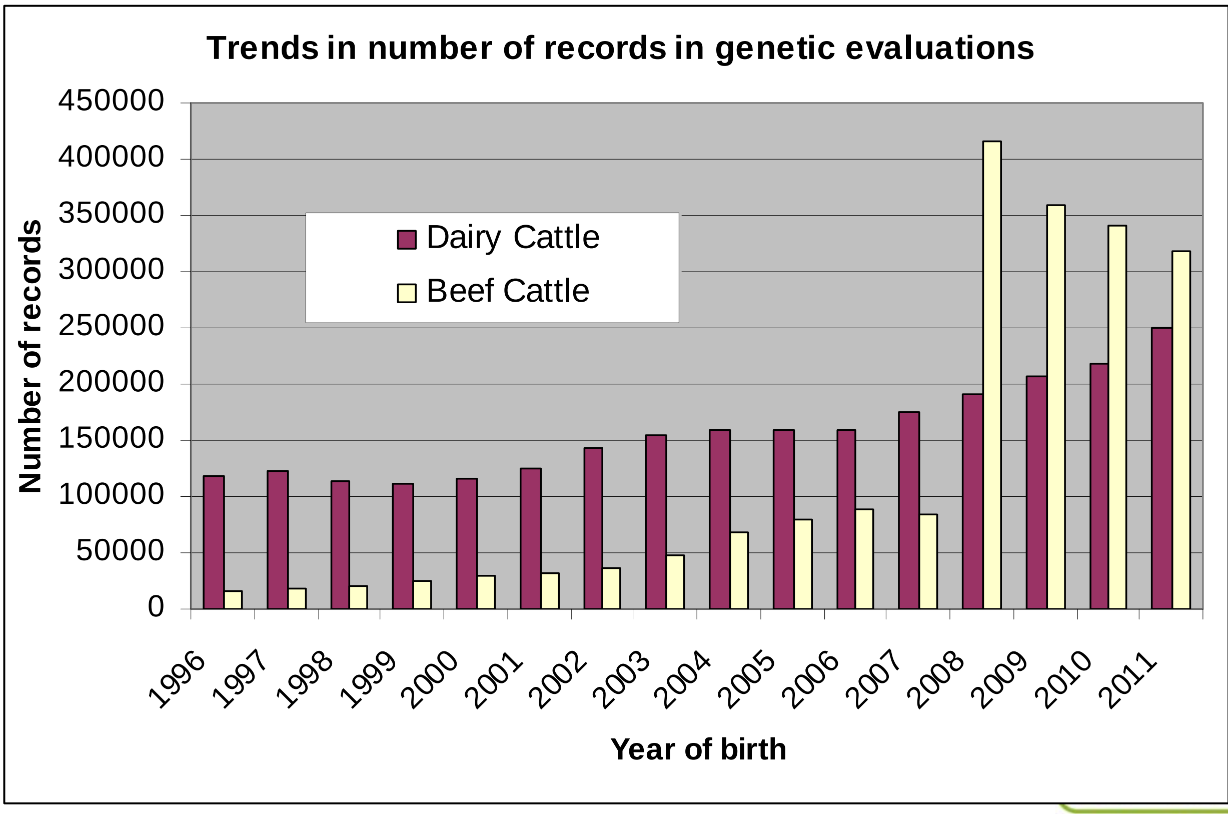
IRISH CATTLE BREEDING FEDERATION

New G€N€ IR€LAND Draft Proposition.

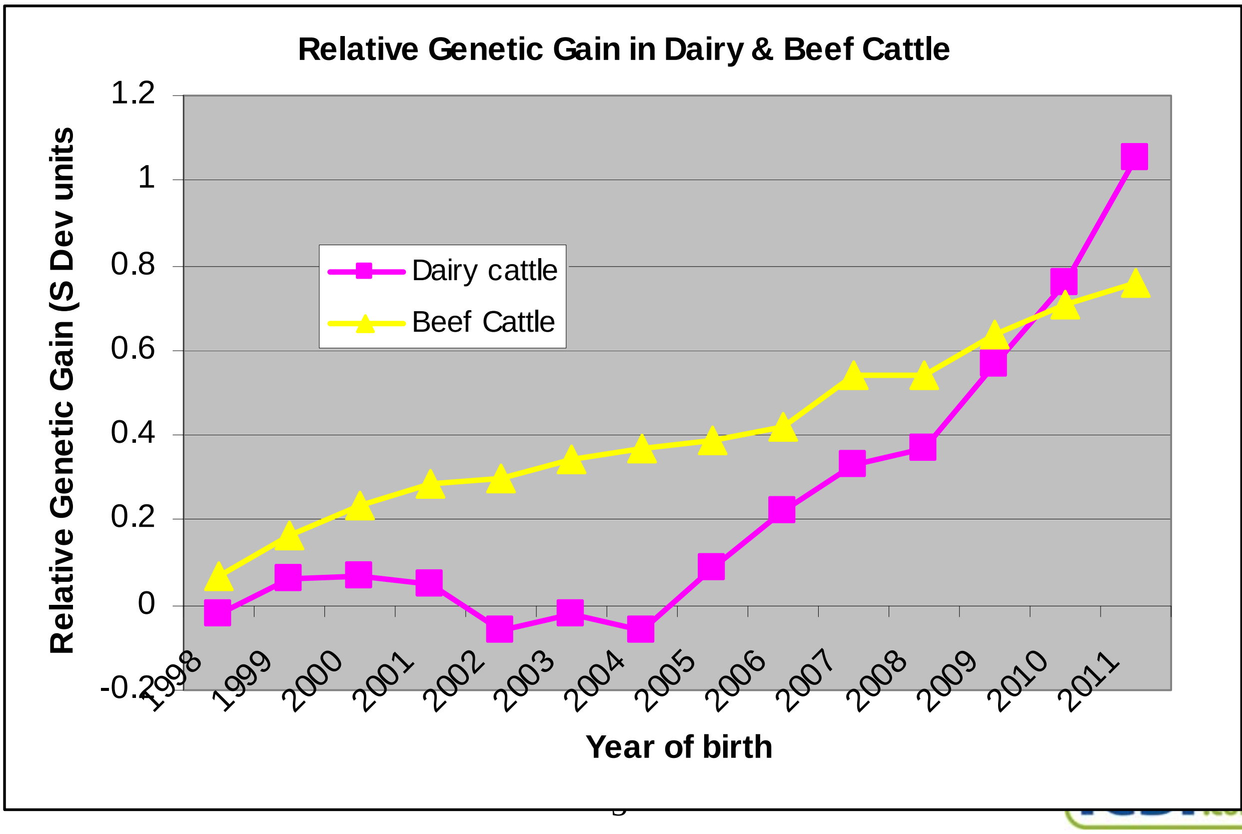
26th April 2012.

National Development Plan
Transforming Ireland

Data quantity & quality.

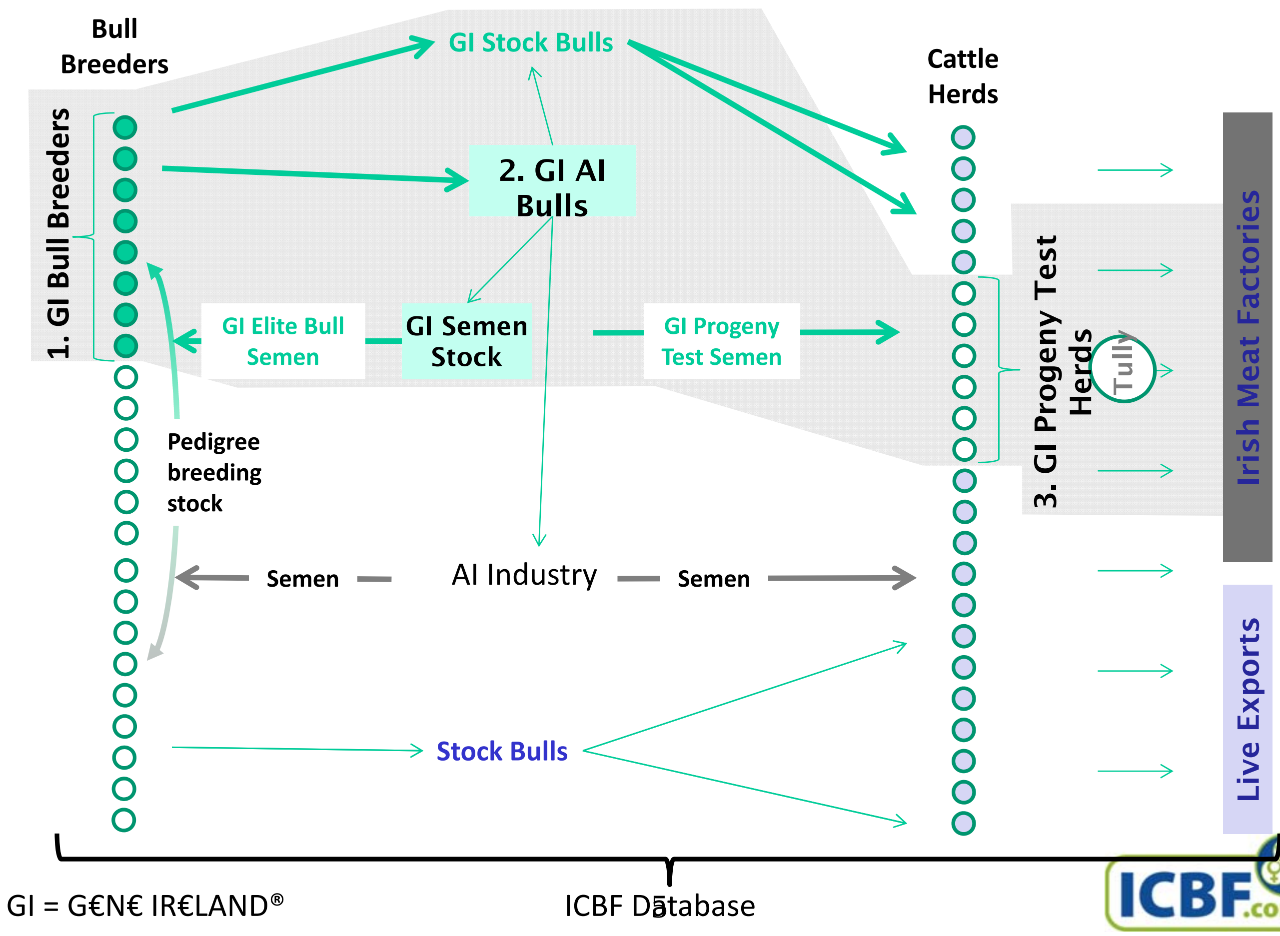


Genetic Gain in Ireland.



Background.

- ICBF invests a lot of money into beef breeding programs (€700k/yr), including €300k into Tully.
- Genetic gain in beef is principally through use of stock bulls.
  - Need AI to generate stock bulls.
  - Need AI for breeding maternal female replacements.
- Primary markets for beef AI is; (i) easy calving (dairy) & (ii) weanling export. Not maternal traits.
- Compared to dairy AI, beef AI is a high cost:low value business.
- To increase genetic gain, we must progeny test a lot more bulls. Not commercially viable for AI companies to invest in these bulls.
- Need a “new entity” to purchase these bulls.



1. Bull breeder herds.

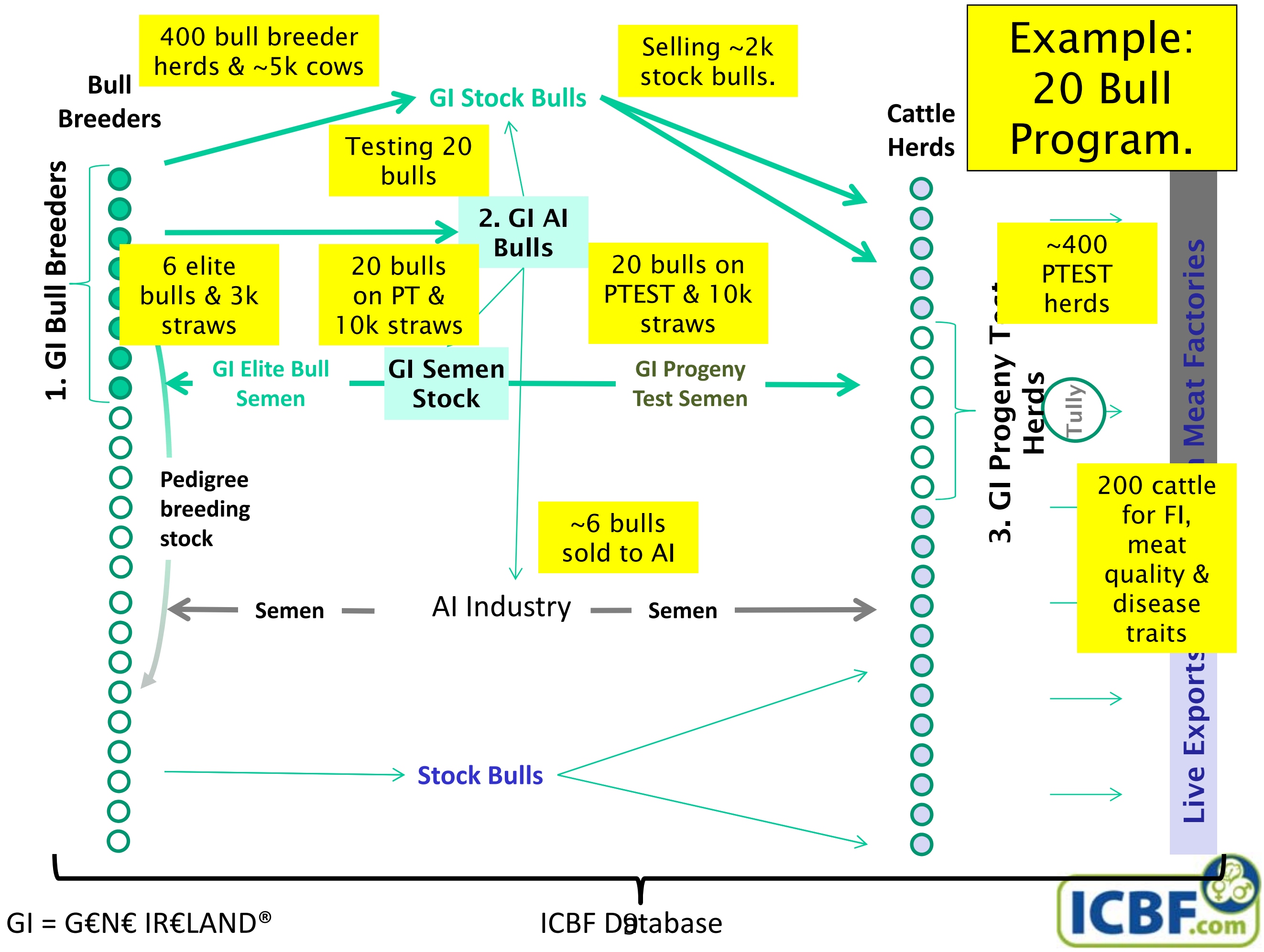
Issue	Key considerations
G€N€ IR€LAND Bull Breeder Herds	• G€N€ IR€LAND (GI) prepares terms and conditions for GI Bull Breeder herd participation. • GI recruits bull breeding herds. Voluntary program for bull breeders. Approximate basis for progeny test (100 candidate bulls = 1 progeny test bull). • GI provides range of services to bull breeding herds, with main focus on; (i) mating of elite cows to produce bulls required for GI breeding program, (ii) provision of stock bulls for wider cattle industry, and (iii) access to stored semen from GI AI bulls (see below). Members pay an annual fee for this service (€250/year). • GI provides guidance on best practice regarding provision of stock bulls and AI bulls (data collection, genetics, health & rearing protocols). • GI assesses information quality and provides feedback to bull breeding herds. GI determine if bull breeding herd has complied with best practice guidelines, scores herd annually and provides a GI "stamp" for herd.

2. GI AI Bulls.

G€N€ IR€LAND AI bull	• GI decides which bulls achieve this status based on: (i) Genetic merit for "New" maternal index, (ii) relatedness to Irish herd, and (iii) disease status (must be that required for entry to AI) • GI makes payment to bull owner & GI becomes owner of the bull (an average of €5k/bull – but will vary depending on breed) • Bull enters semen production and 1000 doses of semen collected per bull, with 500 straws being dispatched to progeny test herds and 500 straws being added to GI semen stock for potential elite mating's. • Bull is sold by GI to partner AI companies (first option) or failing that to commercial herd-owners. Bull is only in GI AI for a short period (~14 mths – ~18 mths). • GI bull breeding herds have access to semen from GI AI bull (500 straws/bull) for elite matings, to generate next generation of young bulls for program.

3. GI Progeny Test Herds.

G€N€ IR€LAND Progeny Test Herds	• GI prepares and maintains catalogue of GI AI bulls to be progeny tested. • GI prepares and maintains progeny test herd participation rules. • GI recruits herds to use progeny test semen and herd owner signs participation agreement. • GI distributes semen to participating herds through AI field service providers. • GI monitor's progeny test herds and ensures recording is conducted according to best practise guidelines. • GI purchases a defined number of progeny/sire (at approximately 1 year of age) for central progeny testing (at Tully). These animals would be evaluated for; (i) feed intake/efficiency, (ii) carcass/meat eating quality and (iii) health/disease traits.



Ownership, Funding & Direction.

- Program would be “owned” by ICBF.
- Funded from ICBF’s annual budget.
- Technical direction provided by stakeholder group.
  - Breed specific for larger breeds.
  - Bulls selected on New Maternals, diversity & functionality.
- Reporting to ICBF board.
- Scaleable budget, with small net surplus (after v costs contingency).

ICBF.com

Cash flows – 20 bull model

Income	2013	2014	2015	2016	2017	2018
Bull Breeder - Gene Ire fee	€100,000	€100,000	€100,000	€100,000	€100,000	€100,000
Farmer - HerdPlus contribution	€85,000	€85,000	€85,000	€85,000	€85,000	€85,000
Sale of surplus bulls	€42,000	€42,000	€42,000	€42,000	€42,000	€42,000
Sale of bulls to AI	€48,000	€48,000	€48,000	€48,000	€48,000	€48,000
Sale - progeny test cattle	€0	€0	€280,000	€280,000	€280,000	€280,000
ICBF annual contribution	€300,000	€300,000	€300,000	€300,000	€300,000	€300,000
Total income	**€575,000**	**€575,000**	**€855,000**	**€855,000**	**€855,000**	**€855,000**
Variable costs	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Bull selection	€4,000	€4,000	€4,000	€4,000	€4,000	€4,000
Bull acquisition	€100,000	€100,000	€100,000	€100,000	€100,000	€100,000
Bull insurance	€7,000	€7,000	€7,000	€7,000	€7,000	€7,000
Semen collection	€60,000	€60,000	€60,000	€60,000	€60,000	€60,000
Semen assembly (PTEST bulls).	€3,600	€3,600	€3,600	€3,600	€3,600	€3,600
Semen storage (Surplus semen)	€12,500	€12,500	€12,500	€12,500	€12,500	€12,500
DNA Collection & Storage	€0	€4,500	€4,500	€4,500	€4,500	€4,500
GROW - Weanlings	€0	€18,000	€18,000	€18,000	€18,000	€18,000
Purchase - progeny test cattle	€0	€0	€200,000	€200,000	€200,000	€200,000
Cost of finishing progeny test cattle	€0	€0	€72,000	€72,000	€72,000	€72,000
GROW - Maternal replacements	€0	€0	€0	€0	€16,800	€16,800
ICBF Fixed Costs	€300,000	€300,000	€300,000	€300,000	€300,000	€300,000
Contingency (10% of Variable Costs=€50k/year)	€50,000	€50,000	€50,000	€50,000	€50,000	€50,000
Total costs	**€537,100**	**€559,600**	**€831,600**	**€831,600**	**€848,400**	**€848,400**
Balance	**€37,900**	**€15,400**	**€23,400**	**€23,400**	**€6,600**	**€6,600**

Other considerations.

- Bulls owned directly by AI
- Cost of purchasing cattle for the central progeny test.
- Purchase and ownership of bulls.
  - No commercial transactions.
  - Bulls in ownership for short period.
  - Semen collection & processing by AI partners.
  - Open to all AI partners.
- Cost of purchasing bulls.

Summary

- Strong, simple & low cost program.
  - More effective use of ICBF funding (€300k/yr).
  - Scale-able, with no impact on ICBF budget.
  - Builds on G€N€ IR€, SCWS & New Maternals.
- Potential to test 20..40…80 bulls/year.
- A breeding program. NOT a commercial business.
- Brings together all elements of beef breeding industry (AI, breeders, herdbooks, farmers, ICBF…..).
- *Worth ~€100m to Irish beef industry over 10 yrs.*

Recommendation.

- The industry supports the principles of the new G€N€ IR€LAND program.
- That ICBF and industry partners (i.e., bull breeders, farmers, AI companies and herdbooks) move to implementation of the new program.