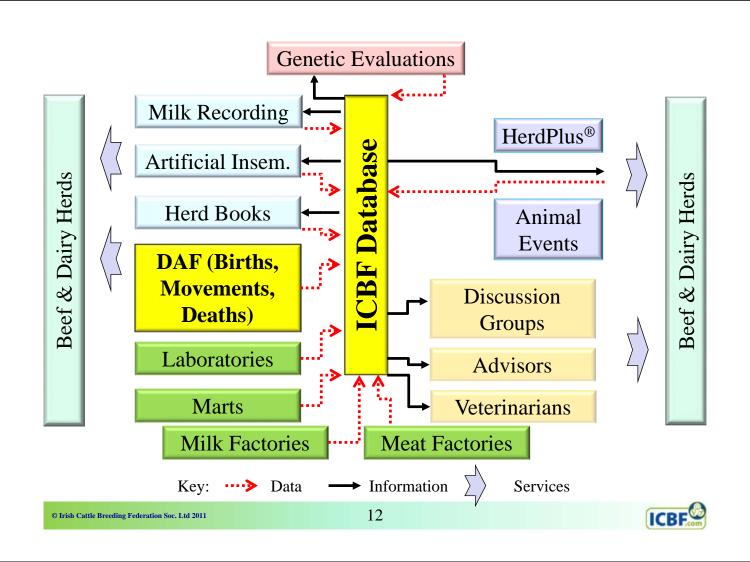
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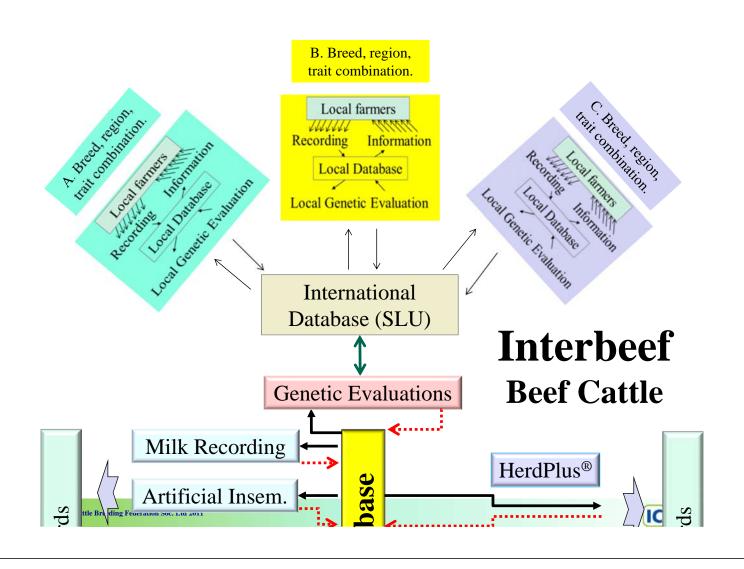
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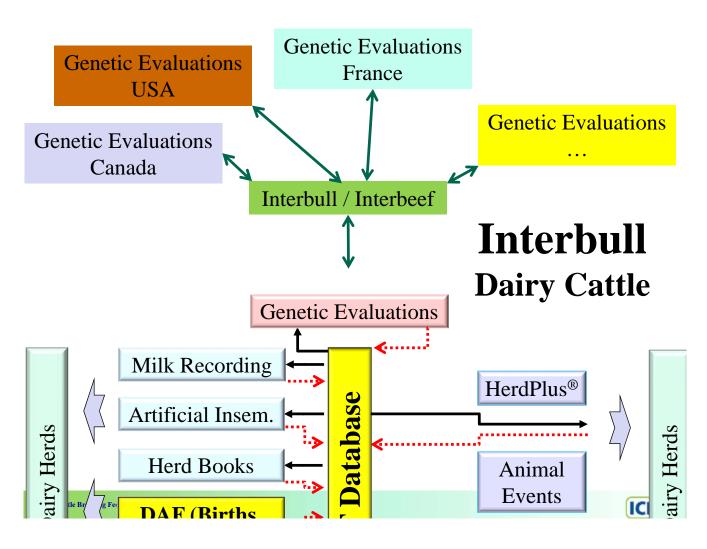


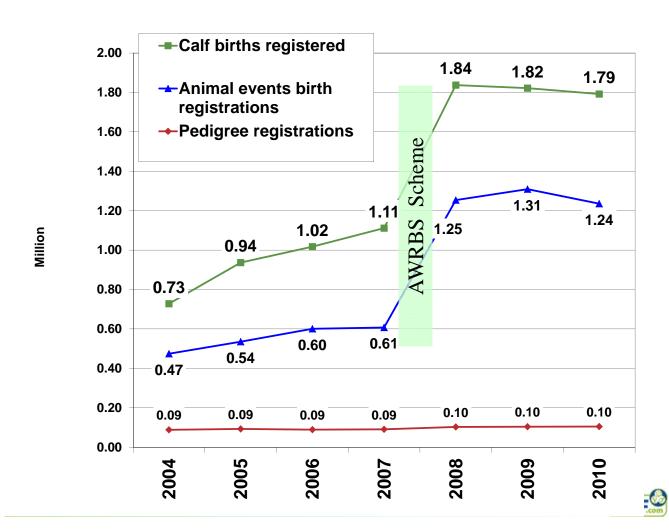


- Control of regulated diseases (FMD, TB, Brucellosis, BSE, ...)
- Beef quality assurance
- Farmer payments
- Price reporting, ...
- Cattle Breeding (Herd Books, Milk Recording, Beef Recording, Artificial Insemination, Genetic Evaluation, Breeding Schemes)
- Farm Management Information (Genetics, Reproduction, Farm Management, Advisory)
- Control of non-regulated diseases









## **TECHNOLOGY**



# Technology - Handheld Computers

# ICBF Database

- Mobile phone connection
- All animals in
- Multiple herds
- Updated with movements
- Data validation at collection point
- Database updated



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### **ICBF**

# Handheld Computers for Recording Technician Artificial Inseminations

### **Before:**

- · Paper based
- Slow processing
- High level of identification errors

### After:

- Electronic with printed receipt left on farm
- · ID validation on farm
- Accurate record in database at end of each day
- · Same € cost



# **Technology - Web Access**

### **Before:**

- Small number of access points to database
- Higher cost for information distribution
- Higher cost for data collection

### After:

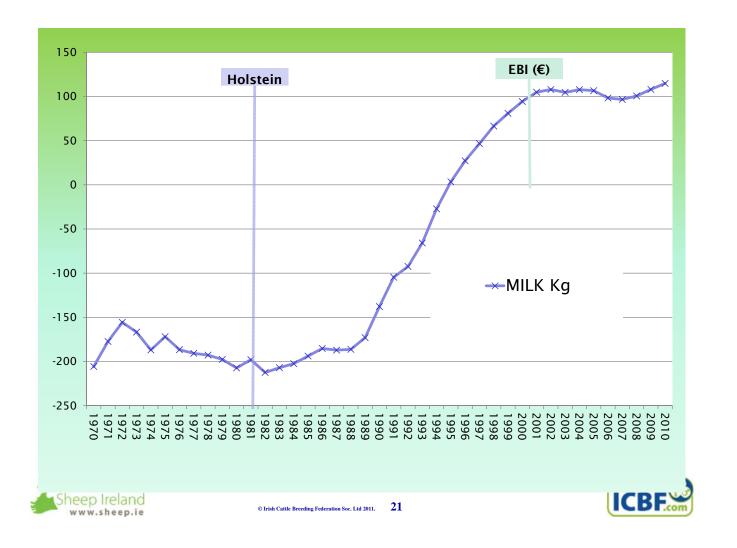
- Large number of access points
- Easy change management
- Lower cost of information distribution
- Lower cost of data collection

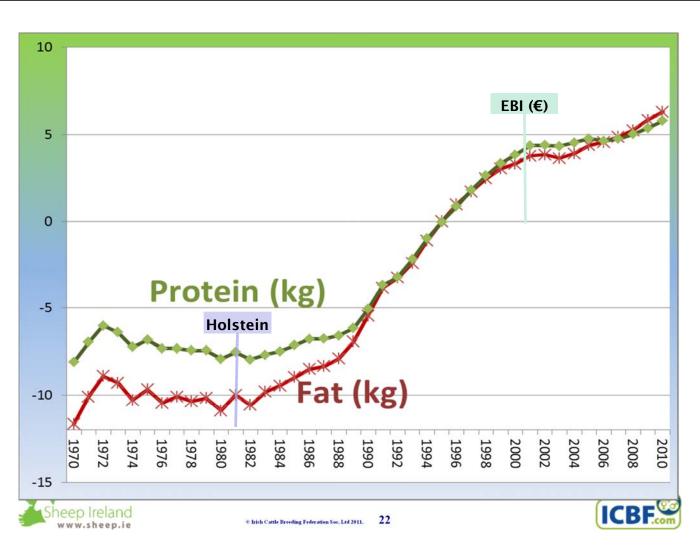
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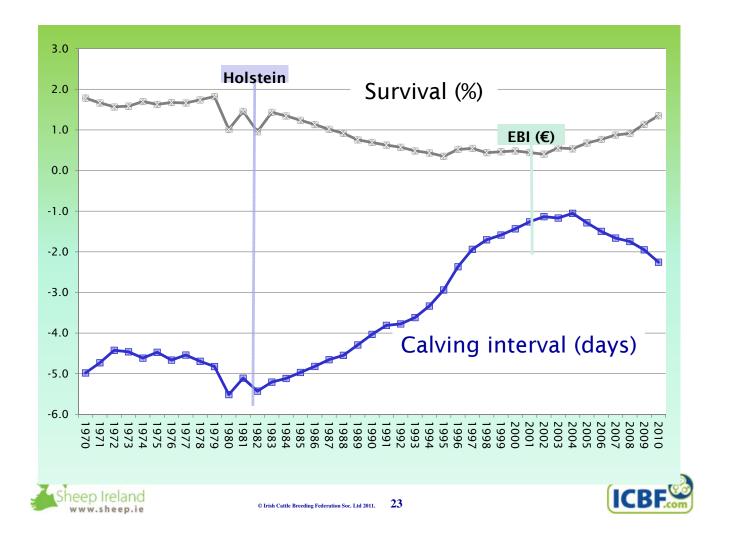
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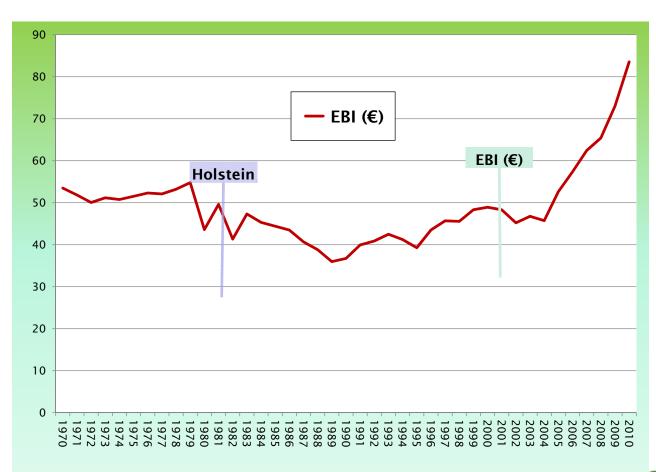


## **OUTCOME - ONE EXAMPLE**











### **SUMMARY**

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- Animal breeding is a unique and powerful tool for improving the profitability of cattle farming.
- Irish animal breeding has been transformed through a unique partnership between farmers, the breeding industry and DAF.

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- The national identification and traceability system adopted by Ireland has greatly facilitated Irish cattle breeding.
- Continued investment in cattle breeding will give excellent returns.
- The model established relies heavily on international cooperation and collaboration.
- Membership and full participation in the activities of ICAR and Interbull are fundamental to the achievements in Ireland cattle breeding.



