



Performance of Primary Agricultural Credit Societies in Udupi District of Karnataka

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Abstract

The Primary Agricultural Co-operative Societies (PACS) form the basic foundation of cooperative credit system essential for farming community. PACS are organized, managed and benefitted by member farmers. The financial institutions directly associated with agricultural finance at grass root level in the State are Primary Agricultural Credit Co-operative Societies (PACS) which provide short-term crop loans to their cultivator members.. Primary Agricultural Credit Societies can strengthen the capacity of farmers to mobilise funds and invest in Agriculture. This can help to channelize more investments in agriculture. Strengthening of market linkages and knowledge dissemination of best practices (Including cropping pattern based on agro-climatic conditions) for the farmers is also important to improve price discovery of farm produce and empower the farmer by strengthening his knowledge capital. Agriculture is the main occupation of the people of Udupi District. A total of 72% of population of the district lives in rural areas and most of them depend on agriculture. PACS plays an important role in providing timely credit to the farming community. Present study was conducted to estimate the financial performance of PACS and to examine the growth of PACS in terms of membership, share capital, deposits, loan advanced and profit. For this purpose a compound annual growth rate (CAGR) is calculated by taking the data for a period of 8 years from 2014-15 to 2020-21. It is concluded from the study that in the PACS of Udupi District, more growth is found in Reserve fund (18%), Working capital (18%) and Deposits(16%) and less growth is observed in membership (2%) and loans (6%) in the last 8 years. The financial performance evaluation of PACS of the district is done by Ratio Analysis. PACS Kodavur of Udupi taluk has the highest profitability ratio (1.48). PACS which are located in Urban areas are having more profitability ratio than PACS of rural areas. PACS Mundkur of Karkala Taluk is having highest liquidity ratio (2.75). PACS Mananje of Kundapur Taluk is having highest solvency ratio to enhance its Business Development Plan.

Introduction

Agriculture being the largest sector of the Indian economy in terms of employment plays an important role in accelerating the pace of economic development and making the economic growth more inclusive and sustainable. Indian agriculture has had a long history of challenges related to land ownership, adequate

irrigation cover and access to infrastructure, technology, market and credit. During last 50 years, Indian Agriculture has undergone major transformation from dependence on Food Aid to a Net Food Exporter. Despite major strides, agriculture is facing distress in many parts of country due to various reasons like high and increasing input cost, non-remunerative price in the market, low share of farmers in final price, poor penetration of crop insurance, absence of market infrastructure etc.,

Agriculture credit has been largely supply driven in its basic design. There is an urgent requirement to make agriculture credit more responsive to the demands of the customers to meet the envisaged objectives of empowering farmers in a holistic manner and thus reposition cooperatives as socio-economic entities. In this context, Primary Agricultural Credit Societies have an important role. PACS being the registered co-operative society has been providing credit and other services like supply of inputs, hiring of agriculture implements and storage facility to its members. Situated at the grass-root level, PACS can be made to function as truly member driven enterprises and provide the vital link in the term cooperative credit system, based on paradigms of transparency and accountability. At present a large number of PACS are rather small in size to be economical and viable and a large number of them are dormant. They face problems of infrastructural weaknesses, operational inefficiencies and structural flaws.

Borrowing membership of a large number of PACS also remains much lower than its potential. In order to re-orient PACS to future challenges and opportunities of rural economy, and inspire confidence in their existing and potential members, depositors and borrowers, business opportunities provided to PACS need to be enlarged. Therefore, PACS need to develop as a one stop shop for meeting all the needs of farmers, provide much-needed forward and backward linkages to rural economy and thus make the PACS and in turn foundations of agri-credit stronger.

PACS can also transform agriculture into a more financially viable activity and enable farmers to undertake activities such as organic farming. A strong PACS is very vital if the call of Government of India to double the Farmer's Income is intended to be doubled through "Evergreen Revolution" and "Rainbow Revolution". We need to put more money in the pocket of the farmer and not in their hands and this can be done only if the farmer is able to take up other activities in addition to traditional agriculture.

Methodology

Udupi District has seven taluks, namely Udupi, Kundapura, Karkala, Kaup, Brahmavara, Hebri and Byndoor. There is a vast network of co-operative institutions working at different levels of credit in this district. As such, the co-operative movement is well developed in this district. The co-operative sector in the district consists of various types of Co-operative agricultural credit and marketing, societies, urban co-operative banks and so on. There are 54 PACS (Primary Agricultural Credit Societies) in Udupi District of Karnataka. Out of 7 taluks in the district, 8 PACS from 5 taluks and 7 PACS from 2 taluks are selected for the study. There are 3,05,161 members in the selected 54 PACS of the district, who formed the universe of the present study. Out of

these members 2,34,282 are borrowers while the remaining 70,879 are non-borrowers. On the basis of random sampling technique,300 of the borrowers and 200 of the non-borrowers were selected for the present study.

Table 1: Overall Growth Index of PACS of Udupi District

SI	Year	Members	Share Capital	Reserves	Deposits	Working Capital	Loan	Profit
1	2013-14	190152	3609	10327.8	84556	111813	27190	1797
2	2014-15	193486	6519	11138.83	100749	140127	33331	2201
3	2015-16	205784	5246	14802.22	139659	182103	31452	2681
4	2016-17	216930	5897	16452.66	141455	192364	29517	2815
5	2017-18	220828	6830	36755.48	157889	231672	19233	3340
6	2018-19	228404	7489	39705.25	181117	272862	18171	3792
7	2019-20	221644	8411	29042.18	211464	297685	19656	3371
8	2020-21	223182	9187	32951.94	236316	357564	41404	4355
	CAGR	2%	14%	18%	16%	18%	6%	13%

The study attempts to study the growth of PACS in terms of membership, share capital, deposits, loan advanced and profit. For this purpose a compound annual growth rate (CAGR) is calculated by taking the data for a period of 8 years from 2014-15 to 2020-21.

$$\text{CAGR}=[(\text{End value}/\text{Beginning Value})^{(1/\text{years})}]$$

Table 1 Illustrates that there is 2% Compound Annual Growth Rate in terms of membership, 14% growth in Share capital, 18% growth of Reserve fund, 16% growth in Deposits, 18 % growth in working capital, 6% growth in loans and 13% growth in Profit. It is observed that the growth in membership of PACS and loan advanced is only 2% and 6% respectively. From this it could be interpreted that PACS are giving less importance to enhance their membership and in advancing loan to its members.

Financial Ratios as Indicators of Performance

Ratios are widely used to evaluate the financial position and performance of a business although many limitations are attached to ratio analysis. Most of the performance evaluation and failure prediction models used ratios as they indicated the performance better than any other tools. Therefore the ratios are used here for performance evaluation of PACS.

The ratios are calculated on the basis of the data drawn from the questionnaire from year 2014 to 2021. All the 54 PACS of Udupi district are considered as sample societies. The eight year averages of the value of ratio variables are taken here because year to year ratios are less reliable due to the tendency to manipulate

accounts like over evaluation of closing stock, under valuation of charges, over charge of provision for expenses etc., There are self correcting when a longer period rather than a year is taken for analysis (Guptha, 1991,p30).

Ratio Analysis: Narayanaswamy, Rao and Mayya(2006) suggested a statistical model for performance evaluation of Primary Agricultural Credit Societies. The ten ratios included in the model that indicate the performance of PACS are used here to evaluate the performance of sample units.

(a) Profitability Ratio:

Profitability ratio is calculated by dividing the net profit earned by outstanding share. The following table indicated the profitability of the PACS of Udipi District.

Table 1

SI	Name of Society	Average Profit (2014-21)	Average Assets (2014-21)	Profitability Ratio
1	PACS Kokkarane	73.81	722.30	0.10
2	PACS Brahmavar	229.14	750.0	0.31
3	PACS Uppoor	36.19	529.10	0.07
4	PACS Sasthana	57.34	656.30	0.09
5	PACS Mandarthi	60.35	395.50	0.15
6	PACS Shiriyara	62.80	1062.30	0.06
7	PACS kota	131.55	695.70	0.19
8	PACS Barkur	30.29	180.40	0.17
9	PACS Hiriyadka	65.06	576.80	0.11
10	PACS korangrapadi	64.88	115.10	0.56
11	PACS Kemmannu	66.11	488.30	0.14
12	PACS Kodavur	63.51	43.00	1.48
13	PACS Herga	59.82	146.70	0.41
14	PACS Padubidri	57.66	275.0	0.21
15	PACS Belle	12.17	123.10	0.10
16	PACS Shirva	32.71	233.70	0.14
17	PACS Belapu	39.22	484.50	0.08
18	PACS Innanje	22.88	458.40	0.05
19	PACS Kaupu	0	132.60	0
20	PACS Katpady	15.98	144.20	0.11
21	PACS Hebri	83.20	913.0	0.09
22	PACS Ajekar	28.96	535.0	0.05
23	PACS Varanga	25.78	324.80	0.08
24	PACS Belve	80.86	523.90	0.15
25	PACS Hirgana	5.80	253.10	0.02

26	PACS Bola	24.52	254.30	0.10
27	PACS Malakervasshe	35.11	449.30	0.08
28	PACS Neerebailur	31.30	484.90	0.06
29	PACS Belman	37.00	486.10	0.08
30	PACS Mundkur	28.88	534.10	0.05
31	PACS Jaladurga	11.00	332.40	0.03
32	PACS Sanoor	5	355.50	0.01
33	PACS Siddapura	55.33	1277.00	0.04
34	PACS Shankaranarayana	72.66	720.70	0.10
35	PACS Mananje	149.32	541.20	0.28
36	PACS Kavradu	31.22	483.60	0.06
37	PACS Panchaganga	68.05	691.80	0.10
38	PACS Molahalli	31.85	636.40	0.05
39	PACS Kundapura	62.02	236.60	0.26
40	PACS Koteswara	63.91	392.00	0.16
41	PACS Vandse	66.32	699.40	0.09
42	PACS Karkunje	30.51	665.70	0.05
43	PACS Basrur	52.76	659.50	0.08
44	PACS Aloor harkur	34.28	566.20	0.06
45	PACS Amparu	87.32	1221.90	0.07
46	PACS Amasebailu	34.81	655.70	0.05
47	PACS Ulloor Machettu	39.67	532.60	0.07
48	PACS Byndoor	68.05	568.90	0.12
49	PACS Mudooru	42.24	570.0	0.07
50	PACS Padukone	24.84	264.50	0.09
51	PACS Kolluru	41.16	503.50	0.08
52	PACS Jadkal	16.28	195.50	0.08
53	PACS Khambadakone	314.55	1022.90	0.31
54	PACS Maravanthe Badakere	76.90	709.30	0.11

From table 2 it could be observed that PACS Kodavur of Udipi taluk has the highest profitability ratio of 1.48. Followed by that are PACS Korangrapady having profitability ratio of 0.56. PACS Herga has the profitability ratio of 0.41. PACS Brahmavara and PACS Khambadakone have the profitability ratio of 0.31. PACS Mananje has the profitability ratio of 0.28. PACS Kundapura has the profitability ratio of 0.26.

From the above data it could be illustrated that PACS which are located in Urban areas are having more profitability ratio than PACS of rural areas. It could be observed from the profitability ratio of PACS Kodavuru, PACS Korangrapadi, PACS Herga, PACS Brahmavara and PACS Kundapura. Only two of the PACS located in rural areas i.e., PACS Mananje and PACS Khambadakone have got higher profitability ratio. In rural areas most of the people depend on agriculture, the primary sector for their livelihood. In Urban areas people depend more on secondary and service sector where the profitability ratio of the PACS situated in the area is higher.

b) Liquidity Ratio:

Liquidity ratio of a company is a measure of company (Institution)'s ability to pay debt obligations and its margin of safety through the calculation of metrics including the current ratio, quick ratio and operating cash flow ratio.

Current Ratio: Current ratio is the ratio of the assets to the liability. The following table indicated the profitability of the PACS of Udupi District.

Table 3

SI	Name of PACS	Total Asset	Total Liability	Current Ratio
1	PACS Kokkarane	5778.386	10648.37	0.54265
2	PACS Brahmavar	5999.969	10937.28	0.54858
3	PACS Uppoor	4232.902	18961.8	0.22323
4	PACS Sasthana	5250.404	2648.73	1.98223
5	PACS Mandarathi	3164.025	9871.6	0.32052
6	PACS Shiriyaara	8498.468	43834.26	0.19388
7	PACS Kota	5565.981	6482.77	0.85858
8	PACS Barkur	1443.332	1787.96	0.80725
9	PACS Hiriyadka	4614.026	2416.79	1.90915
10	PACS Korangrapadi	921.09	3482.41	0.26450
11	PACS Kemmannu	3906.121	3832.01	1.01934
12	PACS Kodavur	343.99	6174.96	0.05571
13	PACS Herga	1173.78	2356.56	0.49809
14	PACS Padubidri	2200.26	6209.49	0.35434
15	PACS Belle	984.8	924.77	1.06491
16	PACS Shirva	1869.872	4292.94	0.43557
17	PACS Belapu	3875.679	1984.73	1.95275
18	PACS Innanje	3666.92	1868.9	1.96207
19	PACS Kaupu	1220.57	2565.22	0.47581
20	PACS Katpady	1153.28	1032.28	1.11722

21	PACS Hebri	7304.359	17109.87	0.42691
22	PACS Ajekar	4280.38	8634.79	0.49571
23	PACS Varanga	2598.294	7815.39	0.33246
24	PACS Belve	4191.221	15709.72	0.26679
25	PACS Hirgana	2025.135	897.33	2.25684
26	PACS Bola	2034.135	3336.28	0.60970
27	PACS Malakervashe	3594.245	9679.74	0.37132
28	PACS Neerebailur	3879.345	1758.77	2.20571
29	PACS Belman	3889.042	3968.09	0.98008
30	PACS Mundkur	4272.463	1549.78	2.75682
31	PACS Jaladurga	2659.2	5059.17	0.52562
32	PACS Sanoor	2844.176	1586.73	1.79248
33	PACS Siddapura	10216.1	15591.48	0.65524
34	PACS Shankaranarayana	5765.585	9389.96	0.61402
35	PACS Mananje	4329.426	30534.11	0.14179
36	PACS Kavradu	3869.181	4619.49	0.83758
37	PACS Panchaganga	5534.617	14364.45	0.38530
38	PACS Molahalli	5090.982	8309.52	0.61267
39	PACS Kundapura	1892.87	2522.96	0.75026
40	PACS Koteswara	3136.2	9958.36	0.31493
41	PACS Vandse	5595.571	11001.88	0.50860
42	PACS Karkunje	5325.348	45866.52	0.11611
43	PACS Basrur	5276.21	6481.62	0.81403
44	PACS Aloor Harkur	4529.438	6595.83	0.68671
45	PACS Amparu	9775.038	8161.23	1.19774
46	PACS Amasebailu	5245.332	8548.14	0.61362
47	PACS Ulluru Machchettu	4260.474	11300.78	0.37701
48	PACS Byndoor	4551.547	14364.45	0.31686
49	PACS Muduru	4560.108	9887.87	0.46118
50	PACS Padukone	2115.616	1999.69	1.05797
51	PACS Kollur	4028.237	48055.02	0.08383
52	PACS Jadkal	1564.167	6592	0.23728
53	PACS Khambadakone	8183.152	32266.96	0.25361
54	PACS Maravanthe badakere	5674.478	7152.86	0.79332
	Total	532984.7	219955.5	

We can find from the above table 3 that out of 54 PACS of Udupi district the following PACS have current ratio more than 1 and the rest less than 1.

Table 4

SI	Name of PACS	Current Ratio
1	PACS Kemmannu	1.01
2	PACS Padukone	1.05
3	PACS Belle	1.06
4	PACS Katpady	1.11
5	PACS Amparu	1.19
6	PACS Jaladurga	1.79
7	PACS Hiriyadka	1.90
8	PACS Belapu	1.95
9	PACS Innanje	1.96
10	PACS Sasthana	1.98
11	PACS Neerebailuru	2.20
12	PACS Hirgana	2.25
13	PACS Mundkur	2.75

All the above PACS of Table 4 indicates that their current assets are more than their current claims and are highly liquid.

c) Solvency Ratio:

Solvency ratio is the ratio of Reserves and Surplus to Share Capital. This ratio indicates the amount of Reserves and Surplus the society has built up out of profit in relation to Share Capital. The higher the ratio of Reserves and Surplus to share capital, the better it is for the society to expand the business without having to depend on outside source of funds

Solvency Ratio= Reserves and Surplus/ Share Capital

Table 5

SI	Name of PACS	Total Reserves	Total Share Capital	Solvency Ratio
1	PACS Kokkarane	2615.21	1331.66	1.96
2	PACS Brahmavar	8366.96	2570.32	3.26
3	PACS Uppoor	1323.92	554.5	2.39
4	PACS Sasthana	1955.07	693.66	2.82
5	PACS Mandarthi	1891.28	1063.08	1.78

6	PACS Shiriyara	34720.54	1438.87	2.41
7	PACS Kota	4507.16	1619.95	2.78
8	PACS Barkur	1491.2	296.76	5.02
9	PACS Hiriyadka	1432.17	982.46	1.46
10	PACS Korangrapadi	2847.29	635.12	4.48
11	PACS Kemmannu	3027.25	804.76	3.76
12	PACS Kodavur	5396.01	739.34	7.30
13	PACS Herga	1178.28	1178.28	1.00
14	PACS Padubidri	5535.1	674.39	8.21
15	PACS Belle	548.43	376.34	1.46
16	PACS Shirva	1192.71	950.94	1.25
17	PACS Belapu	1416.78	512.95	2.76
18	PACS Innanje	1422.15	391.75	3.63
19	PACS Kaupu	487.62	624.92	0.78
20	PACS Katpady	143.39	320.39	0.45
21	PACS Hebri	3742.64	2309.33	1.62
22	PACS Ajekar	3742.64	737.38	5.08
23	PACS Varanga	1623.25	2326.84	0.70
24	PACS Belve	1334.42	1931.52	0.69
25	PACS Hirgana	185.84	171.97	1.08
26	PACS Bola	217.01	397.08	0.55
27	PACS Malakervashe	1955.07	783.6	2.49
28	PACS Neerebailur	1259.28	499.49	2.52
29	PACS Belman	1623.25	2326.84	0.70
30	PACS Mundkur	1197.52	352.26	3.40
31	PACS Jaladurga	811.29	327.34	2.48
32	PACS Sanoor	343.42	221.87	1.55
33	PACS Siddapura	1958.97	2429.79	0.81
34	PACS Shankaranarayana	3951.97	851.24	4.64
35	PACS Mananje	13447.71	1580.43	8.51
36	PACS Kavradu	867.05	522.59	1.66
37	PACS Panchaganga	2364.81	1538.55	1.54
38	PACS Molahalli	1021.68	740.8	1.38
39	PACS Kundapura	1083.67	816.7	1.33
40	PACS Koteswara	2567.01	936.86	2.74
41	PACS Vandse	1643.26	1201.7	1.37

42	PACS Karkunje	907.48	805	1.13
43	PACS Basrur	1674.12	807.99	2.07
44	PACS Aloor Harkur	701.77	711.34	0.99
45	PACS Amparu	2589.36	957.68	2.70
46	PACS Amasebailu	863.54	893.64	0.97
47	PACS Ulluru Machchettu	472.64	1018.76	0.46
48	PACS Byndoor	2364.81	1538.55	1.54
49	PACS Muduru	819.67	1046.38	0.78
50	PACS Padukone	158.9	593.52	0.27
51	PACS Kollur	39850.14	1009.39	3.95
52	PACS Jadkal	1811.24	567.53	3.19
53	PACS Khambadakone	9139.55	1263.01	7.24
54	PACS Maravanthe badakere	1382.86	1210.62	1.14
	Total	124063.36	53188.03	

It is observed from Table 5 that out of 54 PACS of Udupi district only 12 PACS are having solvency ratio less than one. Out of 54 PACS 42 PACS are having solvency ratio more than one. This indicates that 77.78 per cent of PACS has the potential to expand the business without having to depend on outside source of funds.

Conclusion

Agriculture credit has been largely supply driven in its basic design. There is an urgent requirement to make agriculture credit more responsive to the demands of the customers to meet the envisaged objectives of empowering farmers in a holistic manner and thus reposition cooperatives as socio-economic entities. In this context, Primary Agricultural Credit Societies have an important role. PACS being the registered co-operative society, has been providing credit and other services like supply of inputs, hiring of agriculture implements and storage facility to its members. Situated at the grass-root level, PACS can be made to function as truly member driven enterprises and provide the vital link in the term cooperative credit system, based on paradigms of transparency and accountability. In order to re-orient PACS to future challenges and opportunities of rural economy, and inspire confidence in their existing and potential members, depositors and borrowers, business opportunities provided to PACS need to be enlarged. Therefore, PACS need to develop as a one stop shop for meeting all the needs of farmers, provide much-needed forward and backward linkages to rural economy and thus make the PACS and in turn foundations of agri-credit stronger.

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