

DAIRY INDUSTRY Development in INDONESIA

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**Heifer Importation Workshop
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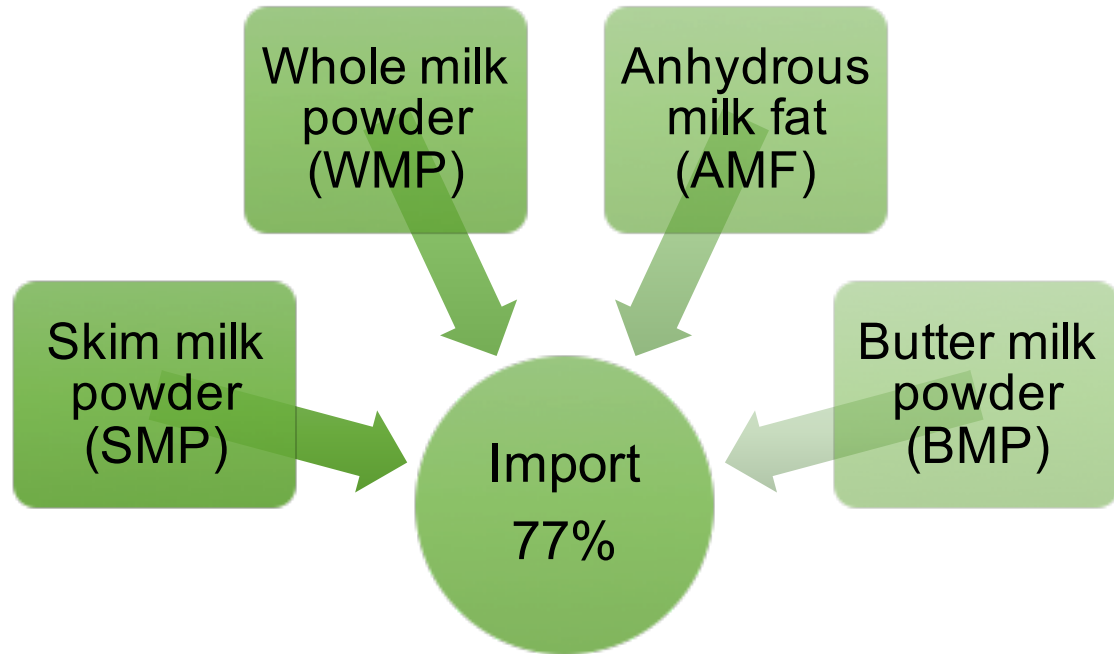
OUTLINE

1. The current condition of Indonesian dairy industry
2. Dairy industry development
3. Dairy industry development model
 - A. Production area expansion to outside of Java
 - B. Partnership program scheme
 - C. Dairy cluster
 - D. Contract farming

1. **INDONESIAN DAIRY INDUSTRY**

Indonesian Dairy Sector

The current national milk demand/requirement reaches **3.7 million ton (fresh milk equivalent)**



Domestic production: **23% (0.85 million ton)**
Import: **77% (2.85 million ton)**

Imported from New Zealand, Australia, Thailand, USA, Europe

Production of MPI and DFM

No.	Description	Unit	Year		
			2014	2015	2016
1.	Number of companies	Business Unit	51	53	60
2.	Production of Milk Processing Industry or MPI (fresh milk equivalent)	Ton	3.290.933	3.293.459	3.700.000
3.	Production of Domestic Fresh Milk (DFM)	Ton	800.749	805.363	852.000
4.	Import of raw material (fresh milk equivalent)	Ton	2.490.184	2.488.096	2.850.000
5.	Percentage of import	%	76%	76%	77%

Absorption of Domestic Fresh Milk (DFM)

- **Only 14 MPI** which absorb DFM among 60 dairy companies in Indonesia
- DFM absorption scheme: integration of the factory with independent dairy farm or partnership with cooperative and/or dairy farmers
- **95% of DFM have been absorbed by MPI**, but **the availability is still limited**
- The limitedness of DFM leads to MPI's dependence on import: 77% (2.85 million ton)

14 MPI absorbing DFM:

1. PT Nestlé Indonesia
2. PT Indolacto (Indofood Group)
3. PT Frisian Flag Indonesia
4. PT Ultrajaya Milk Industry Tbk.
5. PT Sarihusada Generasi Mahardhika (Danone Group)
6. PT Diamond Cold Storage
7. PT So Good Food Manufacturing
8. PT Cisarua Mountain Dairy
9. CV Cita Nasional
10. PT Garudafood Putra Putri Jaya
11. PT Yummy Food Utama
12. PT Bukit Baros Cempaka
13. PT Industri Susu Alam Murni (ISAM)
14. PT Greenfields Indonesia

Distribution of Dairy Cattle Population (2016)

Province	Population (heads)	%
East Java	264.905	49.62
Central Java	137.434	25.74
West Java	119.287	22.34
DI Yogyakarta	4.066	0.76
DKI Jakarta	2.603	0.49
South Sulawesi	1.553	0.29
North Sumatera	1.163	0.22
West Sumatera	891	0.17
Others	1.975	0.37
Indonesia	533.877	100

Prediction of Population, Consumption, and Production

Year	Prediction			Deficit	
	Population (000 heads)	Fresh milk consumption (000 ton)	Milk production (000 ton)	Production – Consumption (000 ton)	%
2017	584	4093	974	-3120	-76.21
2018	604	4352	1014	-3339	-76.71
2019	624	4628	1055	-3573	-77.20
2020	645	4921	1098	-3823	-77.68
2021	666	5233	1143	-4089	-78.15
2022	688	5564	1190	-4374	-78.61
2023	711	5916	1239	-4677	-79.06
2024	735	6291	1290	-5001	-79.49
2025	760	6689	1343	-5347	-79.93

**Deficit keeps
INCREASING**

2. DAIRY INDUSTRY DEVELOPMENT

ON-FARM TARGET

**DFM ratio:
Import will
become 40:60
in 2021**

**Dairy cattle
productivity >
15 L/head/day**

**Lactating cow
population of
394 thousand**

**Increased
milk
processing
facilities and
infrastructure**

**Implementation
of Good
Farming
Practice (GFP)
to improve milk
quality**

3. DAIRY INDUSTRY DEVELOPMENT MODEL

A. Expansion of Production Area to Outside of Java

Supply side

- Availability of labor (labor-intensive industry)
- Availability of technology
- Abundant sources of feed (22 million HA of pasture, by-products of food crops (straw, paddy, and maize): 44 million ton of dry seeds/year), by-products of oil 6 million HA of palm plantations)

Demand side

- Improvement of public awareness on nutritious products
- High consumption of processed foods and beverages
- Proliferation of SMEs producing dairy-based foods and beverages (cake, bakery, coffee shop)

Potential Development Location

No.	Province	District
1.	North Sumatera	Karo, Deli Serdang
2.	Riau	Kampar
3.	West Sumatera	Padang Panjang, Tanah Datar
4.	South Sumatera	Pagar Alam, Muaraenim
5.	Bengkulu	Rejang Lebong, Kepahian
6.	Jambi	Kerinci
7.	South Kalimantan	Banjarbaru
8.	South Sulawesi	Enrekang, Sinjai
9.	North Sulawesi	Minahasa, Tomohon
10.	Bali	Bangli
11.	West Kalimantan	Kodya Pontianak

Challenges



Source: Matondang *et al.* 2012; Romjali & Eko n.d.

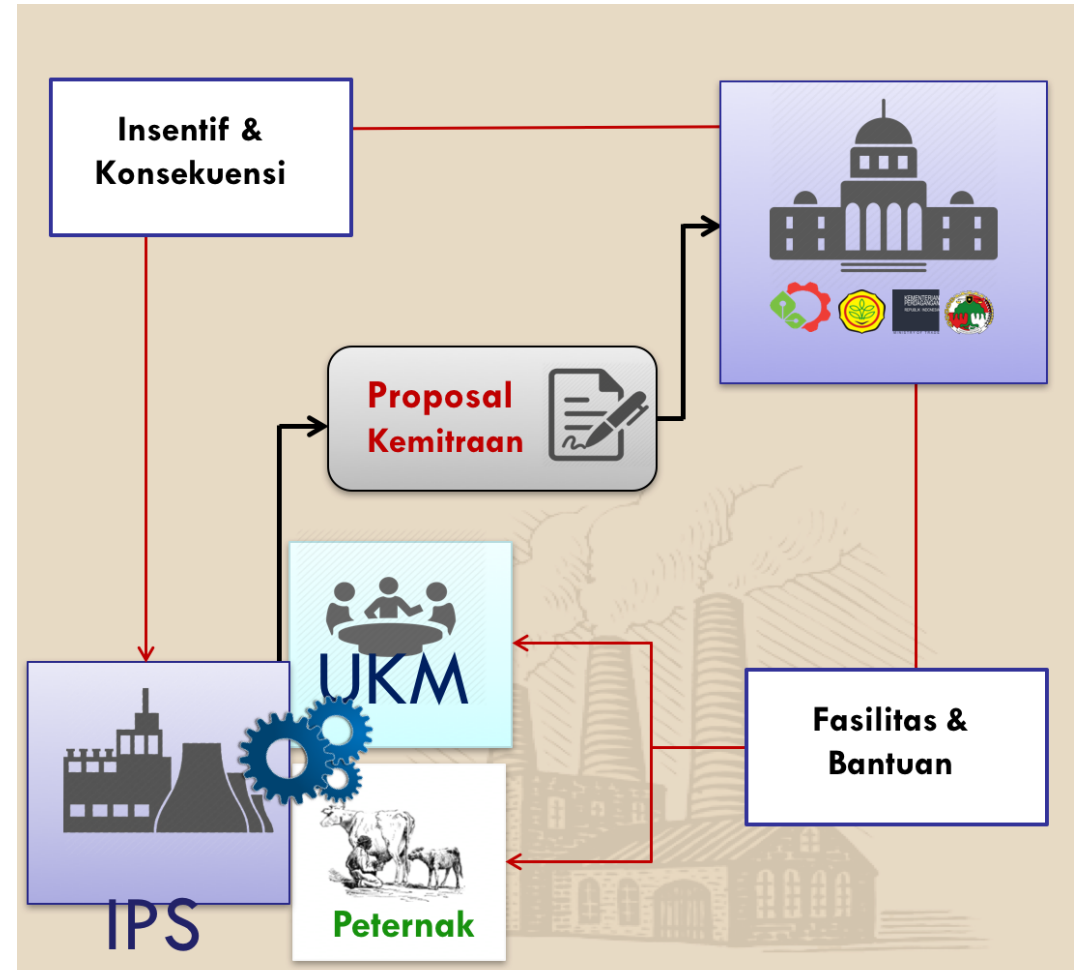
Preparation for Dairy Industry Development Outside Java

- Provision of heifer with quality genetic
- Knowledge transfer: Implementation of Good Farming Practices (GFP)
- Technology transfer: Implementation of dairy cattle technology (feed, dairy cattle maintenance, breeding method, milk quality) and dairy cattle manure management (biogas)
- Development of dairy farmers institution: cooperative and dairy farmer group
- Development of feed mill facility using local resources
- Post-farm equipment facility: cooling unit
- Supporting service provider: financing, insurance for cattle and human health
- Guidance on milk's value added enhancement in order to improve the downstream
- Development of milk processing infrastructure
- Improvement of milk consumption promotion

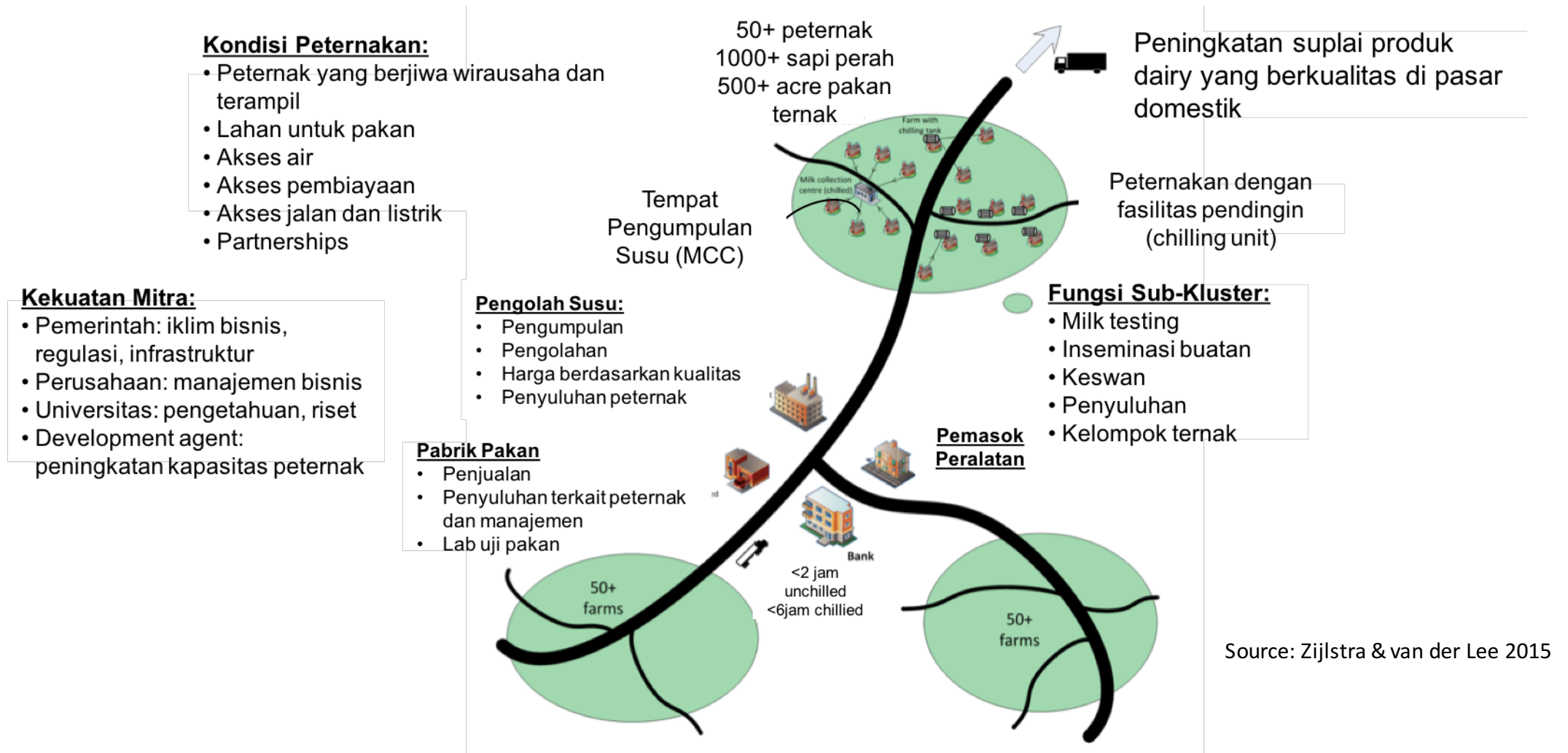
B. PARTNERSHIP PROGRAM SCHEME

Partnership

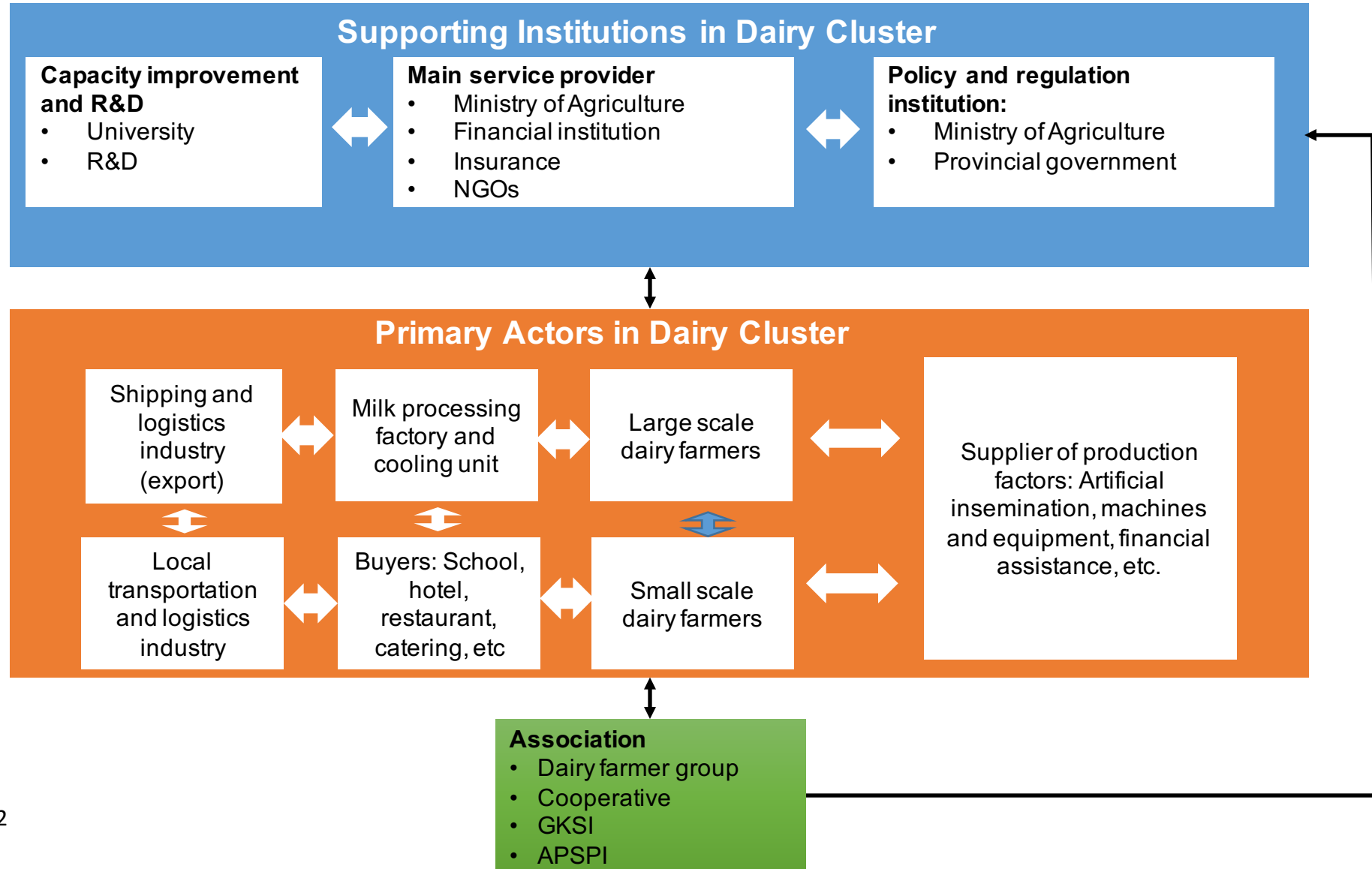
1. Dairy farmers
2. Small and Medium Enterprises (SMEs)
 1. Dairy farmer cooperative
 2. Milk processing cooperative
3. Milk processing industry
4. Government



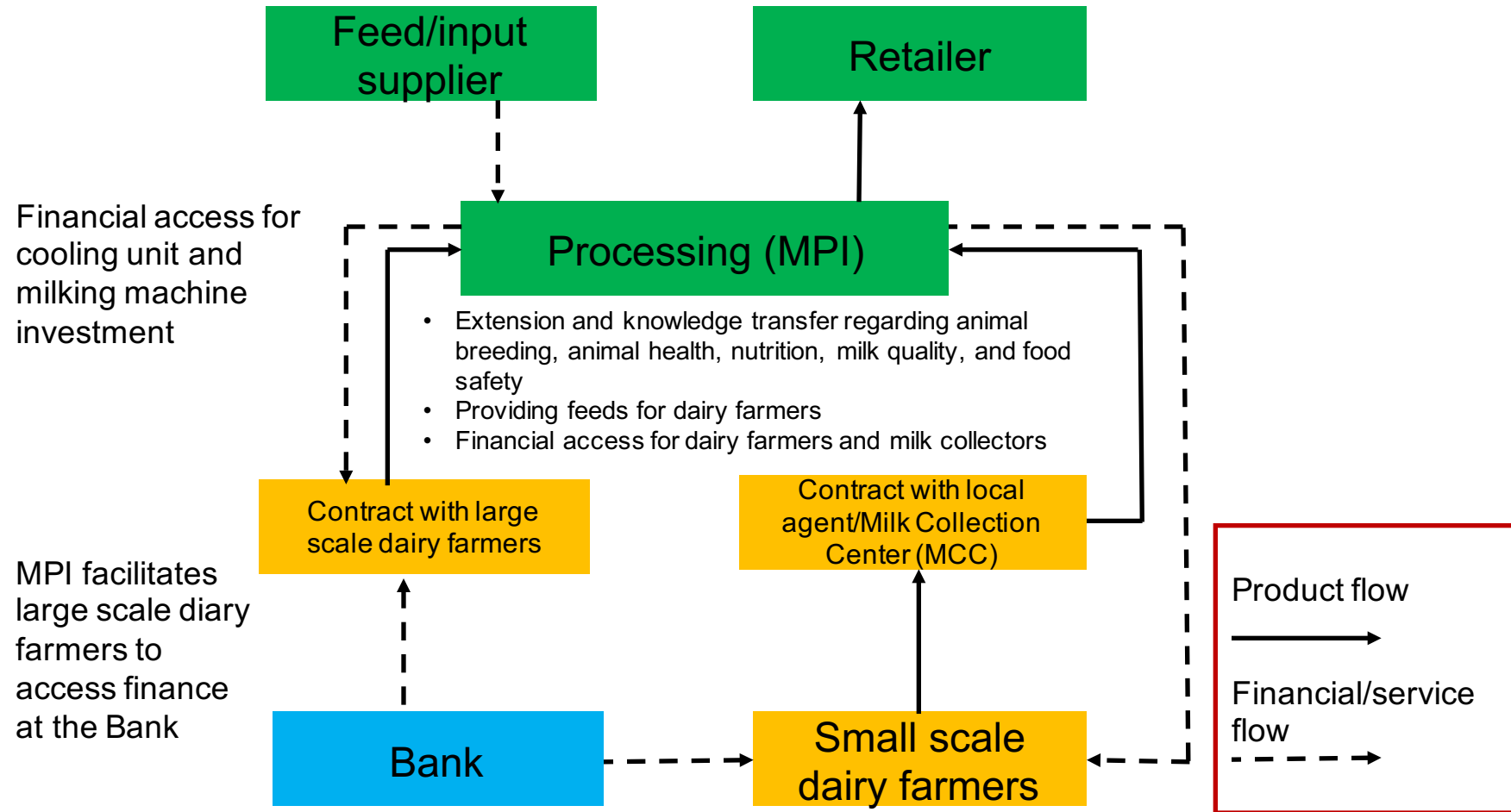
C. DAIRY CLUSTER



DAIRY CLUSTER

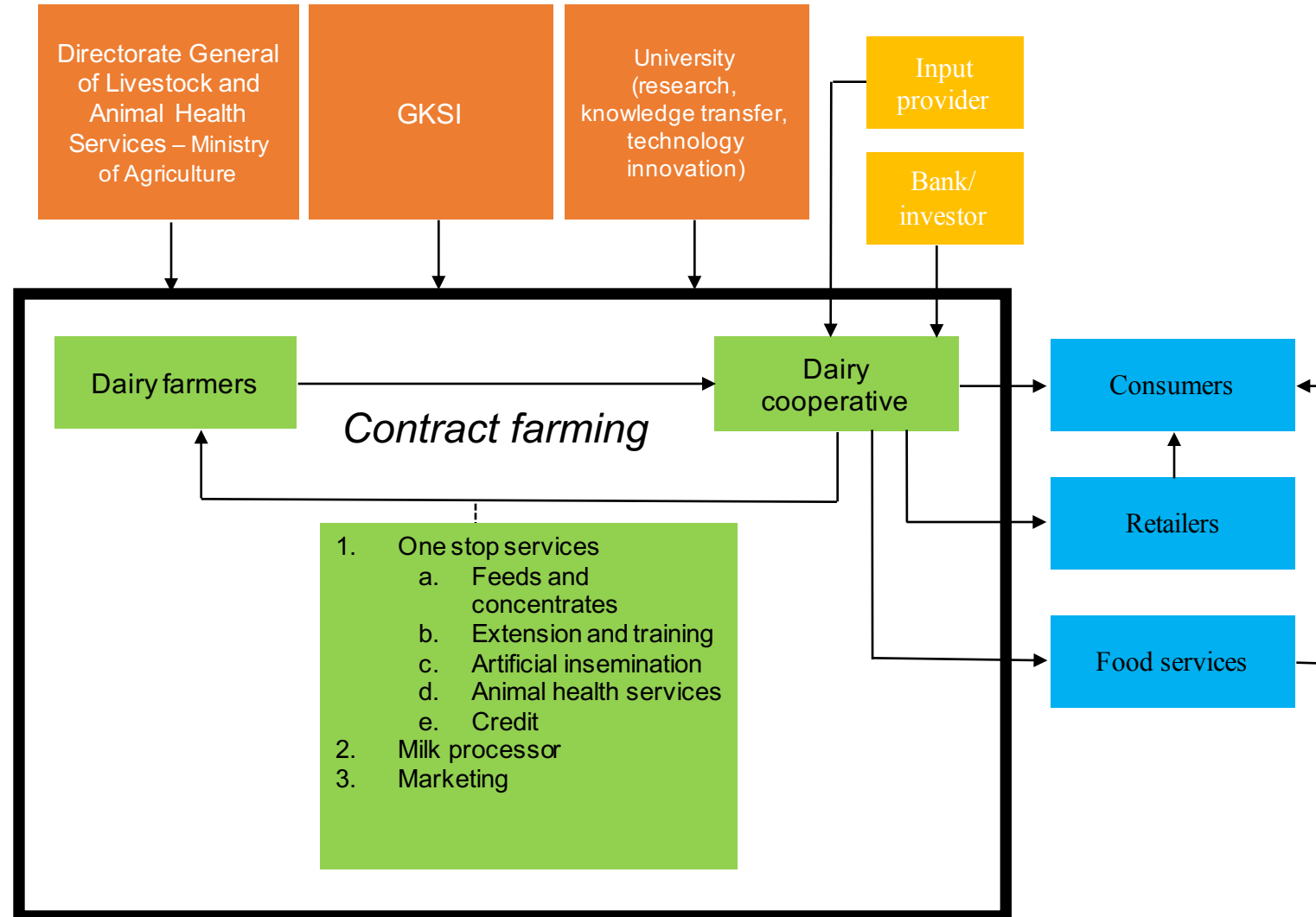


D. CONTRACT FARMING MODEL



Source: Adapted from IFPRI 2015 – Nestle India Model

CONTRACT FARMING MODEL



THANK YOU