THAILAND DAIRY INDUSTRY

Department of Livestock Development Thailand





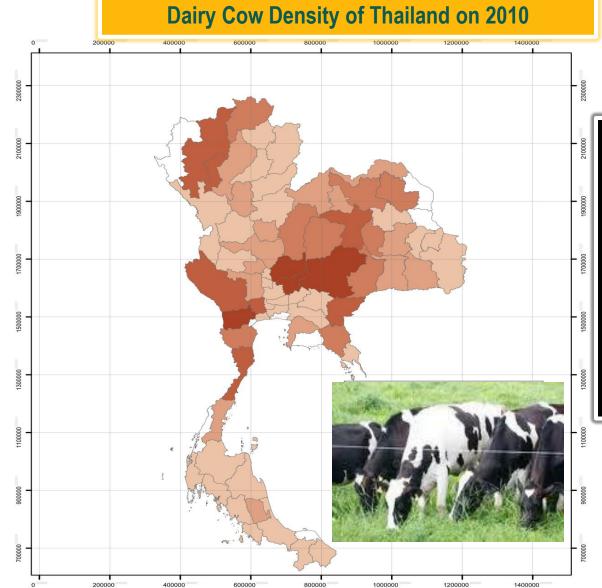
Thailand is located between latitude 5 degrees 37 minutes north and 20 degrees 27 minutes north and longitude 97 degrees 22 minutes East to try 105 degrees 37 minutes East

513,115 km² Area.
47.37 % Agriculture , Forest 33.44 %
1,012,831 million cubic meters rainfall / year.
66.7 million. Population

Dairy Cow and Dairy Farm

Year	Dairy Cattle (heads)	Grow Rate (%)	Dairy Farm (households)
2005	478,836	17.26	23,374
2006	410,986	-14.17	20,907
2007	489,593	19.13	21,230
2008	469,937	-4.01	19,214
2009	483,899	2.97	17,837
2010	529,572	9.44	19,863
2011	554,468	4.70	20,645
2012	556,758	2.22	20,624

Source : DLD



 Mighly Density Area 4 Province
 Saraburi 17.85 %
 Nakornratchasima 17.20 %
 Lopburi 11.17 %
 Ratchaburi 10.03 %

Source: DLD

Dairy Milk Production in Thailand

Year	Dairy Milk Production (tons)	Grow Rate (%)	Milking Cows (heads)	
2005	781,043	4.61	296,472	
2006	759,894	-2.71	310,085	
2007	750,779	-1.20	291,965	
2008	775,864	3.34	293,185	
2009	882,933	13.80	293,287	
2010	933,310	5.71	301,071	
2011	984,960	5.53	310,522	
2012	1,064,270	8.05	295,634	

Source : DLD,OAE

Dairy Milk Price

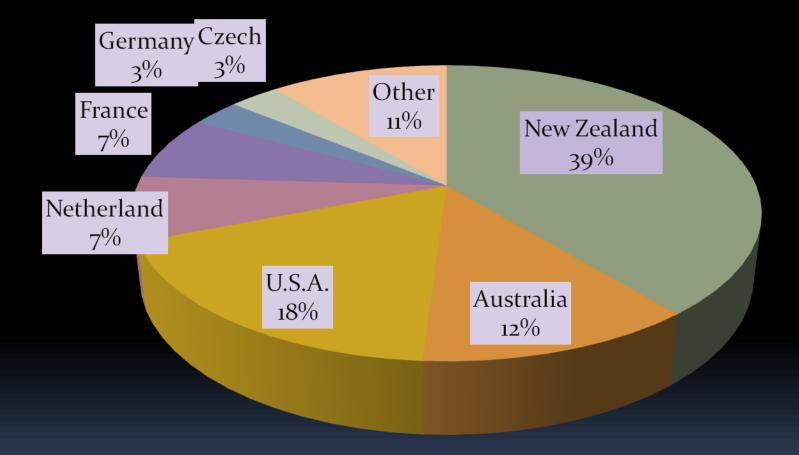
Year	Farm Gate Price (Baht/kg.)	Factory Gate Price (Baht/kg.)			
2005	11.48	12.50			
2006	11.50	12.50			
2007	12.91	12.50/13.75/14.50			
2008	14.56	14.50/18.00			
2009	15.60	16.50			
2010	15.43	16.50/17.00			
2011	15.73	18.00			
2012	16.88	18.00			

Source : OAE

Thai Dairy Product Trade (HS=0402-0406)

				Values : Million \$ US.		
	Year	Imported	Exported	Trade		
L		values	values	Balance		
	2005	339.089	124.287	-214.802		
	2006	343.092	108.731	-234.361 -333.008		
L	2007	464.071	131.062			
	2008	536.463	134.910	-401.553		
	2009	270.943	127.492	-143.451		
	2010	457.645	139.720	-317.925		
	2011	2011 558.151		-396.697		
	2012	616.515	139.330	-477.185		

On 2010, Thailand imported dairy product from



Main Imported Dairy Product

Quantity : ton

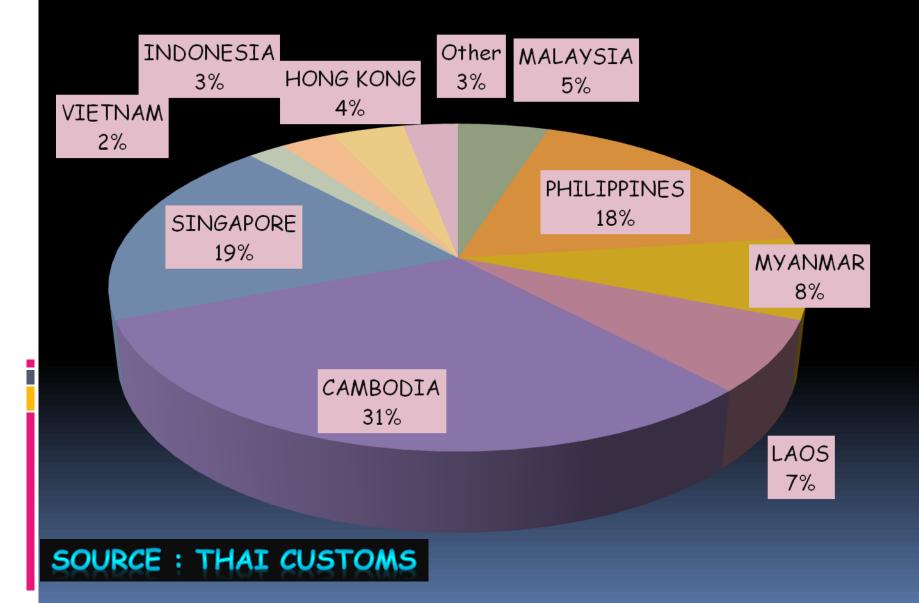
Dairy Product	2007	2008	2009	2010
Skimmed Milk Powder	56,940	60,666	50,117	59,357
Whole Milk Powder	24,450	17,442	16,577	26,529
Whey	24,802	19,311	15,821	26,534

Main Exported dairy Product

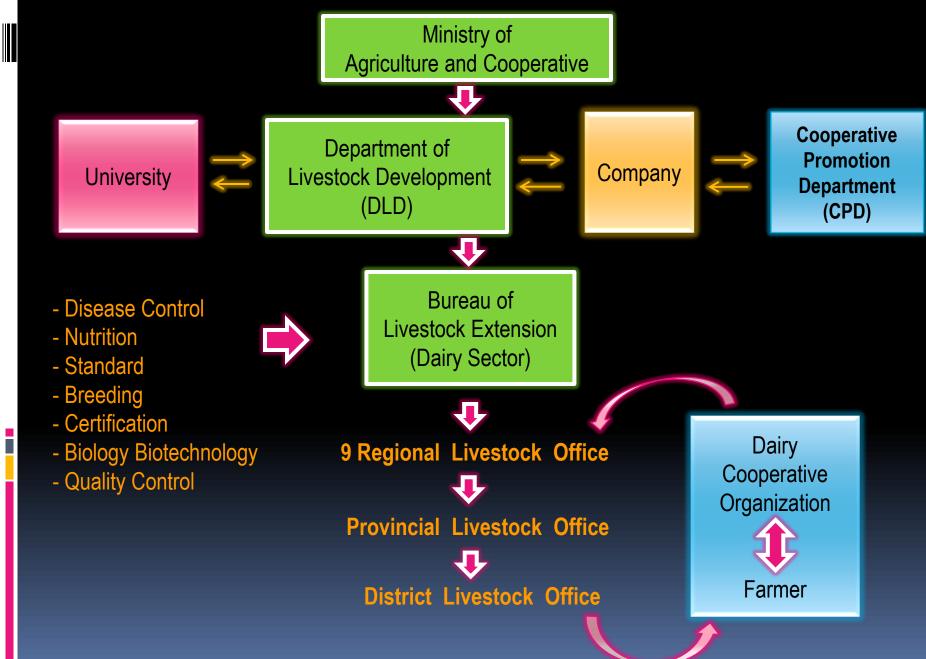
Quantity : ton

Dairy Product	2008	2009	2010
1. Condensed Milk	5,045	4,008	3,672
2. Sweetened Condensed Milk	24,128	22,319	16,998
3. Milk and cream not concentrated (fat content 1- 6 %)	23,941	18,978	14,663

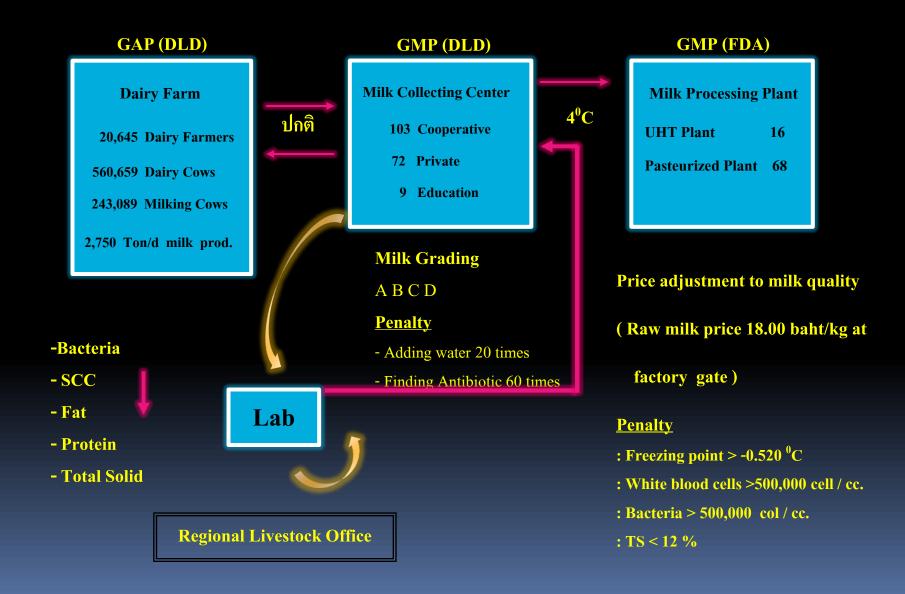
On 2010, Thailand exported dairy products to...



ORGANIZATION CHART



Process of Raw Milk Quality Control by Department of Livestock Development 2012



1. Genetic Improvement



Issues and Problem

- Purebred HF resulting in problem of Low conception rate and short Lactation Period.
- Milk production < 4,000 kg/hd/lac</p>

Current approaches for solutions

- Used upgrading natives cows with purebred HF (use AI)
- DLD has produced crossbreed Tropical HF contain 82.5 – 93.75 % HF

2. Research and extension of livestock





Issues and Problem

Some technology is not suitable for them or requires high capital investment incurring in high cost of production.

Current approaches for solutions

Has introduced demonstrated farm model for technology transfer to encourage farmers ' participation for new technology embedding.

3. Farmers' group related to livestock





Issues and Problem

 Small scale holder, form for away to market.
 They have insufficient capital to improve their farm management and conduct their own cooperatives

Current approaches for solutions

 Government provides funding to help manage dairy cooperatives and support its members. (Soft loan : low interest rate and long term payment)

4. Cattle management





Issues and Problem

Not enough area to grow pasture or roughages.
Poor reproductive performance.

Current approaches for solutions

- Contract farming between pasture groups and livestock groups.
- > Supplement legume added such as leucaena

5. Utilization of local resources as feed





Soybean meal + Waste beer + Cassava

Issues and Problem

In dry season, it lacks of pasture. Most of farmers use rice straw to feed cattle

Current approaches for solutions

 Contract farming for raw material feed from nearby factories such as : pineapple shell, corn stem, cassava shell and palm cake
 Silage to preserve feed

6. Health and hygiene management

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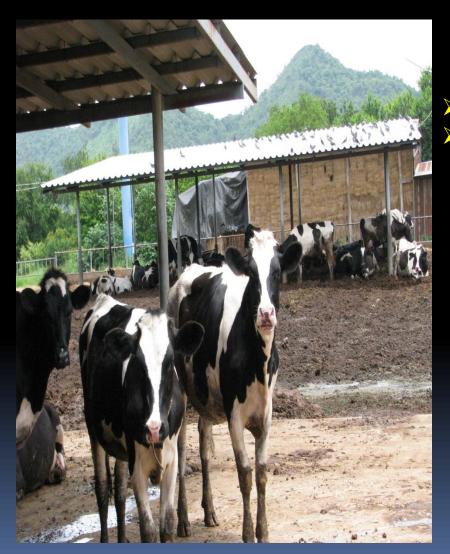
Issues and Problem

20 – 25 % dairy cows are culled due to poor reproductive performance or other health problems

Current approaches for solutions

Record herd analysis is important to profitable dairying or other milk production record system is recommended.

7. Utilization of animal by-products



Issues and Problem

 Smell and waste water from farms
 In the past, livestock communities were far away from the cities have expanded.

Current approaches for solutions

Utilize manure from farms to produce biogas and fertilizer to decrease smell and waste water

8. Quality control of animal products





Issues and Problem

Every milk delivery is inspected with regard to certain quality parameter

Current approaches for solutions

Farmer has to check the cow for abnormal milk before starting to milk the cow Cooperatives establish the standard for controlling raw milk quality by cutting down the price of low quality products or rejecting products and at the same time increasing price for higher quality products

9. Processing of animal product



Issues and Problem

Milk production in 2011 was 2750 tons per day 97 % producing of ready to drink milk 2.8 % was used for cheese production 0.2 % was distributed for sales in villages

Current approaches for solutions

More research and development on new kinds of dairy products

10. Marketing of animal product





BRANRAS DE

Issues and Problem

 Most of farmers sell their primary product to local milk collecting center
 Farmers get a little profit and cannot complete with other brands in the market

Current approaches for solutions

- Promoting dairy products totally produced from fresh milk as high quality product for health
 Increase domestic milk consumption
 Establish local brands (dairy cooperative brand) and sell processed milk directly to local consumers.
 - Balancing of demand and supply of raw milk to avoid over production problems

Vision		Strength of farmers for good future of dairy industry							
1. Research and 2. I			velop	and enhance	3. Promote milk consumption		4. Increase	e efficiency of	
Strategy	development	development on dairy farmers performan			and develop milk	product for	dairy farm	dairy farmer organization	
	1. Research	2. Improve dairy 3. Reduce			4. Promote milk 5. Increase eff		ciency E	. Improve	
	and	breeding for	ſ	cost of dairy c	onsumption	of dairy farmer	d	atabase system	
Mission	development on	enhancing			nd develop	organization			
		production	1	production m	nilk product for				
	dairy farming	efficiency		C	ompetition				
	1. Increase milk	2.teachnology	3.Mi	k quality 4.Re	crease mik	ease milk 6.Establish Dairy Board Office in 2016			
	yield from 12 kg	transfer to		neet good for increasing consumption			n 2016		
	to 15 kg/cow/day	20,000	stand	lard profi ia at least 10 %	profit at least from 14 liters to				
Goal	kg/cow/day	farmer	80 %			/person/ye			
					ar	ar			
					1				
	<u>KPI I</u>	<u>KPI II</u>		<u>KPI III</u>	<u>KPI IV</u>	<u>KPI V</u>		<u>KPI VI</u>	
	% Good Agricultural Practice (GAP) farmers	% processed milk that increasing each year		% milk consumption in	% increasing farm profit			ablish Dairy Board e in 2016	
KPI	Tractice (OAT) farmers increasing each yea		country that		in prom	mereasing each year			
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