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Role of Amul on Milk Producers with Special Reference to Anand District In Gujarat

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ABSTRACT

Animal husbandry activity in India is an early occupation established in rural conditions. The dairy co-operative sector in India has made a significant contribution in creating employment opportunities for the people and providing food security in addition to providing supplementary income in rural areas. The main objective of this research paper is to study the role of AMUL on milk producers in Anand district. It is also necessary to analyze the contribution of AMUL in terms of benefits to milk producers through suggestions for overcoming barriers in various development programs for Amul milk producer development and access to milk producers. Data have been collected by primary and secondary data for this study. A sample size of 160 respondents was selected for this study. The ex-post facto research design of social science was used for the research. The study used statistical measures such as frequency, percentage, arithmetic mean and correlation method. This study highlights the positive role of AMUL on milk producers.

Key words: Milk Union, Milk Producers, Dairy Co-operative, Dairy Development

INTRODUCTION

India's dairy co-operative structure has made a major contribution in increasing milk production. In the year 2017-18, the milk production was about 176.3 million tonnes, which was 17 million tonnes in the year 1951. At present the daily consumption of milk in the country is 375 gm / day. Thus, India's co-operative dairy sector has made a significant contribution in creating employment opportunities for rural people and providing food security in addition to increasing the income of small and marginal farmers and landless laborers in rural India.

HISTORY OF AMUL

The Anand Milk Union Limited (AMUL) is an Indian dairy Co-operative, located at Anand in the state of Gujarat, formed in 1948, it is a co-operative brand managed by a co-operative structure, the Gujarat co-operative Milk Marketing Federation Ltd., which today is jointly owned by 3.6 million milk producers in Gujarat. AMUL sprung from the seeds sown in the black soil of Charotar, an area in the Kaira district of Gujarat, as a dairy co-operative movement to empower the milk producers. The Taste of India, a brand so distinctively Indian has been a part of our lives for nearly seven decades now and still is able to touch a chord in our hearts. As a brand AMUL has grown from being merely a differentiating factor to protect the interests of producers and consumers. AMUL inspired 'Operation Flood' and heralded the 'White Revolution' in India. It began with only two village

level dairy co-operatives and 250 liters of milk per day, nothing but ooze compared to the flood it has become today. AMUL distributes over a million liters of milk per day, it also collects and processes various milk products, during the peak, on behalf of more than a thousand village individually owned by half a million milk producers members. AMUL too has become a symbol of the aspirations of millions of milk producers.

DEVELOPMENT PROGRAMS IMPLEMENTED BY AMUL FOR THE DEVELOPMENT OF MILK PRODUCERS:

Amul has implemented various developmental programs for milk producing members such as collecting from milk producers twice a day, paying regular amount to milk suppliers, collecting milk and delivering it to district milk union, providing quality balanced animal feed, innovative fodder breeding. , Animal health care service, artificial insemination service to milch cattle, distribution of profits to shareholders, contribution to rural socio-economic development, periodic animal insurance, health insurance and some other promotional developmental activities in the interest of milk producers.

LITERATURE REVIEW

G.Panchbhai, G. and et al. (2017)This study is mainly aimed at finding the relationship between the socio-demographic profile of dairy farmers and the scientific methods of animal husbandry they have adopted through the use of correlation analysis. In the present study he has used the ex-post facto research method of the social sciences. There is positive significant relation with extant of adoption dairy animal management practices.

Kumar, Nishi and Saha (2011) concluded that milk producer's satisfaction with dairy co-operative societies. Involvement of organisational, potential of market and motivation of economic condition was found to have strongly influence on the satisfaction level of milk producers.

Mattigatti R. and et al.(1990) analyzed Karnataka State Co-operative Milk Producers Federation Limited and its impact on dairy development. He has discussed regarding different issues of co-operative Milk Producers Federation Limited. He studied the role of milk producer's co-operative societies and their impact on dairy activities in Dharwad district, Karnataka.

Panchbhai, G. and et al. (2017) researcher the main objective of the study was to asses limitation faced by dairy farmers. The research study was conducted at Shivamrut Dudh Utpadak Sahakari Snagh Maryadit, Solapur in Akluj district of Maharashtra state. The results of the research show that ticks in the sheds of milch animals, milk production is low, animals need to be fed large quantities of animal feed, need to focus on high cost of cross breed, dairy milk farmers face shortcomings.

Prasad, A. and Maheswari, M. (2018) in this study attempted to women empowerment through dairy development and co-operative organization with also promoting their awareness of its empowerment. Co-operative plan improve social advancement through economic growth. Sum up of the study is that positive relationship between the socio-economic and supporting background and aware the index of women through co-operative dairy and alter their mindset towards earning and empowerment.

STATEMENT OF PROBLEM

Many review of the existing literature indicates that there is no inclusive study on Aanad Milk Producers Union Limited (AMUL). It is a self-effacing attempt to study the different issues of AnandMilk Producers Union Limited (AMUL).Therfore current study was planned with objective for: To study the profiles of the milk producers, Tostudy the awareness and attitude of milk producers about different development programmes of AMUL and To study the constraints faced and suggestionsby milk producers in terms of getting benefits of different development programmes conducted by AMUL.

Materials and Method:

Research Design: As the study on descriptive research design has been used in order to describe the milk producer'srole of AMUL.

Area of Study: The study has been conducted in Anand District, Gujarat.

Sample Size: The sample size purposively selected by the researcher, in this study is 160 milk producers.

Sampling Technique: The researchers choose purposively sampling method to collecting data.

Sources of Data: This research study is based on primary data as well as secondary data to accomplish objectives of the study.

Primary Data: The primary data for the study has been collected from milk producers through personal interview of questionnaire. The questioner is designed in a systematic manner covering adequate and relevant questions which is useful study. The sample size of 160 milk producers' respondents purposively has been selected for the study.

Secondary Data: The secondary data collected through various books, journals, research articles, News Paper articles and annual report from AMUL, NDDB, and GMMF.

Data Collection: In the research study the researcher has used the self-structured questionnaire and interview method for collecting relevant information.

Data Analysis: After data collection were classified, tabulated, analyzed and interpreted to formulate the findings significant. The statistical measures such as frequency and percentage, arithmetic mean and correlations were used in the study.

DATA INTERPRETATION

Table: 1: Socio-Demographic Profile of the Milk Producers

	Frequency	Percent
Age of the Respondents		
Young age group (up to 35 years)	29	18.12
Middle age group (between 36 to 50 years)	97	60.63
Old age group (above to 50 years)	34	21.25
Education Level of the Respondents		
Illiterate	00	00.00
Primary Education	10	06.25
Secondary Education	40	25.00
Higher Secondary Education	78	48.75
Graduation and above	32	20.00
Gender		
Male	115	71.88
Female	45	28.12
Family Types		
Nuclear Family	32	20.00
Joint Family	128	80.00
Family Size of Respondents (in Numbers)		
Small (Up to 4 members)	26	16.25
Medium (5t o 8 members)	60	37.50
Large (9 and above members)	14	8.75
Marital Status		
Married	123	76.88
Unmarried	27	16.87
Widow	04	2.50
Divorced	06	03.75

Occupation		
Farming + Animal Husbandry	125	78.12
Animal Husbandry + Job	12	7.50
Animal Husbandry + Business	23	14.38
Annual Income		
Very low (up to ₹ 50,000)	49	30.62
Low (₹ 50,00 to 1,00,000)	21	13.12
Medium (₹ 1,00,00 to 1,50,000)	50	31.25
High (₹ 1,50,000 to 2,00,000)	28	17.50
Very High (Above ₹ 2,00,000)	12	7.50
Social Participation		
Membership in one organization	13	8.13
Membership in two organization	48	30.00
Membership in more than two organization	91	56.87
Membership along with position holding	8	05.00
Land Holding (in acre)		
Marginal (Up to 1.00)	17	15.62
Small (1.01 to 2.00)	26	21.87
Medium (2.01 to 4.00)	69	48.75
Large (Above 4.00)	13	13.76
Herd Size		
Small (Up to 2 animals)	131	81.87
Medium (3 to 5) animals	25	15.67
High (6 and above five Animals)	04	02.50
Experience		
Very low (Up to 6 Years)	12	7.50
Low (7 to 612 Years)	20	12.50
Medium (13 to 18 Years)	39	24.38
Very high (25 to 30 Years)	89	55.62

Source: Field Survey figures in the percentage

ATTITUDE OF MILK PRODUCERS TOWARDS DIFFERENT DEVELOPMENT PROGRAMS OF AMUL

Table 2: Distribution of the milk producers according to their attitude of milkproducers towards different development programmes of AMUL (n=160)

No.	Attitude	Number	Per cent
1	Very Low (Up to 32.40)	05	3.12
2	Low (32.41 to 46.80)	10	6.25
3	Medium (46.81 to 61.20)	31	19.38
4	High (61.21 to 75.60)	68	42.50
5	Very High (75.61 to 90.00)	46	28.75
	Total	**160**	**100.00**

Source: Field Survey figures in the percentage

The present data in Table 2 clarify shows that slightly more than two-fifth (42.50 %) of the milk producers have high level of attitude followed by 28.75 %, 19.38 % and 6.25 % of the milk producers were with very high, medium and low level of attitude towards different development programmes of AMUL. Only 3.12 % of them have very low level of attitude towards different development programmes of AMUL.

From the above results, it can be concluded that slightly less than three-fourth (71.25 %) of the milk producers have high and very high level of attitude towards different development programmes of AMUL.

AWARENESS OF MILK PRODUCERS REGARDING DIFFERENT DEVELOPMENT PROGRAMS OF AMUL

Table 3: Awareness of milk producers regarding different development programmes of AMUL (n=160)

No.	Awareness	Number	Per cent
1	Very Low (Up to 3.40)	03	1.87
2	Low (3.41 to 6.80)	10	06.25
3	Medium (6.81 to 10.20)	96	60.00
4	High (10.21 to 13.60)	45	28.13
5	Very High (13.61 to 17.00)	06	03.75
	Total	**160**	**100.00**

Source: Field Survey figures in the percentage

The present data in Table 3 clearly shows that exactly three-fifth (60.00 %) of the milk producers have medium level of awareness followed by 28.13 %, 6.25 % and 03.75 % of the milk producers were with high, low and very high level of awareness regarding different development programmes of AMUL. Only 01.87 % of them have very low level of awareness regarding different development programmes of AMUL.

From the above results, it can be concluded that slightly more than four-fifth (88.13 %) of the milk producers have medium to high level of awareness regarding different development programmes of AMUL.Milk producers are more or less benefited through the different development programmes of AMUL.

RELATIONSHIP BETWEEN ROLE OF PROFILES OF MILK PRODUCERS AND DIFFERENT DEVELOPMENT PROGRAMS

Age and Different DevelopmentProgrammes of AMUL

The data illustrated in Table 4 shows that there was negative and non significant correlation (r = -0.208) between age of milk producers and different development programmes.

Hence, the null hypothesis that "there is no relationship between age of milk producers and different developmentprogrammes" was accepted. It reflects that age of milk producers did not influence on milk producers through different developmentprogrammes significantly.

Education and Different Development Programmes of AMUL

The data presented in Table 4 indicates that there was positive and highly significant correlation (r = 0.420**) between education of milk producers and different development programmes.

Thus, the null hypothesis that "there is no relationship between education of milk producers and different developmentprogrammes" was rejected.

Table 4: Relationship between Role of Profiles of Milk Producers and Different development programs (n=160)

Sr. No.	Independent variables	Correlation coefficient ('r' value)
1	Age	-0.208
2	Education	-0.420**
3	Experience	0.385**
4	Type of family	0.116
5	Social participation	0.334**
6	Occupation	0.185**
7	Size of land holding	0.113
8	Herd size	0.367**
9	Annual family income	0.162**
10	Attitude towards different development programmes of AMUL	0.423**
11	Awareness regarding different development programmes of AMUL	0.383**

*** = Significant at 5% level of probability,** = Significant at 1% level of probability, NS = Non significant at 0.05 level,Source: Computed from field data**

The above finding indicates that education played significant role in increasing different development programmes.

The probable reason might be the higher literacy level of milk producers provides opportunity for greater exposure to the print media and better ability to understand complicated matter regarding various developmentprogrammes of AMUL.

Type of Family and Different Development Programmes of AMUL

The data presented in Table 4 illustrates that there be positive and non significant correlation (r = 0.116) among type of family of milk producers and overall extent of role of AMUL in terms of giving benefits to milk producers through different development programmes.

Thus, the null hypothesis that "there is no relationship between type of family of milk producers and different development programmes" was accepted. Thus, it can be said that type of family of milk producers had not any significant influence in increasing different development programmes.

Social Participation and Different Development Programmes of AMUL

The data presented in Table 4 illustrates that there be positive and highly significant correlation (r = 0.334**) among social participation of milk producers and overall extent of contribution of AMUL in terms of giving benefits to milk producers through different development programmes.

Thus, the null hypothesis that "there is no relationship between social participation of milk

producers and different development programmes" was rejected.

Thus, it can be said that social participation of milk producers had significant influence in increasing different development programmes.

Higher education and active participation in social organizations might have provided the milk producers more opportunity and exposure to share their ideas, information and knowledge regarding benefits obtained for milk producers from different development programmes of AMUL.

Land Holding and Different Development Programmes of AMUL

It is apparent from the data depicted in the Table 4 that there was positive and non-significant correlation (r = 0.113) among land holding of milk producers and overall extent of contribution of AMUL in terms of giving benefits to milk producers through different development programmes.

Hence, the null hypothesis that 'there is no relationship between land holding of milk producers and overall extent of contribution of AMUL in terms of giving benefits to milk producers through different development programmes' was accepted.

Thus, it can be inferred that farm size of milk producers had no significant influence on their different development programmes.

Herd Size and Different Development Programmes of AMUL

The data presented in Table 4 makes it clear that occupation of the milk producers had positive and highly significant correlation (r = 0.367**) with overall extent of contribution of AMUL in terms of giving benefits to milk producers through different development programmes.

Hence, the null hypothesis that "there is no relationship between herd size of milk producers and different development programmes" was rejected.

Hence, it may be concluded that herd size of respondents have played a relevant role in shaping different development programmes.

Occupation and Different Development Programmes of AMUL

The data presented in Table 4 makes it clear that occupation of the milk producers had positive and highly significant correlation (r = 0.185**) with overall extent of contribution of AMUL in terms of giving benefits to milk producers through different development programmes .

Hence, the null hypothesis that "there is no relationship between occupation of milk producers and different development programmes" was rejected.

Hence, it may be concluded that occupation of respondents had played a relevant role in shaping different development programmes.

Annual Income and Different Development Programmes of AMUL

The data presented in Table 4 reveals that correlation between annual income and their level of overall extent of contribution of AMUL of milk producers about AMUL was positive and highly significant (r = 0.162**)

Hence, the null hypothesis that 'there is no relationship between annual income of milk producers and overall extent of contribution of AMUL in terms of giving benefits to milk producers through different development programmes' was rejected.

From above results, it can be inferred that higher annual income played significant role in increasing level of overall extent of contribution of AMUL of milk producers about AMUL.

Higher annual income might have motivated the milk producers to participate and involve in development programmes of AMUL which might have further resulted in getting benefits out of them.

CONSTRAINTS FACED BY MILK PRODUCERS

Table 5: Constraints faced by Milk Producers in terms of getting benefits from different development programmes of AMUL

No.	Constraints	Mean	Rank
1	Lack of awareness about developmentprogrammes of AMUL as well as benefits getting out of them	0.68	X
2	High registration fee and other fees for participating in developmentprogrammes of AMUL	0.80	IV
3	Lack of training facilities	0.69	IX
4	Unavailability of emergency veterinary services	0.84	III
5	Lack of improved equipments for milk collection	0.73	VII
6	Low procurement price	0.85	II
7	Delay in getting sale proceeds	0.89	I
8	Lack of timely collection of milk	0.78	V
9	To many formalities	0.77	VI
10	Lack of market for value added products	0.72	VIII

Source: Field Survey

It can be seen from the Table 5 that main constraints faced by milk producers in terms of accomplishment benefits from different development programmes of AMUL in descending order of rank were; delay in getting sale proceeds (I),low procurement price (II), unavailability of emergency veterinary services (III), high registration fee and other fees for participating in development programmes of AMUL (IV), lack of timely collection of milk (V), too many formalities (VI),lack of improved equipments for milk collection (VII), lack of market for value added products (VIII), lack of training facilities (IX), and lack of awareness about development programmes of AMUL as well as benefits getting out of them (X).

It can be seen from the Table 6 that major constraints faced by milk producers in terms of getting benefits from different development programmes of AMUL in descending order of rank were; timely sale proceeds (I),procurement price should be increased (II), provision for emergency veterinary services (III), registration fee and other fees for participating in development programmes of AMUL should be reduced (IV), timely collection of milk (V), avoidance of too many formalities (VI),there should be improved equipments for milk collection (VII), provide good market facilities for value added Products (VIII), timely training to milk producers (IX) and create awareness about development programmes of AMUL as well as benefits getting out of them (X).

MAJOR FINDINGS

- A great majority (81.88%) of the milk producers belonged to middle to old age group.
- Majority (80.00 %) of the milk producers had joint family obligation.

SGGESTIONS BY MILK PRODUCERS

Table 6: Suggestions to overcome the constraints faced by Milk Producers in adoption

No.	Suggestions	Mean	Rank
1	Create awareness about development programmes of AMUL as well as benefits getting out of them.	0.74	X
2	Registration fee and other fees for par ticipating in development programmes of AMUL should be reduced.	0.87	IV
3	Timely training to milk producers.	0.75	IX
4	Provision for emergency veterinary services.	0.89	III
5	There should be improved equipments for milk collection.	0.80	VII
6	Procurement price should be increased.	0.91	II
7	Timely sale proceeds.	0.92	I
8	Timely collection of milk.	0.85	V
9	Avoidance of too many formalities.	0.83	VI
10	Provide good market facilities for value added products.	0.79	VIII

Source: Field Survey

- A great majority (89.00 %) of the milk producers had high to very high level of experience in animal husbandry activities.
- A great majority (86.87 %) of the milk producers had good social participation either through two or more than two organizations.
- Slightly less than three-fourth (70.62 %) of the milk producers belonged to small to medium landholding.
- Majority (81.87 %) of the milk producers possessed one to two milch animals
- Slightly more than three-fourth (78.12 %) of the milk producers were depending on farming + animal husbandry and farming.
- Slightly less than three-fourth (71.25 %) of the milk producers have medium to high and very high level of annual income.
- Slightly less than three-fourth (71.25 %) of the milk producers has high with very high level of attitude towards different developmentprogrammes of AMUL.
- Slightly more than four-fifth (88.13 %) of the milk producers have medium to high level of awareness regarding different developmentprogrammes of AMUL.
- Slightly less than three-fourth (71.87 %) of the milk producers have medium to high level of different development programmes.

CONCLUSIONS

In conclusion, animal husbandry is an important part of the Indian agro-based economy; It also provides employment opportunities to the poor and vulnerable sections of the rural society. India's dairy industry is developing on a

cooperative basis based on the Amul model. To further improve this, a joint partnership of Amul and milk producers will have to bring about a change in knowledge and technology which will have a direct impact on the animal husbandry practices adopted by milk producers. Sources of education and information among dairy farmers are also likely to be effective in improving dairy farming in rural areas.

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