IRISH CATTLE BREEDING FEDERATION

Milk Recording Services
Higher Benefit / Lower Cost - Options

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Silver Springs Hotel, Cork

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Topics

- National MR Statistics
- MR Uptake
- Milk Recording – New Services/Trials
- Cost scenarios

Milk Recording – National Picture

No. Dairy Herds/Cows in Ireland

- 30,900 Dairy Herds in Ireland
- 1,149,480 Dairy cows in Ireland

No. Milk Recording Herds/Cows in Ireland

- 6,695 (33%) of these herds Milk Recording
- 375,693 (22%) of these Cows in Milk Recording

Irish Cattle Breeding Federation Statistics, 2002

No. Cows Milk Recording – 2003 Update

Herd Size	4 Week	6 Week	8 Week	Totals by herd size ↓
1 – 25	5,643	3,467	904	10,014 (3%)
26 – 80	133,988	97,126	19,612	255,726 (73%)
80+	52,227	29,353	10,126	91,706 (26%)
Totals by Scheme →	**191,858 (54%)**	**129,946 (37%)**	**30,642 (9%)**	**352,516**

Herds with more than 2 tests in last 9 months - Stats extracted from ICBF database on December 2003

Comparison of Milk Recording In Ireland vs International (2002)

	% Herds Recorded	3 Wks %	4 Wks %	6 Wks %	7 Wks %	8 Wks %	9 Wks %
UK	53		89				
Ireland	33		54	37		9	
Netherlands	82	5	63			32	
New Zealand	86		1		3		96
Denmark *	88		74			26	

*** Danish herd pop. comparable scale to Ireland**

Comparison of Milk Recording In Ireland vs Denmark (2002)

No Dairy Herds	30,900	7,500
No. Herds in Milk Recording	6,695 (22%)	6,600 (88%)
No. Cows in Milk Recording	375,693	547,000
Average Herd size in MR	56	83
No. DIY Herds	0 to Negligible	5,600 (85% of MR)
No Herds who own meters	6,100	1,000
No. Field Recorders/ MR Technicians	575	90
Intervals offered	4, 6, 8 wks	4, 8 wks

To Milk Record or not - ?

If the Effort > Benefit,

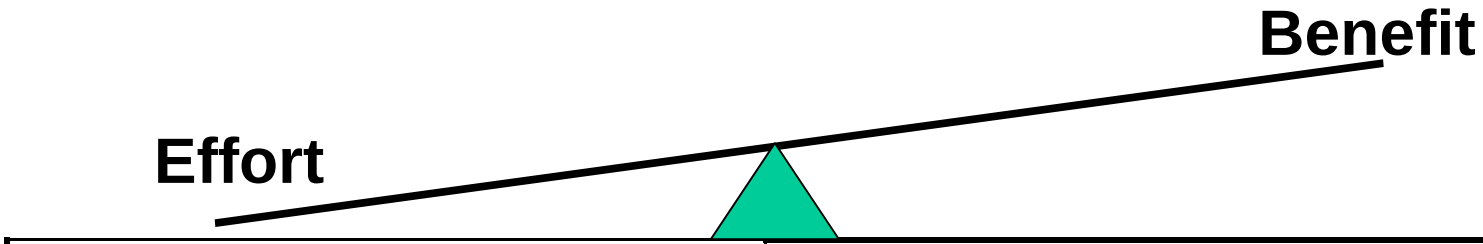
then take up will never happen

If the Benefit > Effort

then take up will happen

(Effort = cost + inconvenience)

To Milk Record or not - ?



Minimise Effort = Reduce Cost ↓	Maximise Benefit = Increase Value Add ↑
DIY option	Better, Timely Reports
Better Meter Utilisation	Timely Action/Mgt Info – more than just for premia
Move to Elec. Data processing – user friendly	Strategic Breeding Info - Decision Support System
Barcoded samples for Lab efficiency	Increase profit

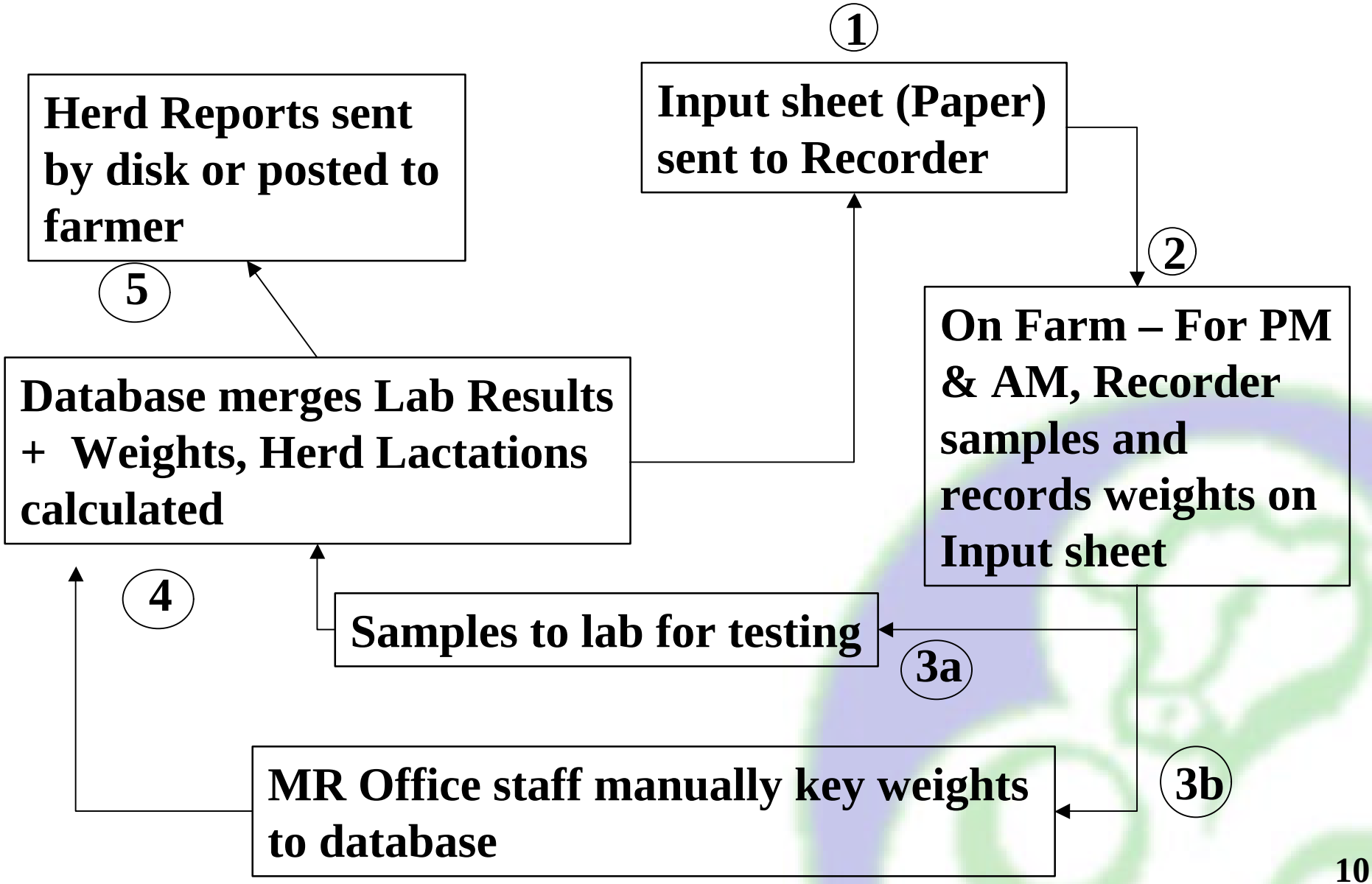
Trial MR Services 2004

To tip the Benefit vs Effort equation in the right direction for the farmer we need to;

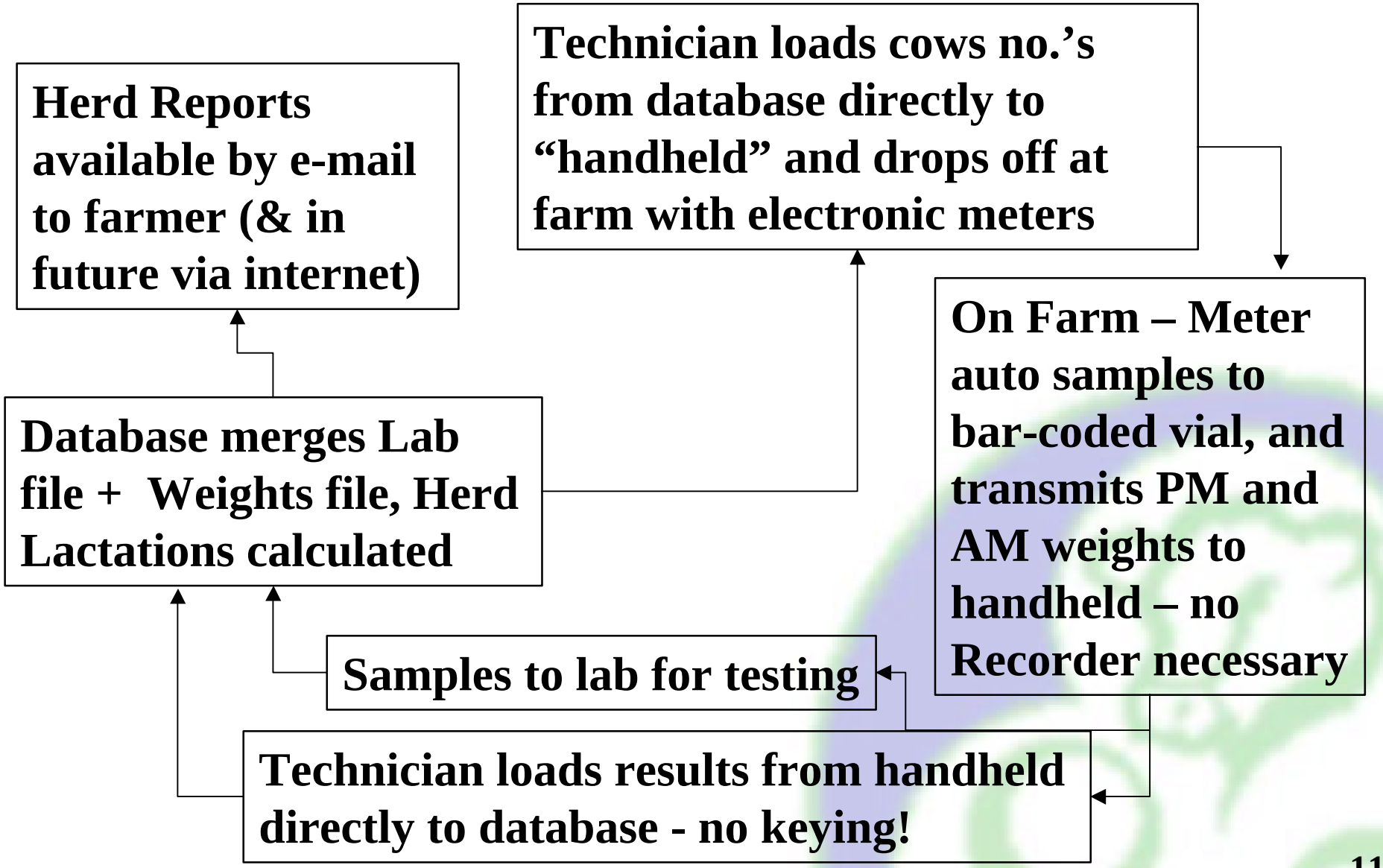
1. **Qualify New Methods, DIY, Sharing Meters, EDI, Barcode tests in Lab etc. Planned for 2004 are;**
   A. **DIY-E (Data Handler + Shared Electronic Meters)**
   B. **Low Cost A8 – seasonal herds**
2. **Increase Farmer education + change "sales pitch" to providing a DSS* (not discussed here)**

DSS = Decision Support System

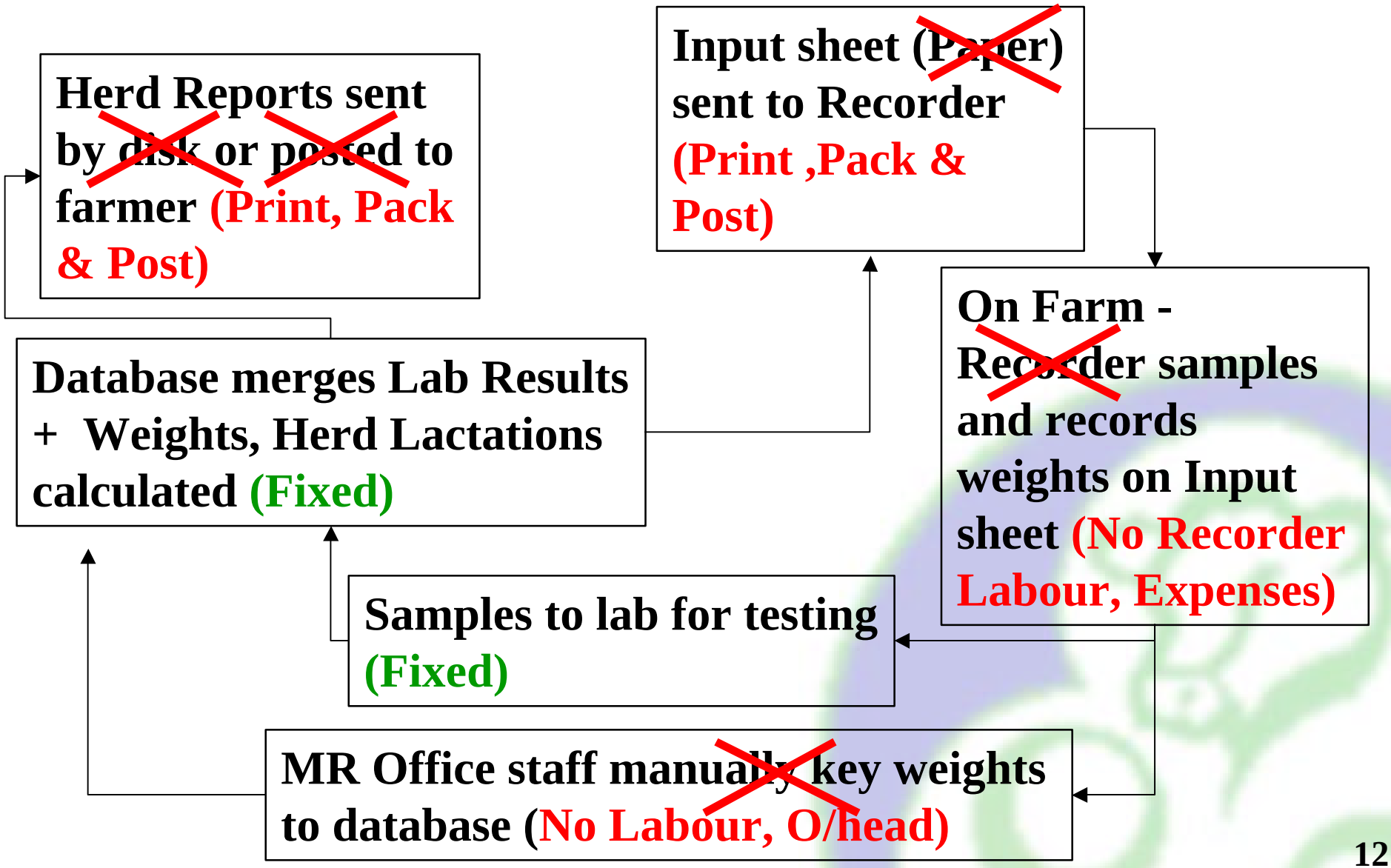
Current Recording Cycle
(5 Step - paper based)



DIY Cycle (Electronic based)



Current Recorder Cycle
(cost- areas saved)



A. DIY-E (Data Handler / Shared Electronic Meters)

1. TECHNICIAN UPLOADS HERD FROM DATABASE TO DATA HANDLER

- ❑ Technician plans and maintains Herd test schedule. (DK = 73 herds/Tech)
- ❑ He ensures all Data Handlers and Meters are sufficiently charged
- ❑ He has access to database from his home PC, can check his farmers data
- ❑ From his PC he Uploads the scheduled herds' data (cows) to Data Handler
- ❑ If there are 5 farmers due for test next day then he uploads 5 Data handlers.
- ❑ Transports Data Handlers and Meters to Farmer on day of PM recording

Data Handler

Upload Herd

Charge Meter

Transport to Farm

No paper input sheet required – herd is loaded to data handler.

A. DIY-E (Data Handler / Shared Electronic Meters)

2. PM/AM - FARMER LINKS COW TO METER /BARCODE – WGT/SAMPLES

- ❑ At milking the farmer links cows number in data handler to meter/barcode.
- ❑ Meter takes Milk Weight Reading when finished
- ❑ Meter automatically takes sample into barcoded vial
- ❑ As cow is linked to meter the Data Handler now has captured the weight and barcode No. for both PM and AM
- ❑Data Handler can also take data on Milking Time, Flow Profile, Wash Profile

Meter

Sample and Weight

Data Handler has data

A. DIY-E (Data Handler / Shared Electronic Meters)

3. TECHNICIAN PICKS UP METERS, DATA HANDLER AND SAMPLES

- After hot wash Farmer takes down meters for Technician to pick up
- Technician takes Meters and Samples with him
- Farmer has option of taking print out of PM, AM readings
- Print out will also give list of dry/missed cows and batt status of meters

Meters washed

Meters moved

Print option for Farmer

A. DIY-E (Data Handler / Shared Electronic Meters)

4. TECHNICIAN DOWNLOADS HERDS DATA DIRECTLY TO DATABASE

- Technician plugs Data Handler into PC Interface and updates database
- No Paper, No Keying, – he checks farmer data, confirms download to Dbase
- Samples are sent to Lab
- Print out will also give list of dry/missed cows and batt status of meters

Data Downloaded

Samples sent to Lab

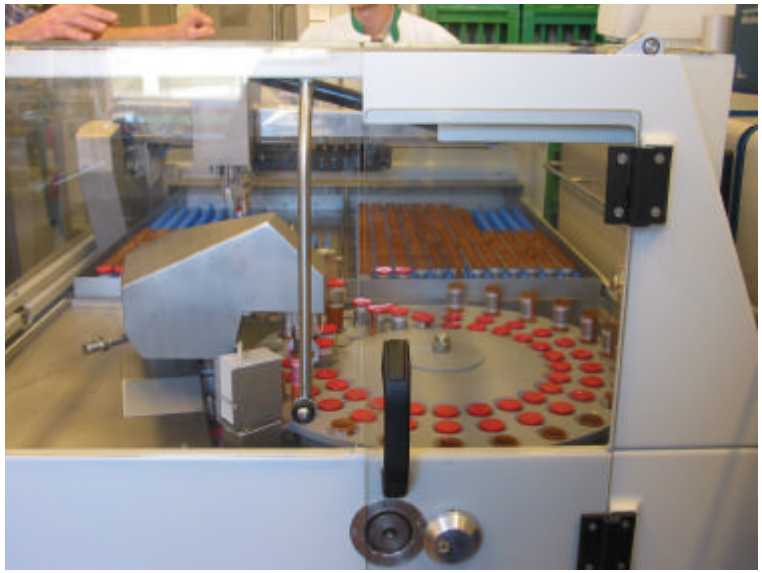
A. DIY-E (Data Handler / Shared Electronic Meters)

5. LAB ANALYSES AND SENDS CONSTITUENT RESULTS TO DATABASE

- ❑ Barcoded vials means no stopping of Foss machines to key Herd ID
- ❑ Robot* tester can test 480 samples/hr all lab tech is load/unload
- ❑ Foss outputs file to database with barcode and constituents linked

* *Intellitech robot can be attached to std Foss (approx 80K Euro*)

Robot +Foss test samples (480/hr)



A. DIY-E (Data Handler / Shared Electronic Meters)

6. FARMER LOGS AND ACCESSES HIS REPORTS ON LINE

- Both Tech and Farmer can see Results on Line –pdf format
- If Farmer wants Hard copy he prints himself
- No print / pack / post cost – if farmer wants this he pays extra.

As well as standard Milk Production Reports some of the other "Decision Support" type reports include;

- **Animals for Breeding**
- **Bull Selection**
- **Reproduction Herd**
- **Expected Calvings**

A. DIY-E (Data Handler / Shared Electronic Meters)

A. DIY–E Project Update:

- 25 DIY Electronic Meters received 03rd Feb 2004
- 3 Data Handlers received 03rd Feb 2004
- Technician selected
- Commissioning trials scheduled on 2 farms 11th 12th Feb 2004
- 5 Dairygold MR Herds will run for season
- Gather and analyse data and qualify for Irish production 2005

Immediate MR Service available 2004

Herds on new database can now avail of new Low Cost A8. (SLAC method of calculation means accuracy is maintained although fewer tests).

- **Low Cost A8**
  - **Seasonal Herds**
  - **4 visits per season**
  - **Target cost to Farmer is € 8 / cow (MRO to decide)**
- **Aims**
  - **Retain/Attract New Clients to Milk Recording**
  - **Reduce Recorder costs for MRO**

Other MR Services under review 2004/5

- Low Cost A8 for all year round calving herds
- More flexible, farmer friendly intervals
- Alternate Recording AM/PM
- Data upload Milk Weights from Electronic Meters

New Client Charges- Scenarios

Example: Farmer with 75 cows, 12 unit parlour, has a PC & wants to sign up for Milk Recording (1 visit = AM+PM)

Item	Current * A4 (€15.27) 11 visits	Current * A8 (€10.56) 7 visits	Low Cost A8 (€8.00) 4 visits	DIY-E A8 (€5.00) 4 visits
Herd Admin Fee	50	50	50	50
Disk fee	33	33	Email	Email
Cow charge	1145	792	600	375
Meters x 12 (Rec Equipment)	1524	1524	1524	Rent @ € 4 /meter/visit = € 192
Total Cost to Farmer	**€2752**	**€ 2399**	**€ 2174**	**€ 617**

**Representative figures are average of 3 large MROs charges , A4 = € 15.27 /cow, A8 = € 10.56, Meter cost = € 127. Low cost A8 @ € 8 /cow, DIY @ € 7/cow scenario*

Existing Recorder Pay

Example: Farmer of 75 cows, 12 unit parlour, has a PC and has signed up for A8 (7 visits). He has been assigned a Recorder.

Item	Cost (€)*
Flat fee (0-25 cows) @ € 33/visit	33
Rate cows 26 – 80 @ € 0.22/extra cow	11
Typical Expenses	5
Recorder Payment per visit	€49
Recorder Payment per annum (7 visits)	**€ 343**

*****_Representative figures are average of what 3 large MROs are paying in 2003. This is direct cost only and does not take in any O/Head for recorder e.g.equip._

Summary

Challenges for implementation of Electronic DIY ;

- ❑ **Practice of Meter movement – this is well established in international - robust post use washing protocol is a given**
- ❑ **Initial cost of meters to MRO – offset by, max. equipment utilisation, equipment rental ,depreciation & growth in business.**

MRO;

- ✓**Reduce Recorder Cost**
- ✓**Eliminate Keying cost**
- ✓**Reduce Lab costs (barcodes)**
- ✓**Increase Meter Utilisation**

Farmer;

- ✓**Reduce MR Charges**
- ✓**User friendly, clean**
- ✓**Improve Data Accuracy**
- ✓**Improved/New Reports**
- ✓ **Breeding Advice**