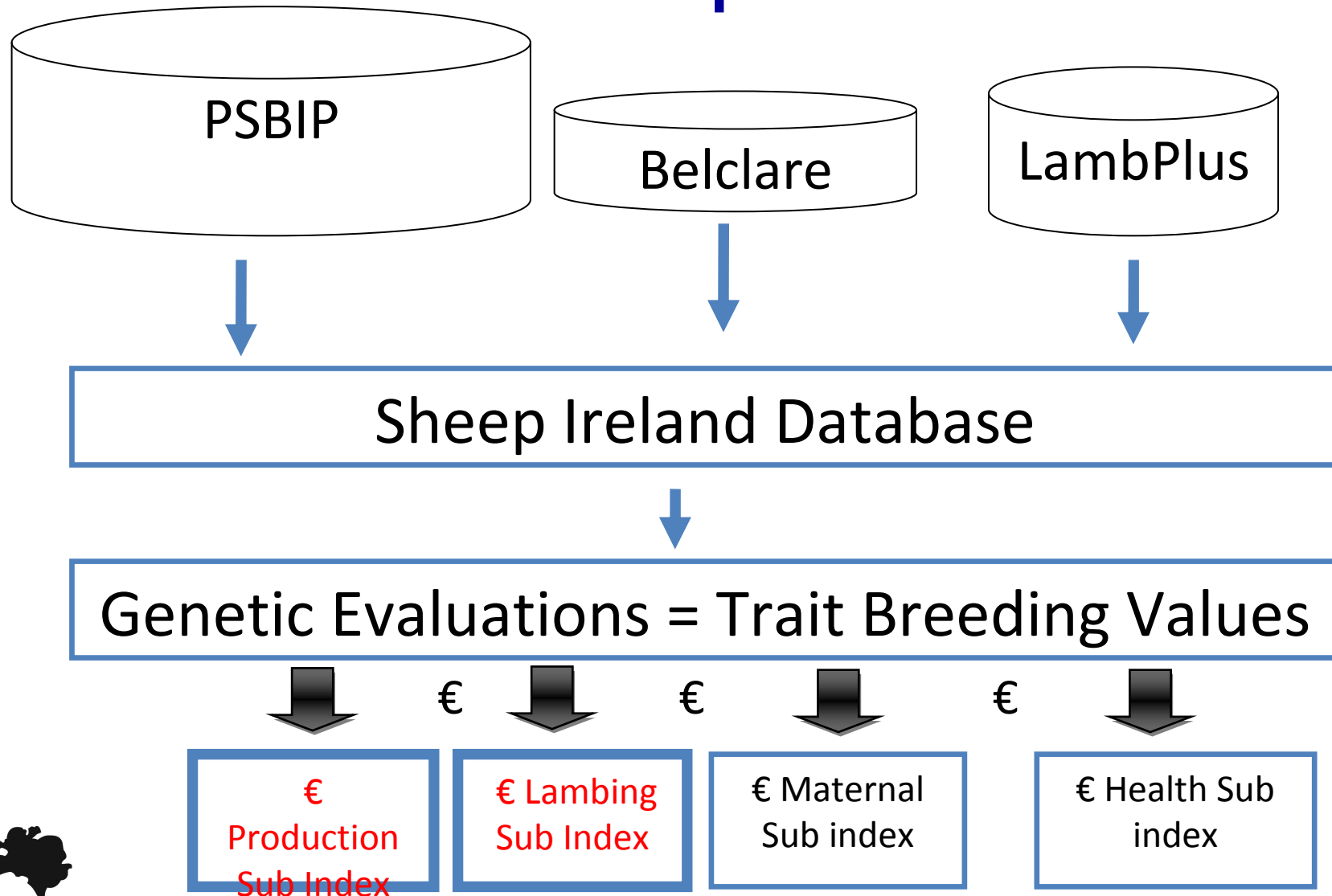




MALP farm walk – Genetic Evaluation and Indices

7th May 2009

The plan



The data

- **All records from historic data**
 - Historic (PSBIP all participating breeds)
 - Belclare
- **New records**
 - LambPlus Pedigree
 - LambPlus MALP
- **And in the future**
 - LambPlus CPT

The data

- **Have records for a range of traits**
 - Number of lambs born (Historic, Belclare, LambPlus)
 - Scan live weight (Historic)
 - Ultrasonic muscle & fat (Historic)
 - Lambing difficulty (Belclare, LambPlus)
 - 40 day weight (LambPlus)

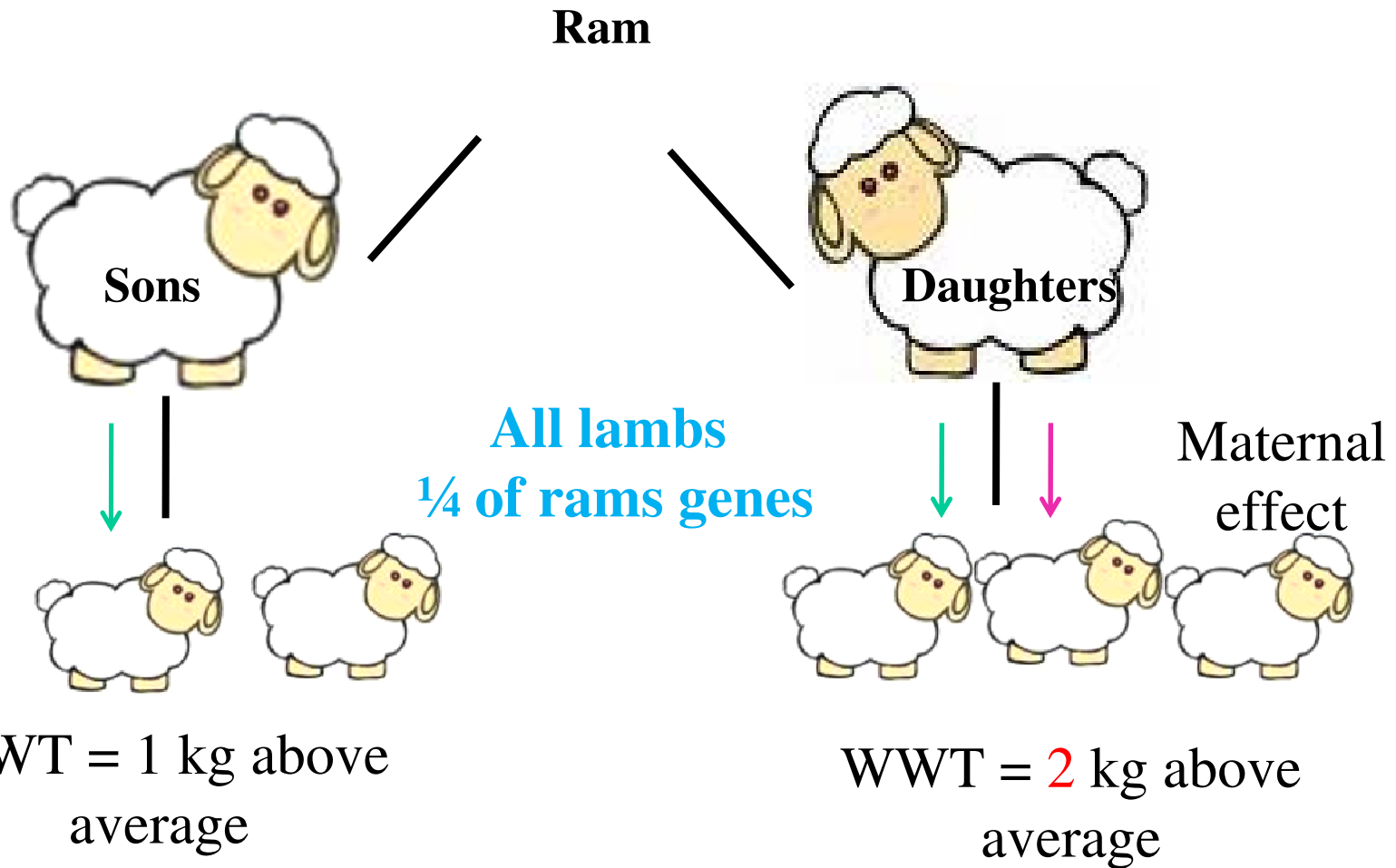
The data

- **More to come**
 - Scan live weight (LambPlus)
 - Ultrasonic muscle/ fat (LambPlus)
 - More weights (LambPlus)
- **All breeds analysed together**
- **More records collected = get more accurate breeding values**

Estimating genetic merit - Breeding Values

- Data analysis across breed to produce Breeding Values (BVs)
- BVs provide the best possible estimate of the actual genetic superiority/ inferiority of the animal
 - Expressed in trait units (e.g. WWT = kg)
 - **NEW!** – comparable across breeds
 - Will get breeding values for the traits we have good data records for

Breeding Values – direct and maternal



Indices

- **GOAL: Increase profitability**
 - Many traits contribute to profitability
 - Need to select on multiple traits
 - Develop indices
 - Trait impact = € economic importance (economic weight)
- **Based on same profit principles as dairy EBI & beef Euro-Star systems**

Proposed Indices

1. € Production Index combines:

- Weaning weight
- Carcase weight
- Carcase conformation score
- Carcase fat score
- Selection for growth rate and carcase
- This year

Proposed Indices

2. € Lambing Index combines:

- Lamb survival (direct)
- Lambing difficulty for singles and multiples (direct)
- **Selection for easy lambing and good lamb survival**
- **This year**

Proposed Indices

3. € Maternal Index combines:

- Slaughter live weight (maternal)
- Lamb survival (maternal)
- Lambing difficulty for singles and multiples (maternal)
- Number of lambs born
- Ewe mature weight
- **Selection for efficient replacement females**
- **More recording needed!!**

Proposed Indices

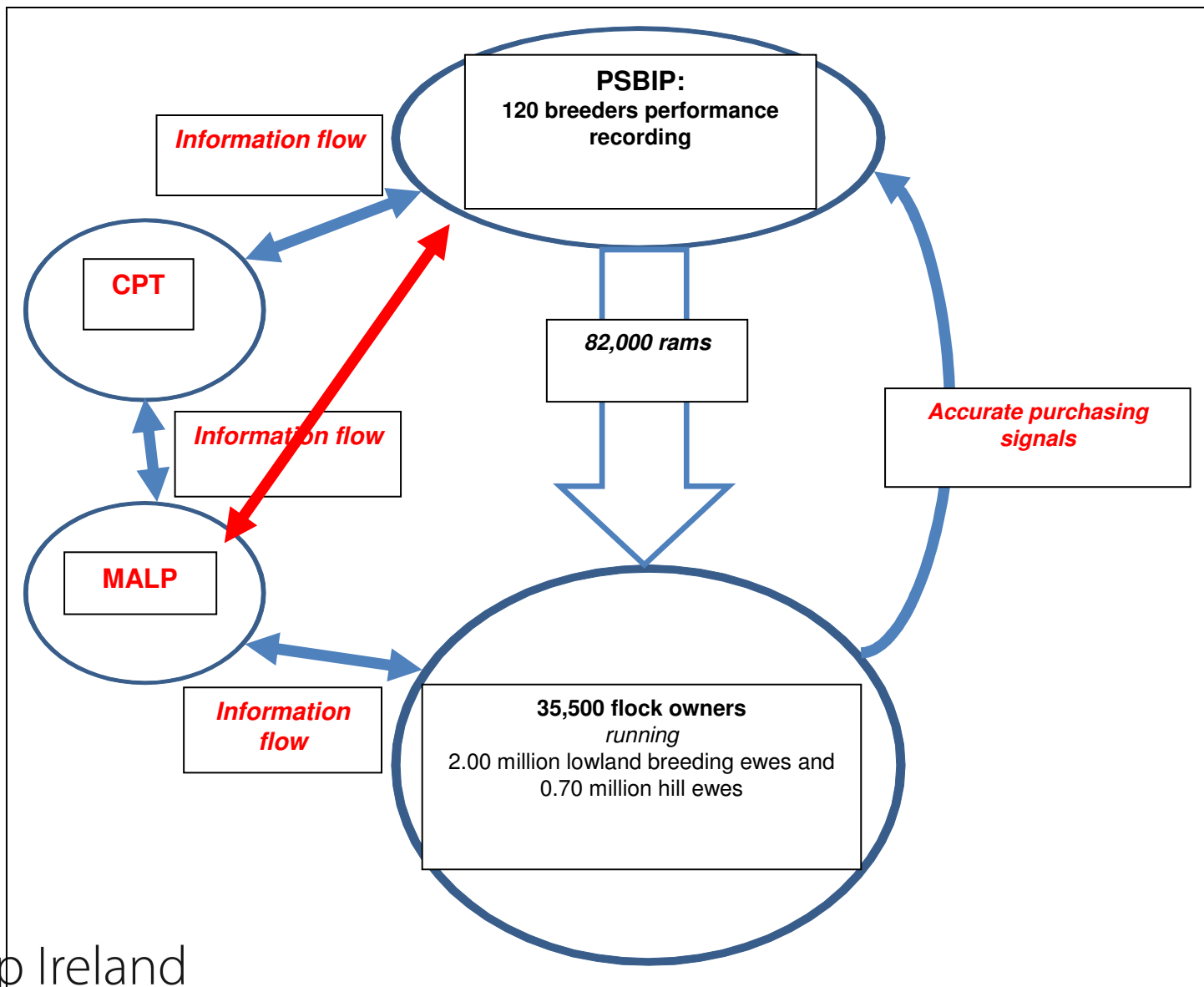
4. € Health Index combines:

- **To be developed later**
 - Foot rot
 - Internal parasite resistance
- **Selection for healthy low cost sheep**
- **More recording needed!!**

Presentation of Indices

- **€ value for each Index**
- **Potentially STAR system as in beef**
- **€W€-Star!**
- **Ideas?**

Scheme Overview



Summary

- Genetic Evaluation system being developed
- Historic and new data analysed together
- € Indices to be available
- Further indices as more data becomes available
- **IMPORTANT FOCUS THIS MATING: To link Pedigree and MALP with recorded rams used in same year**
- **KEEP RECORDING FOR ALL TRAITS!!!**