



*Case Report*

## Empowering Women in Dairy Enterprise through SHG: A Case Study of Haryana

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### Abstract

The present paper was an effort to study two women SHG's named as Anmol Mahila Dugdh Samiti and Nirmal Dhara Dugdh Samiti which were situated in rural areas of Karnal (Haryana). The major focus of the study was on making women self-reliant, self-employed and empowered by creating entrepreneurial skills in women. This paper also throws light on the importance of institution and NGO in removing various constraints and other problems like financial problems, technical skills etc. Both of SHG procure milk from different villages, store milk, add value, and advertise their product, market creation till product reached to final consumer. The main characteristics of these SHG's was that, middlemen was totally removed from the value chain therefore ultimately reduces the total cost. Value addition includes khoa, ghee, dahi and waste management was also wonder. Season wise profit analysis was done to know the efficiency of SHG. This state is full of orthodox people, where women are considered as servant of the house. These two groups act as role model for other women of the villages. These women broke the glass ceiling and acts as epitome for the orthodox society.

**Key words:** Profit Analysis, Value Addition, Women Empowerment

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### Introduction

India is the largest milk producing country in the world with 176.3 mt of milk in 2017-18 (Basic Animal Husbandry Statistics, DAHD&F, Govt. of India). Milk is one of important components of the dairy farming which is helpful in enhancing the income of the rural households. Dairy farming is mainly dominated by the women. As, women have to perform multiple roles and activities ranging from care of animals, feed and fodder collection, cleaning of animals, processing of milk into various products etc. The dairy market is showing a shift towards value added and quality of milk. The consumer in the new era is mainly



concerned with value added products. Women are becoming better manager of an enterprise than the men. Entrepreneurship development in the rural areas not only depends upon the money, but also depends upon the socio-economic background of the family. Women plays important role in dairy industry from rearing of animals to processing and value addition of milk (Prathyusha *et al.*, 2014).

Self-help group (SHG) is one of significant drive for poverty alleviation as well as to increase the well-being of the rural people. A Self- Help Group is a voluntary and self-managed group of poor women having similar socio-economic conditions which save a certain fixed amount of fund from which small loans are given to the members for meeting their needs. SHG inculcate the habit of saving, decision making power, self-esteem and discipline among the members. According to Gandhiji the full benefits of the development can only be apprehend with all people participation and role of the women cannot be ignored. According to census 2011, the women percentage i.e. (48%) was lower than men population (51%). But their role in the progress of the society is remarkable. In the ancient era, women's were mainly dependent on the male and engaged in house work. Now the stereotype has changed and more women are engaged in productive work beyond the four walls of the house. Development of the enterprise in the rural area by women entrepreneurs deliver the value added milk and milk products which acts as important source of protein for rural poor. The main objective and purpose of this paper was to throw the light on women entrepreneurs in the rural areas.

### **Materials and Methods**

The study was conducted in the district of Karnal, state of Haryana due to the existence of self-help groups which was initiative of the NGO's and research institutes.

### **Selection of Self Help Groups**

Two self-help groups named Anmol mahila dugdh samiti (AMDS) in Amritpurkalan and Nirmal dhara mahila dugdh samiti (NDMDS) in Taprana were created under the guidance of NGO: Arpana Research and Charities Trust and ICAR-NDRI. Both these self-help groups are the successful examples of women empowerment.

### **Analytical Tools**

The both variable and fixed costs were calculated in the study and used for calculation of the cost and returns in the paper.

### **Fixed Costs**

Fixed costs do not vary with the level of output and remain unchanged over a short period of time. The various components of fixed cost are depreciation and interest on fixed capital.

### **Variable Cost**

Variable costs are those costs, which are incurred on the variable factors of production and can be altered in the short run. Labour cost, transportation cost, electricity costs were included the variable cost. The cost of hired labour was calculated considering type of work allotted and wages paid whereas, family labour costs were determined on the basis of existing wage rate of permanent farm labour.

### **Result and Discussion**

This portion of the paper discussed the training and demonstration, establishment of self-help groups, mobilization of funds, milk procurement, processing and value addition, marketing channels and advertisement, progress of SHG's and cost and returns from milk and milk products etc.

### **Training and demonstration**

ICAR-NDRI had provided the training to two SHG's which was mainly related to focused on processing, value addition, technical and quality related aspects. Fourteen members from each group were guided for the skill development training in the manufacturing of milk and milk products with major focus on income generation and to promote the enterprise building by self-help group women. These training were provided on weekends (i.e. Saturday and Sunday) in the NDRI itself with the help of Dr. A.K Singh, Principal Scientist, Dairy Technology Division, NDRI, Karnal. Further, the module of the training was also developed to make these women aware about the nutritional aspects of milk products, their quality testing, handling of various equipments and machines used in the manufacturing of various milk products, by-product utilisation, maintaining hygienic practices while handling dairy products, labelling, packaging and maintaining of finances. Besides these, women are also enlightened about the backward and forward linkages and are also sensitized with marketing skills.

### **Establishment of Self-Help Groups**

AMDS was established in 2010 in Amritpurkalan with initial fourteen members who later got reduced to four, due to certain social, personal and cultural constraints which were represented later in the paper. NDMDS was set up in 2012 in Taprana village, presently having six members. As mentioned above, in this self-help group, the members reduced from twelve to ten and then finally to six due to entrepreneurial stress.

### **Mobilization of Funds**

To start any venture, some amount of money is required. Likewise, both the SHG fulfilled their financial needs with the help of NGO: Arpana Research and Charities Trust. The NGO: Arpana Research and Charities Trust have provided a loan of 10,000 at 1.5 % interest to individual members for the purchase of raw materials, machineries and equipments. Moreover, this NGO also provided them the technical support

in the form of various machineries such as bulk milk cooling unit, khoa making machine and cream separator supplied by chadha sales private limited. Dr A.K Singh, Principal scientist, NDRI assisted them in the purchase of machinery of machineries and instruments like Gerber centrifuge, lactometer, weighing machine, deep freezer.

Simultaneously the other SHG named; NDMDS was also guided and supported by NGO: Arpana Research and Charities Trust and NDRI. But initially, this SHG accumulated their funds by contributing 5000 (per head) from their personal savings. Due to economic constraint faced by them in the transportation and lack of cooperation from the driver, they decided to buy their own vehicle. For this purpose, they have taken the loan of 1.5 lakhs at the rate of 1.5% from the above mentioned NGO to be repaid in easy instalments. To minimize the cost of transportation and to escape from the fraudulent practices caused by the drivers, the members of the group has decided to learn driving. The NGO has provided them fund to learn driving lessons from the maruti driving school, Karnal. The two members from this group are now expertise in driving and are independent in taking their own decisions.

### **Milk Procurement**

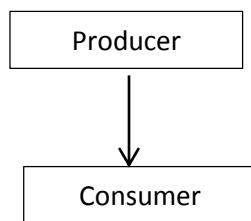
The major task of the SHG was to collect milk from different places. In case of ADMS, the milk was procured from the Village Bhiwani, Amritpur kalan and Sharma Dairy from Karnal. The other group, NDMDS procures milk from Amar Dairy and Village Taprana, Karnal.

### **Processing and Value Addition**

Value addition has been hailed as one of the solutions to the perishability challenge of milk by converting it to a more durable form and hence reducing farm losses (Kiptarus, 2005). The main objective of processing and value addition of milk is to increase the profitability, shelf life of dairy products, by-product utilization. The high profitability of value added dairy products compared to raw fresh milk indicates that if more dairy entrepreneurs are trained to produce products like yoghurt, butter and cheese targeted at the local market, their performance may increase especially during periods of milk gluts. Value addition of milk is one of the tools to double the farmer's income (Rafiq *et al.*, 2018).

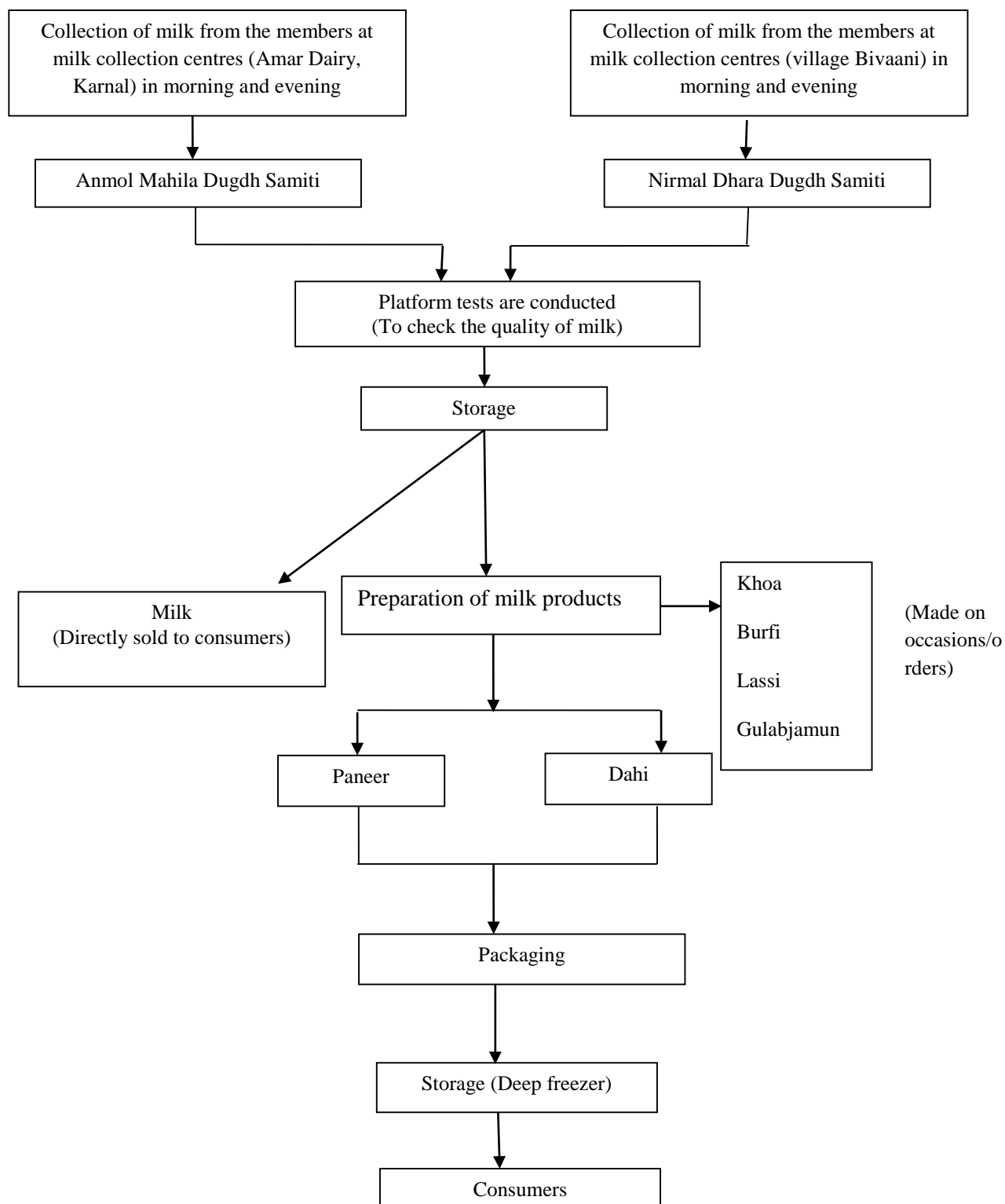
### **Marketing Channels and Advertisement**

The profitability of any enterprise depends upon the marketing channel adopted by the seller. Direct marketing channel is more profitable as number of middlemen have reduced or nil. The main marketing channels for selling of milk and milk products was direct i.e. Producer to consumer. An efficient milk marketing chain is one which enhances the farmers to retain at least 50 % of the retail price of the milk. Marketing of milk and milk products prepared by SHG's is important and difficult task as the products have to be sold to the rural people through rural marketing concept.



In urban areas, marketing of such products is much more difficult as there are large number of seller of the milk and milk products. In order to increase the sale, the SHG showed focus on quality and reasonable price. To make their permanent customers, initially they have personally visited nearby places and created awareness of their milk and milk products. AMDS sells about 77.5% of milk for human consumption in rural areas such as Bivani village, Amritpur Kalan and urban areas such as sector-13, Dayalpur colony in Karnal. About 10% of the buffalo milk is sold to Halwai. Rest of the milk i.e. 12.5% is being utilised for preparation of Paneer, Dahi and Khoa. On the other hand, NDMDS sold about 83.33% of the milk directly to the urban locality such as Sector-7, 8, 9, Vasant Bihar, Ashoka Nursery and Hospital Chowk in Karnal. The remaining portion of the milk i.e. 16.67% is used for formation of the value added products. For popularising, recognising and promoting the milk and milk products of concern SHG, students of the Sri Ram College of commerce, Delhi helped them out. These students went door to door and described the product profile including nutrition, ingredients and quality etc. The procurement and distribution of milk is given in the Fig. 1. This figure describes the collection of milk, storage, value addition, marketing of milk and milk products to the consumer.

Figure 1 Flow chart depicting the procurement and distribution of milk



### Progress of SHG's

A new journey always start with new hurdles, initially both of the SHG groups faced many problems especially the criticism from the people of the village. Gender discrimination and lack of social acceptability made them to rethink about their decision of starting a new venture. AMDS procured 20-25 litre milk per day in the starting of the month. Later on, total milk procurement increased to 150 litres per day. Currently total milk collection is being increased to 200 litres per day, which is utilised for making paneer, khoa, dahi and directly sold for human consumption. Initially, they had kept prices of milk somewhat higher as compared to dudhiya to get assured supply of milk which is illustrated in the table1. This table depicts the procurement price of milk from farmers by dudhiya and AMDS. Buffalo's milk collected from the farmers at price Rs.30/lt and Rs. 33/lt by dudhiya and AMDS respectively whereas cow's milk collected at price Rs.22/lt and Rs.25/lt. This pricing strategy of women SHG's lead them to collect ample amount of milk.

**Table 1:** Milk price of dudhiya and AMDS SHG group

Particulars	Price of Milk	
	Dudhiya	AMDS
Buffalo's Milk Price(litre/day)	30	33
Cow's Milk Price(litre/day)	22	25

This strategy of high milk price fascinates the majority of the households to sell the milk to SHG. Despite, some of the households have not showed interest in this regard and they are not willing to give them support. According to them, how a women can come forward to establish their own start-up as they are considered as weaker gender of the society. NDMDS members started their venture with 5 litre milk per day. The procured milk quantity increased to 50 litres per day within one month. Presently, total milk procurement is 150 litres per day. Member purchased the milk at somewhat higher than that of dudhiya illustrated below in the table2. This strategy helped them to get plenty of milk both for selling and preparation of milk and milk products.

**Table 2:** Purchase price of milk by dughiya and NDMDS SHG group

Particulars	2010	
	Dudhiya	NDMDS SHG's price
Buffalo's Milk Price(litre/day)	31	34
Cow's Milk Price(litre/day)	24	26

The same approach was adopted by NDDS SHG, as these groups are guided by NGO: Arpana Research and Charities Trust and ICAR-NDRI. These women have broken the glass ceiling and emerged as role model for society.

### Cost and Returns from Milk and Milk Products

The AMDS was procuring on an average 200-300 lt/day from nearby villages at the time of survey. The gross profit was about Rs. 1487666, whereas net profit/year was about Rs.82541. The group has three members, which are earning Rs.15000/month /member in table3. These group members were managing all the activities properly with least cost. Their income per month had decreased, due to establishment of new dairies in the village. The women's of this group are actively performing their duties.

**Table 3:** Income generated from the milk and milk products Amritpur Kalan Mahila Dugdh Smiti SHG

Season	Products	Quantity procured	Gross Profit (Rs./year)	Cost (Rs./year )	Net Profit (Rs/month)	Income per member per month (Rs.)		
<b>Total milk</b>		350						
<b>Winter</b>	Milk (l)	320	1775000	1312500	82541	15010		
	Paneer (kg)	4						
	Dahi (kg)	10						
<b>Total milk</b>		350						
<b>Rainy</b>	Milk (l)	320	1710000	1260000			82541	15010
	Paneer (kg)	5						
	Dahi(kg)	5						
<b>Total milk</b>		200						
<b>Summer</b>	Milk (l)	175	978000	900000	82541	15010		
	Paneer (kg)	3						
	Dahi (kg)	10						

**Table 4:** Income generated from the milk and milk products Nirmal Dhara Dugdh Smiti SHG

Season	Products	Quantity procured	Gross Profit (Rs./year)	Cost (Rs./year )	Net Profit (Rs/month)	Income per member per month (Rs.)		
<b>Total milk</b>		250						
<b>Winter</b>	Milk (l)	220	1275000	937500	53725	8954		
	Paneer (kg)	4						
	Dahi (kg)	10						
<b>Total milk</b>		250						
<b>Rainy</b>	Milk (l)	220	1230000	900000			53725	8954
	Paneer (kg)	5						
	Dahi(kg)	5						
<b>Total milk</b>		150						
<b>Summer</b>	Milk (l)	125	738000	540000	53725	8954		
	Paneer (kg)	3						
	Dahi (kg)	10						

Nirmal Dhara Dugdh Smiti SHG member procures milk from different places at Rs. 34 per litre and average selling price of milk, paneer and dahi Rs. 40 per litre, Rs. 250 per kg and Rs. 40 per kg respectively. Net profit per month was calculated after deducting fuel cost, electricity cost, hired labour wages etc. The average profit per member was found to be around Rs.8900/member shown in the Table 4.



### Impact of Dairy Setup

“Women as entrepreneur” is considered as current phenomenon. The inception of women in the dairy sector as entrepreneur is a notable evolution in the liberation of women, thereby securing them a well-deserved position in the society. The interaction and conversations with the SHG members through survey schedules regarding the impact of the dairy unit imparts a positive response. The members of SHGs conveyed that the start-up had provided them a regular source of income, social acceptability as entrepreneur and sole breadwinners of their families. Earlier, these women are dependent on their husbands to meet daily household expenses, ignored to take decision for the betterment of the society and family itself.

But now, in male dominated society, they are independent, efficient decision makers and are confident enough to practice their skills and form their opinions. On an average, both the group members earn nearly about Rs.10000/month/member. This scope of for full gainful employment resulted in increased source of income which is reflected in improved living conditions, enhanced savings, better education for their children and intake of nutritious and quality food. One notable social change is that these rural women act as an epitome of inspiration for other women of the village. Yet another impact has been that of improved awareness and increased social participation. Inspired by the success story of these SHG members, many people of the village particularly unemployed males encouraged themselves to begin their own dairy start-ups. Currently, there were 3 dairies established in Amritpur Kalan and one dairy in Taprana village.

### Constraints Faced

Success of any enterprise depends upon one’s ability to put efforts in right direction with right decision. Women’s are considered as weaker gender in the society and sufferers of traditions. They face a lot of problems when they enter in the field of entrepreneurship. To survive and to make their enterprise successful, they have to fiercely fight and stand firm for their right. Various constraints such as Social, Family/Personal, Cultural and Market related constraints are discussed below one by one. There are social taboos present in the society which discriminates the women. There is need to change these taboos (Qureshi *et al.*, 2016)

### Social Constraints

With respect to social constraints, women observed that social pressure and taboos, lack of equal treatment by the other society members, lack of cooperation among the SHG members hesitate to sell and buy milk from door to door and lack of freedom to take decisions. Initially they were criticized by the village people, as they did not accept women as entrepreneurs. Within one year, both these women’s groups setup their start-up successfully.



### **Family/Personal Constraints**

A major problem conveyed by the group members in this aspect were dominance of husband in the family, lack of family support, increased workload and responsibility. Both of the self-help group felt low level of education as their main personal constraint.

### **Psychological Constraints**

As far as psychological constraints are concerned, lack of motivation, lack of self-confidence, were the major impediments followed by increased stress due to dual responsibility and poor participation in decision making.

### **Marketing Related Constraints**

The major hurdles faced by the members were delay in payment, lack of transportation, difficulty in competing with the products which are sold at lower prices with inferior quality and competition of other newly established dairy start-ups. Currently, majority of constraints have been minimised. There is increase in the social acceptability of women as entrepreneur in the society. Now they are efficient in decision making and developed risk taking abilities. They have gain equal status in the society with greater freedom and mobility. The success of these dairy start-ups has not only conferred self-confidence but also make them aware about the marketing skills.

### **Conclusion**

Rural women are increasingly becoming responsive of their rights, their existence and their capabilities and their capabilities. Nowadays, women entrepreneur are usually a group of women (rural or urban) who have broken all the social boundaries and are generating new avenues for economic participation. The present case study illustrates the success story of both the groups i.e. ADMS & NDDS are the best examples for rural women entrepreneurship. Both these groups not only conferred social and economic benefits but also emerged as a global icon. The institutional support provided by NDRI and financial assistance and financial assistance by the NGO: Arpana Research and Charities Trust is quite notable. Their constant attention and consistent support had played a strategic role in inculcating the entrepreneurial skills and also making them aware about the latest technologies and innovations. These women act as “Northern star amidst darkest night”. Other women of the society should take inspiration from them and follow their path. For the progress of the nation, it is necessary to change the mind-set towards the women. In this stringent male dominated society, this world needs a sassy, free and vibrant woman. The women who is a walking contradiction, a women who is spendthrift but altogether an efficient budget manager. A woman who is vulnerable and excellent fighter.



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