END OF PROJECT REVIEW

SITUATION: CHALLENGES ALONG THE INDONESIA'S DAIRY VALUE CHAIN

Dr. Sahara
Department of Economics
Bogor Agriculture University

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Presentation Outline

1. Introduction
2. Research objectives
3. Key results and discussions
4. Conclusion and policy implications

Introduction

The dairy market in Indonesia: relies on import (above 77%)

Several development efforts have been done to increase domestic milk production

The challenges occurs not only at the farm level → along the value chain of dairy product

Description	2017	2018	2019	2020	Growth (%)
Domestic needs (000 ton)	4267.32	4355.08	4332.88	4385.73	2.06
Production (000 ton)	918.24	992.64	957.22	997.35	8.10
Import (000 ton)	3355.81	3368.08	3380.4	3392.76	0.37
Percent import	78.64	77.34	78.02	77.36	-1.66
Consumption (kg/capita/year)	16.29	16.49	16.32	16.27	1.23

Source: Ministry of Agriculture, 2021

Research Objectives

Identify opportunities and challenges along the Indonesia's dairy value chain

Method

Time:

- **Before Covid-19: 2018**
- **During Covid-19: 2021**

FGD, Deep interview: → Actors along the value chain in West Java

Input Suppliers
1. Input shop of KPS Cianjur Utara
2. Input shop of KPS Bogor

Farmers

Cooperatives
1. KPS Bogor
2. KUD Giri Tani
3. KPS Cianjur Utara
4. KPGS Cikajang
5. KPBS Pangalengan

Milk Processors
1. Cimory
2. Frisian Flag Indonesia
3. Indolakto
4. Fonterra

Milk Processors and Retailers
1. Susu Mbok Darmi
2. Momo Milk

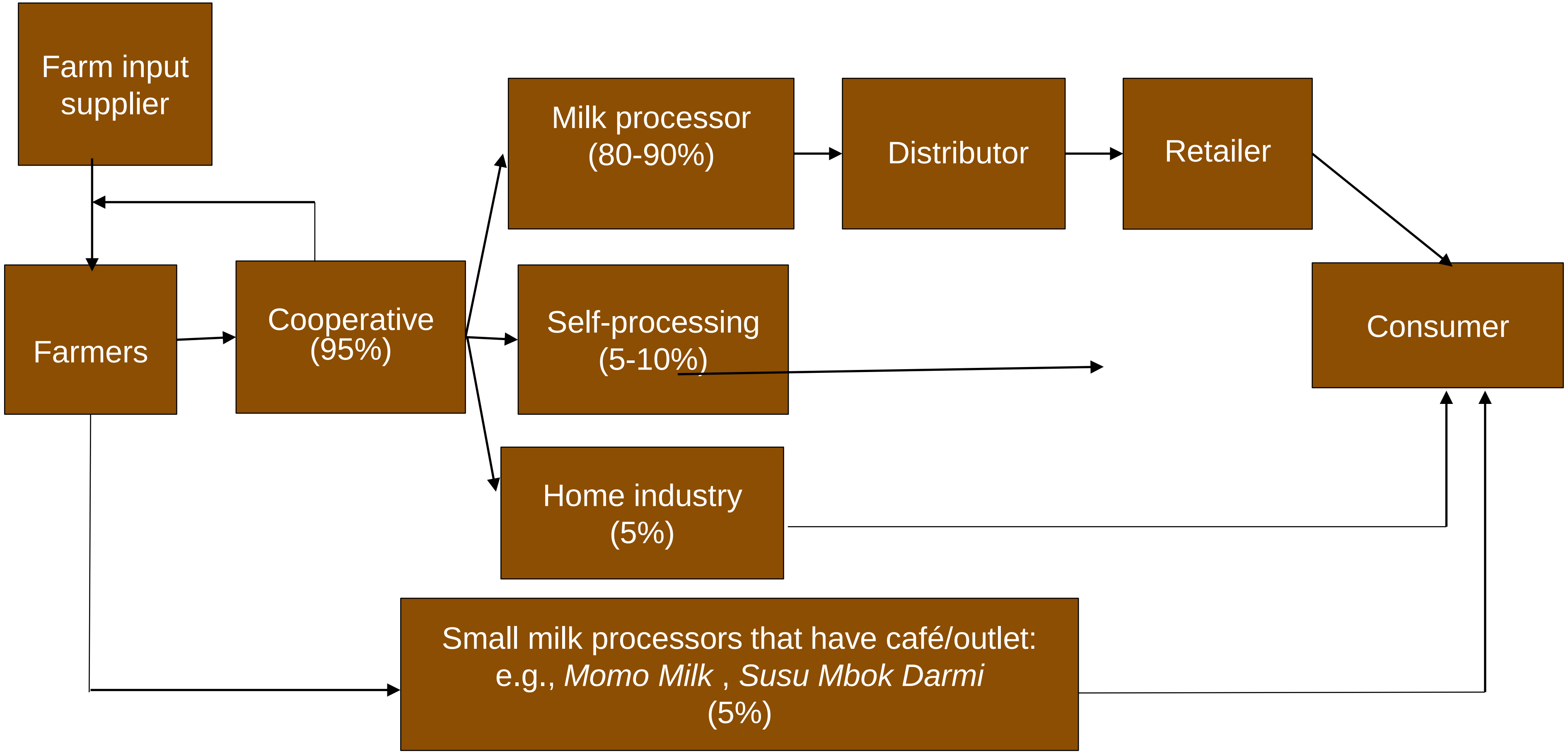
Retailers
1. Ranin Coffee
2. Narma Toserba

Modern Retail
Hypermart

GKSI

Key results and Discussion

Value Chain of Dairy Industry



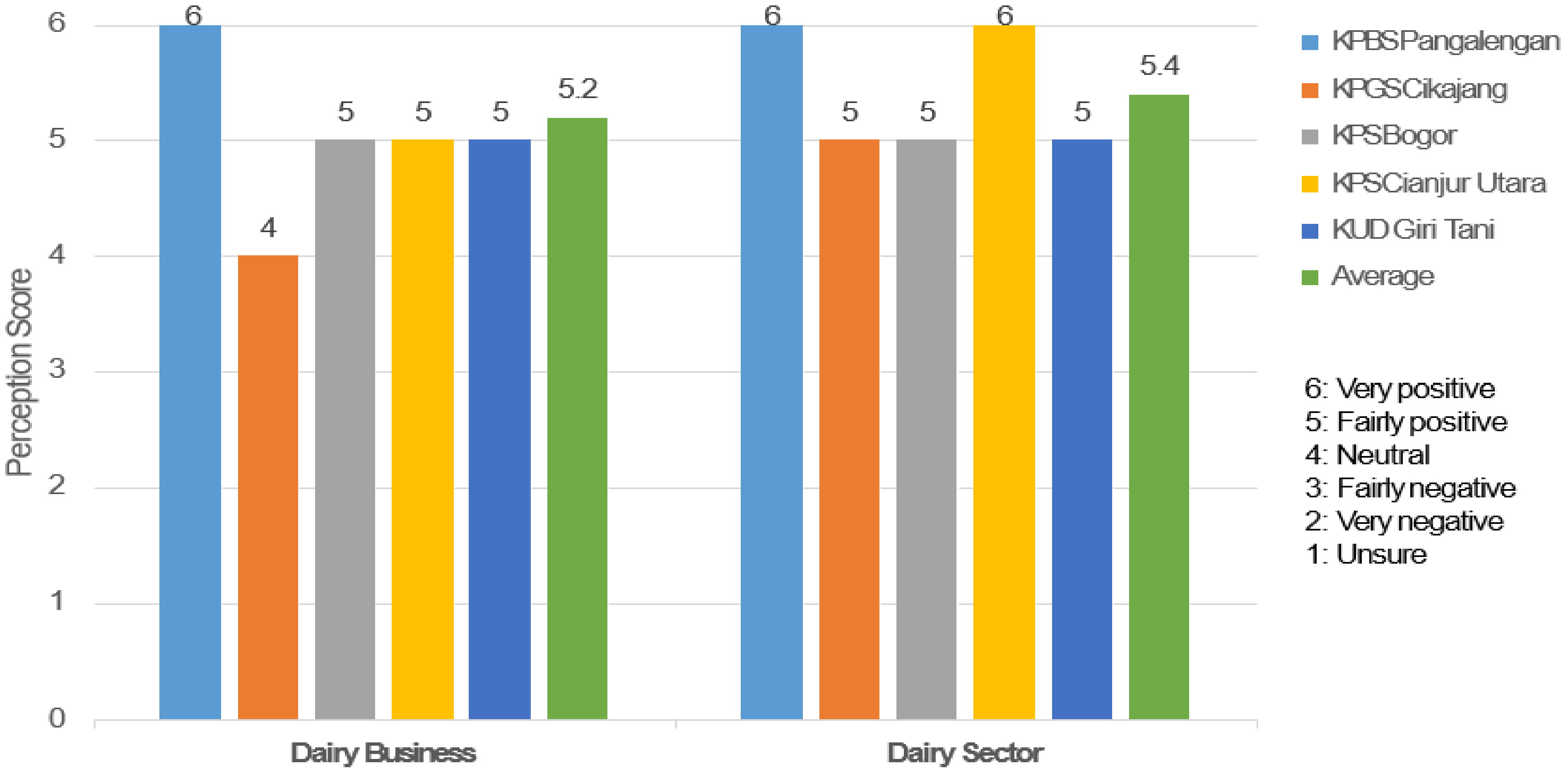
Value Chain of Dairy Industry

Value Chain Actor	Role
Input Supplier	• Providing feed, equipment and veterinary care for cattle.

Farmers	• Maintaining cattle and supplying fresh milk
	  • For most farmers, dairy production is the primary source of income (80%).
	  • The majority of farmers are smallholder, owning 2-3 cattle.

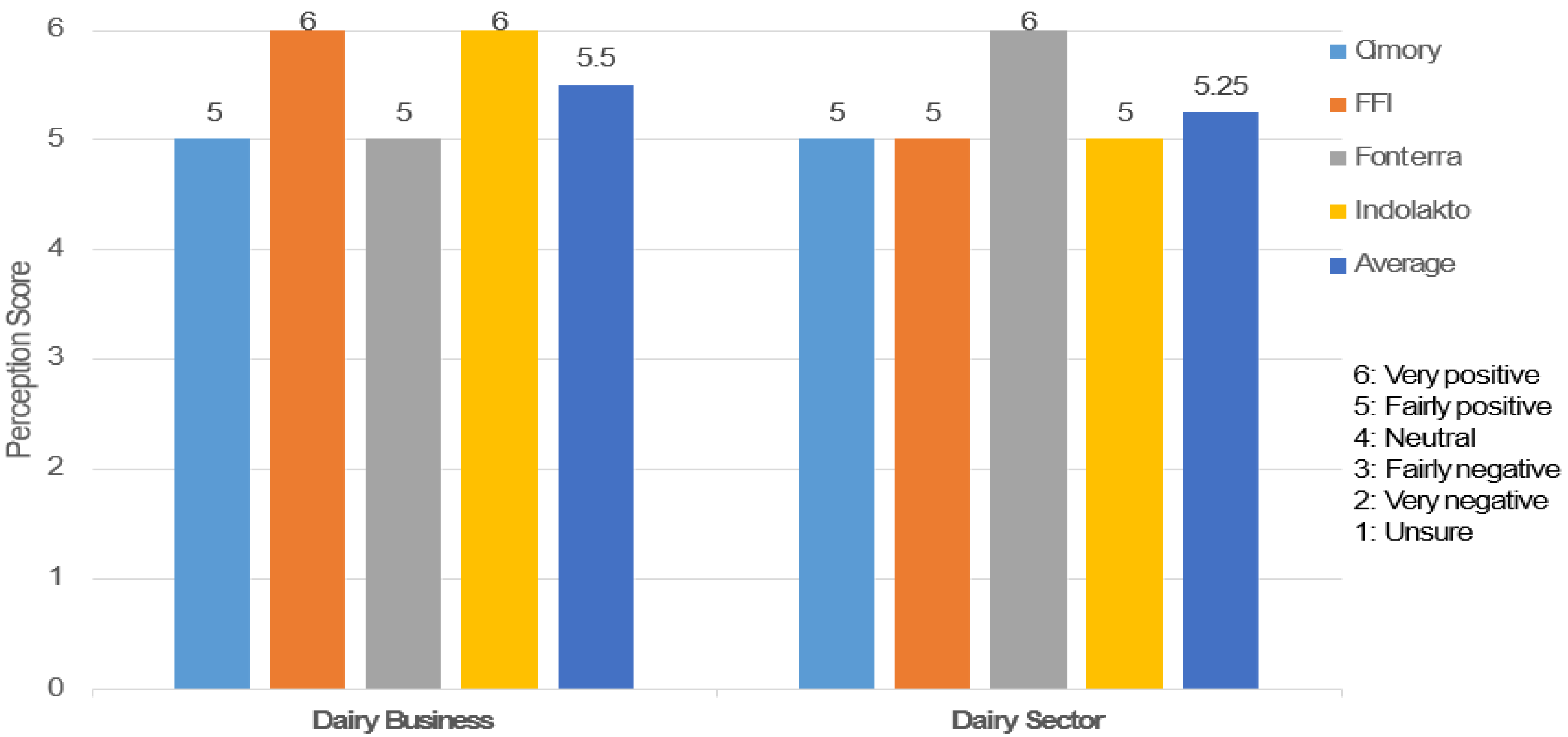
Dairy Co-operatives	• Linking farmers to milk processors. • Providing technical and managerial skills for farmers, financial support, and market access.
Milk processors	• Transforming fresh milk to derivate milk products such as pasteurized milk, Ultra High Temperature milk, yoghurt, and cheese,
Retailers	• Selling milk products to end consumers

Before Covid: Coop's Perception on the Future of Their Dairy Business & the National Dairy Sector

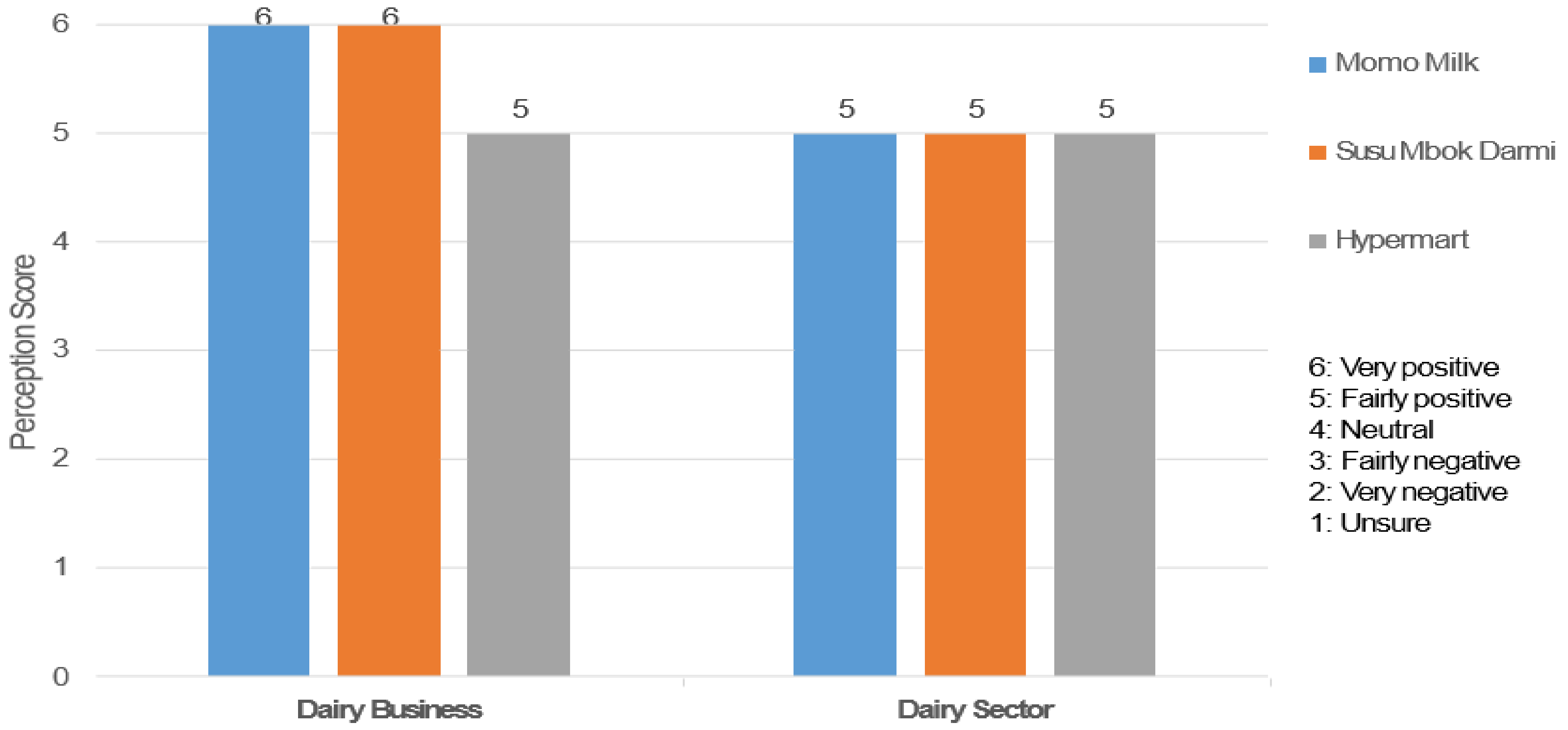


6: Very positive
5: Fairly positive
4: Neutral
3: Fairly negative
2: Very negative
1: Unsure

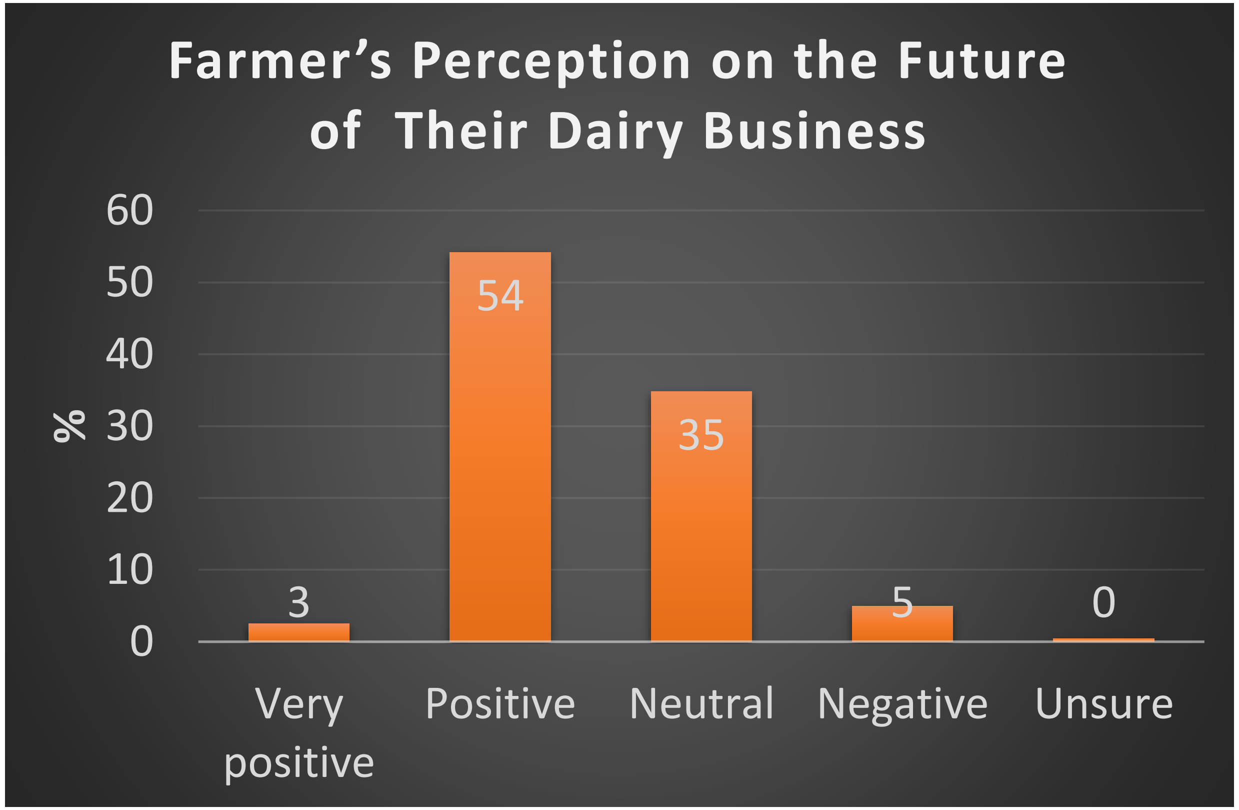
Before Covid: Processor's Perception on the Future of Their Dairy Business & the National Dairy Sector

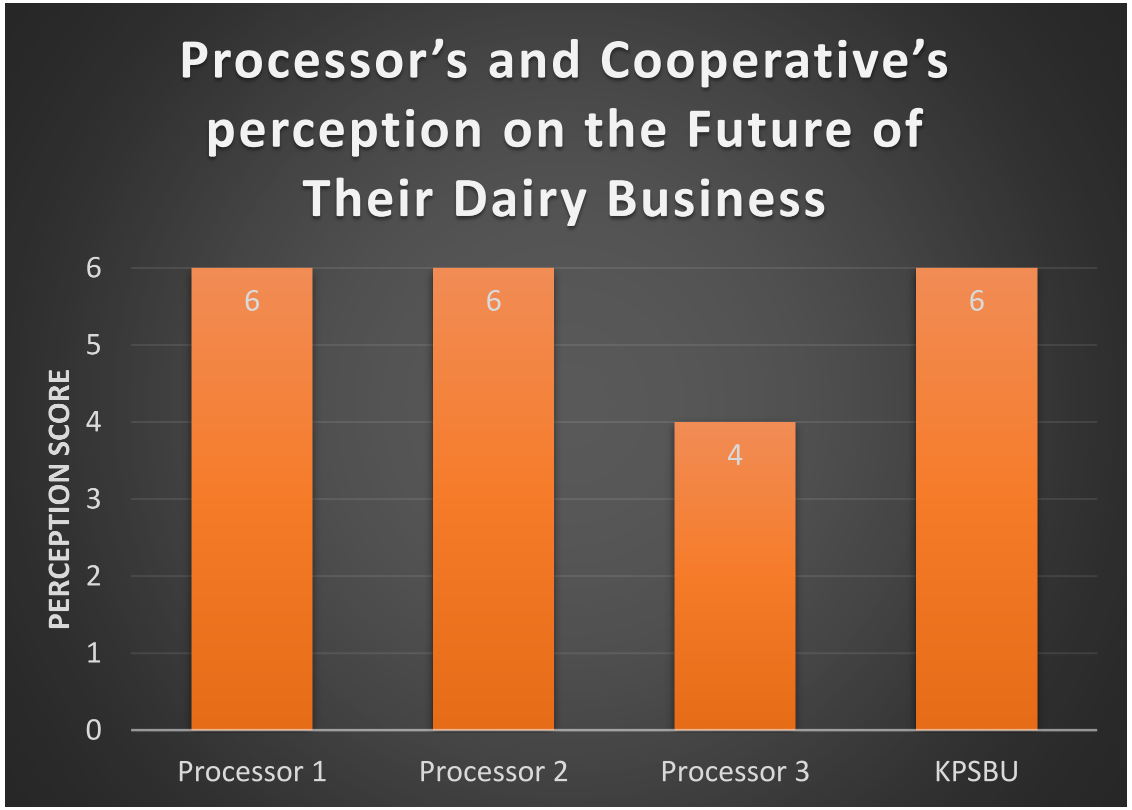


Before Covid: SME’s & Retailer’s Perception on the Future of Their Dairy Business & the National Dairy Sector



During Covid: Farmer’s, Processor’s and Cooperative Perception





6=Very positive
5=Positive
4=Neutral

3=Negative
2=Fairy negative
1=Unsure

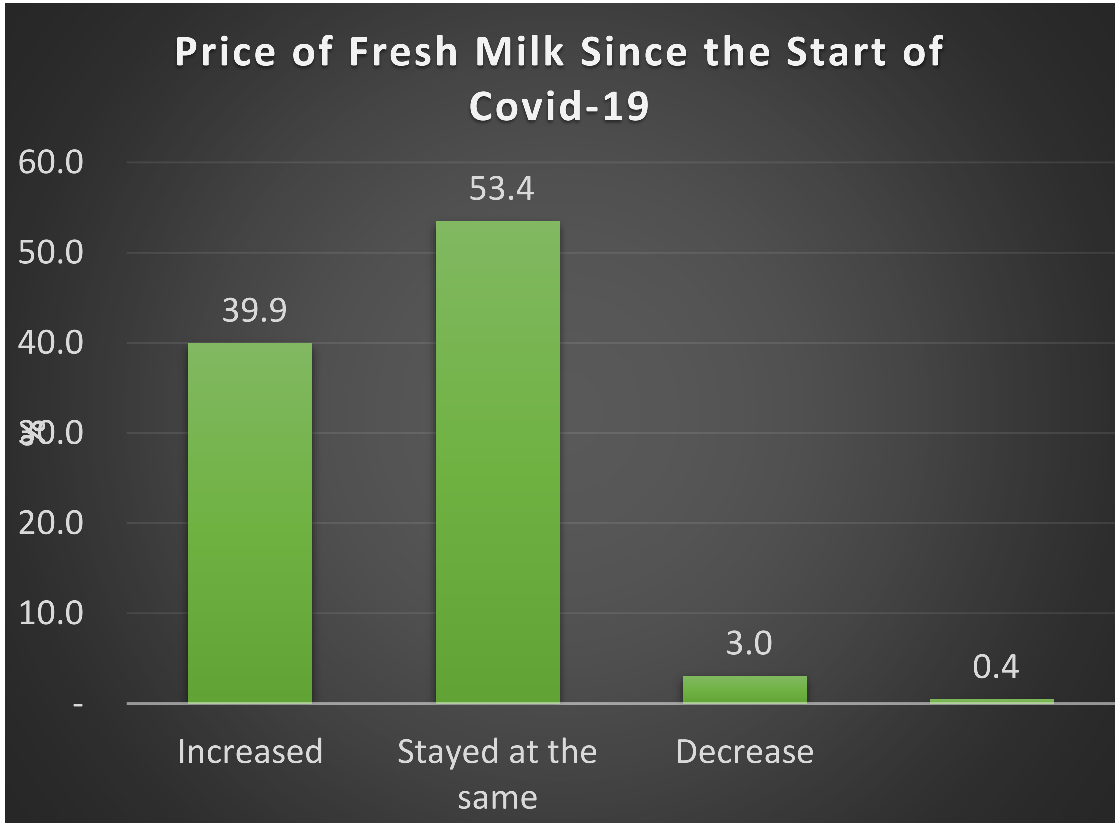
Prices of Fresh Milk (IDR per Liter)

Before Covid-19

- Highest: 4 850
- Lowest: 4 350

During Covid-19

- Highest: 5 415
- Lowest: 5 152



Price Mechanism

Farmers get paid based on the quality: 86% (yes)

Important Quality Factors:

- % fat: 46% (yes)
- Total Plate Count (TPC) :37% (yes)
- Total Solid (TS) :28% (yes)

Challenges Faced by the Actors Along the Dairy Value Chains

Actors	Challenges
Farm Input Suppliers	• Low quality, limited availability, and price fluctuations of inputs • Limited land for forage
Farmers	Farmer regeneration, farmer capabilities, cattle ownership, milk quality, milk quantity and productivity. • Land and cow ownership scale are small. • The size of cow/cattle house is small and located next to farmer's house. • Aging farmers
Cooperatives	• Technical skills (milk quality and milk supply) • Managerial skills (human resources development and organizational management). • Price fluctuation
Milk Processors	• Fresh milk supply fluctuation from cooperatives (quality and quantity) • SME's • Lack of infrastructure particularly cold chain system
Retailers	• Limited access of cold chain system • Competition from digital markets

Market Access, Input & Technical Support During Covid

Did COVID-19 restrictions at your village/district effect your ability	Response
To sell milk to KUD when compared to normal?	96% neither easier nor more difficult
To find grass during when compared to normal?	96% neither easier nor more difficult
To purchase concentrates when compared to normal?	93% neither easier nor more difficult
To purchase veterinary/medical inputs (e.g. veterinary medicines)?	92% neither easier nor more difficult
To access water to provide to animals when compared to normal?	94% neither easier nor more difficult
To receive technical support from extension/KUD staff?	25% more difficult
	61% neither easier nor more difficult

Conclusion

- Actors involve in the dairy value chain:
  - Farm input suppliers, farmers, cooperatives, processors, distributors, retailers and consumers
- Before and during Covid-19, the majority of actors along the value chain are optimistic about the future of dairy industry
- Quality is important factor in pricing
  - % fat
  - Total Plate Count (TPC)
  - Total Solid (TS)
- Access to markets and inputs during Covid-19 are quite similar
  - During Covid-19 pandemic, some farmers face difficulties accessing technical support from extension service/ cooperative compared to before Covid 19 pandemic.

Policy Implications

Actors	Recommended actions
Farm Input Suppliers	• Improve the availability of forages through procurement of land for forages. • Price stability for raw material for feed.
Farmers	• Attract young generation to include in the dairy farming. • Procurement of land for forages. • Provide capacity building of farmers to increase their skill in the dairy farming. • Increase dairy cattle population • Improve local breed.
Cooperatives	• Increase the managerial skills of the staff. • Improve the management of cooperative to the modern and lean organization. • Provide technical supports to farmers during Covid-19

Milk Processors	• Develop product diversification.
	• Small processor:
	    • Increase investment in equipment (pasteurizer, freezer)
	    • Create Standard Operational Procedure (SOP) in production unit.

Retailers	• Use online market • Promote the benefits of consuming dairy product to the consumers through advertising.
Government	• Synergized government policies • Promote milk for young generation by creating a government policy to increase drinking milk awareness.

Thank You!

http://www.adelaide.edu.au/global-food
https://www.indodairy.net/