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Developing Dairy Smallholder-Inclusive Value Chain Model in Indonesia

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1. Story and Background

- GDP contribution from the livestock was the 3rd largest in the agricultural sector which the growth was an average 5.07% from 2011 to 2014
- However, there has been a wide gap between milk production and consumption. In 2009-2013, fresh milk production only grew by 4.48 %
- As a result 65% of domestic demand of milk has been fulfilled from import
- Close to 90% of such farms are concentrated in West, Central and East Java with a small proportion of around 2% in Sumatra
- The average productivity of cattle in Indonesia is nearly half of the international standard at 12-14 liters per day
- More than 90% of the dairy market is dominated by processed milk as opposed to fresh i.e. UHT milk and that in powdered or sterilized form



2. Overview of the Business Model and the Chains

Purposes and Scope

1) Business promotion

Improve competitiveness by upgrading activities (process, products and functional), better access to a wide range of resources and services, larger markets access and comply with standards and certification

2) Poverty alleviation

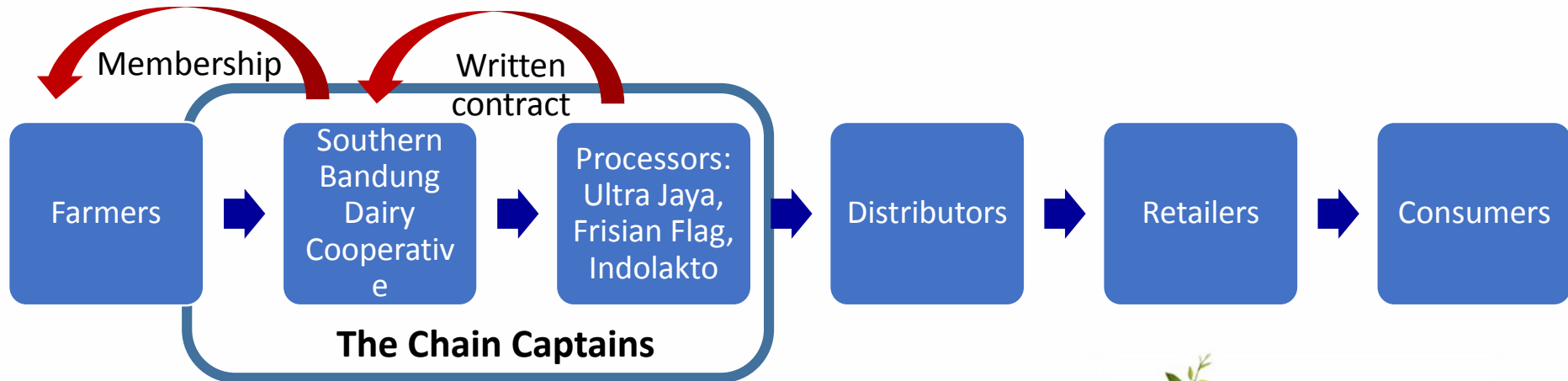
Income and price stabilization, creation of productive employment including women employment

3) Food security including nutrition improvement



2. Overview of the Business Model and the Chains (cont.)

A Dairy Value Chain and the Chain Captains





3. Business Objectives/Drivers

A mutually beneficial business relationship is always a viable market

Benefits for the smallholders:

- Access to market, including at a guaranteed volume and price
- Quality based-pricing
- Updated new technologies: milking machines, digital barcode system in Milk Collecting Point
- Access to inputs
- Regular quality monitoring
- Technical support and training
- Farmers to farmers dairy program

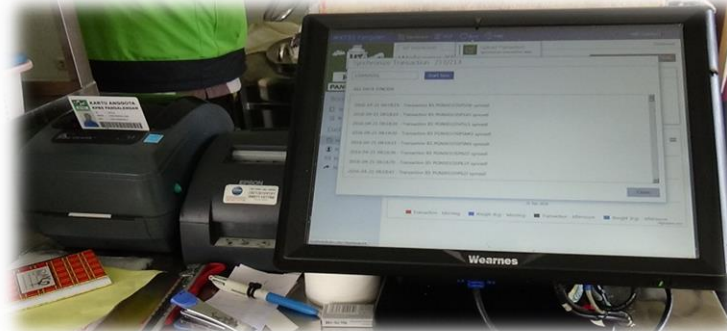
Benefits for the chain captains:

- Guaranteed quantity and quality of supply
- Quantities and quality of supply is determined in the contract
- Company/Coop can monitor compliance on production which comply to standards
- Securing stable prices
- Quick access to land/production capacity



4. How is “Success” Defined?

- Commercially viable (profitability)
- Inclusiveness of smallholders, including women participations
- Replicability and scale up the model
- Better organization of cooperative





4. How is “Success” Defined? (cont.)

Inclusiveness Assessment

Ownership	Voice	Risk	Reward
<ul style="list-style-type: none">• Pooling of resources allows access to markets and value-added activities• Efficiency gains and much stronger bargaining power for members	<ul style="list-style-type: none">• Decisions are taken on a “one member, one vote” basis in cooperatives.• Business links upstream and downstream provide opportunities to enter new markets for both smallholders and milk processor company• But, the dairy industry structure is oligopoly (5 big processors)	<ul style="list-style-type: none">• The market risk is shared across the cooperative members• There is a need to continue supporting cooperatives to get certification and adherence to global market standards	<ul style="list-style-type: none">• Longer-term financial benefits is more important than immediate returns• Membership fees are well paid out• High-value markets such as dairy milk products carry higher risks of financial losses• Smallholders may not be able to keep up with rapid changes in demand in national and global markets• Public investment is needed to support the smallholder competitiveness



5. Roles and Contributions of Key Players

1. Cooperative/dairy farmers

Collecting milk, marketing and processing, trading, feed mill, extension services, human and animal health care, new technologies (bar code system and milking machines), lending credit and capacity building

2. Business entity: Milk processors

Contractual arrangement, provision of supports (market information, quality monitoring, updating new technologies), processing, selling end-products to distributors

3. Government

Extension services, subsidized credits to cooperatives, standards and certification and public infrastructure



6. Challenges in Developing & Maintaining the Model

- Smallholder size – diseconomies of scale
- Difficult to meet quantity and quality standards
- International market environment
- Cost of production is high due to feed and land for forages
- Lack of logistics infrastructure (e.g. cold chain)
- Age of farmers
- The management of cooperatives is demanding, particularly because of their democratic nature and due to the inadequate management skills of its membership.



7. Final Takeaway Messages

- Long term vision and commitment
- Creating fairness and equity in the contracting arrangement
- Replicability and scale up of the model studied seems possible, given that certain structural and contextual conditions are met
- The central characteristic of successful cooperatives is effective and better organization
- Appropriate policy and legal frameworks are needed for successful dairy milk cooperatives.