AN ANALYSIS OF GROWTH OF DAIRY CO-OPERATIVE: A STUDY OF GOA

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ABSTRACT

The Goa's economy is highly influence by tourism industry and mining sector, these two sectors are considered as back-bone of Goa's economy. In Goa there are about 176 primary dairy co-operative operates at village level and most are small in term of membership, share capital and milk procurement. Further it is experience that only 15 to 20 percent member milk producers are actively participates by supplying milk to dairy societies. The present study entitled " An analysis of growth of dairy co-operative: a study of Goa" is based on secondary data collected from annual report of Goa Milk Union Ltd. for the period 1984-85 to 2014-15.the data is analysed with the help of fixed base index numbers method and variables evaluated are: number of dairy co-op. societies, members of dairy societies, share capital,total milk collected in (lit) and working capital. The study reveals that all the variables evaluated has depicted positive growth accept in case of working capital which has observes fluctuation during study.

Key Words:Growth of dairy co-operative, Members of dairy societies,Primary dairy co-operativeand Working capital

INTRODUCTION:

In present capitalistic economic in struggle for existence only the fittest survive, so in the competitive era the struggle for existence where by the strong oppress the weak there is strong rivalry and even violence for existence particularly among the beasts and animals, but human being are noble social living and they live and work for mutual benefit. This is also called Co-operative. Co-operation means mutual association of economically weaker persons against exploitation and monopoly of stronger and socially privilege persons for the mutual better man of their social and economic condition. Thus under co-operation economically and socially weaker people having common problems units together against the evils of exploitation and monopoly and accomplish their mutual objective through principle of, all for one and one for all.

Be for liberation, the co-operative movement was virtually, absent in Goa. There was only one mutual institution called 'The Caixa de Providencia De Nova Goa' that functioned as an insurance firm. In Goa, dairy processing industry started reshaping in the seventeenth century but, many ferry tails story indicates that Goa was prospers in term of production of

milk. In Sangemtaluka, a 'DHOOD SAGER' water fall name appears from the fact that during olden time place Molem was prime producer of milk and 'Dhanger' community were involved in rearing mulching animals. Even during Portuguese regime, milk farms used to run on conventional basis, after liberation in 1961, co-operative milk societies were established in 1964. In 1982, Goa dairy adopted Anand Dairy Patten to enhance milk production through integrated policy of cattle cum dairy development. In Goa, dairy co-operatives are organized as two tier structures were primary milk producers are affiliated with primary dairy co-operative societies at village level and primary societies are affiliated with Goa dairy milk union ltd.

The Goa's economy is highly influence by tourism industry and mining sector, these two sectors are considered as back-bone of Goa's economy. But, the significance and contribution of agriculture and animal husbandry cannot be overlooked. In recent years, even in global slowdown, the performance of dairy industry and dairy co-operatives in most of the state has shown positive trend but, presently Goa is importing more than 58 percent of its milk requirement from neighbouring states. Most of primary dairy co-operative societies in the state of Goa are small in term of membership, share capital and milk procurement. Further it is experience that only 15 to 20 percent member milk producers are active members. Economic status of dairy members is influence by general growth, financial status and the efficiency of the dairy societies. In Goa, there are 2,244 co-operative societies with the membership of 8, 11,495 of which 176 are dairy societies with the membership of 19,895. The present scenario clearly indicates that, there are only 7.84 percent dairy societies out of total co-operatives with 2.08percent membership to it's out of total membership. This indicates that people of Goa has neglected dairy sector an as economic activity. From the experience of other states like that of Gujarat, dairy sector has potentiality to influence socio-economic status of members. Presently Goa needs at least 3.5 Lakh litres of milk per day and

Goa Milk Union Ltd. can process on an average only 80,000 litres of milk per day.In this study an attempt is made to evaluate growth of dairy co-operative in the state of Goa.

REVIEW OF LITERATURE:

A host of studies have been undertaken by the National Dairy Development Board, Institute of Rural Management and other research scholars below some the earlier studies are outlined for quick overview.

Deepak B. Bhamare(1996)**,**The study was cared with broad objectives: 1) to study growth of dairy co-operatives in Dhule District of Maharashtra; 2) to assess the commercial viability of dairy co-operatives as business and support to the farm income and 3) to evaluate impact of dairy co-operatives on socio-economic status of dairy farmers. The required data is collected though primary and secondary source, primary information were collected from 300 respondents with the help of scheduled questionnaire. The data was analysed with the help of simple statistical tools like mean, standard deviation's 't' test, percentage etc. The study reveals that there has been growth of dairy co-operatives inDhule District of Maharashtra as dairy co-operatives ranks third with 15,969 societies in 1993.Almost all size of dairy societies operating in Dhule Districthave shown a continuous declining in rate of return during study period demonstrating poor commercial viability. Further study reveals that dairy co-operative has positive impact socio-economic status of member farmers. The study concludes that co-operative dairy members have become more aware of new plans and project, they are also aware of employment offered by dairy co-operatives.**Kholkar B. Tippanna**(2008)**,**has attempted to examine the role of milk marketing union in collecting and marketing of milk and milk products in Belgaum District. The study attempts to analysis economic feasibility of dairy farming. The data required is collected though financial statements of diary federation

and primary source i.e. survey of respondents. Financial data for the period 2001-2002 to 2006-07 is considered by the study. The data is analysed by using simple tools like financial ratio, percentage, average etc.According to this study dairy sector has the huge potential to generate employment with lower investment. It is found by the study that an investment of 10 lakhs in dairying can generate 290 man years of employment. The thesis finds that dairy co-operative sector has played an important role in enhancing a socio-economic status of milk producing farmers in the study area. The study opines that Karnataka State is second largest milk producer in the country after Gujarat, with 60 percent of its output contributed by the co-operative sector. **Rajage, A.B**. (2009),has analysed economic viability of milk union. He considers milk collection, milk distribution, share capital, membership, co-operative milk societies, growth of milk union assets, income of milk union and milk borrowing from other union as a variable to evaluate economic viability. The data required by the researcher is collected from annual financial statements of milk union. The data is analysed with simple tools such as trend analysis, percentage and average. The study finds that: 1) The milk procured by the milk union shows increasing trend for the period of study; 2) Growth rate of assets of union particularly investment in fixed assets has improve during study period but, during the same time term loans of milk union were also on a higher side; 3) The study reports that co-operative membership has shown fluctuating trend during the period under investigation. This is mainly due to increased competition posed by the private milk collectors; 4) The study reveals that milk distribution area coverage has improved by the union with the support milk purchased from other unions; and 5) The researcher reports that the percentage share of earnings through sale of milk and milk products by union were higher.**Pujan, A. Ashok,K.S.*et.al.***(2009), has attempts to explore the performance of primary agriculture co-operatives in Karnataka. The researchers collected necessary information and required data from annual published reports for the period from 1996-97 to 2005-06. The data

collected was analysed with the help of growth rate, average and percentage. The study finds that: 1) primary agriculture co-operative has covered almost 98.93 percent of villages under the study area and it has covered 82.78 percent of families/households, demonstrating growth in membership and base capital of the primary agricultural society; 2) The study reveals that there has been increased borrowing on the part of a member farmers indicating increased in cropping intensity - as borrowing relate to cropping; 4) profitability of agricultural society has depicted improvement during the period of study and 3) According to the researchers there has been increased in deposits as well as improvement in recovery of loans. The study concludes that the performance of primary agriculture co-operative societies in Karnataka has depicted improvement in all the variables considered in the study like, village coverage, family coverage, profitability and deposits. **Hooda, Vijaysingh and Chacal S.S.**(2010), analysis the growth and financial performance of primary agriculture credit societies in India. To study the performance of primary agricultural credit societies the researcher considers the following variables: expansion of societies in terms of number of societies, membership, employees, deposits, profitability, working funds and loans and advances.The study finds that there was no significant growth of primary societies in terms of aforesaid variables and that the financial performance as per the ratios was not satisfactory. The researchers observed that owned funds of primary agricultural credit societies have been increased but at the same time Government holding in the share capital has also increased during the study period indicating that the agricultural credit societies are not self-reliant in terms of finance. **Vijayachandran D.**(2001),studies the dairy co-operative to explore:1) Impact of dairy co-operatives on the socio-economic condition of dairy farmers; 2) To examine whether dairy occupation generate additional income and employment to dairy farmers and 3)To study various promotional activities of dairy co-operative societies. The study covers the period from 1994-95 to 1999-00 and analysis primary and secondary data. The primary data was collected through

scheduled questionnaire and respondents in the sample were selected by the purposive sampling technique. Researcher considered 100 co-operative members and 50 non co-operative members from the study area. The study analysis the primary and secondary data by using simple statistical tools like mean, percentage, and trend analysis etc. The study observes as follows :1) Study find that the dairy co-operatives offer reasonable price for the milk supplied by its members and also provides additional benefits to the producers such as bonus, loan, insurance etc.; 2)The study reveals that majority of the respondent manage their dairy firms by their own source of funds;3) It is further reported that about 43 percent of members have enjoyed the bonus and 4)According to study dairy has enhanced socio-economic status of member producers much more as compare to non-member farmers.**Singh, Surandar and Varma N.K.**(1992),they attempt to analysed time series analysis of milk procurement by co-operative milk union. The researchers collected data for the period from January 1983 to March 1988 and analysed the data by employing time series analysis techniques. The study reveals that, milk procurement and milk price were higher during the month of May and Jun and milk procurement and milk price were low in February. The study concludes that in dairy business seasonality plays an important role in quantity of milk production and trend in milk procurement.

DATA AND METHODOLOGY:

The secondary data collected from different dairy co-operatives for the financial year 1984-85 to 2014-15. Broad variables that are assessing the growth of primary dairy co-operative societies are: number of dairy co-op. societies, members of dairy societies, share capital,total milk collected in (lit) and working capital.The fixed base index numbers are used to assess the growth of these variables over a period 1984-85 to 2014-15.In this study only those dairy societies are considered which were registered before accounting year 2000-01. Index of Growth of variables is calculated with the help of following formula:

Index Number = Current Year / Base Year * 100

Based on the index number for the terminal year of the study ranks are allotted to the primary dairy co-operative societies and based on the ranks marks are given by the formula N+1-Rank where N indicates number of dairy societies. The marks that are score for each indicator of growth are then aggregated to derive composite score and based on composite score the best and worst performing dairy societies on the growth parameters are identified.

DATA ANALYSIS AND INTERPRETATION:

The growth of dairy co-operatives has been studied by evaluating number of primary dairy co-operative affiliated with Goa Milk Union Ltd., which are operating on 'ANAND' patten; Number of dairy member'sregistered with dairy society; Amount of share capital; Milk collected in litres and Working Capital.According to the Registrar of Co-operativeSocieties as on 2014-15, there are 176 primary dairy co-operative societies in Goa. As depicted to table no. 1 and 2 the number of dairy societies registered in Goa hasincreasing from 59 in 1984-85 to 176 in 2014-15 and the index of number of dairy societies has increased from 100in base year 1984-85 to 298.3 in the 2014-15. Further table indicates that there has been increasing growth trend till 2011-12 with 179 dairy societies and then some societies has discontinued and closed due to poor supply of milk.

As far as membership of dairy societies is concerned there has been an increasing trend through the study period from 1984-85 to 2014-15. In base year there were 8,565 milk supplying members of 59 dairy societies in 1984-85 which has increased to 19,926 milk supplying members in 176 dairy societies in 2014-15. Index growth table indicates that membership has increased from 100 in 1984-85 to 298.3 in 2014-15.

Share capital of co-operative institution indicates financial strength. According to analysis depicted in table no. 1 and 2 share capital has shown significant growth, from Rs. 17,66,100in 1984-85 to Rs. 1,49,13,490 and the index has increased from 100 in 1984-85 to

884.4 in 2014-15. The increasing trend in share capital was observed till 2003-04 and then there was marginal decline in share capital and then it has shown increasing trend.

Milk collection is importantfunction of primary dairy co-operative societies at village level. According to table milk collection of Milk Union through primary dairy has increased to 29821898 litres in terminal year 2014-15 from 5041256 litres in 1984-85. The growth index of milk collected in litres over the same period has increased from 100 to 591.6 from base year 1984-85 to 2014-15. The height growth index of milk collection was (678.5) observed in 2004-5 and lowest growth index was (495.2) was recorded in 2012-13.

The working capital shows the ability of co-operativeinstitution to manage day to day expenditure. The working capital as depicted in table no. 1 and 2 has increased from Rs. 8529160 in 1984-85 to Rs.81469459 in 2014-15.The index of working capital has increased from 100 to 955.02 over the period under study from 1984-85 to 2014-15. The growth index of working capital was lowest in 1992-93 (4.8) followed by 1999-00 (8.6) and in the year 1998-99 with index (9.0).

CONCLUSION:

According to analyses growth of dairy co-operatives is assessed by considering the variables like, number of dairy co-operative societies, members of dairy societies, share capital,total milk collected in (lit) and working capital.The study reveals thatnumber of dairy societies registered in Goa has increasing from 59 in 1984-85 to 176 in terminal year of study and the index of number of dairy societies has increased from 100in base year 1984-85 to 298.3 in the 2014-15. On the other hand membership of the milk producer has shown significant positive trend during the study period from 100in base year 1984-85 to 232.6 in the terminal year of the study. Further study concludes that share capital and milk collection has also registered a significant growth but, in case of working capital study observes growth with fluctuation.

Table No:1
THE GROWTH OF DAIRY CO-OPERATIVES IN THE STATE OF GOA
(1984-85 To 2014-15)

Sir No	Year	Number of dairy co-op. Societies	Members of Dairy Societies	Share Capital	Total Milk Collected in (Lit)	Working Capital
1	1984-85	59	8565	1766100	5041256	8529106
2	1985-86	66	8672	1768100	5631910	6606100
3	1986-87	76	9788	2170000	4881894	8707567
4	1987-88	87	10139	2170200	7006056	8504274
5	1988-89	92	10541	2297800	9524938	3493772
6	1989-90	102	11024	2643600	11709735	27877945
7	1990-91	120	12330	2958267	12924759	3567220
8	1991-92	135	12810	3068631	14205827	3088952
9	1992-93	142	13838	3184522	14125983	406281
10	1993-94	145	14801	3785351	15187454	5404451
11	1994-95	152	15041	4998000	16800231	6122051
12	1995-96	153	16224	5081290	18000724	3570085
13	1996-97	155	17040	5162338	17812415	41242112
14	1997-98	156	17142	5427092	19949904	5393330
15	1998-99	158	17251	5873135	22343893	765086
16	1999-00	162	17430	6447510	29202055	729720
17	2000-01	164	17542	7024832	30491714	2433080
18	2001-02	164	17525	7734088	31501468	2562072
19	2002-03	169	17765	8481775	32411192	3250294
20	2003-04	171	17853	9280321	33494631	1828093
21	2004-05	171	17855	8808523	34211899	8681184
22	2005-06	174	17931	9736252	33701601	14694609
23	2006-07	175	18254	9924598	28480726	1703645
24	2007-08	176	18443	9956060	28074366	7736977
25	2008-09	178	18762	10646209	28106179	3820136
26	2009-10	178	19884	11191542	27924162	2492684
27	2010-11	179	19895	11159852	26527954	5681858
28	2011-12	174	19907	11882249	26100707	48862238
29	2012-13	175	19915	12669680	24966092	42001854
30	2013-14	175	19921	13766970	27736750	80662155
31	2014-15	176	19926	14913490	29821898	81469459

Sources: Annual statements of Goa Dairy Milk Union Ltd.

Table No: 2
GROWTH INDEX OF DAIRY CO-OPERATIVES IN THE STATE OF GOA (1984-85 To 2014-15)

Sir No.	Year	Number of dairy co-operatives Societies	Members of Dairy Societies	Share Capital	Total Milk Collected in (Lit)	Working capital
1	1984-85	100.0	100.0	100.0	100.0	100.0
2	1985-86	111.9	101.2	100.1	111.7	77.5
3	1986-87	128.8	114.3	122.9	96.8	102.1
4	1987-88	147.5	118.4	122.9	139.0	99.7
5	1988-89	155.9	123.1	130.1	188.9	41.0
6	1989-90	172.9	128.7	149.7	232.3	326.9
7	1990-91	203.4	144.0	167.5	256.4	41.8
8	1991-92	228.8	149.6	173.8	281.8	36.2
9	1992-93	240.7	161.6	180.3	280.2	4.8
10	1993-94	245.8	172.8	214.3	301.3	63.4
11	1994-95	257.6	175.6	283.0	333.3	71.8
12	1995-96	259.3	189.4	287.7	357.1	41.9
13	1996-97	262.7	198.9	292.3	353.3	483.5
14	1997-98	264.4	200.1	307.3	395.7	63.2
15	1998-99	267.8	201.4	332.5	443.2	9.0
16	1999-00	274.6	203.5	365.1	579.3	8.6
17	2000-01	278.0	204.8	397.8	604.8	28.5
18	2001-02	278.0	204.6	437.9	624.9	30.0
19	2002-03	286.4	207.4	480.3	642.9	38.1
20	2003-04	289.8	208.4	525.5	664.4	21.4
21	2004-05	289.8	208.5	498.8	678.6	101.8
22	2005-06	294.9	209.4	551.3	668.5	172.3
23	2006-07	296.6	213.1	561.9	565.0	20.0
24	2007-08	298.3	215.3	563.7	556.9	90.7
25	2008-09	301.7	219.1	602.8	557.5	44.8
26	2009-10	301.7	232.2	633.7	553.9	29.2
27	2010-11	303.4	232.3	631.9	526.2	66.6
28	2011-12	294.9	232.4	672.8	517.7	572.9
29	2012-13	296.6	232.5	717.4	495.2	492.5
30	2013-14	296.6	232.6	779.5	550.2	945.7

31	2014-15	298.3	232.6	844.4	591.6	955.2

Note: Growth of Index from 100 in base year 1984-85 to terminal year 2014-2015.
Source: Annual statements of Goa Dairy Milk Union Ltd.

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