



Greener Journal of Business and Management Studies

ISSN: 2276-7827 ICV: 6.02

Submitted: 27/08/2017

Accepted: 04/09/2017

Published: 16/09/2017

Subject Area of Manuscript: Business management

DOI: <http://doi.org/10.15580/GJBMS.2017.3.082717109>

Linkage between Dairy Farmers and Actors, Stakeholders in the Milk Chain: A case study of Cu Chi District, Ho Chi Minh City of Vietnam

By

Bui Thi Nga

Research Article (DOI: <http://doi.org/10.15580/GJBMS.2017.3.082717109>)

Linkage between Dairy Farmers and Actors, Stakeholders in the Milk Chain: A case study of Cu Chi District, Ho Chi Minh City of Vietnam

Bui Thi Nga

Faculty of Accounting and Business Management, Vietnam National University of Agriculture

Email: hieu0306@gmail.com / btnga@vnua.edu.vn; Phone: +84 (0) 91 88 39 181

ABSTRACT

Vietnamese dairy farmers are still facing many difficulties. One of the main reasons is their loose linkage to actors and stakeholders in the dairy milk chain. This study aims to analyze and assess the real situation of linkages between dairy farmers and actors, and relevant stakeholders in the milk chain, in a case study of Cu Chi district, Ho Chi Minh city of Vietnam, and provides some suggestion to improve these linkages. Data came from a questionnaire survey of 40 dairy farmers in the study sites in the first quarter of 2017. The results showed that linkage between dairy farmers with the collectors, suppliers were quite loosened. There was no linkage between dairy farmers to milk distributors. There was a good and tighten the linkage between milk processing company and dairy farmers through three types of contract: supplies inputs; buy milk; supply inputs and buy milk, in which, the second type was the most popular. Farmers had a loosen linkage to government vets, but had a tight linkage to private vets. Their linkage to extension experts, milk company's technician, animal, medicine sellers, farmers association... were not very tight. There was no linkage to insurance agents. Some suggestions are provided: Farmers had better actively improve their linkage to milk collectors and processing company through long term signed contract; find, set up, and develop the relationship with retailers, milk and cake shop, etc. to sell milk; enhance the linkage to suppliers through contract farming to prevent them from unexpected increasing input price; establish a linkage to milk insurance agents to protect them in case of risk or uncertain loss; reinforce the linkage to farmers' association, veterinary service, cooperatives and extensions service center to get valuable technical knowledge and skill support.

Keywords: dairy farmer, milk chain, linkage, actor, stakeholder

1. INTRODUCTION

Dairy farming in Cu Chi develops quite well with a total herd of 66,700 dairy cows (in October 2016), accounting for 2/3 of the total head cows of Ho Chi Minh city (Thanh Nguyen, 2016) and produce more than 400 tons milk daily. It creates stable jobs and brings high economic efficiency to nearly 8,300 farmers in 20 communes and towns of the district directly, and creates stable jobs and incomes for thousands of other farmers who grow grass for sale for dairy farmers indirectly in this region. Milk yield in this region was not high, but due to low purchased feed cost with the using of family labor led to low production cost, the farm margin was quite high, accounted for 57.7% milk receipts (Bui Thi Nga, 2017).

However, recently, dairy farmers in many regions in Vietnam in general, and in this region, in particular, have faced a lot of difficulties. Many of them had a loosen linkage to suppliers and had to buy unexpected increasing input price. Many of them had a loosen linkage to collectors, dairies and milk distributors, therefore they got difficulty to sell milk. Some of them could not find any support when they need. In Cu Chi, there have been around 300 dairy farmers who are raising 2,300 dairy cows in Cu Chi district, without linkage and signing contracts to sell milk to a milk processing company. This situation has had a great impact on the farmers, because when a milk processing company does not buy, milk cannot be sold in the open air market, many dairy farmers have to sell their cow. In these cases, prices of dairy cows dropped dramatically from 40 to 60 million Vietnam dong (VND)¹ per dairy cow to 20 million VND, some even received only 10 million VND. Traders paid at the price of beef cows (Ngoc Anh, 2015). There were 1200 dairy farmers changed their orientation to raising the beef cattle (Huu Ky, Tran Dang, 2017). Although the local authorities at provincial, district and commune levels have carried out many solutions, such as establish cooperative groups, enhance the capacity of farmers to negotiate and persuade dairy plan to buy milk from

¹ Vietnam Dong is Vietnamese currency

farms, train dairy farmers to improve their skills of dairy cow husbandry, etc., but many farmers still have difficulty to sell the milk (Thanh Nguyen, 2016). One of the main reasons for this situation is the loose linkage between farmers and actors, stakeholders in the milk chain, especially the link between farmers and milk processing companies.

This study aims to analyze and assess the real situation of linkages between dairy farmers and actors, and relevant stakeholders in the dairy milk chain in a case study of Cu Chi district, Ho Chi Minh city of Vietnam and suggest some recommendations to improve the linkage between dairy farmers and actors, relevant stakeholders in the milk chain in order to increase the milk consuming and benefit for them.

2. METHODOLOGY

Two communes with the highest number of dairy cows and farmers in these communes face the most difficult to sell milk in Cu Chi district - An Phu and Tan Thanh Dong communes - were selected as study sites. Tan Thanh Dong commune has about 1,500 dairy farmers, raising 20,000 dairy cows and is the commune with the highest number of dairy cows in Vietnam. There were 121 farmers faced difficulty to sell milk and had to sell their cattle, with a total number of sold were 840 heads. Some dairy farmers had to sold out all of their cattle and transfer to other jobs (Pham Oanh, 2016).

An Phu commune has more than 400 dairy farmers with nearly 5,000 heads. This is also the most difficult commune in dairy farming in Cu Chi district, where more than 100 dairy farmers have not yet signed contracts with milk processing companies and could not sell their milk. Many new farmers raising cows for 2 years were starting to sell dairy cows at the very low costs.

Total 40 farm owners (from now called farmers) were selected randomly (approximated 20 farmers per commune) and then standard questionnaires were used to collect data in a survey in the first quarter of 2017.

3. RESULTS

3.1 General information of dairy farmers in the study site

The dairy farmers exploited their family labors for the farm works at an average of 2 laborers per farm. The maximum number of family labors was four and the minimum was one. There were 70% farms hiring more labor in the labor market with numbers ranging from 1 to 4 people, mainly for seasonal or crop jobs.

The average land area per farm was 9,701 square meters (m²), of which land for grass growing accounted for 95%. The average land area per head cow was 409 m² and the acreage of grass growing per head was 389 m². According to respondents, this area was not enough for them to grow grass for cattle.

Table 1: General information of dairy farmers

Detail	Unit	n	Mean (SD)	Median (Min; Max)
Labor				
Hired labor	People	28	0.29 (0.85)	0 (0; 3)
Family Labors	People	38	2.18 (0.8)	2 (1; 4)
Land				
Agriculture land	m ²	35	9,701.51 (17504.32)	3,300 (50; 90200)
Forage area	m ²	37	9,222.43 (17108.28)	3,000 (0; 90000)
Milk production				
Total cattle	Head	40	23.7 (12.7)	22.5 (7; 60)
Dairy cattle	Head	40	19.3 (10.93)	16 (6; 56)
Calves on milk	Head	40	3.3 (3.63)	2 (0; 13)
Milk Yield 2	Kg/cow/day	39	15.22 (2.54)	15 (10; 20)

Source: Survey results, 2017

The average size of the herd in the study site was approximately 24 heads per farm. The minimum farms had 7 cows and the maximum had 60 cows. Of which, the average dairy cattle were 19 heads, with 44.6% were calves and heifers, the rest were lactating and dry cows.

The average lactation milk yield per cow was quite low at only 3,945.4 kilograms (kg), the lowest milk yield was only 2,400 kg and the maximum was 6,000 kg. The average milk yield per day per cow in this region was rather low at only 15.22 kg.

3.2 Linkage between dairy farmers with milk actors in the chain

The milk chain in the study site includes the functions of milk production, collecting and bulking, processing, and distribution. These functions are performed by major actors: dairy farmers, milk collectors, milk processing company, and milk distributors.

There were 9 (of 39) surveyed farmers had linkage to milk collectors, accounted for only 23.1%. Of which, there were 6 farmers had signed contract with them, took part 15.4% total surveyed farmers. The 3 other farmers had an informal and oral contract. This means, the linkage between dairy farmers with the collectors in this area is loosened. The content of the contract mainly focuses on consuming milk only within one year with quite clear contract articles.

For dairy farmers, the most concerned linkage was to sell milk. In order to sell milk, beside the linkages with the collectors and the processing company, they had linked to middle men, milk and cake shop, and some retailers in the local region. However, in this region, it seems that, there was no linkage between dairy farmers with these actors because there were 100% responded farmers said that they did not sell milk to them, and did not have any linkage to them.

Table 2: Linkage between dairy farmers and other chain actors

Description	Milk collectors		Milk processing company		Middle men, milk & cake shop, wholesalers/retailers	
	No	%	No	%	No	%
Total	39	100	39	100	35	100
Farms had no linkage	30	76.9	1	2.5	35	100
Farms had linkage	9	23.1	38	97.4	0	0
Farms had signed contract	6	15.4	38	97.4	0	0
Farms had oral contract	3	7.7	0	0	0	0
Major content of contract	Buy milk		Supply input Buy milk Supply input and buy milk		No	
Term of contract	1 year		1 year		No	
Article of signed contract	Clear		Clear		No	

Source: Survey results, 2017

Signing a contract with a milk processing company is the most important thing to ensure the milk selling for dairy farmers in Vietnam in general, and in this study site, in particular. In some case, a dairy farmer had a good linkage to milk collectors through contract farming, but he or she had not had a good linkage to dairies, and had not signed a contract with them, he is not ensured to sell all of his milk. Therefore, all dairy farmers had tried their best to have a signed contract with dairies.

The survey results showed that milk processing company did not have any oral contract with farmers. There were 38 responded farmers had signed contract with the processing company² in the region. There was one farmer said that he had not signed a contract with the processing company, and another farmer did answer this question. Term of contract was only one year with clear contract articles.

² In Vietnam, each region normally has only one milk processing company.

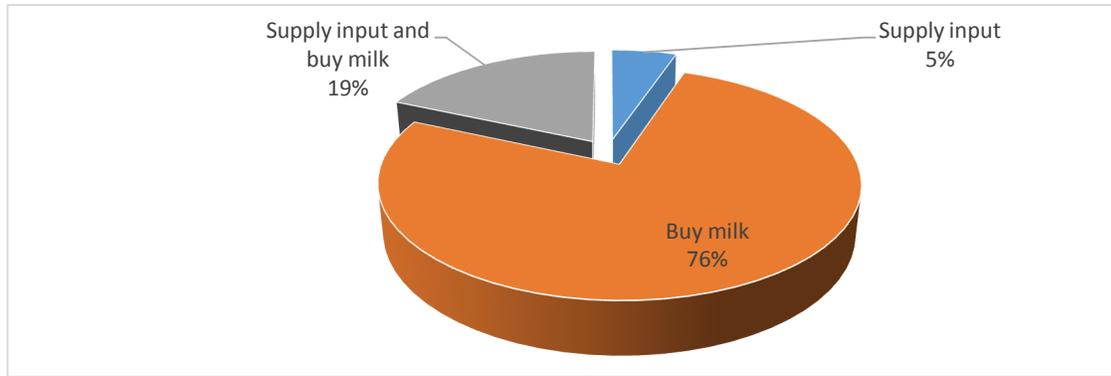


Figure 1: Types of contract signed with the milk processing company (n=38)
 Source: Survey results, 2017

There are three types of the signed contract between dairy farmers and the processing company: (1) the company supplies inputs of milk production to dairy farmers; (2) the company buy milk from dairy farmers; and (3) the company supplies inputs for milk production to dairy farmers and buy milk from them. The third type of contract was the most popular in other regions in Vietnam. However, in this region, the second type occupied the largest share (76% total surveyed farms). These numbers indicate that, there was good and tighten the linkage between dairy farmers with milk processing company. However, it seems that, there were still 5% farmers face difficulty to sell milk because they did have a signed contract with the processing company.

3.3 Linkage between dairy farmers with relevant stakeholders in the milk chain

Beside the actors, some stakeholders are considered as supporters in the milk chain in the study site, like suppliers provided inputs, veterinarian and outreach initiatives helped farmers to deal with their specialized problems such as disease control, protecting dairy cows from harsh conditions, preventing them from suffering the effects of natural disasters, etc. Financial institutions provided them loans for keeping cattle. The Government and local authorities created the environment to produce milk through decisions, resolutions, directives, decrees, etc.

There were only 1 farmers – occupied 2.5% surveyed farmers, had informal and oral contract linkage to suppliers. These numbers also reflect that the linkage between dairy farmers with the suppliers in the region was loosened. The farmers also had loosened linkage to government vets (only 7.5%) through consultancy service. However, they had a quite tight linkage to private vets, 70% farmers got consultancy service and linkage to them. Besides, farmers also had links to other stakeholders such as local extension experts, milk company’s technician, animal, medicine sellers, farmers association... but the linkage were not very tight.

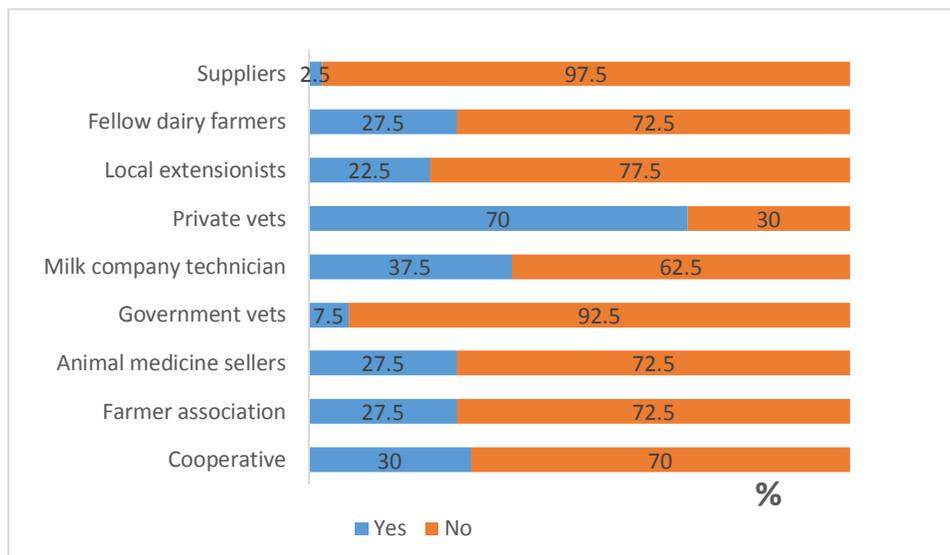


Figure 2: Interact and linkage between farmers to relevant stakeholders
 Source: Survey results, 2017

In addition, dairy farmers in this region also had links to other stakeholders. There were 61.1% and 51.4% of the responded farmers answered to have linked to veterinary service center and farmers' association, respectively. Five of them had links to other organizations and institutions such as university, financial institutions. However, there was no linkage between farmers with insurance agents in this region while the dairy is considered as high risk of diseases, fluctuated market, imperfect systems of quality control and marketing and easily affected by the harsh natural condition of Vietnam.

Table 3: Linkage to other stakeholders

	Farmers' Association		Veterinary Service		Insurance Agents		Other organizations, institutions	
	No	%	No	%	No	%	No	%
Yes	19	51,4	22	61,1	0	0	5	13,5
No	18	48,6	14	38,9	36	100	32	86,5
Total	37	100,0	36	100,0	36	100	37	100

Source: Survey results, 2017

4. CONCLUSION AND SUGGESTION

The milk chain in the study site includes the functions of milk production, collecting and bulking, processing, and distribution and are performed by major actors: dairy farmers, milk collectors, milk processing company, and milk distributors. The linkage between dairy farmers with the collectors is quite loosen as there were only 15.4% surveyed farmers had formal linkage to milk collectors through signed contract and 7.7% had oral and informal contract. There was no linkage between dairy farmers to milk distributors. The milk processing company did not have any oral contract with farmers. There was good and tighten the linkage between dairy farmers with a milk processing company as 97.4% responded farmers had signed contract with the processing company, with three types of contract: the company supplies inputs to dairy farmers; the company buys milk from dairy farmers; and the company supplies inputs and buy milk from dairy farmers. The second type occupied the largest share (76% total surveyed farms).

Besides, suppliers provided inputs, veterinarian and outreach initiatives helped farmers to deal with their specialized problems, financial institutions provided loans, government and local authorities created the environment to produce milk. The linkage between dairy farmers with the suppliers in the region was loosened because there were only 2.5% surveyed farmers had informal and oral linkage to suppliers. The farmers also had loosened linkage to government vets (only 7.5%), but they had a quite tight linkage to private vets (70%). In addition, farmers also had links to other stakeholders such as local extension experts, milk company's technician, animal, medicine sellers, farmers association... but the linkage were not very tight. There was no linkage between farmers with insurance agents in this region while the dairy is considered as high risk of diseases, fluctuated market, imperfect systems of quality control and marketing and easily affected by the harsh natural condition of Vietnam.

From the above analysis, some suggestions are provided to improve the linkage between dairy farmers and actors, stakeholders in the milk chain in Cu Chi district in order to increase the benefit for farmers:

- Farmers had better actively improve their linkage to other milk chain actors. They should strengthen their relationship with milk collectors and processing company, sign long term contract with them to ensure to sell all of their milk. In addition, they could diversify their chance of selling milk through finding, setting up, and developing the relationship with milk distributors such as retailers, milk and cake shop, etc.
- They should enhance the linkage to supporters of the chain. The good, formal and tight relationship with suppliers through contract farming could prevent them from unexpected increasing input price. Good linkage to milk insurance agents may support them when they face the risk of a contingent, or uncertain loss that is quite popular in the dairy industry.
- Moreover, they should reinforce the linkage to farmers' association, veterinary service, cooperatives and extension service center because these organizations could provide them some valuable technical knowledge and skill support.

ACKNOWLEDGEMENTS

The author would like to thank the Australian Centre for International Agriculture Research (ACIAR) for their support in doing small project AH/2016/020.

The author also would like to thank Mr. Nguyen Ngoc Bang, a PhD candidate, and Dr. John Al-Alawned, lecturer in Veterinary Epidemiology, University of Queensland, Australia for their support in processing the data in table 1.

REFERENCES

- Bui Thi Nga (2017), Performance of milk production in smallholders: A case study of Cu Chi district, Ho Chi Minh City of Vietnam, Greener Journal of Business and Management Business Studies, ISSN: 2276-7827
- Huu Ky, Tran Dang, 2017, Ho Chi Minh City strong replacement the dairy herd <http://danviet.vn/nha-nong/tpho-chi-minh-manh-tay-thay-mau-dan-bo-sua-743422.html>, download on 15/01/2017
- Ngoc Anh (2015), Dairy farming getting difficult, <http://nld.com.vn/kinh-te/nuoi-bo-sua-ngay-cang-kho-20150327213550173.html>, download on 18/12/2016
- Pham Oanh (2016), Nguoi dan Cu chi gui sua cho nguoi than tam, Vietnamese online, <http://vietnamnet.vn/vn/kinh-doanh/thi-truong/dan-nuoi-bo-cu-chi-gui-sua-cho-nguoi-than-tam-309040.html>, download on 18/01/2017
- Thanh Nguyen (2016), Solution for the dairy farmers, Nhan Dan online, <http://www.nhandan.com.vn/tphcm/tin-chung/item/31066102-go-kho-cho-nguoi-chan-nuoi-bo-sua.html>, download on 18/12/2016

Cite this Article: Bui TN (2017). Linkage between Dairy Farmers and Actors, Stakeholders in the Milk Chain: A case study of Cu Chi District, Ho Chi Minh City of Vietnam. Greener Journal of Business and Management, 7(3):024-029, <http://doi.org/10.15580/GJBMS.2017.3.082717109>