



PERFORMANCE OF THE PRIMARY AGRICULTURAL CO-OPERATIVE CREDIT SOCIETIES IN NAGAPPATTINAM DISTRICT OF TAMILNADU

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ABSTRACT

Primary Agricultural Cooperative Credit Societies, being financial intermediaries, render financial services with the objectives of growth, profit and services. There are 122 Primary Agricultural Cooperative Credit Societies in the Nagapattinam District lending Short term and Medium term agricultural credit to farmers dealing with seasonal agricultural operations. With this background, the study aims to build a knowledge base on the performance of select Primary Agricultural Cooperative Credit Societies in Nagapattinam district of Tamilnadu. The results of study revealed that the selected PACCS in the study area have not performed well on all the parameters of operational performance. One society performed well on one parameter, but worst on another which proves that the overall operational performance of the societies has not been quite good and all the societies have to make improvements on different fronts.

KEYWORDS: PACCS, financial performance, cooperative banks.

INTRODUCTION:

A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise. They are business entities where people work together to solve common problems, seize exciting opportunities and provide them with goods and services. A cooperative is managed on the basis that the customers of a business are also owners of the business. Every user of services can become a member of the cooperative society, provided they have the requisite qualifications, thereby enjoy the privilege of ownership.

The cooperative movement became the largest socio-economic movement in the world. It has contributed significantly to the alleviation of poverty, creation of productive employment and the enhancement of social integration in the country. The cooperative movement in India has taken deep roots in various sectors. It has also been making significant contributions to economic and social development of the people. Cooperatives initially have been concerned with agricultural credit, marketing of agricultural produce and distribution of fertilizers and pesticides and other essential commodities. Cooperative Banking System has a unique position in the Rural Credit Delivery System of India. They have made significant strides in the field of rural credit. Over the years, they have remained the prime



institutional agency with their vast network, wide coverage, and outreach extending to the remote parts of the country.

STATEMENT OF THE PROBLEM

In Tamil Nadu, there are 4,534 Primary Agricultural Cooperatives Credit Societies as of 31.3.2018. Their main objective is to provide agricultural and non-agricultural credit in rural areas. They also undertake the distribution and sale of agricultural inputs viz., Fertilizers, seeds and small agricultural equipments. In addition, they operate 15,569 Public Distribution System outlets, making the essential commodities available in rural areas. Primary Agricultural Cooperatives Credit Societies do also lend for other purposes to their members like housing and also lend to Self Help Groups.

Primary Agricultural Cooperative Credit Societies, being financial intermediaries, render financial services with the objectives of growth, profit and services. However, the financial stability of these societies has a direct bearing to the extent of mobilization of deposits and the collection of loans before they become overdue. If the overdue are not kept under control, they will have a crippling effect of curtailing the ability of the societies to recycle the funds and expand their business. The low resource base has been a major constraint in the effective functioning of Primary Agricultural Cooperative Credit Societies which necessitates augmenting the deposits and improving the performance of lending to reach smooth credit creation. Further, it paves the way to streamline the operations of Primary Agricultural Cooperative Credit Societies and to set right the mismatches in the growth of Primary Agricultural Cooperative Credit Societies throughout the country.

There are 122 Primary Agricultural Cooperative Credit Societies in the Nagapattinam District lending Short term and Medium term agricultural credit to farmers dealing with seasonal agricultural operations. With this background, the present study aims to build a knowledge base on the performance of select Primary Agricultural Cooperative Credit Societies in Nagapattinam district of Tamilnadu. So it is pertinent to explore: What are the sources of funds? How the funds are mobilized and deployed profitably? How to make resource mobilization and deployment of funds effective? What is the extent of overdue? These questions need answers through studies, which would help the societies to improve their performance and achieve their objectives. Hence, this present study entitled “A study on the Performance of Select Primary Agricultural Cooperative Societies in Nagapattinam District of Tamil Nadu” was undertaken.

RESEARCH METHODOLOGY

The study is analytical and used primary data to understand the problem under study. In this study multi stage sampling technique was followed for the study. In the First Stage, the researcher selected Tamilnadu as the place of research. Then, Nagapattinam district was chosen randomly among 32 districts in Tamilnadu. The Nagapattinam district comprises of eight taluks, namely Kilvelur taluk, Kuthalam taluk, Mayiladuthurai taluk, Nagapattinam taluk, Sirkazhi taluk, Tharangambadi taluk, Vedaraniyam and Thirukkuvalai taluk. In the third stage four taluks namely Kuthalam taluk, Nagapattinam taluk, Sirkazhi taluk, and Tharangambadi taluk were selected from the eight taluks in Nagapattinam district. In the final stage one society from each selected taluk, namely Kuthalam, Thethakudi south, Hanumanthapuram and Akkur Primary Cooperative Credit Societies, which are oldest societies, functioning more than 50 years was selected to analyze the performance of the Primary Agricultural Cooperative Societies.

PERFORMANCE ANALYSIS

The performance analysis selected Primary Agricultural Cooperative Societies in the study area is shown in the succeeding pages.

SHARE CAPITAL

The Primary Agricultural Cooperative Credit Societies raise their own funds mainly in the form of share capital. The value of a share is least as low as possible to make it easier for the farming community to

become members. As the membership has become exclusively for farmers, the credit societies have to raise the share capital only from farmers and also from Government. The growth rate of the share capital of the selected PACCS in the study area is shown in table 1.

TABLE 1
SHARE CAPITAL

(Rs. in Lakh)

Year	Share Capital							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	07.78	100.00	06.30	100.00	05.64	100.00	06.48	100.00
2008-09	08.06	103.60	06.93	110.00	06.02	106.74	07.16	110.49
2009-10	08.34	107.20	07.60	120.63	06.74	119.50	07.69	118.67
2010-11	08.98	115.42	07.81	123.97	06.92	122.70	08.05	124.23
2011-12	10.68	37.28	07.89	125.24	07.19	127.48	08.10	125.00
2012-13	11.82	151.93	07.92	125.71	07.60	134.75	08.11	125.16
2013-14	13.29	170.82	08.36	132.70	07.89	139.89	08.16	125.93
2014-15	14.19	182.39	08.41	133.49	07.91	140.25	08.32	128.40
2015-16	14.55	187.02	08.60	136.51	08.04	142.55	08.64	133.33
2016-17	14.98	192.54	08.72	138.41	08.15	144.50	08.79	135.65
Mean	11.27	-	7.85	-	7.21	-	7.95	-
S.D	2.87	-	0.76	-	0.87	-	0.69	-
C.V (%)	25.47	-	09.68	-	12.07	-	08.68	-
CAGR (%)	6.77	-	3.30	-	3.75	-	3.10	-

Source: Annual Reports

Table 1 shows that the average share capital was Rs. 11.27 lakhs, Rs.7.85 lakhs Rs.7.21 lakhs and Rs.7.95 lakhs was registered in Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS respectively. The CAGR of share capital of 6.77 per cent was found in Kuthalam PACCS and lower CAGR was recorded in Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS. Among the four selected societies, the Kuthalam PACCS recorded high coefficient of variation of 25.47 per cent, which indicates less consistency in the growth rate of share capital during the study period. Therefore, it can be inferred from the table that the performance of societies in terms of growth rate of share capital was not satisfactory during the study period.

RESERVE FUNDS

The Reserve fund is maintained by the societies to meet the unforeseen losses. The size of the fund determines the financial strength of the PACCS. Therefore, contributions are made to the fund every year from out of the profit of societies. It may be used to meet unforeseen losses, that too, with the permission of the Registrar of Cooperative Societies and also in the working capital. The growth of the reserve funds of the selected units in the study area is given in table 2.

**TABLE 2
RESERVE FUND**

(Rs. in Lakh)

Year	Reserve Fund							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	19.06	100.00	10.66	100.00	17.79	100.00	8.95	100.00
2008-09	23.51	123.35	12.27	115.10	19.29	108.43	9.57	106.93
2009-10	25.27	132.58	14.02	131.52	21.72	122.09	10.01	111.84
2010-11	33.07	173.50	17.58	164.92	24.50	137.72	15.09	168.60
2011-12	38.33	201.10	17.62	165.29	26.83	150.82	17.49	195.42
2012-13	41.08	215.53	18.40	172.61	26.97	151.60	18.27	204.13
2013-14	47.95	251.57	19.93	186.96	27.14	152.56	20.23	226.03
2014-15	49.35	258.92	20.95	196.53	28.42	159.75	22.71	253.74
2015-16	49.93	261.96	22.95	215.29	29.84	167.73	26.57	296.87
2016-17	55.23	289.77	23.40	219.51	29.97	168.47	27.49	307.15
Mean	38.28	-	17.78	-	25.25	-	17.64	-
S.D	12.61	-	04.33	-	04.30	-	06.79	-
C.V (%)	32.94	-	24.35	-	17.03	-	38.49	-
CAGR (%)	11.23	-	8.18	-	5.35	-	11.88	-

Source: Annual Reports

Among the selected PACCS, all the PACCS showed increasing trend of reserve funds during the study period. The higher CAGR was found in Akkur PACCS followed by Kuthalam PACCS. The coefficient of variation of the PACCS showed the variation in growth rate of reserve funds during the period under study. Therefore, it can be inferred from the table that the performance of the PACCS with regard to reserve funds was not satisfactory in the study area.

BORROWINGS

The borrowing power of a society is determined from time to time by the Government on the basis of share capital plus reserve fund invested with the Central Cooperative Bank. The societies can get cash credit facilities from the central bank for their business. The societies can also get deposits from members and non-members in strengthening their own resources. The borrowing of the selected PACCS during the study period is shown in table 3.

**TABLE 3
BORROWINGS**

(Rs. in Lakh)

Year	Borrowings							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	57.87	100.00	27.44	100.00	32.45	100.00	23.27	100.00
2008-09	58.11	100.41	29.14	106.20	36.94	113.84	28.98	124.54
2009-10	63.26	109.31	31.13	113.45	41.42	127.64	29.86	128.32
2010-11	64.76	111.91	32.89	119.86	39.17	120.71	31.22	134.16
2011-12	82.02	141.73	36.51	133.05	44.86	138.24	35.38	152.04
2012-13	99.87	172.58	35.67	129.99	44.37	136.73	38.19	164.12
2013-14	111.33	192.38	37.97	138.37	46.90	144.53	41.66	179.03
2014-15	165.23	285.52	39.52	144.02	47.58	146.63	45.57	195.83
2015-16	201.92	348.92	38.28	139.50	49.63	152.94	49.44	212.46
2016-17	219.05	378.53	43.39	158.13	51.17	157.69	49.92	214.53
Mean	112.34	-	35.19	-	43.45	-	37.35	-
S.D	61.34	-	4.99	-	5.92	-	9.17	-
C.V (%)	54.60	-	14.18	-	13.63	-	24.55	-
CAGR(%)	14.24	-	4.69	-	4.66	-	7.93	-

Source: Annual Reports

It is observed from the table that the borrowings of the PACCS has increased considerably during the study period. The higher CAGR was found in Kuthalam PACCS followed by Akkur PACCS. The high coefficient of variation was registered in the Kuthalam PACCS when compared to other PACCS, which showed a considerable variation in borrowings. Therefore, it can be inferred from the table that the PACCS mainly depended on external sources to issue loans to the members in the study area.

LOANS AND ADVANCES

The loans and advances granted by the selected PACCS help in meeting the short-term and medium-term financial needs of the farmers. The loans and advances made by the selected societies are shown in table 4.

**TABLE 4
LOANS AND ADVANCES**

(Rs. in Lakh)

Year	Loans and Advances							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	74.99	100.00	30.29	100.00	34.45	100.00	24.38	100.00
2008-09	76.22	101.64	31.63	104.42	39.85	115.67	29.91	122.68
2009-10	77.54	103.40	32.71	107.99	42.94	124.64	32.12	131.75
2010-11	84.69	112.94	35.13	115.98	43.79	127.11	34.09	139.83
2011-12	100.52	134.04	38.90	128.43	45.93	133.32	38.46	157.75
2012-13	115.94	154.61	39.67	130.97	47.21	137.04	42.17	172.97

2013-14	129.98	173.33	40.58	133.97	49.38	143.34	46.31	189.95
2014-15	185.36	247.18	40.95	135.19	52.36	151.99	49.81	204.31
2015-16	230.92	307.93	43.87	144.83	53.49	155.27	52.78	216.49
2016-17	245.72	327.67	44.82	147.97	54.74	158.90	53.97	221.37
Mean	132.19	-	37.86	-	46.41	-	40.40	-
S.D	65.31	-	05.12	-	06.40	-	10.24	-
C.V (%)	49.41	-	13.52	-	13.79	-	25.35	-
CAGR (%)	12.60	-	4.00	-	4.74	-	8.27	-

Source: Annual Reports

Among the selected societies, the loans and advances has continuously increased year after year in all the societies. The Kuthalam PACCS has registered the highest CAGR of 12.60 per cent, followed by Akkur PACCS with the CAGR of 8.27 per cent. The Thethakudi South PACCS and Hanumanthapuram PACCS have secured the low growth rate during the study period. The coefficient of variation of 49.41 per cent, 13.52 per cent, 13.79 per cent and 25.35 per cent were recorded in Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS, which indicated that less consistency in loans and advances of the Kuthalam PACCS and Akkur PACCS when compared to other two societies. Therefore, it can be inferred from the table that the performance of the societies is satisfactory with regard to the growth rate of loans and advances in the study area.

DEPOSITS

The Primary Agricultural Cooperative Credit Societies mobilize deposits as their primary source of funds. Having achieved optimal deposit level, societies shall be able to lend funds to generate interest on lending. In addition to lending, the deposit funds can be placed in certain investment avenues which suit the societies. Deposit mobilization is a continuous function for societies to ensure the sum total of deposits at any time adequate to maintain the current level of lending and investments especially to compensate the withdrawals made by depositors. Usually, the deposit level is kept slightly or certain percentages above lending and the investment level to ensure that the societies has adequate cash reserves to meet their expected withdrawals and also recurring withdrawals. The deposit mobilized by the societies during the study period is shown in table 5.

TABLE 5
DEPOSITS

(Rs. in Lakh)

Year	Deposits							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	61.54	100.00	38.89	100.00	18.45	100.00	24.43	100.00
2008-09	59.88	97.30	37.39	96.14	20.36	110.35	25.51	104.42
2009-10	60.86	98.90	33.82	86.96	20.13	109.11	25.72	105.28
2010-11	61.64	100.16	29.28	75.29	21.09	114.31	25.95	106.22
2011-12	64.06	104.09	27.67	71.15	19.34	104.82	24.94	102.09
2012-13	68.46	111.24	26.68	68.60	19.66	106.56	28.29	115.80
2013-14	80.01	130.02	29.78	76.57	24.46	132.57	34.10	139.58
2014-15	100.38	163.11	33.28	85.57	30.71	166.45	43.76	179.12
2015-16	123.91	201.35	40.17	103.29	31.11	168.62	52.69	215.68
2016-17	130.09	211.39	43.95	113.01	31.84	172.57	63.06	258.13

Mean	81.08	-	34.09	-	23.72	-	33.85	-
S.D	27.24	-	5.84	-	5.42	-	14.16	-
C.V (%)	33.60	-	17.13	-	22.85	-	41.83	-
CAGR (%)	7.77	-	1.23	-	5.61	-	9.95	-

Source: Annual Reports

It is observed from the table that the deposit mobilization of the Kuthalam PACCS and Thethakudi South PACCS have fluctuated whereas deposit mobilization of the Hanumanthapuram PACCS and Akkur PACCS have steadily increased during the study period. The CAGR of Akkur PACCS, Kuthalam PACCS, Hanumanthapuram PACCS and Thethakudi South PACCS was 9.95 per cent, 7.77 per cent, 5.61 per cent and 1.23 per cent respectively. Therefore, it can be inferred from the table that the performance of the Akkur PACCS, Kuthalam PACCS in terms of deposit mobilization is satisfactory when compared to Hanumanthapuram PACCS and Thethakudi South PACCS.

INVESTMENT

The investment made by the selected PACCS in the study area is shown in table 6.

TABLE 6
INVESTMENT

(Rs. in Lakh)

Year	Investment							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	38.71	100.00	15.21	100.00	08.44	100.00	14.01	100.00
2008-09	28.03	72.41	15.60	102.56	11.18	132.46	14.48	103.36
2009-10	21.74	56.16	13.71	90.14	10.84	128.44	14.36	102.50
2010-11	39.15	101.14	11.21	73.70	13.55	160.55	14.69	104.85
2011-12	25.95	67.04	08.44	55.49	11.56	136.97	10.62	75.80
2012-13	27.84	71.92	07.95	52.27	10.33	122.39	11.61	82.87
2013-14	30.18	77.96	12.72	83.63	12.27	145.38	14.54	103.78
2014-15	35.93	92.82	14.34	94.28	13.72	162.56	22.72	162.17
2015-16	39.42	101.83	06.22	40.89	17.07	202.25	25.87	184.65
2016-17	45.87	118.50	09.01	59.24	11.19	132.59	28.95	206.64
Mean	33.28	-	11.44	-	12.015	-	17.19	-
S.D	07.61	-	3.35	-	2.34	-	6.30	-
C.V (%)	22.87	-	29.28	-	19.47	-	36.65	-
CAGR (%)	1.71	-	-5.10	-	2.86	-	7.53	-

Source: Annual Reports

The CAGR of 1.71 per cent, -5.10 per cent, 2.86 per cent and 7.53 per cent was found in Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS respectively. All the selected societies have a high coefficient of variations during the study period. It shows the variable nature of the trend of investments. Therefore, it can be inferred from the table that all the selected societies register low rate of investment, hence the performance of the PACCS is not satisfactory in terms of growth rate of investments.

OPERATING PROFIT

Operating profit refers to the excess of revenues over expenses derived from normal business operations. Operating income, representing income from ordinary business activities, excludes expenses, such as interest and taxes. Also called as earnings before interest and taxes. Operating profit is calculated by gross income minus operating expenses and depreciation. The operating profit of the selected PACCS during the study period is shown in table 7.

TABLE 7
OPERATING PROFIT

(Rs. in Lakh)

Year	Operating Profit							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	15.29	100.00	13.74	100.00	10.05	100.00	10.68	100.00
2008-09	15.84	103.59	12.98	94.47	12.84	127.76	10.97	102.72
2009-10	16.12	105.43	13.08	95.20	13.65	135.82	11.54	108.05
2010-11	16.47	107.72	13.97	101.67	12.49	124.28	12.97	121.44
2011-12	17.83	116.61	14.35	104.44	13.79	137.21	11.82	110.67
2012-13	18.25	119.36	15.07	109.68	14.08	140.10	12.93	121.07
2013-14	18.59	121.58	15.46	112.52	14.76	146.87	13.76	128.84
2014-15	19.07	124.72	14.12	102.77	15.42	153.43	14.27	133.61
2015-16	19.85	129.82	13.41	97.60	13.95	138.81	15.14	141.76
2016-17	20.79	135.97	14.63	106.48	14.91	148.36	14.07	131.74
Mean	17.81	-	14.08	-	13.59	-	12.82	-
S.D	1.84	-	0.82	-	1.53	-	01.53	-
C.V (%)	10.33	-	05.82	-	11.26	-	11.93	-
CAGR (%)	3.12	-	0.63	-	4.02	-	2.80	-

Source: Annual reports

The operating profit of the all the selected societies has shown an increasing trend except Thethakudi South PACCS during the study period. A CAGR of 3.12 per cent, 0.63 per cent, 4.02 per cent and 2.80 per cent was found in Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS respectively. The coefficient of variation indicates that the Thethakudi South PACCS more consistency when compared to other PACCS. It is further observed from the study that all the selected societies registered a low growth rate of less than five per cent. The growth rate of operating profit of Thethakudi South PACCS was very poor during the study period. Therefore, it can be inferred from the table that the performance of the PACCS with regard to operating profit was poor during the study period.

NET PROFIT/LOSS

The net profit earned by the selected primary agricultural cooperative credit societies after deducting all expenses, including overhead and employee salaries from total income is revealed in table 8.

TABLE 8
NET PROFIT/LOSS

(Rs. in Lakh)

Year	Net Profit/Loss							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	10.74	100.00	09.55	100.00	07.05	100.00	06.43	100.00
2008-09	11.29	105.12	- 02.97	-	- 1.45	-	07.47	116.17
2009-10	11.53	107.36	- 03.85	-	- 2.07	-	06.86	106.69
2010-11	12.10	112.66	- 04.17	-	- 2.19	-	- 2.16	-
2011-12	12.38	115.27	05.98	62.62	- 2.87	-	- 2.93	-
2012-13	13.44	125.14	06.17	64.61	-3.15	-	- 3.82	-
2013-14	13.04	121.42	08.15	85.34	08.72	123.68	- 4.10	-
2014-15	13.82	128.68	10.50	109.95	09.63	136.60	02.53	39.35
2015-16	14.11	131.38	11.96	125.24	09.13	129.50	05.82	90.51
2016-17	15.20	141.53	12.42	130.05	10.21	144.82	07.96	123.79
Mean	12.77	-	09.25		06.93		06.18	
S.D	01.40	-	2.59		05.05		01.94	
C.V (%)	10.96	-	28.00		72.87		31.39	
CAGR (%)	3.53	-	2.66		3.77		2.16	

Source: Annual reports

Among the four selected PACCS, only Kuthalam PACCS earned net profit throughout the study period. The Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS registered a CAGR of 3.53 per cent, 2.66 per cent, 3.77 per cent and 2.16 per cent respectively. All the societies have high value of coefficient of variations except Kuthalam PACCS. Therefore, it can be inferred from the table that a low growth rate of net profit indicates poor operating efficiency of the PACCS in the study area.

TOTAL ADVANCES TO TOTAL DEPOSITS

The ratio measures the efficiency of the society in converting the deposits available with it (excluding other funds like equity capital, etc.) into high earning advances. Total deposits include demand deposits, savings deposits and term deposits. Total advances also include the receivables. The higher ratio reflects the higher profitability of the societies. The total advances to total deposits of the selected PACCS are shown in table 9.

TABLE 9
TOTAL ADVANCES TO TOTAL DEPOSITS

Year	Advances to Deposits Ratio (%)							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	121.86	100.00	77.89	100.00	186.72	100.00	99.80	100.00
2008-09	127.29	104.46	84.59	108.60	195.73	104.83	117.25	117.48
2009-10	127.41	104.55	96.71	124.16	213.31	114.24	124.88	125.13

2010-11	137.39	112.74	119.98	154.04	207.63	111.20	131.37	131.63
2011-12	156.92	128.77	140.59	180.50	237.79	127.35	154.21	154.52
2012-13	169.35	138.97	148.69	190.90	240.13	128.60	149.06	149.36
2013-14	162.45	133.31	136.27	174.95	201.88	108.12	135.81	136.08
2014-15	184.66	151.53	123.05	157.98	170.50	91.31	113.83	114.06
2015-16	186.36	152.93	109.21	140.21	171.94	92.08	100.17	100.37
2016-17	188.88	154.99	101.98	130.93	171.92	92.07	85.59	85.76
Mean	156.26	-	113.90	-	199.76	-	121.20	-
S.D	26.24	-	23.94	-	25.64	-	22.20	-
C.V (%)	16.79	-	21.02	-	12.84	-	18.32	-
CAGR (%)	4.48		2.73		-0.82		-1.52	

Source: Annual reports

It is evident from the table 9 that the average advance to deposit ratio of Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS is 156.26 per cent, 113.90 per cent, 171.92 per cent and 121.20. The ratio has increased to nearly 155 per cent and 131 per cent in Kuthalam PACCS and Thethakudi South PACCS whereas it has declined to 92.07 per cent, 85.76 per cent in 2016-17 when compared to 2007-08. The positive compound annual growth rate of 4.48 per cent and 2.73 per cent were found in Kuthalam PACCS, Thethakudi South PACCS, and negative growth rate of 0.82 per cent and 1.52 per cent was registered in Hanumanthapuram PACCS and Akkur PACCS during the study period. Therefore, it can be understood from the table that the efficiency of the society in converting the deposits into high earning advances in Kuthalam PACCS, Thethakudi South PACCS is moderately satisfactory during the study period whereas Hanumanthapuram PACCS and Akkur PACCS need for further improvement.

BUSINESS PER EMPLOYEE

This tool measures the efficiency of all the employees in generating business for the society. It is arrived at by dividing the total business by the total number of employees. By business, the researcher means the sum of total deposits and total advances in a particular year. The business per employee of the selected societies during the study period is shown in table 10.

TABLE 10
BUSINESS PER EMPLOYEE

(Rs. in Lakh)

Year	Business per employee							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	11.38	100.00	08.65	100.00	07.56	100.00	08.14	100.00
2008-09	11.34	99.65	08.63	99.77	08.60	113.76	09.24	113.51
2009-10	11.53	101.32	08.31	96.07	09.01	119.18	09.64	118.43
2010-11	12.19	107.12	08.05	93.06	09.27	122.62	10.01	122.97
2011-12	13.72	120.56	08.32	96.18	09.32	123.28	10.57	129.85
2012-13	15.36	134.97	08.29	95.84	09.55	126.32	11.74	144.23
2013-14	17.50	153.78	08.80	101.73	10.55	139.55	13.40	164.62
2014-15	23.81	209.23	09.28	107.28	11.87	157.01	15.60	191.65
2015-16	29.57	259.84	10.51	121.50	12.09	159.92	17.58	215.97
2016-17	31.32	275.22	11.10	128.32	12.37	163.62	19.51	239.68

Mean	17.77	-	08.99	-	10.02	-	12.54	-
S.D	07.70	-	01.02	-	01.63	-	3.85	-
C.V (%)	43.33	-	11.35	-	16.27	-	30.70	-
CAGR (%)	10.65	-	2.53	-	5.05	-	9.13	-

Source: Compiled and calculated from annual reports

As depicted in table 10, mean business per employee of the Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS was Rs. 17.77 lakhs, Rs. 08.99 lakhs, Rs. 10.02 and Rs. 12.54 lakhs respectively. The trend indicates that the growth rate of business per employee of the societies about 275 per cent, 128 per cent, 163 per cent and 240 per cent in 2016-17 against 2007-08. A higher compound annual growth rate of 10.65 per cent and 9.13 per cent was found in Kuthalam PACCS and Akkur PACCS whereas a low growth rate of 2.53 per cent and 5.05 per cent was recorded in Thethakudi South PACCS and Hanumanthapuram PACCS. Therefore, it can be inferred from the table that Kuthalam PACCS and Akkur PACCS are better performers than Thethakudi South PACCS and Hanumanthapuram PACCS in terms of the productivity of the employee during the study period.

EARNINGS PER EMPLOYEE

This ratio is most useful when compared against other societies. Ideally, a society wants the highest revenue per employee possible, as it denotes higher productivity. It is calculated as: Operating profit / No. of employees. The earnings per employee of the selected PACCS during the study period is shown in table 11.

TABLE 11
EARNINGS PER EMPLOYEE

(Rs. in Lakh)

Year	Earnings per employee							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	1.27	100.00	1.72	100.00	1.43	100.00	1.78	100.00
2008-09	1.32	103.94	1.62	94.19	1.83	127.97	1.83	102.81
2009-10	1.34	105.51	1.09	63.37	1.95	136.36	1.92	107.87
2010-11	1.37	107.87	1.75	101.74	1.78	124.48	2.16	121.35
2011-12	1.49	117.32	1.79	104.07	1.97	137.76	1.97	110.67
2012-13	1.52	119.69	1.88	109.30	2.01	140.56	2.16	121.35
2013-14	1.55	122.05	1.93	112.21	2.11	147.55	2.29	128.65
2014-15	1.59	125.20	1.77	102.91	2.20	153.85	2.38	133.71
2015-16	1.65	129.92	1.68	97.67	1.99	139.16	2.52	141.57
2016-17	1.73	136.22	1.83	106.40	2.13	148.95	2.35	132.02
Mean	01.48	-	1.71	-	01.94	-	02.14	-
S.D	0.15	-	0.23	-	0.23	-	0.25	-
C.V	10.14	-	13.45	-	11.86	-	11.68	-
CAGR	3.14	-	0.62	-	4.06	-	2.82	-

Source: Compiled and calculated from annual reports

It is observed from the table 11 the a high mean value of earnings per employee of Rs. 02.14 lakhs and Rs. 1.94 lakhs was found in Akkur PACCS followed by Hanumanthapuram PACCS. The mean value of earnings per employee of the Kuthalam PACCS and Thethakudi South PACCS was Rs. 1.48 lakhs and Rs. 1.71 lakhs during the study period. The trend shows that the growth rate of 136.22 per cent, 106.40 per cent,

148.95 per cent and 132.02 per cent was registered in Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS. A low compound annual growth rate of 3.14 per cent, 0.62 per cent, 4.06 per cent and 2.82 per cent were found in the societies respectively. Therefore, it can be inferred from the table that performance in terms of productivity of the employees of the all the selected societies is not good, they should improve employee productivity in terms of earnings per share in the years to come.

OPERATING EFFICIENCY (TOTAL OPERATING EXPENSES TO TOTAL ASSETS)

The efficiency ratios are calculated to measure the effectiveness with which funds are utilized in the business, how well the society control expenses relative to producing revenues, and how productive employees are in terms of generating income, managing assets and handling operations. The lesser proportion of operating expenditure provides more profits to societies. The operating efficiency ratio of the selected PACCS during the study period is shown in table 12.

TABLE 12
OPERATING EFFICIENCY RATIO

Year	Operating Efficiency Ratio (%)							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	17.46	100.00	31.30	100.00	25.19	100.00	31.01	100.00
2008-09	17.24	98.74	32.94	105.24	27.58	109.49	27.35	88.20
2009-10	17.91	102.58	34.45	110.06	26.94	106.95	27.83	89.75
2010-11	16.78	96.11	33.70	107.67	27.29	108.34	27.66	89.20
2011-12	14.88	85.22	31.08	99.30	26.39	104.76	27.15	87.55
2012-13	13.57	77.72	32.17	102.78	27.01	107.23	27.84	89.78
2013-14	12.40	71.02	33.37	106.61	26.49	105.16	27.06	87.26
2014-15	09.07	51.95	34.11	108.98	25.70	102.02	28.01	90.33
2015-16	07.47	42.78	32.78	104.73	26.14	103.77	27.80	89.65
2016-17	07.36	42.15	33.95	108.47	25.89	102.78	28.93	93.29
Mean	13.41	-	32.99	-	26.46	-	28.06	-
S.D	4.17	-	1.16	-	0.75	-	01.16	-
C.V (%)	31.10	-	03.52	-	02.83	-	04.13	-
CAGR (%)	-8.28		0.82		0.27		-0.69	

Source: Compiled and calculated from annual reports

Table 12 shows the selected PACCS have not been efficient on this front as the average value of operating efficiency ratio has been very high in Thethakudi South PACCS (32.99 per cent), Akkur PACCS (28.06 per cent), Hanumanthapuram PACCS (26.46 per cent) and Kuthalam PACCS (13.41 per cent) during the study period. However, in the Kuthalam PACCS the ratio was declined to 42 per cent and in Akkur PACCS a marginal decline of 93.29 per cent was found in 2016-17 when compared to 2007-08. The ratio was slightly increased to 108 per cent and 103 per cent in Thethakudi South PACCS and Hanumanthapuram PACCS during the same period. Therefore, it can be inferred from the table that among selected societies Thethakudi South PACCS, Hanumanthapuram PACCS, Akkur PACCS are failed to curtail their expenditure during the study period.

BURDEN RATIO

This ratio is a tool to measure the burden bearing capacity of the society. The formula for calculating the burden ratio is (Non-interest operating Expenditure - Non-interest operating income)/Average Total Assets. A society with a low burden ratio is better off. An increasing trend would show a lack on the burden bearing capacity of the society. The burden ratio of the selected PACCS is given in table 13.

TABLE 13
BURDEN RATIO

Year	Burden Ratio (%)							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	01.92	100.00	01.15	100.00	02.14	100.00	02.19	100.00
2008-09	02.81	146.35	02.07	180.00	02.62	122.43	02.46	112.33
2009-10	02.96	154.17	01.85	160.87	02.01	93.93	02.87	131.06
2010-11	02.74	142.71	02.63	228.70	02.48	115.89	02.45	111.87
2011-12	02.67	139.06	02.76	240.00	03.11	145.33	02.86	130.59
2012-13	01.89	98.44	03.18	276.52	03.65	170.57	03.18	145.21
2013-14	01.62	84.38	01.87	162.61	02.10	98.13	02.17	99.09
2014-15	02.10	109.38	01.80	156.52	03.23	150.93	02.14	97.72
2015-16	01.92	100.00	02.16	187.83	02.18	101.87	03.22	147.03
2016-17	02.13	110.94	02.27	197.39	01.70	79.44	02.68	122.37
Mean	02.28	-	02.17	-	02.52	-	02.62	-
S.D	0.47	-	0.57	-	0.62	-	0.40	-
C.V (%)	20.61	-	26.26	-	24.60	-	15.27	-
CAGR (%)	1.04	-	7.04	-	-2.28	-	2.04	-

Source: Compiled and calculated from annual reports

Table 13 shows the mean Burden Ratio of the Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS was 02.28 per cent, 02.17 per cent, 02.52 per cent and 2.62 per cent respectively. There is no major variation was found in the mean burden ratio of the societies. The trend indicates that the ratio has increased to nearly 111 per cent, 197 per cent and 122 per cent in Kuthalam PACCS, Thethakudi South PACCS and Akkur PACCS whereas it has declined to 79 per cent in Hanumanthapuram PACCS in 2016-17 when compared to 2004-05. The high value of compounded annual growth rate of 7.04 per cent was found in Thethakudi South PACCS followed by Akkur PACCS with a growth rate of 2.04 per cent. The compound annual growth rate of the Kuthalam PACCS was 1.04 per cent and negative growth rate was registered in Hanumanthapuram PACCS during the study period. The coefficient variation shows the variable nature of the burden ratio in the selected societies. Therefore, it can be inferred from the table that the burden bearing capacity of the PACCS is poor in the study area.

OPERATING PROFIT TO TOTAL ASSETS

Operating profit to total asset ratio is considered to be the best measure of profitability in order to assess the overall performance of the business. It indicates how well the management has used the investment made by shareholders and creditors into the business. It is commonly used as a basis for various managerial decisions. As the primary objective of business is to earn profit, higher the return on capital employed, the more efficient the business is using its funds. The ratio can be found for a number of years, so

as to find a trend as to whether the profitability of the business is improving or otherwise. Operating profit to total asset ratio of the selected PACCS is shown in table 14.

TABLE 14
OPERATING PROFIT TO TOTAL ASSETS

Year	Operating profit to Total Assets (%)							
	Kuthalam PACCS	Trend (%)	Thethakudi South PACCS	Trend (%)	Hanumanthapuram PACCS	Trend (%)	Akkur PACCS	Trend (%)
2007-08	13.44	100.00	08.14	100.00	09.43	100.00	10.57	100.00
2008-09	15.19	113.02	06.35	78.01	08.74	92.68	11.63	110.03
2009-10	16.23	120.75	07.89	96.93	06.38	67.66	12.85	121.57
2010-11	13.30	98.96	09.23	113.39	10.43	110.60	10.42	98.58
2011-12	14.10	104.91	10.17	124.94	09.46	100.32	09.47	89.59
2012-13	12.69	94.42	09.74	119.65	08.49	90.03	09.42	89.12
2013-14	11.61	86.38	11.43	140.42	07.95	84.31	08.74	82.69
2014-15	08.62	64.14	06.48	79.61	11.27	119.51	10.58	100.09
2015-16	07.34	54.61	08.72	107.13	10.70	113.47	10.46	98.96
2016-17	07.13	53.05	09.13	112.16	10.96	116.22	09.41	89.03
Mean	11.97	-	08.73	-	9.38	-	10.36	-
S.D	03.23	-	01.58	-	1.53	-	01.21	-
C.V (%)	26.98	-	18.10	-	16.31	-	11.38	-
CAGR (%)	-6.14%		1.15%		1.51%		-1.16%	

Source: Compiled and calculated from annual reports

Table 14 shows among the four societies, Kuthalam PACCS has the highest mean operating profit to total assets ratio of 11.97 per cent, followed by Akkur PACCS with a mean value of 10.36 per cent. The average operating profit to total assets ratio of Hanumanthapuram PACCS and Thethakudi South PACCS was 9.38 per cent and 8.73 per cent during the study period. The trend indicates that the ratio declined in Kuthalam PACCS and Akkur PACCS with a growth rate of 53.05 per cent and 89.03 per cent, whereas it has increased to 112 per cent and 116 per cent in Thethakudi South PACCS and Hanumanthapuram PACCS in 2016-17 when compared to 2007-08. A low compound annual growth rate of -6.14 per cent, 1.15 per cent, 1.51 per cent and -1.16 per cent were found in Kuthalam PACCS, Thethakudi South PACCS, Hanumanthapuram PACCS and Akkur PACCS respectively during the study period. Therefore, it can be inferred from the table that the profitability of PACCS in the study area is poor during the study period.

PERCENTAGE CHANGE IN NET NPAS

This measure gives the movement in Net NPAs in relation to Net NPAs in the previous year. The higher the reduction in Net NPAs level, the better is for the societies. It is given by the formula: % Change in Net NPAs = (Net NPAs at the end of the year – Net NPAs at the beginning of the year)/Net NPAs at the beginning of the year. The percentage change in net NPAs of the selected PACCS is shown in table 15.

TABLE 15
PERCENTAGE CHANGE IN NET NPAs

Year	Percentage of change in net NPAs			
	Kuthalam PACCS	Thethakudi South PACCS	Hanumanthapuram PACCS	Akkur PACCS
2007-08	10.25	15.26	12.06	08.30
2008-09	-26.27	37.27	22.34	14.17
2009-10	-01.91	-31.78	07.55	-04.67
2010-11	-06.76	55.20	-06.92	08.42
2011-12	12.54	-03.57	14.41	05.37
2012-13	04.42	-09.73	-11.32	03.22
2013-14	05.76	-14.48	07.55	22.08
2014-15	28.78	20.77	0.72	27.55
2015-16	19.50	-13.42	24.39	-08.09
2016-17	06.90	17.45	-09.39	-0.73
Mean	05.32	07.30	06.14	07.56
S.D	15.01	26.62	12.69	11.27
C.V	282.14	364.66	206.68	149.07

Source: Compiled and calculated from annual reports,

Table 15 reveals that the Akkur PACCS has the highest mean percentage (7.56 per cent) of change in net NPA followed by Thethakudi South PACCS (21.6 per cent). The mean percentage of change in net NPA of Kuthalam PACCS and Hanumanthapuram PACCS was 5.32 and 6.14 per cent during the study period. All the selected PACCS has high coefficient of variation, which indicates high volatile nature of the net NPA of the PACCS in the study area.

PRODUCTIVITY OF THE EMPLOYEE

In order to find out whether there is any significant difference between employee productivity of the selected PACCS in the study area, a null hypothesis is formulated and tested in table 16.

Null hypothesis

There is no significant difference between selected PACCS in the employee productivity.

TABLE 16
ANNOVA TEST

		Sum of Squares	Df	Mean square	F	Result
Business per employee	Between groups	461.30	3	153.77	7.89	Significant**
	Within groups	700.81	36	19.47		
	Total	1162.11	39			
Earnings per Employee	Between groups	2.41	3	0.80	16.80	Significant**
	Within groups	1.72	36	0.05		
	Total	4.13	39			

** Significant at 5% and 1% level

Table 16 reveals that the calculated F value is greater than that of the table value at 5 per cent level (2.87) and 1 per cent level (4.38). Therefore, the null hypothesis is rejected. Hence, it can be concluded that

there is a significant difference between selected PACCS in the employee productivity in terms of Business per employee and Earnings per Employee.

EARNING QUALITY OF THE PACCS

To find out whether there is any significant difference between earning quality of the selected PACCS in the study area, a null hypothesis is framed and tested with the help of ANOVA test.

Null hypothesis

There is no significant difference between earning quality of the PACCS in the study area.

TABLE 17
ANNOVA TEST

		Sum of Squares	Df	Mean square	F	Result
Operating profit to Total Assets Ratio	Between groups	59.42	3	19.81	4.7356	Significant*
	Within groups	150.58	36	04.18		
	Total	210.00	39			

Significant* at 5 % level, ** Significant at 5% and 1% level

Table 17 indicates that the calculated F value is greater than that of the table value at 5 per cent level (2.87) and 1 per cent level (4.38). Therefore, the null hypothesis is rejected. Hence, it can be concluded that there is a significant difference between earning quality of the selected PACCS in the study area.

GROSS NPA AND GROSS ADVANCES

The Gross NPA forms part of gross advances in all the three selected PACCS in the study area. To find out whether there is any significant relationship in the gross NPA and that of gross advances, correlation coefficient and t-test are applied.

Null hypothesis: There is no significant positive correlation between gross NPA and gross advances of the PACCS.

TABLE 18
GROSS NPA AND GROSS ADVANCES

Name of the Society	Mean (Rs.in Lakhs)	SD	r	t-value	Result
Kuthalam PACCS	45.94	15.93	0.98	13.93	**Significant
	132.19	65.30			
Thethakudi South PACCS	13.34	1.61	0.63	2.29	Not significant
	37.86	5.12			
Hanumanthapuram PACCS	14.85	2.27	0.95	8.61	**Significant
	46.41	6.41			
Akkur PACCS	12.99	3.27	0.97	11.28	**Significant
	40.40	10.24			

** Significant at 5% and 1% level

Table 18 reveals that there is a significant difference between gross NPA and gross advances of the Kuthalam PACCS, Hanumanthapuram PACCS and Akkur PACCS. However, there is no significant difference between gross NPA and gross advances of the Thethakudi South PACCS.

CONCLUSION

To conclude, the selected PACCS in the study area have not performed well on all the parameters of operational performance. One society performed well on one parameter, but worst on another which proves that the overall operational performance of the societies has not been quite good and all the societies have to make improvements on different fronts.

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