

Challenges Faced by Dairy Producers for Pursing Sustainable Livelihood in Mullaithivu District

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Abstract: Dairy farming contributes to the rural economy by the way of production of organic fresh milk, milk based products, and the addition to the supply of draught power (bio-gas). It also ensures the supply of valuable nutrients and provides self-employment opportunities to the people. The fresh milk productions are identified in Mullaithivu as a livelihood source and uplift the living standards of resettled families through government and non-government projects. This district was badly affected by the thirty-year conflict, which ended in May 2009. People were subjected to multiple displacements and numerous lost their livelihoods. Several people in Mullaithivu district have transformed their livelihoods, for their subsistence. Many rumors stated that the dairy farmers in this district have bearable livelihood, but in real it has not been accomplished, even though they are experienced in dairying and crop agriculture, and many assistances were offered. Many initiations both from the government and private sector considers this district as an important area should be developed. Even though there are many initiations in this district, peoples are not satisfied and have not recovered from the recession. Many academician considered many reasons as challenges for this underdevelopment of economics. This study focuses to identify the challenges faced by dairy producers for pursuing sustainable livelihood for development through their livelihood as dairy production. Data were collected from 35 dairy farmers through Participatory Rural Appraisal Method (PRA) via qualitative methodology. This applied marketing researched categorized the challenges as marketing problems, investment problems, problems for managing cattle, lack of research in dairy production, social and cultural barriers, and the lack of networking system. There are many weaknesses identified at the farmers' level for achieving their target. Lack of integrated system in dairy sector management in post conflict areas should be linked in into a social network system for managing livelihood at sustainable level.

Key words: dairy producers; investment; Participatory Rural Appraisal (PRA); sustainable livelihood; social network system; self-employment

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1. Introduction

Sustainable development strategies of developing countries will continue to give priority to human development, with the eradication of poverty as its central goal. Human development requires more attention to be directed towards quality issues as well as coherence at the national level. Human development success depends to a large extent on using the opportunities created by globalization and on minimizing its negative impacts. In this context, better management of capital flows and macroeconomic regulations may be necessary and coherence between national development strategies and global decision-making is important. Global institutions have to accommodate the special needs of developing countries, especially those of the least developed countries, the small island developing States, the landlocked developing countries and the countries in post-conflict situations. The global agenda will also need to attach greater importance to human rights, conflict prevention, good governance and reduction of inequality.

The conflict between the Sri Lankan government and the Liberation Tigers of Tamil Eelam (LTTE) has lasted nearly three decades and is one of the longest-running civil wars in Asia, which marked many wound on the life of the poor people in North and East Sri Lanka, particularly in Mullaithivu district. General public transformed their livelihood to survive as vulnerable folks in the post war context. For communities affected by the disaster it is a priority to protect, recovered develop the resources that they need for medium and long term food security, and future livelihood. In situation of conflict, war, disaster communities have lost their assets through fight and conflict, their livelihood activities and access to markets are often seriously restricted. Livelihood initiatives should aim to protect and promote food security, where feasible through agricultural production, small business, and employment.

Many government and non-government organizations commenced work in Mullaitivu district to increase income of war affected families through an integrated livelihood project. Many vulnerable people were selected and they were given castles to increase their income level for their self-sufficiency and earning from business. (SLCDF, 2012/2013). The dairy industry has potential to contribute considerably to economic development of Mullaithivu district, which is the traditional industry surviving thousands of years. Milk production also plays an important role in alleviating nutritional poverty in all age groups. It is a source of extensive employment opportunities in those places. The farmers and non-farmer groups in the villages have the potentials to become good earners through dairy business in Mullaithivu. At the initial stage of the dairy farming many were interested to started up the livelihood and produced a remarkable returned from the investment made from the individual fund and by the recovery agencies. Many reports produced by the relevant organization said that the vulnerabilities have succeeded well but, still they have problems of managing their dairy business as livelihood. In the war affected area recovery from the war should lead a long term sustainable returns to have individual development as well as the countries development. People try to drop out from the livelihood, because of many reasons.

From the pilot survey researchers had found that there are some basic and problems need to be resolved hurriedly, through the applied research researchers used the participatory rural approach method to find the real challenges faced by the dairy farmers in Mullaithivu district for pursuing sustainable livelihood, even though there are many projects implemented to recover as post war mechanism for livelihood development. Therefore, the research question of this research is as follows

RQ: Even though there are many government and non-government initiations occurred in the places, still

why the dairy farmers have challenges for pursuing sustainable livelihoods.

2. Objectives of the Study

- (1) To identify the challenges for dairy producers in Mullaithivu district
- (2) To specify the weakness in the network among the dairy farming related entities through the farmers' perspectives.

3. Research Methods

This study is totally an applied marketing research did through qualitative methodology. Present study adopted participatory rural appraisal method (PRA) to answer the research question.

PRA is intended to enable local communities to conduct their own analysis and to plan and take action (Chambers, 1992). PRA involves project staff learning together with villagers about the village. The aim of PRA is to help strengthen the capacity of villagers to plan, make decisions, and to take action towards improving their own situation. PRA is a methodology of learning rural life and their environment from the rural people. It requires researchers/field workers to act as facilitators to help local people conduct their own analysis, plan and take action accordingly. It is based on the principle that local people are creative and capable and can do their own investigations, analysis, and planning. The basic concept of PRA is to learn from rural people. Chambers (1992) has defined PRA as an approach and methods for learning about rural life and conditions from, with and by rural people. He further stated that PRA extends into analysis, planning and action. PRA closely involve villagers and local officials in the process.

The population of the study was the dairy farmers, milk traders, and milk collectors in Mullaithivu district to get a better understanding of the challenges related to livelihood income generation activities researchers used PRA to directly talk with people who are involved in dairy farming, and they allowed them to share their knowledge, as facilitators. 35 dairy farmers, milk collectors, and milk traders participated in this PRA. Researchers played the role of facilitators, facilitating the discussion and allowing informants to guide the discussion flow and content. Interventions were made only to clarify certain aspects of the discussion. Participants were allowed to express their views and expectations, challenges for pursuing the dairy business as a sustainable livelihood in the casual life. Diagrams, maps were created by the participants by using symbols they develop or define. This helps them to understand the challenges and to modify them if necessary in a creative way. Participants wrote notes and figures regarding the questions posted by the researchers, who actively involved with the participants. Collected data were translated and coded to have a clear finding to the research problem. During the data collection method researchers followed the criteria mentioned by Chambers (1994) in PRA. End of the PRA all the documents (digitally recorded data, graphs, notes, figures), are carefully translated and transcribed for data analysis.

Data were analyzed through coding method manually by the researchers. Researchers encountered the same themes over and over, and no new insights were emerging from the data; a case of theoretical saturation (Strauss & Corbin, 1998). To code the data, open coding and axial coding schemes were used (Strauss & Corbin, 1998). In open coding, researchers identified important concepts using in-vivo codes (concepts based on the actual language used by the informants). Next the in-vivo codes were grouped into higher level concepts called first-order categories, based on some underlying similarities between them. Next, the researchers used axial coding, wherein searched for relationships between and among the first-order categories, and assembled them into second-order

themes. These second-order themes were used to understand the emergent framework (Corley & Gioia, 2004).

The study practiced the following ethical considerations based on the suggestions of Welman, Kruger and Mitchell (2005); the respondents' permission was sought before the research commenced (Voluntary participation), the respondents were informed of the objectives of the study so that they could decide whether they wanted to participate or not (Informed consent), all information that was collected would be kept confidential. The respondents could remain anonymous if they wanted. All the information would be analyzed and generalized and not be attached to any particular respondent (Anonymity)

4. Research Results

Many national, regional and international organizations are working in partnerships using development-oriented livestock research to achieve sustainable improvements to the livelihoods of resource poor livestock keepers in developing countries, to make animal products more affordable and accessible for the poor, and to conserve natural resources in Mullaithivu district, but still this sector has lot of challenges for pursuing as sustained one.

The majority of dairy farmers in Mullaithivu are individuals. Entrepreneurs are also getting involved in small-scale and commercial dairy farming in some villages through micro-credit programmes, provided by Bank and NGOs, which are aimed at poverty alleviation. On the basis of primary use of cows, farm size and use of dairy products, dairying may be classified into the following four categories (1) dairying for home consumption, (2) production from dual-purpose cows (draft and milk), (3) small-scale dairy farming and (4) commercial dairy farming.

There are many small scale owned dairy farms, and milk collection centers in Mullaithivu. These are mostly used as breeding farms and for the supply of heifers to small-scale farmers. Moreover, various NGOs Banks, government authorities, private companies have very large livestock development projects. These projects target landless and marginal farmers, particularly women, as part of their rural development and income-generation activities. Mostly, they provide credit facilities and some of them provide support services to small-scale dairy farms. These activities are implemented in collaboration with the Department of Agriculture, Government of Sri Lanka.

Marketing of livestock and their products is handled mainly by Individuals. Other than marketing by a few dairy-processing enterprises, marketing of milk and milk products from traditional small-scale dairies is carried out in an unorganized manner. Three different systems of milk marketing exist in Mullaithivu (1) village systems — where milk from farmers is marketed to consumers by middlemen; (2) direct selling — individual farmers directly sell the milk to consumers and (3) organized collection of milk from farmers for processing and marketing by private enterprises.

A chain of intermediate traders is involved in transferring milk and milk products from farmers (producers) to the consumers. This increases the cost for marketing and decreases the profit margin. Imperfections in the village marketing systems, which result in high prices for input and low prices for output, may discourage the development of dairy in Mullaithivu.

From the PRA method researchers found many challenges from the dairy farmers' perspectives, examples for the quotes are given in Table 1. Many of them suffer from death of cow, and very large number of indigenous animals with low productivity and a small portion of cross-breeds.

Challenges Faced by Dairy Producers for Pursing Sustainable Livelihood in Mullaithivu District

Table 1 In Vivo Codes: Representative Quotes

In vivo codes	Representative quotes
Marketing problems	<i>Many of us use organic feeding to our cattle but awareness on organic milk consumption is very low in our villages, it is very difficult to bring our milks in urban cities. We don't have our own distribution system, intermediators exploiting us...</i>
Investment problems	<i>We don't know how to calculate the interest rate and cost of capital, we pay credit form our returns, by paying in small amount we think it is friendly for us but, we know that micro credit exploit our returns, but we pay because , this gives us capital whenever we need without surety...</i>
Social, political, and cultural problems	<i>As women ..managing small scale business also very difficult in our places, we are bound in culture ...many of us lost our heads we have to work alone to look-after our family.. it is an acceptable livelihood but have many challenges</i>
Challenges on managing cattle	<i>We have many green places for organic feeding, but we have many problems to access those places due to land mines...we were offered very poor productivity cattle ...</i>
Lack of research on diary livelihood	<i>Universities should come up with solutions, getting a permission, having a solution for a problems are the difficult task for us. We need help form the societies , and dairy farming based organization</i>
Poor networking	<i>Entities, which linked to dairy farming are working isolated , all should work under a common system integrated approaches will help us in improved way.</i>

Source: Authors constructed

“Many entities offer credit facilities abut with limited access, they expect surety from us, we could not access the finance when we need it. We displaced for a long period, after settlement we were offered cattle without training, we faced many challenges to make bearable in our commerce.”

Some of them said that, they have not enough feeding places in their areas, even though they have green wide land spaces for feeding castles,

“Most of the places resettled are not cleared form land mines, but those places are very good for feeding cattle, we spend more for feeding it lowers the profit margin.”

Another farmer said the poor network among the society, farmers, government organizations, on-government organizations, and universities,

“We expect university should contribute to business management and cattle management for sustainability in dairy farming.”

Quotes are coded into in vivo codes and first order categories, challenges and suggestions as categories or second order themes. Coding is shown in the Table 2.

Table 2 Examples of in-vivo Codes, First-Order Categories and Second-Order Themes

In vivo codes	First order categories	Challenges
Lower market demand Poor market growth Lower price Product varieties Quality packed products Consumer awareness Small portion prefer fresh milk Exploitation of intermediators Exploitation of milk collectors Exploitation of private companies Informal channel Little investment on promotion Poor health awareness Demand for organic milk	Demand Product quality Promotion Consumer related problems Crating awareness Packing Market growth	Marketing problems
Access to formal credit mechanisms is very poor Accessible	Credit Repayment methods	Investment problems

Challenges Faced by Dairy Producers for Pursing Sustainable Livelihood in Mullaithivu District

very high interest Weak social capital Micro credit with higher interest and unethical recollection procedures lack of awareness on credit management lower advisory intentions voluntarily from university for credit management	Poor Capital management	
Very poor extension support services leading to very poor knowledge transfer Entrepreneurial capacity is hindered by a low capacity to take risks Many places are not cleared to feed the cattle's Lack of policy focus on strengthening indigenous breeds not plentiful government subsidies on bulk chilling and processing infrastructure Exists on paper but is very difficult to access Problems as women dairy famers	Government supports Lack of social participation Cultural barriers	Political, social and cultural problems
Duplicate or cheap medicines Increasing feed costs Many places are not cleared to feed the cattle's Farmers not interested in quality feed because of the low price of milk large number of indigenous animals with low productivity and a small portion of cross-breeds Availability of health and breeding services is almost non-existent in whenever they needed	Trained medical assistance Low productivity Health and breeding services	Challenges on managing cattle
Knowledge and new techniques are not accessible Various subsidies available for milk processing and testing infrastructure, but not recognized to them Lack of research in dairy business management	Research Testing Business management	Lack of research on diary livelihood
University, government organization, non-government organizations are not linked for dairy farming, business management Long procedure for solving farmer based problem	Lack of Integrated approaches Isolated entities Poor coordination	Poor networking

5. Conclusions

Identified challenges are categorized into marketing problems, investment problems, problems for managing cattle, lack of research in dairy production, political, social and cultural barriers, and the lack of networking system. Form the table identified categories as challenges are given below:

(1) Marketing problems

- (a) Lower market demand in the local market
- (b) Poor market growth
- (c) Lower price
- (d) Consumers now have a variety of quality products
- (e) Consumer awareness on product quality is increasing but in a very small portion of the population
- (f) Exploitation of milk collectors
- (g) Quality of milk through informal channel is an issue and to some extent in formal channel as well
- (h) Very little investment on the promotion of health or quality of milk

(2) Investment problems

- (a) Access to formal credit mechanisms is very poor
- (b) Accessible but at very high interest
- (c) Weak social capital and trust in the villages, which can sustain dairy farmer organizations if properly managed
- (d) Micro credit with higher interest, and unethical recollection procedures

(3) Political, social and cultural problems

(a) Very poor extension support services, leading to very poor knowledge transfer

(b) Entrepreneurial capacity is hindered by a low capacity to take risks

(c) Many places are not cleared to feed the cattle's

(d) Lack of policy focus on strengthening indigenous breeds

(e) Not plentiful government subsidies on bulk chilling and processing infrastructure

(f) Exists on paper but is very difficult to access

(4) Challenges on managing cattle

(a) Duplicate or cheap medicines

(b) Increasing feed costs

(c) Many places are not cleared to feed the cattle's Farmers not interested in quality feed because of the low price of milk

(d) Very large number of indigenous animals with low productivity and a small portion of cross-breeds

(e) Availability of health and breeding services is almost non-existent in whenever they needed

(f) Focus on livestock is understated

(5) Lack of research on diary livelihood

(a) Knowledge and new techniques are not accessible

(b) Various subsidies available for milk processing and testing infrastructure, but not recognized to them

(c) Lack of research in dairy business management

(6) Poor networking

(a) University, government organization, non-government organizations are not linked for dairy farming, business management

(b) Long procedure for solving farmer based problems

The marketing of milk in Mullaithivu is complex and varied. There are individual farmers who sell direct to processors, consumers, hotels, cafeterias and canteens. Cooperatives are organized primarily for the purpose of collecting and selling milk to either hotels or processors. The formal, or processed dairy, market consists of small dairy cooperatives, larger local cooperatives, district dairy cooperatives, dairy cooperative unions and networks of collection points and milk chilling centers operated by cooperatives or the main dairy processors. Most farmers are not members of cooperatives or farmer societies. There are a few large-scale processors who have organized farmers to sell their milk to them.

Contributing to the informal market are small private milk collectors, small local processors of traditional dairy products, retailers and dairy producers who sell directly to hotels and restaurants or to consumers. This research identified many challenges related to the sustainable dairy farming in Mullaithivu district through participatory rural appraisal with the milk producers, processors and distributors in small scale. It is the responsibility of the government and the social institutions to support them to overcome their challenges to meet their expectations on dairy business. Researches provided the following suggestion to win the challenges in this sector.

(1) Allow the farmers to resettled or un-cleared areas for feeding by implementing resettlement system and clearing procedures.

(2) Bring about changes in cooperatives to make them true representatives of farmers instead of functioning as intermediators.

(3) Continually train the dairy farmers, milk traders and distributors to have sustainable focus on their livelihood business.

(4) Support to dairying as a livelihood to encourage commercial dairy farming and encourage production and productivity by extension and breed development.

(5) Strengthen dairy farmer cooperatives to enable farmers to get a higher price for milk.

(6) Strictly implement quality regulations and improve infrastructure and training for quality.

(7) Strengthen the breed development programs, Strengthen extension facilities on medical facility for cattle.

(8) Create policy regulations to make mandatory testing as a basis for setting milk price, and differentiate the quality milk category for higher price.

(9) Encourage the organic farming as a price differentiator in the national market, and train the farmers for organic feeding for cost maximization.

(10) Increase access to credit through dairy farmer organizations and other agencies.

(11) Implement a monitoring system for evaluating the productivity of cattle and boost them for more productivity through research.

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