



“Improving Milk Supply, Competitiveness & Livelihoods in Smallholder Dairy Chains in Indonesia”

Project Aims, Objectives and Project Partners

IndoDairy AGB.2012.099

Inception Workshop

Wendy Umberger, Ph.D. Professor & Executive Director

Centre for Global Food & Resources

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Project agencies and partners

Indonesia	Australia
<i>Indonesian Centre for Animal Research and Development (ICARD)</i>	<i>University of Adelaide</i>
<i>Bogor Agricultural University</i>	<i>Department of Economic Development (DEDJTR in Victoria)</i>
<i>Indonesian Centre of Agricultural Socio Economic Policy Studies (ICASEPS)</i>	<i>Subtropical Dairy Ltd (a regional arm of Dairy Australia)</i>

Also, village unit cooperatives (KUDs) and dairy processors.





Australian Government
**Australian Centre for
International Agricultural Research**

THE CENTRE
FOR GLOBAL FOOD
AND RESOURCES



THE UNIVERSITY
of **ADELAIDE**



**Indonesian Center for Animal
Research and Development**
Indonesian Agency for Agricultural Research and Development Ministry of Agriculture



**Indonesian Center for Agricultural
Socio Economic and Policy Studies**
Indonesian Agency for Agricultural Research and Development, Ministry of Agriculture



SB-IPB
Sekolah Bisnis - Institut Pertanian Bogor



**Dairy
Australia**



Economic Development,
Jobs, Transport
and Resources



Activities 2012 to 2015

A 3-year development phase:

- Scoping projects - Java, Sumatra
- Established a “Reference Advisory Group” – DGLAHS, ICARD, IPB, IPS, GKSI
- Reviewed recent research activities and reports
- Interviewed participants along the dairy value chain to identify constraints and opportunities
- Undertaken farm visits and interviews
- Held stakeholder workshops to identify priorities
- Evaluated research strategies
- Developed a detailed R&D plan
- Held initial consultations with ICARD



ACIAR



Indonesian stakeholders

Government

- DGLAHS - Ministry of Agriculture – Jakarta
- ICARD
- ICASEPS
- DGLS East Java
- Dinas Peternakan Jawa Barat
- Dinas Peternakan Sumatra Utara

Universities

- IPB (Bogor Agriculture University)
- Padjadjaran University

Regional training

- Batu Farm Train Centre
- JICA Cikole

Producers

- PT Ultra Jaya Dairy Farm
- Fajar Taurus Dairy Farm

Artificial insemination

- Lembang Artificial Insemination Center (LAIC)

Co-ops

- KPBS, Pangalengan Bandung Selatan
- KPSBU, Lembang
- KUD SAE Pujon
- GKSI – East Java

Processors

- PT Frisian Flag Indonesia- Jakarta
- PT. Nestlé Indonesia
- PT Cimory (PT. Cisarua Mountain Dairy)

Agribusiness

- PT Elders Indonesia
- Manildra Indonesia

Issues / Constraints

Pre Farm Gate

- Information access
 - market signals (price, quality, quantity) are often not clear for farmers
- Feed resources
 - quantity and quality, highly variable
- Animal productivity
 - genetic potential of cows is more than farmers need
 - opportunity to focus on a “better” cow type (efficiency)
 - how calves and heifers are grown affects how they milk
- Business management
 - lack of access to capital



Issues / Constraints

Post Farm Gate

- Domestic supply of fresh milk (quantity and quality) does not meet growing demand for short shelf-life dairy products
- Farm gate price is linked to international market price
 - Because of products manufactured e.g. sweet condensed milk, processors can substitute non fresh dairy ingredients
 - It is very difficult to transport fresh milk
 - Lack of refrigeration in the fresh milk supply chain
- Lack of understanding (across chain) of market dynamics, including price signals

Opportunities and Priorities

- Economic development from growing domestic dairy sector, including smallholder production, value-adding and consumption
- Opportunities to improve income to smallholder dairy farmers
- Enhance capacity of farmers, extension workers and researchers through a better sharing of information and knowledge of:
 - management of forages and herd nutrition
 - herd reproduction and rear better replacements
 - milk quality through less mastitis and better milk harvesting

Overall goal of project

Overall goal of this project is to contribute to increasing milk supply (quantity and quality) by 25% by 2020 for at least 3,000 dairy producers in the geographic locations of West Java and North Sumatra.

Overall objectives

- **Objective 1:** Identify and recommend strategies and policies to support development of sustainable, profitable and smallholder-inclusive dairy supply chains in North Sumatra and West Java.
- **Objective 2:** Identify barriers to adoption of profitable management practices and farm business models and develop strategies to inform development of extension programs in West Java and North Sumatra.
- **Objective 3:** Develop, pilot and evaluate innovative extension approaches in West Java that improve on-farm profitability of smallholder farmers

Objective 1: Identify and recommend strategies and policies to support development of sustainable, profitable and smallholder-inclusive dairy supply chains in North Sumatra and West Java.

Research questions:

- What market and investment opportunities are most likely to lead to the development of new and sustainable smallholder dairy supply chains in North Sumatra?
- How can public and private partnerships be improved to enhance dairy development programs ?
- What are the practical policy lessons that can be derived from this research and how should stakeholders collaborate in ways that will benefit smallholders and increase spill-overs?

Objective 1: Identify and recommend strategies and policies to support development of sustainable, profitable and smallholder-inclusive dairy supply chains in North Sumatra and West Java.

Activities for Objective 1

- Activity 1.1 Development and annual review of business guidelines and opportunities for heifer importation from Australia to Indonesia
- Activity 1.2 A whole-of-chain analysis of the Sumatra and West Java dairy industries
- Activity 1.3. Evaluation of regional dairy industry development policies in Sumatra and West Java
- Activity 1.4. Identify existing and future market opportunities for the Sumatra dairy sector
- Activity 1.5. Identify whole-of-chain opportunities for industry and government in Sumatra and West Java
- Activity 1.6. Encourage development, policy dialogue and industry advocacy in ways that benefit smallholder dairy farmers and improve research capacity of lead agencies

Objective 2: Identify barriers to adoption of profitable management practices and develop strategies to inform development of extension programs in West Java and North Sumatra.

Research addressed for Objective 2 are:

- How and why do rates of adoption of technology and management practices, herd health, input use, productivity and innovative marketing channels differ between farmer segments?
- Are there farmer (e.g. knowledge and education, gender, perceptions and attitudes) and farm household characteristics (e.g. program participation, assets, size) that help explain differences allowing more effective strategies and programs to be developed?
- What are barriers to adoption and drivers of adoption of profitable management practices and technology?
- What are the most effective “whole-of-chain” strategies for overcoming barriers to adoption of profitable technology and management practices.
 - How can public and private stakeholders be engaged and work together to implement these strategies?

Objective 2: Identify barriers to adoption of profitable management practices and develop strategies to inform development of extension programs in West Java and North Sumatra.

Activities for Objective 2:

- Activity 2.1. Develop, conduct and analyse a baseline formal survey of a representative sample of dairy farming households in West Java and North Sumatra.
- Activity 2.2. Identify profitable management practices, business and extension models, and use this information to develop strategies that will increase on-farm profitability.

Objective 3: Develop, pilot and evaluate innovative extension approaches in West Java that improve on-farm profitability of smallholder farmers.

Research questions for Objective 3 are:

- What are the most effective extension methods that will enable smallholders to:
 - optimise feed resources and adopt improved feeding practices and nutrition;
 - adopt profitable calf rearing and animal husbandry practices;
 - improve milk quality;
 - incorporate business management into farming decision making to improve profitability?
- What technical support and training is a priority for smallholders when endowed with dairy cows by the provincial government or private sector programs?

Objective 3: Develop, pilot and evaluate innovative extension approaches in West Java that improve on-farm profitability of smallholder farmers.

Activities for Objective 3

- Activity 3.1. Co-design an integrated training program with extension staff, service providers and the private sector across the technical areas of nutrition and forage management, animal husbandry and reproduction, milk quality, and business management.
- Activity 3.2. Develop and deliver milk hygiene training for cooperative staff and farmers linked at the milk collection centres (MCC) in West Java.
- Activity 3.3. Pilot and evaluate training programs with extension staff and dairy service providers in West Java and North Sumatra.
- Activity 3.4. Embed, monitor and evaluate the practice change activities delivered in 3.2 and 3.3.
- Activity 3.5: Assess the short-run and potential long-run impacts of project activities through a follow up survey during the final phase of the project.



Terimah Kasih! Thank You! Questions?

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