



STATE-WISE ANALYSIS OF THE VIABILITY AND PERFORMANCE OF PRIMARY AGRICULTURAL COOPERATIVE CREDIT SOCIETIES IN INDIA

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ABSTRACT

This study examines the viability and performance of primary Agricultural Cooperative Credit Societies (PACCS) across Indian states using 2023 data. This analysis focuses on capital strength, credit expansion, recovery efficiency, outreach and inclusion, credit intensity per society, and alignment with agricultural dependency. States are grouped to identify structural disparities in performance. The findings reveal significant interstate variations in financial strength and operational efficiency. Southern and western states demonstrate stronger institutional capacity, while several agriculturally dependent states show credit gaps and higher overdue risks. The study highlights that recovery efficiency and institutional strength play a more decisive role than agricultural dependency alone. A regional comparison further confirms the uneven development of the Cooperative Credit structure. The paper suggests strengthening the recovery system, improving credit alignment, and expanding outreach to enhance PACCS's long-term viability in India.

KEYWORDS: PACCS, Recovery Efficiency, Agricultural Dependence, State-wise Analysis, Institutional Performance of PACCS.

1. INTRODUCTION

Primary Agricultural Cooperative Societies (PACCS) constitute the foundation of the Cooperative Credit Structure in India. Functioning at the village level, they provide short-term and medium-term Credit to farmers, particularly small and marginal cultivators. In many rural areas, PACCS remain the most accessible institutional source of Agricultural Finance and play an essential role in supporting crop production and allied activities. The Performance and financial health of PACCS are crucial for the stability of the Cooperative Credit System. Their viability depends on factors such as membership strength, share capital, borrowing activity, loan disbursement, recovery performance, and the level of overdues. A strong PACCS network contributes not only to Agricultural development but also to rural financial inclusion and grassroots economic stability. However, the Functioning of PACCS is not uniform across India. Differences in economic conditions, Agricultural base, administrative efficiency, and member participation create variations in performance among states. Some states show higher Credit disbursement and better recovery rates, while others face challenges such as low operational activity and assessment. The year 2023 provides a recent snapshot of PACCS's operational and financial status nationwide. An analysis based on 2023 data provides insight into the current patterns of Credit flow, recovery efficiency, outreach coverage, and overall viability. Such a focused examination helps identify states based on their performance levels, thereby enabling understanding of inter-state variations in the Cooperative Credit System.

2. OBJECTIVES

1. To analyse the state-wise performance of PACCS in India using 2023 data.
2. To evaluate the financial viability of PACCS based on credit and recovery indicators.
3. To compare and classify states according to their level of performance.

3. STATEMENT OF THE PROBLEM

Primary Agricultural Cooperative Credit Societies (PACCS) play an essential role in providing institutional credit to farmers at the grassroots level. However, their performance and financial strength vary across Indian states. While some states show strong credit disbursement and better recovery performance, others face issues such as low operational activity and high overdues. These variations raise concerns about the viability and sustainability of PACCS in different regions. Therefore, there is a need for a state-wise assessment based on recent data to understand the differences in performance and financial health of PACCS in India.

4. METHODOLOGY

The Present study is based on secondary data for the year 2023. Data on the number of PACCS, membership, share capital, loan disbursements, recovery performance, and overdues were sourced from published official sources. The study employs a descriptive-analytical research design. Percentage analysis and ratio analysis are used to evaluate financial viability and operational performance. States are classified and compared based on selected indicators to identify variations in performance levels.



States	Total No of PACCS	Total Membership	Paid-up Share capital	Total No of Borrowers	Short-term Loans Issued	Medium Term Loans Issued	Short-term loans outstanding	Medium Term Loans Outstanding	Collection Shot Term	Collection Medium Term
Andaman and Nicobar	58	13.24	252.83	7.35	439.91	795.94	1747.5	2601.67	3318.78	3662.77
Andhra Pradesh	2042	7526.92	213688.13	2039.85	1572987.54	1701260.49	1278189.78	1475390.97	1155545.88	1238257.08
Arunachal Pradesh	35	19.17	385.59	0	0	0	0	0	0	0
Assam	766	3034.41	1536	82	713	794.25	503	594.43	272	277.61
Bihar	8463	9765	9542.72	234	42189.21	42189.21	0	0	27126.17	27126.17
Chandigarh	17	1.97	8.26	0	0	0	0	0	0	0
Chhattisgarh	1924	3919.45	62834.99	2507.29	624182.52	628938.43	154312.7	165009.54	559089.02	562830.38
Delhi	0	0	0	0	0	0	0	0	0	0
Goa	93	95.31	712.45	0	455.87	2978.63	2279.85	7465.42	764.84	2413.37
Gujarat	9212	2865.86	111951.62	983.11	1682114.43	1801150.4	1646392.17	1848146.85	1584014.4	1681784.46
Haryana	776	3047	63672.5	1454	1208067.42	1209009.01	619046.09	643044.3	1086595.82	1087967.99
Himachal Pradesh	2193	1502	22546.47	429	2163.39	73734.82	3731.15	135821.59	1989.62	68182.14
Jammu and Kashmir	609	420.08	633.3	9.3	48.27	48.27	1796.77	3196.82	224.8	1093.2
Jharkhand	0	0	0	0	0	0	0	0	0	0
Karnataka	7240	4412.65	292250.26	2349.15	2565905.7	3108580.54	2486584.63	3236727.63	2121566.62	2333638.81
Kerala	1620	30341	286656.3	11490	456314	693801	446114	674302	393646	531613
Madhya Pradesh	4457	5249.47	64236	2853	465534	473766.04	341703	388203.33	410381.81	425448.14
Maharashtra	21862	10818.66	436602.34	3701.99	2279229.13	2456143.01	2644977.9	3656697.36	1791572.03	1911708.7
Manipur	309	84.32	431.12	0	109.2	109.2	0	6.84	0	0.4
Meghalaya	510	119.18	1061.17	1.69	1128.5	1171.11	4272.36	4340.03	656.47	687.77
Mizoram	73	0	160.83	0	1390.66	2950.84	430.15	930.64	0	0
Nagaland	7601	5.21	6895.82	5.21	1705.52	11226.15	32523.45	61831.66	16130.6	16130.6
Orissa (Odisha)	2703	6973.62	88152.38	3178.94	906144.77	932874.15	816182.02	870004.27	681674.17	703239.1
Pondicherry (Puducherry)	53	200	1268.6	33	23282.05	27640.13	16360.35	22094.75	3012.65	3129.43
Punjab	3998	3070.26	48760.12	1675.93	965348.82	1008717.27	699183.47	774681.32	907441.38	955443.17
Rajasthan	7488	10648.94	134159.38	3399	1954821.44	1973373.03	1246248.3	1255417.07	2001659.33	2065820.54
Sikkim	179	24477	174.37	0	732.29	732.29	1220.73	1686.13	621.67	678.57
Tamil Nadu	4513	13529.93	239307.96	5099.94	2472171.68	2724468.69	2161546.17	2531283.87	1717763.47	2033890.39
Telangana	823	2753.84	67167.86	1722.17	682489.79	751769.62	433836.31	604892.39	418572.1	459678.96
Tripura	268	540.71	N.A.	43.49	340.36	352.76	515.54	515.54	176.27	176.27
Uttar Pradesh	8929	2748	19247	616	78580	79747	161246.65	163175.54	63069.3	70077
Uttarakhand	733	42	15727.97	42	127070.49	147851.5	105133.82	147258.69	81343.22	98114.81
West Bengal	7408	12153.55	29028.25	5270.86	162281.4	192917.06	158879.31	208862.35	141446.04	158826



States	Overdues Short Term	Overdues Medium Term	Total Cultivated Land in the State	Total Uncultivated Land in the State	Total population in the State	No of Male	No of Female	Total Number of Villages	Total Number of Blocks	Number of Villages Covered By PACCS
Andaman and Nicobar	1706.56	1761.39	13125	25547	556.97	314.51	242.46	556	3	128
Andhra Pradesh	374443.01	414163.36	6744000	1335000	52849	26432	26417	28206	401	28206
Arunachal Pradesh	0	0	234500	N.A.	1383.73	713.91	669.82	5616	N.A.	N.A.
Assam	31.16	42.27	3781320	1713070	26649	13788	12861	24590	38	23422
Bihar	23845.02	23845.02	5331733	4027835	103538	54617	48921	45098	38	45098
Chandigarh	0	0	N.A.	N.A.	1056	581	475	23	1	10
Chhattisgarh	88373.47	93350.14	2721955	919082	22084.09	11084.12	10999.97	18289	130	18214
Delhi	0	0	0	0	0	0	0	0	0	0
Goa	197.84	884.79	N.A.	N.A.	1458.54	739.14	719.4	411	2	198
Gujarat	273901.43	299299.78	11733306.51	6492880.03	61869.73	32432.2	29437.53	18901	244	16620
Haryana	241919.74	256956.31	3556000	273000	25351	13495	11856	7356	140	7199
Himachal Pradesh	1389.7	39465.4	525894	765774	6865	3482	3383	17882	78	17882
Jammu and Kashmir	1594.34	2115.74	1870076	1954568	10828.46	5727.34	5101.12	7419	120	6294
Jharkhand	0	0	N.A.	N.A.	0	N.A.	N.A.	N.A.	N.A.	N.A.
Karnataka	112902.06	132114.35	12846000	6204000	71710	36266	35444	29754	240	29754
Kerala	33137	97438	2579000	9529.43	33387	16021	17366	1670	14	1581
Madhya Pradesh	148798.51	173161.9	13225911	4836737	53669	28227	25442	56568	359	54349
Maharashtra	840819.22	995820.03	15343543.75	6016162.7	102855.1	53948.7	48906.4	42796	391	38330
Manipur	0	6.44	285000	1726000	2293.89	1161.95	1131.94	2581	N.A.	2098
Meghalaya	3484.44	3515.88	343431	794269	2967	1492	1475	6459	N.A.	3124
Mizoram	0	0	133226	44158	1091	552	539	853	11	362
Nagaland	10534.6	10534.6	538000	156000	1978	1024	954	1280	12	N.A.
Orissa (Odisha)	164342.05	180195.12	5306771	3181641	38844.12	19005.01	19839.11	51302	330	49200
Pondicherry (Puducherry)	1500.96	1575.25	20007	18955	1610	802	808	323	4	323
Punjab	713497.29	760606.59	6898977	1526241	30801	15117	15684	13132	1389	9895
Rajasthan	246637.73	293339.83	17400000	N.A.	68548	35551	32997	44672	295	43264
Sikkim	1222.47	1293.22	75749.68	15115.64	679	358	321	1040	N.A.	1040
Tamil Nadu	234148.63	327869.13	6927881.9	3951708.88	69448.87	35911.62	33537.25	21524	392	19242
Telangana	63873.36	106231.7	7656641.99	2512415	83446	42025	41421	10434	342	9913
Tripura	163	884	474498	568671	3674	1874	1800	1011	58	1011
Uttar Pradesh	30019.71	51586.94	17300000	12100000	166053	87466	78587	112804	901	112804
Uttarakhand	44982.81	59266.57	707413.69	1419706.31	9948	5072	4876	15149	95	11339
West Bengal	55511.55	76848.58	5095190.42	6365597	177678.69	68495.5	109183.19	101518	170	99240

Source: National Federation of State Cooperative Banks Ltd

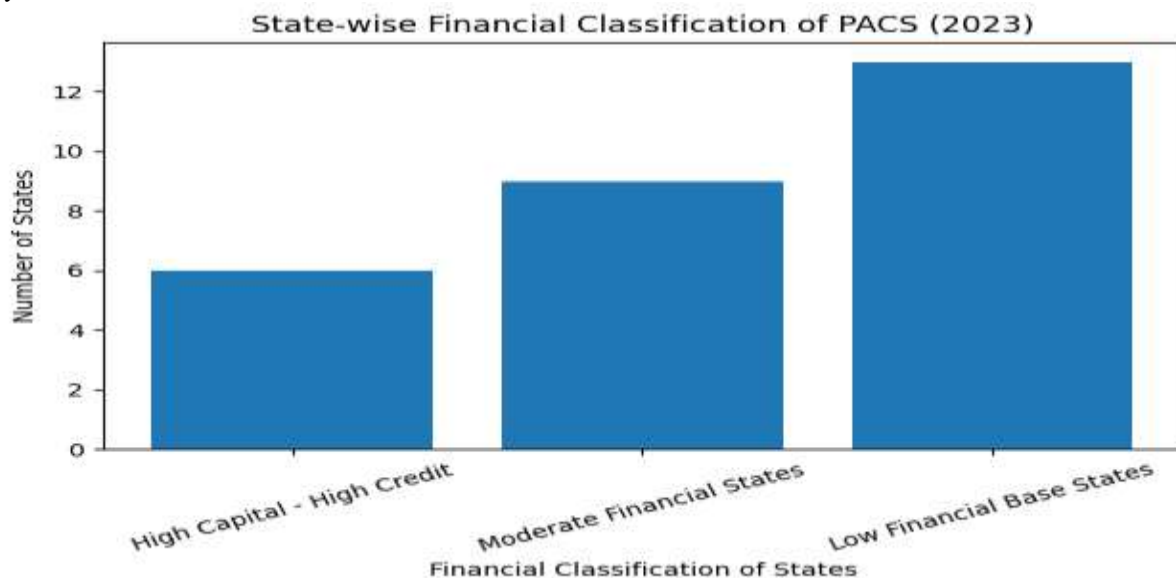
Note: Figures in the above table are for the Financial Year 2023

DISCUSSION

5 .FINANCIAL CLASSIFICATION OF PACCS BASED ON CAPITAL STRENGTH AND CREDIT EXPANSION (2023)

The financial strength of Primary Agricultural Cooperative Credit Societies (PACCS) varies significantly across Indian States. To understand these variations, states are classified into three categories based on paid-up share capital and total loan disbursement (short- and medium-term combined) for 2023. Share capital operations. The combination of these two indicators provides a clear picture of institutional strength and operational capacity. States such as **Maharashtra, Karnataka, Tamil Nadu, Gujarat, Rajasthan, and Andhra Pradesh** fall under the High Capital-High Credit category. These states exhibit strong capital mobilisation and substantial credit flows, indicating a well-developed cooperative credit structure. The large scale of operations in these states reflects better financial stability and broader outreach of PACCS. The Moderate Financial states include **Kerala, Telangana, Haryana, Madhya Pradesh, Odisha, Punjab, Chhattisgarh, West Bengal, and Uttar Pradesh**. These states maintain active PACCS operations but operate at a comparatively moderate scale in terms of Capital and credit expansion. Their financial viability is stable but requires further strengthening to match the leading states. The Low Financial Base states consist mainly of smaller states and some North-Eastern regions where both capital base and credit disbursement remain limited. The lower scale of operations suggests weaker institutional capacity and restricted outreach. Strengthening capital mobilisation and expanding credit are essential to improving PACCS's viability in these regions.

Overall, this classification highlights apparent interstate disparities in PACCS' financial strength in India. The concentration of strong performance in a few states indicates uneven development within the Cooperative Credit system.



The bar diagram clearly shows that a majority of states fall under the low financial Base category, while only six states qualify as High Capital-High Credit states. This indicates significant interstate disparities in PACCS' financial strength across India. The concentration of strong economic performance in a limited number of states suggests uneven development of the Cooperative credit system.

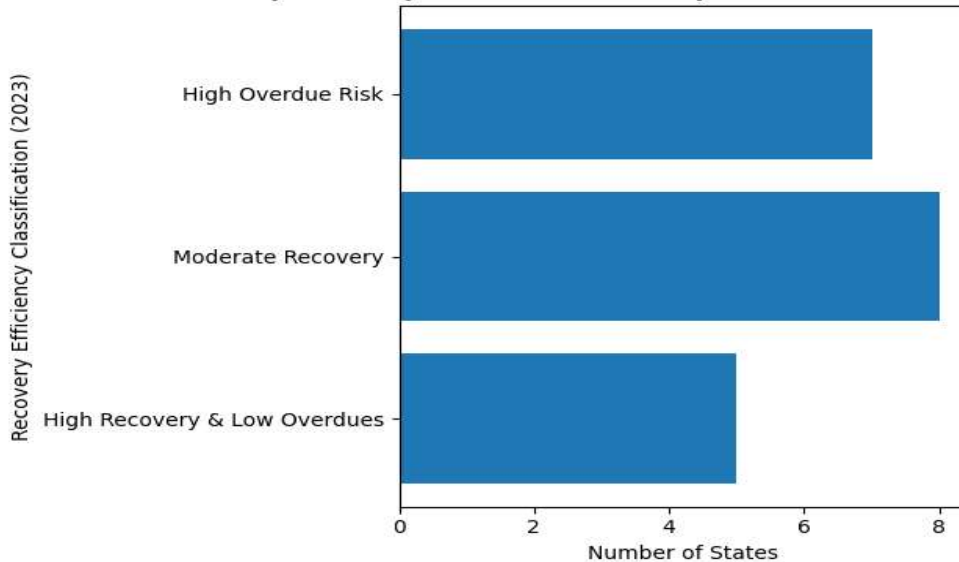
7. RECOVERY EFFICIENCY AND FINANCIAL VIABILITY OF PACCS ACROSS INDIAN STATES (2023)

Recovery performance is a key indicator of the financial viability of Primary Agricultural Cooperative Credit Societies (PACCS). While credit disbursement reflects operational scale, recovery efficiency determines sustainability. High recovery with low overdues indicates sound credit management, whereas high overdues create financial stress and weaken institutional stability. Based on total collection performance and overdue levels for 2023, states are classified into three categories. 1. High recovery and low overdues (Financially Stable States): **Tamil Nadu, Karnataka, Andhra Pradesh, Telangana, Kerala**. These states show strong collection performance relative to loan disbursement and comparatively controlled overdue levels. The administrative efficiency. PACCS in these states demonstrate stronger financial sustainability and lower credit risk. 2. Moderate Recovery States: **Gujarat, Rajasthan, Madhya Pradesh, Haryana, Odisha, Punjab, West Bengal, Chhattisgarh**. These states maintain reasonable recovery performance but also report noticeable overdue amounts. While credit operations are active, the presence of moderate overdues suggests the need for improved



monitoring and repayment enforcement to ensure long-term viability. 3. High Overdue Risk States (Financially Vulnerable): Maharashtra, Assam, Bihar, Uttar Pradesh, Himachal Pradesh, Jammu and Kashmir, and **Several North-Eastern States**. These states report relatively high overdue levels relative to credit disbursements. High overdues reduce liquidity and increase financial stress within PACCS. In such states, despite credit expansion in some cases, inefficient recovery undermines overall economic stability.

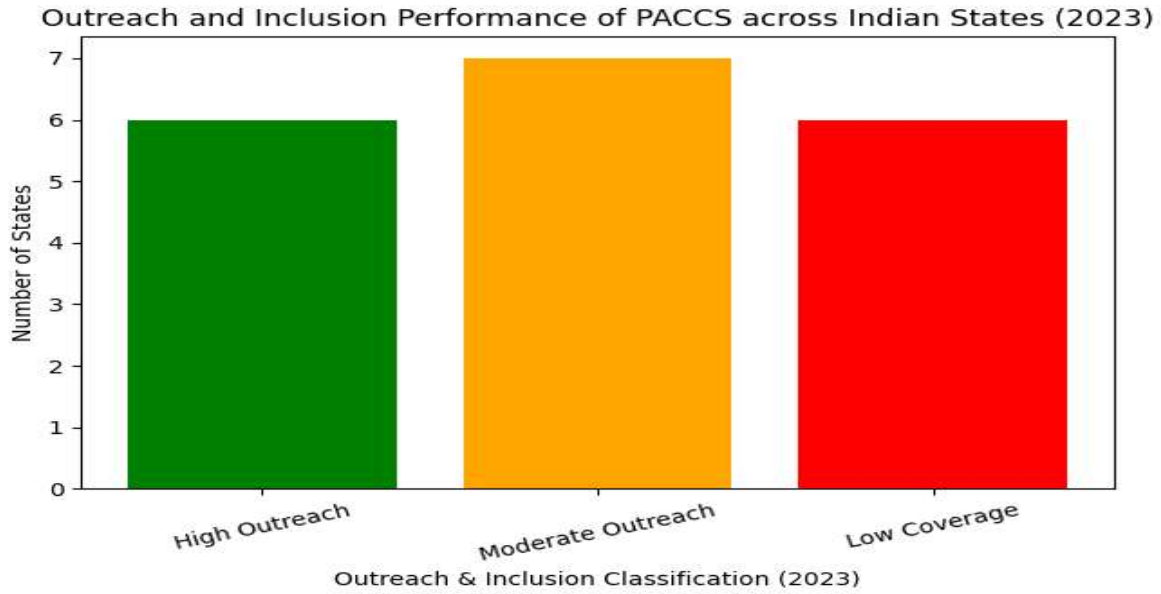
Recovery Efficiency and Financial Viability of PACCS across Indian States (2023)



The analysis shows that high credit expansion alone does not ensure financial sustainability. Recovery efficiency plays a decisive role in maintaining PACCS's viability. States with robust recovery systems maintain stronger liquidity and operational stability, while those with high overdue balances face greater financial vulnerability. Strengthening recovery mechanisms, borrower monitoring, and financial discipline is essential for improving institutional performance.

8. OUTREACH AND FINANCIAL INCLUSION: PERFORMANCE OF PACCS ACROSS INDIAN STATES

Outreach reflects the extent to which Primary Agricultural Cooperative Credit Societies (PACCS) serve rural households. It is measured through indicators such as the number of members, the number of borrowing members, and the coverage of villages. Broader outreach indicates stronger inclusion and deeper penetration of Cooperative Credit in rural areas. Based on membership base and borrower coverage in 2023, states are grouped into three categories. 1. High Outreach States (Strong Rural Penetration): **Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Uttar Pradesh, Gujarat**. These states have a large membership base and high borrower participation. PACCS in these regions cover a substantial proportion of rural households. The Cooperative structure is deeply rooted, and financial inclusion through PACCS is relatively strong. 2. Moderate Outreach States: **Rajasthan, Madhya Pradesh, Telangana, Kerala, Punjab, West Bengal, Odisha**. These states show moderate membership and borrower coverage. PACCS are functional and active, but their outreach is not as extensive as in the leading states. There is scope to expand membership and improve credit linkage. 3. Low Coverage States (Limited Inclusion) Assam, Bihar, Himachal Pradesh, Jammu and Kashmir, Chhattisgarh, and Several North-Eastern States. In these states, the membership base and participation in borrowing remain comparatively low. PACCS Coverage is limited, and financial inclusion through Cooperative credit remains uneven. Strengthening institutional presence and improving members' mobilisation are necessary to enhance inclusion.

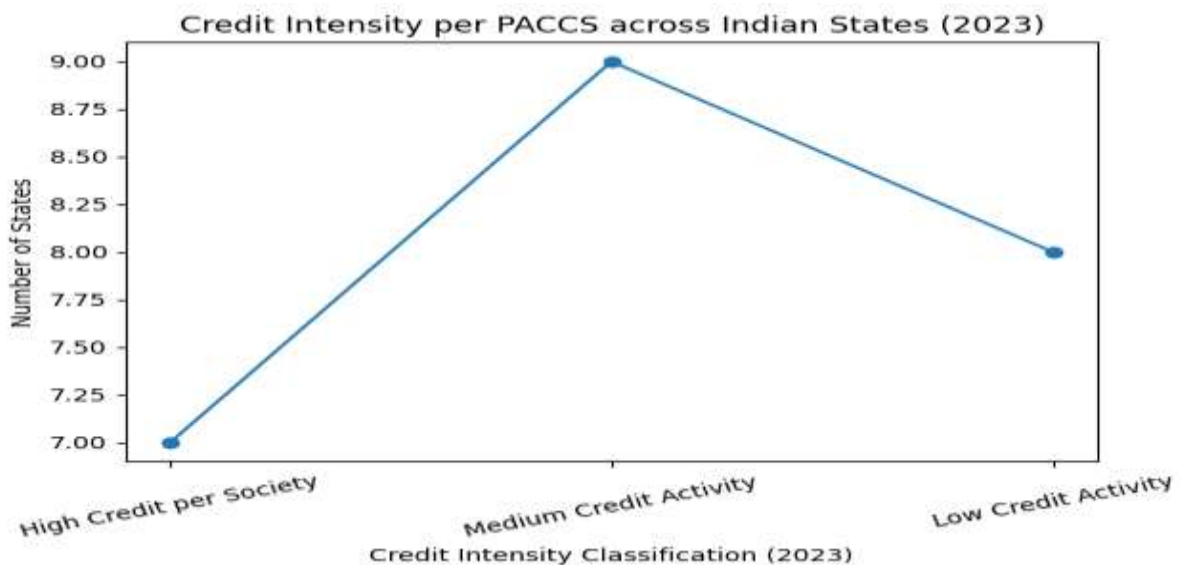


Outreach Performance varies significantly across states. Some states may have substantial capital or recovery Performance but limited outreach. Therefore, financial Strength alone does not ensure inclusive growth. Expanding the role of PACCS in promoting rural financial inclusion.

9. CREDIT INTENSITY PER PACCS ACROSS INDIAN STATES (2023)

Credit Intensity refers to the average amount of loan disbursed per primary Agricultural Cooperative Credit Society (PACCS). It is calculated by dividing total loan disbursement by the number of functioning PACCS in each state. This indicator helps assess the operational scale and lending capacity of individual societies. Higher credit intensity suggests stronger financial operational and better utilisation of institutional capacity, while lower intensity indicates limited lending activity at the society level.

States are classified into three categories: 1. High Credit per Society (Strong Operational Scale). Maharashtra, Karnataka, Tamil Nadu, Gujarat, Andhra Pradesh, and Telangana are in this category. In these states, the average credit disbursement per PACCS is relatively high. Societies operate on a larger scale and manage substantial loan portfolios. This reflects better infrastructure, stronger capital base and higher borrower demand. 2. Medium Credit Activity States: **Rajasthan, Madhya Pradesh, Kerala, Punjab, Haryana, Uttar Pradesh, West Bengal.** These states show a moderate average lending per society. PACCS are active but operate at a balanced or mid-level scale. There is potential to enhance operational capacity and credit expansion. 3. Low Credit Activity States (Limited Operational Depth) **Assam, Bihar, Himachal Pradesh, Jammu and Kashmir, Chhattisgarh, and Several North-Eastern States.** In these states, the average credit per PACCS remains comparatively low. Societies operate with limited loan portfolios, reflecting weaker financial strength, lower borrower base, or structural constraints.





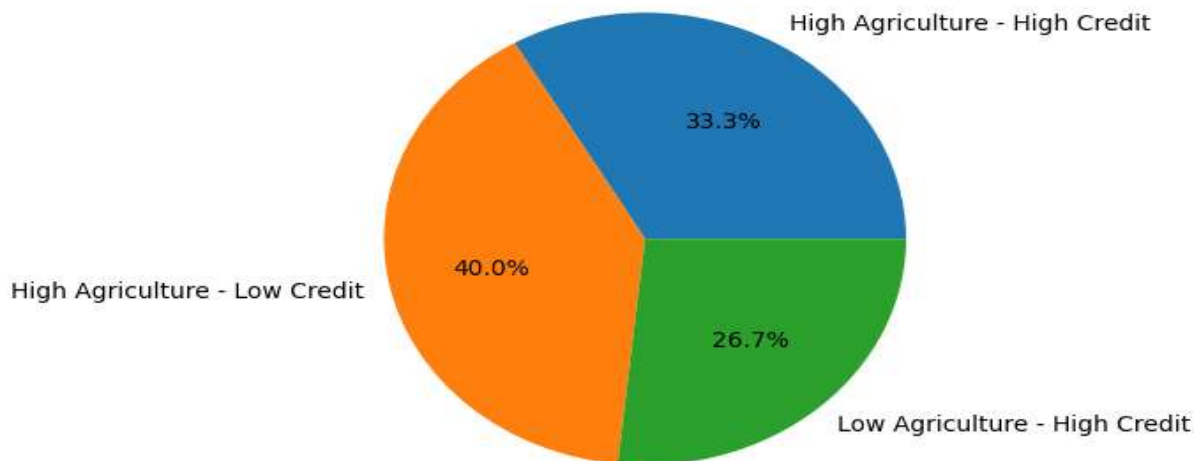
Credit intensity per PACCS provides insight into operational efficiency beyond total state-level credit volume. States with high credit intensity demonstrate more substantial institutional depth, whereas low-intensity states may require structural and financial strengthening. Balanced development requires both wider outreach and deeper credit operations.

10. AGRICULTURAL DEPENDENCY AND CREDIT ALIGNMENT OF PACCS

Agricultural dependency reflects the Proportion of the population engaged in Agriculture and the contribution of Agriculture to the state economy. Since PACCS primarily provide short-term and crop loans, credit flow is expected to be higher in agriculturally dependent states. However, the relationship between Agricultural dependence and Cooperative Credit distribution is not uniform across states. Based on agricultural dependence and PACCS credit disbursement.

1. High Agriculture-High Credit States (Aligned Credit Structure): **Rajasthan, Madhya Pradesh, Andhra Pradesh, Telangana, Karnataka.** These states have a significant share of the population dependent on agriculture and also show substantial PACCS credit disbursement. Credit flow appears aligned with Agricultural demand. PACCS play an active role in supporting crop production and rural livelihood.
2. High Agricultural-Low Credit States (Credit Gap States): **Bihar, Assam, Odisha, Chhattisgarh, and Several North-Eastern States.** These states are agriculturally dependent, yet PACCS credit disbursements remain comparatively low. This indicates a gap between Agricultural needs and institutional credit supply. Structural weaknesses, lower capital base, or institutional inefficiencies may restrict credit expansion.
3. Low Agricultural-High Credit States (Diversified Credit Structure): **Tamil Nadu, Maharashtra, Gujarat, Kerala.** In these states, the share of the agricultural economy is relatively lower than in highly agrarian states, yet PACCS credit flows remain high. This suggests diversifying lending activities beyond crop loans, including allied and non-credit activities, as well as diversified rural lending.

Agricultural Dependency and Credit Alignment of PACCS (2023)



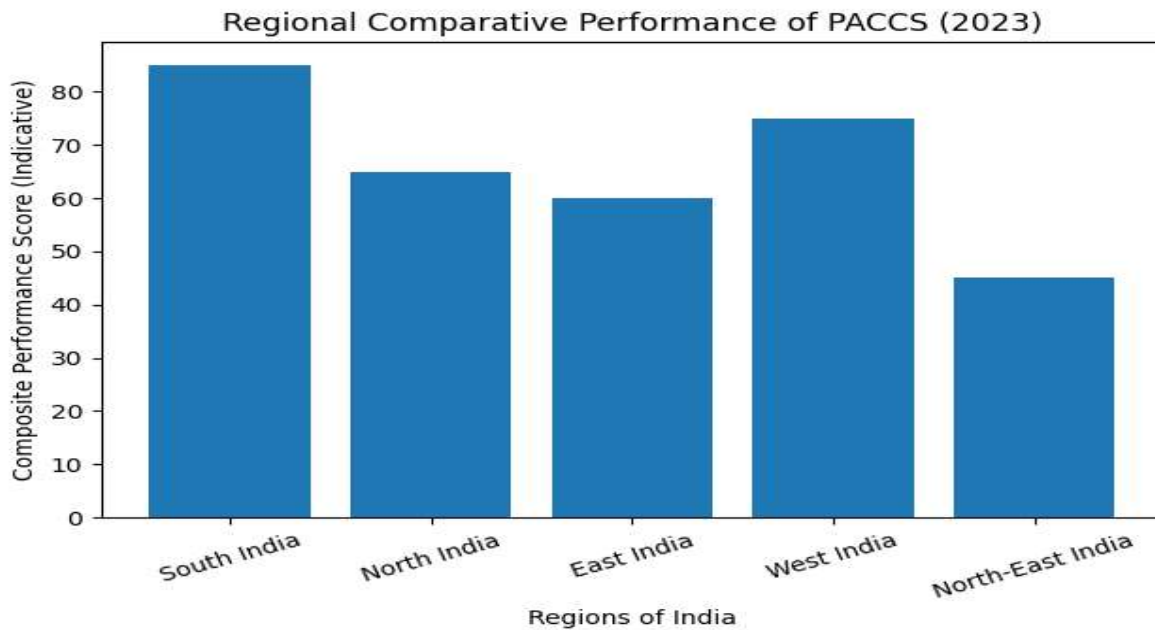
The analysis shows that Agricultural dependency alone does not determine credit intensity. While some states display alignment between Agricultural demand and credit supply, others show either credit gaps or diversified leading patterns. Strengthening credit delivery in high-agricultural but low-credit states is essential to ensure inclusive rural development.

11. REGIONAL COMPARATIVE ANALYSIS OF PACCS

A regional comparison of Primary Agricultural Cooperative Credit Societies (PACCS) can be understood through the lens of regional development theory and institutional economics. According to regional development theory, economic performance differs across regions due to variations in historical evolution, institutional capacity, Agricultural structure, and policy implementation. In India, Cooperative development has not evolved uniformly. Southern and Western regions historically invested more in Cooperative institutional strengthening, member participation, and financial discipline. This aligns with institutional theory, which holds that stronger local institutions lead to better financial outcomes. From a structural perspective, Agricultural intensity and cropping patterns also influence credit demand. Regions with irrigated Agriculture and commercial crops tend to generate higher credit absorption capacity. In contrast, rain-fed and subsistence Agricultural regions often display lower credit intensity and higher risk. The concept of financial deepening further explains disparities. Financial deepening occurs when financial institutions expand outreach, increase credit penetration, and improve recovery



systems. Regions with better governance and administrative monitoring experience stronger financial deepening of PACCS.



Therefore, regional comparative analysis is not merely a geographic classification but reflects differences in institutional strength, economic structure, Agricultural dependency, and governance efficiency. Understanding these regional variations helps identify structural gaps and policy priorities for balanced Cooperative development across India.

12 CONCLUSION

This study examined the viability and performance of Primary Agricultural Cooperative Credit Societies (PACCS) across Indian states using 2023 data. The analysis covered Capital strength, Credit expansion, recovery efficiency, outreach and inclusion, credit intercity per society, Agricultural dependency alignment, and regional comparison. A limited number of states, particularly in the southern and western regions, demonstrate a strong capital base, higher credit intensity, and better recovery efficiency. These states reflect stronger institutional capacity and financial sustainability. In contrast, several agriculturally dependent states exhibit comparatively lower credit flows and higher overdue rates, indicating structural and operational weaknesses. The study also highlights that Agricultural dependency alone does not guarantee higher credit support. Institutional strength, governance quality, recovery mechanisms, and financial management practices play a decisive role in determining performance outcomes. A regional comparison further confirms the uneven development of the Cooperative Credit structure across India. Overall, while PACCS continue to play a vital role in supporting rural credit and financial inclusion, balanced regional development remains a policy priority. Strengthening recovery systems, expanding outreach in low-coverage states, and improving credit alignment in agricultural-dependent regions are essential to enhancing PACCS's long-term viability in India.

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