



## **The effect of microfinance on dairy sector for uplifting backward sector in Kerala**

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### **Abstract**

Poverty in India is widespread with the nation estimated to have one third of world's poor. Micro finance as a powerful tool and a novel concept emerged for eradication poverty at the grass roots through financial inclusion, economic and social development and attaining self –sufficiency. Micro Finance is an important factor which can lead to the rise in the standard of living of poor families if it is utilized in an effective manner. Micro finance enters in all areas as and sectors including the dairy sector in Kerala. Dairy development gained acceleration in the state of Kerala with the inclusion of the State under the 2<sup>nd</sup> phase of the Operation Flood programme in 1983 and the North Kerala Dairy Project (NKDP) in 1990. Most of the farmers in the dairy sector are poor and difficulty to find capital of their own. Micro finance is one of the sources of capital for the farmers. This paper attempts to examine the effect of microfinance on dairy sector for overcoming poverty by analysing the primary data obtained through an interview with 150 members of different districts of Kerala, India as well as secondary data.

**Keywords:** dairy sector, micro finance, poverty alleviation

### **1. Introduction**

Microfinance is a type of banking service that is provided to low-income or unemployed individuals who do not have access to typical banking services. Ultimately, the goal of the field is to give these individuals the opportunity to become self-sufficient and sustainably lift themselves out of poverty. Microfinance is a general term used to encompass a vast variety of financial services to serve the poor, such as microcredit, micro savings, micro insurance, and fund transfers. The two main mechanisms for the delivery of these financial services are: (1) relationship-based banking for individuals and (2) group-based models for several individuals to come together to apply for loans and other services as a team.

The dominant model of microfinance in India revolves around the “Self-Help Group” (SHG). SHGs as village based organizations that focus on building the savings and credit, as well as the social empowerment, of female members (Development Economics Capacity Building Unit of the World Bank). These groups perform three principal functions: (i) they act as an intermediary in transactions with the formal financial sector; (ii), they provide a mechanism for alternative (i.e., non-public) service delivery—such as contracting directly for training in agriculture or other vocational skills, healthcare, childcare, and educational services; and (iii) they serve as a platform for broader engagement by members in local civic affairs. This model is based off the group lending methodology pioneered by the Grameen Bank. Micro finance enters in all areas as and sectors including the dairy sector in Kerala. Most of the farmers in the dairy sector are poor and difficulty to find capital of their own. Micro finance is one of the sources of capital for the farmers.

#### **1.1 Dairy Farming**

India remains the world’s largest producer and consumer of

milk. The wilful efforts of people and the government reflected through successful implementation of programmes like Operation Flood, transformed India from its defect state in milk production to the world’s milk producing country. India has the largest cattle and buffalo population in the world. Cows and buffaloes are the main milk animals, contribution 96 per cent of the total mil production of the country. The average milk yield of buffaloes and cows put together is much less than the global average. There are significant regional variations in the structure of dairying in the country. There are different issues faced by dairy industry in India.

In the agriculture and allied sectors of the economy Dairying play a very significant role? Dairying is treated as an important occupation especially women in rural areas in almost all countries across the world. Nearly one billion people live on dairying as important job and is operated through dairy farms and family type. Milk is treated as an important nutrient and is a vital part of the global food system for the sustainability of people in rural areas. The development of modern dairying began around 1850, has been driven by the growth of urban markets and by scientific, technological and economic factors. They are:

1. The invention of specialised machines especially the cream separator;
2. Research in chemistry, physics, and bacteriology;
3. The discovery of pasteurisation;
4. The introduction of the test devised by American agricultural chemist S.M. Babcock for determining the fat content of milk;
5. Improved refrigeration and transportation;
6. The discovery of new uses for the by products milk processing; and Increased milk productivity resulting from scientific feeding of cattle and, the application of advanced biotechnology to breeding

## 1.2 Dairy Co-operatives in Kerala

The first dairy industrial co-operative was registered in 1932 as a mutual help co-operative at Thirumala in Trivandrum under the Department of Co-operation of erstwhile Travancore-Cochin State. It is evident from documentary evidences that organised dairy industry in Kerala has a tradition of above eighty years. The Dairy co-operatives were operational in Malabar Region which was a part of the Madras Presidency with the registration of the Calicut Milk Supply Union in the year 1939.

Milk is a commodity which could be easily adulterated there existed a customer friendly practice among the dairy farmers where the cow was milked at the doorsteps of the customers to ensure the quality of the milk. Later when co-operatives were organised the cows were brought to the premises of the society and milking was done in the common milking yard to ensure the quality of milk supplied both to the society and the customers and popularly known as "Kettikaravu".

## 1.3 Top milk producing countries in the world

A brief summary of the world's top milk producing countries include:

### 1. India

India is the world's largest milk-producing country with an annual production of 117 million tons of ECM, 65 per cent of which is produced by buffaloes and a national herd of 113 million head of cattle/ buffaloes. The production is around 956 litres/cow/year in the case of feeding which mainly on crop residues as straw, hay and green fodder and supplemented by small quantities of low cost compound feed. Milking is done manually and the milk transported to village collection centres or collected by local milkmen. About 15 per cent of the milk is used by the farming households and only 15 to 20 per cent is delivered to formal milk processors, the rest channelized through the unorganized sector.

### 2. United States of America

The USA produces 87.46 million tons of ECM/year. This is coming from 78,000 dairy farms with average dairy herds of 115 cows producing 2643 litres/day (or 23litres/cow). The country's dairy production systems may be classified as high-input/high-output (8400 litres/cow/year). The feeding is based mainly on grass/corn silage and compound feed. The cows are milked by machine, mainly in milking parlours. The milk is stored on-farm in cooling tanks before being sent to formal processors and around 99 per cent is delivered to processors.

### 3. China

The world's third largest producer of milk is China which accounts for 41.14 million tons of ECM from cows and (to a lesser degree) buffaloes. As most of the milk is sent to formal processors and ranked second in terms of milk processing volumes. Production growth has been driven mainly by increased numbers of cows rather than increased milk yields. China's milk yields are the highest of all the Asian countries with an average of 3.7 tons per cow/annum. Of all the milk consumed in China, 86 per cent is produced within the country.

## 4. Pakistan

Pakistan is the world's fourth largest producer of milk with a production of 35.49 million tons of ECM in which buffaloes accounting for 75 per cent of production. Milk is produced by approximately 15 million dairy farming households producing approximately 6.4 litters/farm/day. The system of dairy production systems in Pakistan is almost similar to those of India. Of the produced milk 50 per cent of the milk is consumed by the farming households and 40 percent sold to the informal market and the remaining 10 per cent is delivered to formal milk processors.

## 5. Russia

The production of Milk in Russia is 32.14 million tons of ECM and it is one of the world's largest growing dairy markets. The growth of this sector is prevented on account of declining number of cattle population. In Russia 50 per cent of its milk is production is coming from small farms and private households sector. But the government support for larger players with more than 2000 cows.

## 1.4 Review of Literature

Mutai Renny. K and Achieno Godfrey Osborn (2013) <sup>[1]</sup>. in a Study on Impact of Microfinance on Economic Empowerment of Women : The case of Microfinance Institutions' Clients in Narok Town recommended that Microfinance Institutions should Endeavour to extend more credit facilities to women clients as this enhances their economic empowerment. So also IFIs and other institutions should provide more training programmes to women in order to improve their entrepreneurial skills and help to reduce problems which hinder their access to microfinance and growth.

Madlani (2013) <sup>[2]</sup> emphasized a study on women entrepreneurship and rural development. He tried to examine the dominance of women entrepreneurs in rural areas and the rural marketing mix strategies of them through SHG's. He also attempted to find out the limitations of women entrepreneurs in rural marketing. According to the study he suggested that literacy and training programmes are essential for the women entrepreneurs of rural areas. He also points out the importance of diversified microfinance and implementation of proper staffing pattern. He concludes that institutions not only help poor women to become self sufficient and economically independent, but it also dismantling the existing patriarchal setup and re-aligning the gender, caste and power dynamics which is widely prevalent in Indian society.

Kristin Krenz, Dorie J Gilbert and Gokul Mandayam(2013) <sup>[3]</sup> in a study on Exploring women's Empowerment Through Credit Plus Microfinance in India concluded that it facilitate pathways of individual and collective empowerment and emergent themes of empowerment were enhanced socio emotional well being, increased economic assets and improved household gender equity.

In an article on Role of the SHGs in the Economic Empowerment of Women, Aswani S.P and Zajo Joseph (2014) <sup>[4]</sup> examined the role played by the SHGs in the economic empowerment of the poor women. The study concluded that SHGs have helped the poor people greatly in improving their standards of living and in contributing to their

financial independence.

Fazalbhoy (2014) <sup>[5]</sup> carried out a study on women entrepreneurship as the way for economic development. This article visualized the banking institutions role of women entrepreneurship with respect to the banking institutions and deals with growth of women entrepreneurs in India, role SHG's in promoting finance and empowering them through capacity building programmes. He also illustrated future policies of government providing conducive environment for their business and livelihood. He concluded that banking institutions must offer formalized credit facilities to this sector to promote entrepreneurship among rural women.

Philip Mader (2014) <sup>[6]</sup> in a study on Financialisation Through Microfinance: Civil Society and Market-Building in India pointed out that microfinance does not reduce poverty, but it does successfully ;construct economic relations between owners of capital and borrowers of capital, allowing surpluses to accumulate through finance. Microfinance is shown to achieve this expansion by establishing credit based linkages between owners and borrowers of capital allowing surplus accumulation to take place via the credit relation. Underlying this material relationship, there is a level at which financialisation motivates and pressures civil society actors to bring microfinance to the poor.

Katherine Dineen and Quan G. Le (2015) <sup>[7]</sup> in an article on The Impact of an Integrated Microcredit Program on the Empowerment of Women and Gender Equality in Rural Vietnam concluded that the importance of the empowerment components in the Peace Trees microcredit program, which serves as leverage for higher income generation and greater gender equality. The micro credit program has also integrated the poverty alleviation paradigm and the financial self sustainability paradigm.

Srivastava. B.P and Serry. A.M (2016) <sup>[8]</sup> in a study on Demystifying micro Finance in Inclusive Growth attempted to portray the concept of Micro finance, its outreach and prevalence among the target groups, roles played by ;banks, MFIs and some of the well performing NGOs/SHGs while touching upon some focused areas for justifying its relevance in inclusive growth. The premises of micro finance have assumed phenomenal importance in accelerating the pace of financial reach of the targeted beneficiaries. Inclusive growth has always received special emphasis in the Indian Policy Making.

Bommali (2017) <sup>[9]</sup> conducted a study on the impact of Micro Finance in Empowerment of Self- Help Groups' of women. The objective of the study is to evaluate the role of micro finance in the empowerment of women and to analysis the problems faced by them in availing financial support. The study concluded that microfinance has a profound influence on the economic status, decision making power, knowledge and self worthiness of women participants of self help group linkage program in Visakhapatnam.

### 1.5 Research Gap

From the review it can be seen that most of the studies are too aggressive or wherever disaggregation has been done. Most of the studies have been done covering the impact of micro finance for the micro financial institutions and SHGs, so there is enough scope of research in this area. Keeping this in view

this study has been undertaken to cover the effect of micro finance on dairy sector, for poverty alleviation and whether micro finance has made any change for their life.

Has it improved their standard of living? This study tries to be covered in state of Kerala.

### 1.6 Significance of the study

One of the major sources of livelihood for the world's poor is the livestock. It is an integral part of India's agricultural economy and plays a multifaceted role in providing livelihood support to the rural population. Livestock or dairy sector apart from contributing to national economy in general and to agricultural economy in particular, provides employment opportunities, asset creation, coping mechanism against crop failure and social and financial security. Dairying is the main source of animal protein for the population. Small and marginal farmers and landless labourers own majority of the livestock resources. The sustainable development of the dairy sector would lead to more inclusive development and empowerment of women. Dairy sector contributes 3.03 per cent of the Gross State Value Added (GSVA) and 29.18 per cent of the GSVA in agriculture and allied sectors during 2015-16.

India ranks first among the worlds' milk producing nations and the milk production during 2014-15 and 2015-16 was 1,463.10 lakh MT and 1,554.9 lakh MT respectively registering an annual growth rate of 6.27 per cent. Among the major milk producing states in India, Kerala ranks 14<sup>th</sup> position with a production of 26.50 lakh MT in 2015-16 with an annual growth rate of 2.11 per cent, the first being Uttar Pradesh followed by Rajasthan, Gujarrat and Madhya Pradesh. During 2015-16 a total of 5929 lakh litres of milk was procured by the dairy co-operative societies in the State. The average milk procured per day by Anand Pattern Co-operative Societies (APCOS) during the year 2015-16 was 1,109 MT against the previous year average of 1,026 Mt. The procurement per day per society during 2015-16 increased to 380 litres from 348 litres in 2014-15. So also the procurement of milk by Kerala Co-operative Milk Marketing Federation (KCMMF) increased to 4,334.81 lakh litres against the sale of 4,624.51 lakh litres during 2015-16.

### 1.7 Need for the study

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**1.8 Objectives**

- To study the micro finance practices of dairy farmers
- To study the impact of micro finance on dairy sector in Kerala
- To identify the constraints of the producer farmers in production and marketing.
- To analyse the effect of micro finance for satisfying their basic needs of dairy sector beneficiaries.

**1.9 Limitations of the study**

The present study examined the various dynamics of production and marketing of milk in Kerala from the perspective of the ultimate stakeholders, the producer farmers, as such the role and dynamics of the organisational network of cooperatives were not included in the purview of the study. The scope of the study was limited to the pre-production and production activities undertaken by the farmers at household level till the disposal of milk to the primary dairy cooperative society

**2. Data Analysis and Methodology**

The study is exploratory and analytical in nature as very few studies have been conducted in the present context. Primary data for the study was collected from the members of the various SHGs in the study area. 150 SHGs were identified covering all the villages in of Kerala, and one member from each group was selected as the respondent on a simple random sampling basis. A structured interview schedule was administered personally for each member. Secondary data was collected from articles published in journals, financial institutions, reports, newspapers, websites, research abstracts, books, e-books, and theses submitted to various universities. The gathered data was analysed using Statistical Package for Social Sciences (SPSS) package.

**2.1 Data Collection Tool**

A questionnaire was designed to collect data from the sample with regard to the following: income, assets, debts, savings and expenditure patterns (before and after they ventured into Micro Finance).

**3. Results and Discussion**

The results of the study demonstrated that the role of microfinance has a strong relationship with income, education, and business progress on dairy sector. However, the role of microfinance shows no significant effect on health care. The result suggested that the microfinance plays an important role on reducing poverty, improving income of household, improves access to children’s education and also supports improving business for poor people. They found that interest

free loans could be used as a powerful tool against poverty. We make the following recommendations to sustain microfinance and make it effective and fulfilling. Education and training should be provided for microfinance beneficiaries on how to efficiently utilize the funds. Interest charged on microfinance products should be reduced. Further, management and staff of microfinance institutions must be given the needed training and education to help build and strengthen the skill, competencies and abilities for effective service delivery. Efforts should also be made to reach the poor who are the target of microfinance policies and programs. Furthermore, since the poor do not have collateral, management and staff should make available to them tailor-made unsecured products. Loan products should be of a longer duration to give beneficiaries opportunities to generate future income out of the borrowed money. Loans should not be callable by the financial institution prior to maturity. Lastly, the Government should create sound political and economic environments for smooth operations and performance. Without such an environment, no business will thrive. Borrowers need sound economic environments to make a return on their borrowed funds.

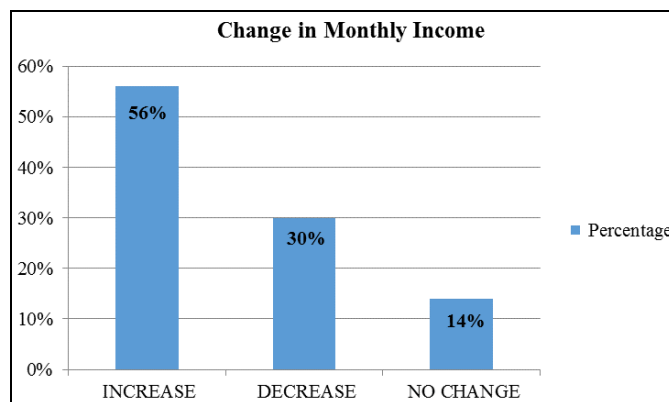
**3.1 Monthly Income**

Income measures the financial stability of a family. It measures the purchasing power of the respondents to take care of basic household expenses, education of children and the like. It was found that starting a business had an impact on the monthly income of the respondents.

**3.1.1 Change in monthly income**

**Table 1:** Change in Monthly Income

Change in Monthly Income	No. of Respondents	Percentage
Increase	84	56%
Decrease	45	30%
No change	21	14%
Total	150	100%



**Fig 1:** Change in Monthly Income

Above diagram, shows that about 82% of the respondents reported an increase in the monthly income, while around 13% reported decrease and 6% reported no change in income.

**4. Conclusion**

As the microfinance industry is developing very rapidly,

institutions are increasingly concerned with developing new products and services. The microfinance industry has experienced dramatic growth during the last two decades, in general and the last decade, in particular. This study indicates that micro finance has made rapid changes for the beneficiaries of dairy sector and it has improved their standard of living. Although the dynamics underlying the micro finance industry have shifted to a new phenomenon that many decision makers still do not fully understand, the risks need to be managed efficiently in the industry of micro finance. The members working under micro finance are able to lead a better life compared to when they were before. They are able to provide better facilities for their family and also provide better education to their children. The next decade will most probably see a continuation of this growth. Such growth is not only sought by many MFIs but also needed in most countries because the unnerved and underserved markets continue to remain large. There should be also good support from government side. Further schemes should be introduced to support the dairy farmers, proper market and training programmes should be given for them. Proper awareness also should be given for dairy farmers to increase production and improve the productivity of milk.

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