

Organization of Milk Collection in Indonesia

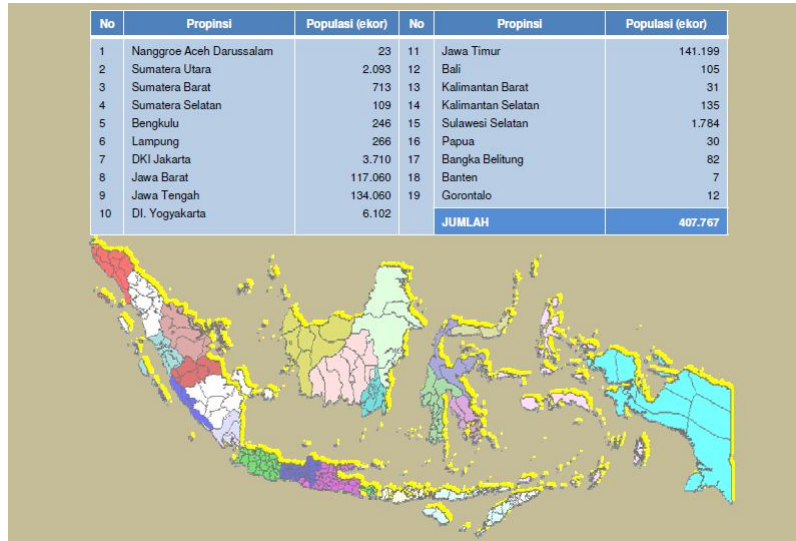
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Dairy Expert Roundtable Meeting,
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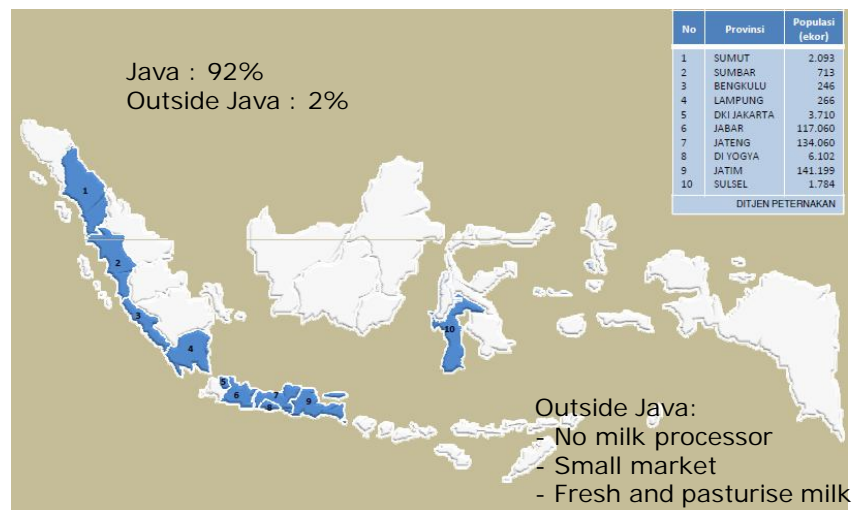
The Advantage of Dairy Industry in Indonesia

- Village based industry
 - Involves 69,300 farmers and 211,000 employees
 - Allows farmers to get daily income
 - Improves nutritional status
 - Utilize local resources
 - Support sustainable agriculture
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Dairy Cattle Population Indonesia



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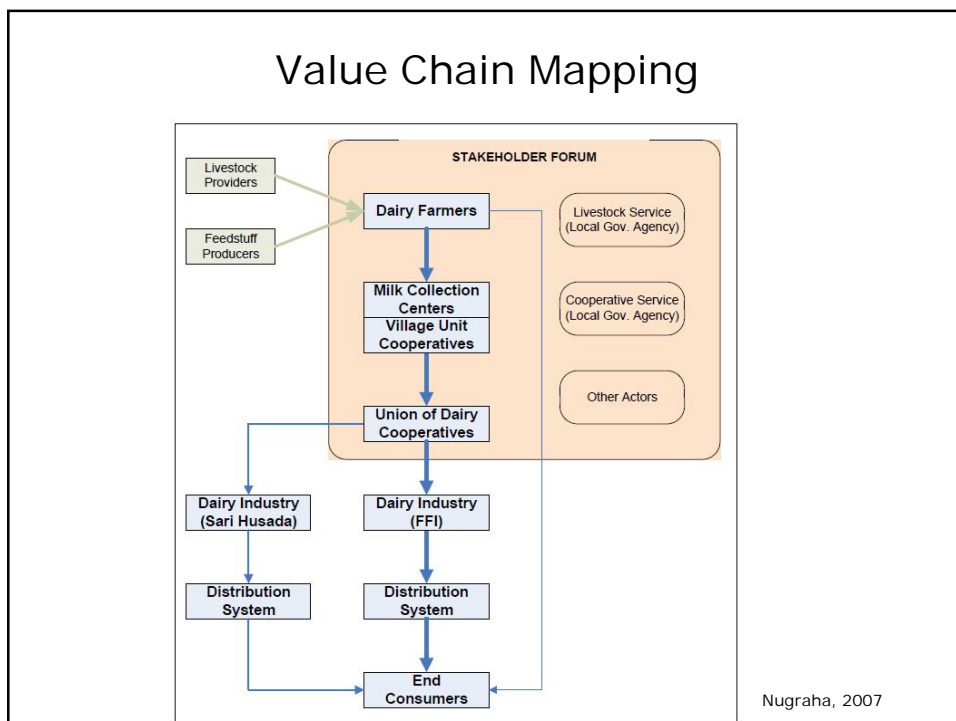
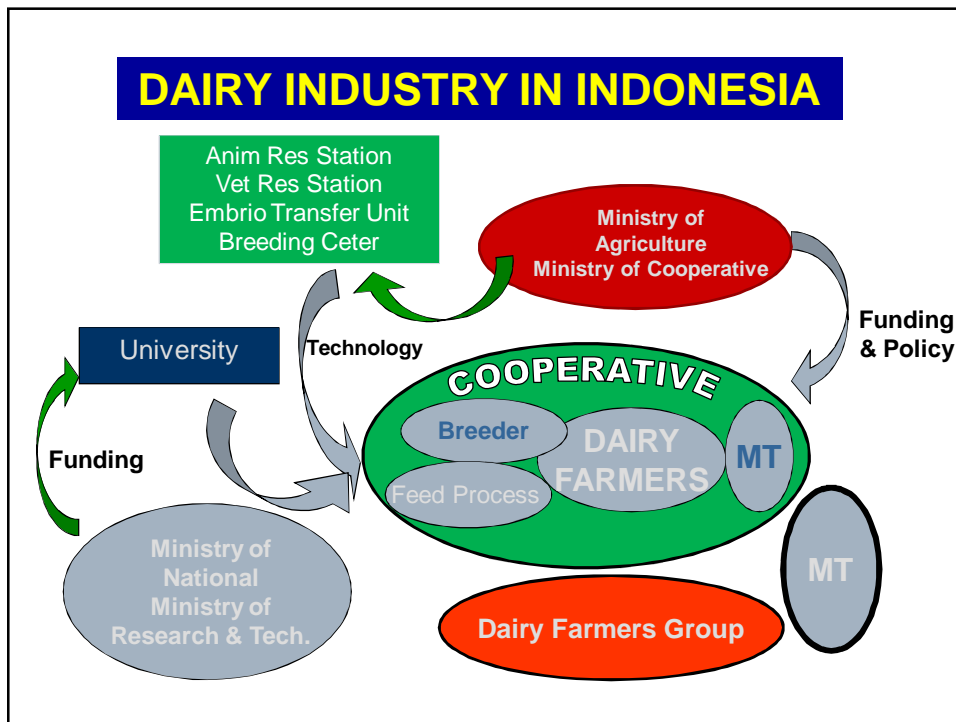


Dairy Population & Milk Production

- In 2010 dairy population 407,767 head
 - Mainly in Java
 - Milk production 682,120 ton/year
 - Almost 99% of milk is distributed to big dairy industries, only 1% distributed to small milk processor.
 - Local milk production is only 20-25% of total demand
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Milk Processing

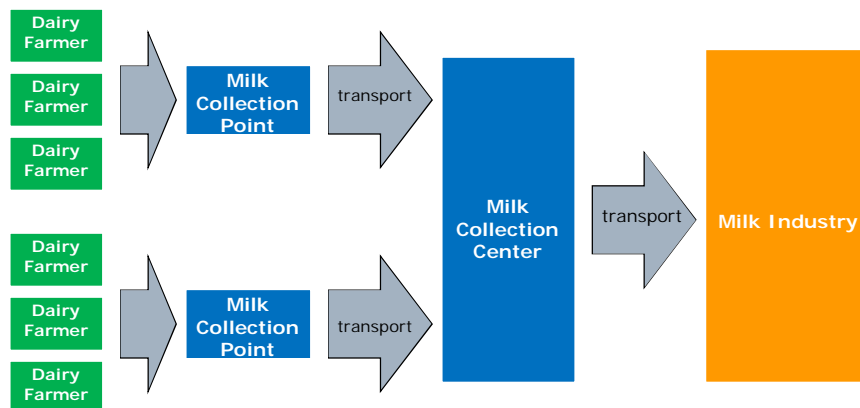
- Demand of fresh milk products increase
 - Major Dairy Industries:
 - Nestle,
 - Friesien Flag,
 - Indomilk,
 - Ultrajaya,
 - Sarihusada, and
 - Danone
 - Major problem is low milk quality
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Current Condition

- ❑ Low milk quality:
 - Low fat and protein – low feed quality
 - TPC > 1 millions
 - ❑ Milking management
 - ❑ Milk handling
 - ❑ Quality of cooling unit
 - ❑ The distance between farmer to cooling is some time far
 - ❑ Sometime found the poor road conditions
 - ❑ Transportation condition
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Milk Collection From Farmer to Milk Industry



Milk collection point

- There are several hundred milk collection point
 - Farmers take their milk to the milk collection point
 - There are alcohol and density cheking
 - Milk is tranported to cooling center by truck
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Milk collection center

- Every cooperative has cooling center
 - There checking for quality
 - Total solid, SNF, Fat, Protein, density
 - Transported to the factories with tanker
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Technical Guideline – Milk Collection Center

- ❑ Walls and floors should be water-resistant (porcellen)
 - ❑ The ceiling is made of materials that do not pollute the milk and covered
 - ❑ Door and window can close itself freely and widely shutters maximum 15% of floor area.
 - ❑ Has good ventilation
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Technical Guideline – Cooling Unit

- ❑ Milk Tank with technical specifications as follows:
 - Having capacity capacity (volume) 2000 liters
 - Tanks and pipes made of either steel stainless steel inner and outside
 - Oval or rectangular shape (but not the inside of the angle) with elongated type (Horizontal)
 - Mixer milk with a speed of 36 rpm, with electric power 0.3 kilowatt (kw)
 - Condenser fan with 0175 kw of electrical power
 - Chilled water pump with electric power 0.75 kw
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Technical Guidline – Cooling Unit

- Cooling Units (Refrigeration Units) with the specification consists of:
 - Cooling capacity with a compressor (cooling capacity of compressor) amounted to 16 340 kcal/hour.
 - Number of compressor in increments of 1 pieces with electric power of 4.5 kw.
 - With the ability of cooling temperatures up to -40 ° C
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In the future

- Improve milking management and milk handling
 - Equiped by portable milking machine
 - Improvement road infrastructure
 - Build small cooling unit in vilage
 - Milk price insentives
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Thank You
