HOW TO INCREASE QUALITY AND QUANTITY IN DAIRY CATTLE AS DUAL PURPOSE BY GENETIC IMPROVEMENT

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HOW TO INCREASE QUALITY AND QUANTITY IN DAIRY CATTLE AS DUAL PURPOSE BY GENETIC IMPROVEMENT

Argi Argiris, IPB Bogor, Indonesia
Background

- **Australia Awards Indonesia: Red Meat Partnership Policy Training Course, April-May 2015**
  - 10 technical staff from Ministry of Agriculture, Indonesia
  - 6 week short introductory policy course
    - funded by DFAT/DAFF
    - managed by Coffey International, Jakarta
    - delivered by UQ International Development
Dairy cattle are dual purpose, for milk and beef
Average milk production is low (10.5 lt/day)
Low quality standards for milk processing
Identification on cattle is not effective
Mobility of calves is high
Difficult to get good data on animal performance
Design of breeding policy
Problems

- How to increase dairy cattle population
- How to increase average milk production
- Start to identify cattle
- How to get good data as a basic tool to make good policy (population, reproduction, production, breeding management etc)
- How to introduce improved technology (reproduction, production, feeding, breeding, animal health, etc)

GENETIC IMPROVEMENT by BREEDING SCHEME
PhD project, IPB Bogor

- Customer satisfaction with dairy semen from AI Centres in Indonesia
  - 2 AI centres in Indonesia, supply same product, compete in same market
- Assessment of semen quality supplied by centres
  - Possibility of introducing technology from Australia
  - Beef Breeding Services, Rockhampton - adapted microscope used to identify sperm with better survival rates
  - Opportunity to cooperate with Australia to export semen to Asian and African countries
- Survey customers in 5 areas in East Java regarding semen performance
- Investigate microchipping of calves so their location during their life can be tracked
  - Performance recording and estimation of breeding values
- Economic evaluation of natural breeding compared to AI in beef cattle
POTENTIAL RESULTS

- Introducing new genetics for better quality and quantity of milk
- Increased milk production
- Introduce a performance recording system
- Get good data on animal performance
- Efficiency of reproduction/production etc
- Make better policy decisions with good data
- Increase farmers’ incomes
Vista

PRODUCTION CAM (07/66) 51 dams 47 herds (83% Rep.)
- Milk: 2287 kg 99
- Fat: +0.02 86 99
- Protein: +0.02 74 99

CONFORMATION CAM (07/90) 51 dams 43 herds (70% Rep.)
- Conformation: +4 73
- Dairy Character: +10
- Frame/Capacity: +7
- Rump: +8
- Feet & Legs: +5
- Mammary System: +2
- Fore Udder: -3
- Rear Udder: +6
- Size: +9
- Statute: +6

Descriptive Traits
- Chest Lean Strength: +4
- Rump Width: +0
- Pin Gaiting: +6
- Bone Qual: +6
- Leg Set: +20
- Udder Texture: ±
- Med. Disp.: ±
- Fore Height: ±
- Rear Att.: ±
- Fore Att.: ±
- Floor Width: ±
- Tails: ±

Auxiliary Traits
- Calving Ease (84% Rep.): 3.6
- Milking Speed (76% Rep.): 7.9
- Heat Life (64% Rep.): ±
- Somatic Cell Score (46% Rep.): ±

Stk: Rothrock Tradition Leadman EX GM
Dam: Mayerlane Velma Velvet ET VG
- Birthdate: 91/01/01

GP: 70HO0730
Reg. #: USAM2159770

Mayerlane Vista ET

MGS: Walkway Chief Mark VG SP GM

02-02 305 12,869 461 3.60% 422 3.30% (kgs)
1 Lact: 14,706 530 3.60% 489 3.30%
THANK YOU