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Summary

Agricultural credit serves as a crucial indirect input and helps enable the adoption of modern production technology and encouraging private investments on the farms. It is this due to this criticality that, a large number of institutional agencies are involved in the improving access and outreach of credit to agriculture. The Government of India, Reserve Bank of India and National Bank for Agriculture and Rural Development (NABARD) have initiated several policy measures to improve the accessibility of farmers to the institutional sources of credit. Due to the proactive policies, the share of institutional credit, which was little over 7 per cent in 1951, increased manifold to over 69 per cent in 2018, reflecting concomitantly a remarkable decline in the share of non-institutional credit from around 93 per cent to about 31 per cent during the same period. Similarly, agricultural credit disbursement in the country increased from Rs. 22032 crore in 1995-96 to Rs.1863363 crore in 2021-22 at a compound annual growth rate (CAGR) of 19.53 per cent. The per hectare credit flow indicates that there was an impressive increase from Rs.26100 in 2011-12 to Rs.93210 in 2021-22. However, there exists wide regional disparities as are indicated by the range of Rs.21756 per hectare in North Eastern Region to Rs.259554 per hectare in Southern Region. Regional imbalance in the distribution of agriculture credit has persisted over the years. In 2021-22, Southern Region had the largest share (47.13 per cent) followed by the Northern Region (16.27 per cent). It is also pertinent to note that Southern Region receives 47.13 per cent of the total agricultural credit while its share in total gross sown area is only 16.96 per cent. There is large regional disparities in C-D Ratio also, it was highest in Southern (87.6 per cent) followed by Northern (77.7 per cent), Western (77.5 per cent), Central (53.1 per cent), North-Eastern (46.4 per cent) and Eastern (44.7 per cent) regions for the year 2022. Besides the apparent disparities amongst states, their exist stark disparities within a sate which we have attempted to bring out in our district level from select states across different region. States like Uttar Pradesh are a case in point as to why we require a district specific approach to our credit policy. The present situation warrants the attention of the policymakers for mitigating these regional disparities with a due policy focus on credit starved districts. The study also brings out the disparities in agriculture credit disbursement as per landholding size. The central idea is to suggest some important policy instruments like use of digital technology and ways to strengthen the institutional framework to enable a convergence in the availability and access to credit across regions and farm-holding sizes.

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Introduction

The Rural Institutional Credit Market, as it shaped up during 1970s and 80s in the aftermath of 'Green Revolution', was characterized, among others, by multi-product and multi-agency approach. The rationale behind such an approach was that for the economy of the size and diversity like ours, multiplicity of credit products and agencies alone would serve, grease and induce the required development process in the rural economy. Under this arrangement, the farmer entrepreneur would have the flexibility to approach any of the bank branches in its area for credit support either for farm investments or for purchase of farm inputs, depending on his choice of credit needs. Moreover, each credit product was targeted to cater to the stipulated and specific production/investment needs within that specific sector/activity presuming implicitly that the economic function of an activity is independent of the other economic activity of the same farm enterprise, without each influencing or intermingling with the other. Again, components of investment credit or production credit would exclude the maintenance cost of farm production assets, as it is presumed that expenses/maintenance is a recurring cost, which the farm enterprises can meet out of their own farm surpluses. These credit products implicitly also presumed that the consumption needs and production/investment needs of farm enterprises are independent of each other and will not influence or cut upon each other.

However, experience over the preceding few decades suggests that multi-credit product approach has a number of systemic and structural rigidities, turning most of the credit products inefficient and sub-optimal. For example, production credit, as stipulated by the Date Committee and further modified by the Kalia Committee was available on crop season basis only, allowing the farmers to avail the loan at one point of time and repay the same immediately after the harvest of the crop/s. It resulted, among others, in piling up of input inventory whether needed or not at a point of time, adding up farmers' debt service in the process. In addition, it lacked timeliness in loan disbursements. Again, inadequacy of loan amount sanctioned under the then prevailing policy and procedures was also reported to be common, more due to rigidity in the scale of finance followed by the banks without taking into account ground level realities and requirements. Moreover, the crop loan system didn't allow beneficiary farmer necessary flexibility in utilization of the loan amount as per the need. The system was considered cumbersome necessitating frequent shuttling of the farmers between his village and the bank branch for sanction and drawal of the loan amount. To overcome this problem, KCC scheme was launched in 1998 with the aim of providing adequate and timely credit support from the banking system under a single window with flexible and simplified procedure to the farmers. While the KCC structure has vastly improved the crop loan dispensation to agriculture, there exist large scale disparities in KCC penetration across regions.

Agriculture plays a crucial role in the development of the Indian economy. Though the share of agriculture in national income has come down since the beginning of planning era in the economy, it still has a substantial share in the country's Gross Domestic Product/Gross Value Added (GDP/GVA). The contribution of agriculture and allied sector activities in GDP, which was 55.40 per cent in 1950-51, now stands substantially reduced to only 18.64 per cent in 2021-22 (National Account Statistics, 2022). This sector provides livelihood to about 70 per cent of the total population and generates employment

or 54.6 per cent of the country's work force (Economic Survey 2020-21). The Government of India has initiated several policy measures to improve the accessibility of farmers to the institutional sources of credit. The emphasis of these policies has been on progressive institutionalization for providing timely and adequate credit support to all farmers with particular focus on small and marginal farmers and weaker sections of the society to enable them to adopt modern technology and improved agricultural practices for increasing agricultural production and productivity. Most policies focused on enhancing the credit flow have borne fruit as total credit flow in agriculture was just Rs.4,352 crore in 1982-83 which has increased to Rs.1863363 crore in 2021-22.

However, despite significant jump in credit flow to agriculture sector, disparity in credit distribution is observed across regions and in terms of farm landholding. Empirical data suggest that Southern region get almost half of the total agriculture credit flow and reach of institutional agencies have remained poor to the small and marginal farmers. Against this backdrop, the paper aims to analyse the growth in agricultural credit, issues and concerns for regional disparities, highlight the disparities existing within states and across landholding sizes and suggest policy measures to overcome these challenges.

Data and Methodology

The study is based on secondary data compiled from various published sources. The data on gross cropped area (GCA), agricultural gross value added (AgGVA) and Gross Value Added (GVA) were compiled from the Handbook of Statistics on Indian States (2021), Reserve Bank of India (RBI). The data on agricultural credit were collected from the Agriculture Statistics at a Glance, published by the Department of Agriculture and Co-operation, Ministry of Agriculture and Farmers Welfare, Government of India (GoI), NABARD Annual Reports, and various issues of the Economic Survey, published by the Ministry of Finance, GoI. Data on institutional and non-institutional agricultural credit were compiled from the All-India Debt and Investment Survey, various publications brought out once in 10 years by the NSSO/National Statistical Office and Ministry of Statistics and Programme Implementation. Data on district level GCA was sourced from the respective state website and district level GLC has been taken from Potential Linked Credit Plan (PLP) of NABARD for the respective states. The data for the state-wise GLC flow has been taken from respective state's State Focus Paper of NABARD. The data provides useful information on different dimensions of rural finance. The data were compiled and analysed with simple tabular techniques, compound annual growth rate (CAGR) and Coefficient of Variance (CV).

Results and Discussion

Evolution of shares of institutional and non-institutional sources: state-wise and region-wise institutional vis-à-vis non-institutional agricultural credit

One of the objectives of the credit policy is to minimise the role of non-institutional sources, mainly the money-lenders in the flow of agricultural credit. Several initiatives

have been taken in this regard since Independence. Some major milestones in rural credit are the acceptance of Rural Credit Survey Committee Report (1954), nationalisation of major commercial banks (1969 and 1980), establishment of RRBs (1975), establishment of National Bank for Agriculture and Rural Development (NABARD) (1982) and the ongoing reforms in the financial sector since 1991 (Vyas *et al*., 2004). Simultaneously, several measures like establishment of Lead Bank Scheme, direct lending for the priority sectors, banking sector's linkage with the Government sponsored programmes targeted at the poor, Differential Rate of Interest Scheme, the Service Area Approach, the SHG-Bank Linkage Programme were undertaken. In recent years, initiatives like Kisan Credit Card Scheme (KCCs), Special Agricultural Credit Plans, Rural Infrastructure Development Fund (RIDF) and Agriculture Infrastructure Fund, etc have been introduced to enhance the flow of credit to the rural sector. Several committees have been constituted to suggest ways to increase the availability of institutional credit to the rural areas.

The state-wise and region-wise share of institutional and non-institutional sources in the total rural credit for the last four rounds of All India Debt and Investment Survey (AIDIS) is given in Table 1. It can be observed that all states have witnessed a significant rise in reliance for credit on institutional sources after the bank nationalization. However, the performance and trends were not uniform across different states. In some states like Bihar, Chhattisgarh, Tamil Nadu and most of the North Eastern states, the share of institutional credit in the total rural credit fell dramatically. For instance, in Bihar it fell from 51 per cent in 1991-92 to 24 per cent in 2002-03. A similar picture is drawn in all the North East States where the overall institutional credit penetration decreased from 71.27 per cent (1991-92) to 59.55 per cent (2002-03) and later on it increased to 81.41 per cent in 2018-19. A similar trend on decline in borrowings from institutional sources was witnessed in the Eastern Region during the 2002-03 to 2012-13 period (declined from 58.09 per cent to 38.23 per cent). At all India level, the share of institutional credit continuously increased from 55.65 per cent in 1991-91 to 67.00 per cent in 2018-19. Kumar *et al*, (2007) have opined that during the period of banking reforms, the excessive emphasis on profitability eroded the primary mandate of some of the formal financial institutions like co-operatives and RRBs and facilitated the comeback of exploitative non-institutional credit sector in rural lending. It is interesting that Southern Region despite its superior institutional banking infrastructure and credit culture continues to have a persistent large share of borrowings from non-institutional sources.

Table 1. Share of Institutional and Non-Institutional Borrowings in Different States of India: 1991-92 to 2018-19 (%)

State/Region	Institutional sources				Non-institutional sources			
	1991-92	**2002-03**	**2012-13**	**2018-19**	**1991-92**	**2002-03**	**2012-13**	**2018-19**
Haryana	52.67	61.78	63.09	73.60	47.33	38.22	36.91	26.40
Himachal Pradesh	60.30	57.16	83.72	95.20	39.70	42.84	16.28	4.80
Jammu & Kashmir	42.80	82.74	63.46	66.80	57.20	17.26	36.54	33.20
Punjab	59.26	53.82	71.70	73.90	40.74	46.18	28.30	26.10
Rajasthan	30.29	38.69	43.50	53.00	69.71	61.31	56.50	47.00
Northern	**49.06**	**58.84**	**65.09**	**72.50**	**50.94**	**41.16**	**34.91**	**27.50**
Arunachal Pradesh	56.47	78.40	74.80	72.30	43.53	21.60	25.20	27.70
Assam	45.04	46.43	72.23	87.50	54.96	53.57	27.77	12.50

Manipur	53.19	7.76	49.65	46.90	46.81	92.24	50.35	53.10
Meghalaya	91.88	38.11	96.30	90.70	8.12	61.89	3.70	9.30
Mizoram	68.22	84.54	85.56	94.30	31.78	15.46	14.44	5.70
Nagaland	72.76	71.29	20.82	80.20	27.24	28.71	79.18	19.80
Sikkim	98.58	75.81	79.00	89.70	1.42	24.19	21.00	10.30
Tripura	84.02	74.04	69.30	89.70	15.98	25.96	30.70	10.30
North Eastern	**71.27**	**59.55**	**68.46**	**81.41**	**28.73**	**40.45**	**31.54**	**18.59**
Bihar	51.23	23.51	28.87	49.10	48.77	76.49	71.13	50.90
Jharkhand	94.40	90.93	28.03	58.60	5.60	9.07	71.97	41.40
Odisha	70.15	69.27	37.94	61.70	29.85	30.73	62.06	38.30
West Bengal	55.52	48.63	58.10	72.60	44.48	51.37	41.90	27.40
Eastern	**67.83**	**58.09**	**38.23**	**60.50**	**32.18**	**41.92**	**61.77**	**39.50**
Chhattisgarh	74.39	57.32	57.21	79.60	25.61	42.68	42.79	20.40
Madhya Pradesh	57.76	62.26	60.56	67.70	42.24	37.74	39.44	32.30
Uttaranchal	28.97	53.94	83.42	91.10	71.03	46.06	16.58	8.90
Uttar Pradesh	54.84	53.61	61.56	66.90	45.16	46.39	38.44	33.10
Central	**53.99**	**56.78**	**65.69**	**76.33**	**46.01**	**43.22**	**34.31**	**23.68**
Gujarat	74.70	75.74	79.20	81.60	25.30	24.26	20.80	18.40
Maharashtra	77.06	78.12	76.50	88.20	22.94	21.88	23.50	11.80
Western	**75.88**	**76.93**	**77.85**	**84.90**	**24.12**	**23.07**	**22.15**	**15.10**
Andhra Pradesh	25.56	37.50	43.74	35.50	74.44	62.50	56.26	64.50
Karnataka	62.78	62.51	63.00	68.40	37.22	37.49	37.00	31.60
Kerala	81.79	81.63	89.80	86.90	18.21	18.37	10.20	13.10
Tamil Nadu	61.92	46.63	63.96	67.60	38.08	53.37	36.04	32.40
Telangana	0.00	0.00	34.53	41.70	0.00	0.00	0.00	58.30
Southern	**58.01**	**57.07**	**59.01**	**60.02**	**33.59**	**42.93**	**34.87**	**39.98**
All-India	***55.65***	***57.09***	***59.80***	***67.00***	***44.35***	***42.91***	***40.20***	***33.00***

Source: Data of Debt and Investment Survey NSSO, 48th, 59th, 70th and NSO 77th Rounds.

In order to bring the excluded agricultural households into the fold of institutional credit in a structured and sustainable manner, there is a need to build an enabling ecosystem with respect to policy interventions, institutional innovations and digital technologies. The enabling ecosystem would include digitisation of land records, reforming of land leasing framework, creating a national level agency to build consensus among states and the Centre with regard to agriculture-related policy reforms and innovative digital solutions to bridge the information gap between the banks and farmers (RBI, 2019).

Institutional Credit: Share of Various Agencies in Ground Level Credit (GLC) Flow to Agriculture

The recent past witnessed a healthy growth in the flow of agriculture credit, particularly since the introduction of the policy of doubling of agriculture credit by the Government of India. Agriculture credit grew at an overwhelming rate of 35 per cent per annum during the doubling period (2004-05 to 2006-07). During the period 1999-2000 to 2021-22, overall agricultural credit disbursement increased from Rs.46268 crore to Rs.1863363 crore (Table 2). Overall, GLC disbursement grew at the rate of 18.84 per cent per annum with the highest growth rate of 21.59 per cent registered by the RRBs, followed by CBs (20.63 per cent) and Cooperative Banks (12.52 per cent).

One of the prominent features of the trends in GLC is the change in share of various agencies. Disaggregated data indicate that the share of cooperative banks, which was around 40 per cent of GLC in agriculture during 1999-2000, had reduced to 13.05 per cent in 2021-22. There was tremendous improvement in the share of commercial banks, which was 53.46 per cent during 1999-2000, but settled at an average of 72 per cent from

2009-10 to 2014-15. However, it came down to 70.23 per cent in 2015-16 and thereafter it has picked up and is now stagnant around 76 per cent. RRBs improved their share from 6.86 per cent in 1999-2000 to 13.03 per cent in 2015-16. However, it has come down slightly to 10.96 per cent in 2021-22. The higher CV of commercial banks (90.08 per cent) and RRBs (94.15 per cent) signify greater variability in credit disbursement by these agencies in comparison to cooperative banks (68.43 per cent).

Table 2. Agency-wise Credit Flow to Agriculture Sector in India

(Rs.in crore)

Year	Cooperative Banks	Regional Rural Bank	Commercial Banks	Other Agencies	Total
1999-2000	18260 (39.47)	3172 (6.86)	24733 (53.46)	103	46268
2000-2001	20718 (29.22)	4220 (7.99)	27807 (52.64)	82	52827
2001-2002	23524 (37.91)	4854 (7.82)	33587 (54.13)	80	62045
2002-2003	23636 (33.98)	6070 (8.73)	39774 (57.18)	80	69560
2003-2004	26875 (30.90)	7581 (8.72)	52441 (60.29)	84	86981
2004-2005	31231 (24.92)	12404 (9.90)	81481 (65.02)	193	125309
2005-2006	39403 (21.83)	15223 (8.43)	125477 (69.52)	382	180485
2006-2007	42480 (18.52)	20435 (8.91)	166485 (72.57)	-	229400
2007-2008	48258 (18.95)	25312 (9.94)	181088 (71.11)	-	254658
2008-2009	45966 (15.23)	26765 (8.87)	228951 (75.83)	226	301908
2009-2010	63497 (16.51)	35217 (9.16)	285800 (74.33)	-	384514
2010-2011	78121 (16.68)	44293 (9.46)	345877 (73.86)	-	468291
2011-2012	87963 (17.21)	54450 (10.65)	368616 (72.13)	-	511029
2012-2013	111203 (18.31)	63681 (10.48)	432491 (71.21)	-	607375
2013-2014	119964 (16.43)	82653 (11.32)	527506 (72.25)	-	730123
2014-2015	138469 (16.38)	102483 (12.12)	604376 (71.50)	-	845328
2015-2016	153295 (16.74)	119261 (13.03)	642954 (70.23)	-	915510
2016-2017	142758 (13.40)	123216 (11.56)	799781 (75.04)		1065755
2017-2018	150389 (12.87)	140959 (12.06)	877155 (75.07)		1168503
2018-2019	152340 (12.12)	149667 (11.91)	954823 (75.97)		1256830
2019-2020	157367 (11.30)	165326 (11.87)	1070036 (76.83)		1392729

2020-2021	190682 (12.10)	190012 (12.06)	1194704 (75.84)		1575398
2021-2022	243220 (13.05)	204180 (10.96)	1415964 (75.99)		1833363
CAGR	**12.52**	**21.59**	**20.63**		**18.84**
CV (%)	**68.43**	**94.19**	**90.08**		**87.07**

Source: NABARD data bank (various issues) and Ensure Portal, NABARD.
Note: Figures given in parentheses indicate the percentage.

Overall Growth and Outreach of Agricultural Credit

During 2021-22, the institutional credit flow to the agriculture sector in India was to the tune of Rs.18.63 lakh crore against the target of Rs.16.50 lakh crore, including Rs.10.99 lakh crore of short-term credit and Rs.7.64 lakh crore of long-term credit (Table 3). It may also be observed from the table that the share of Cooperative Banks, RRBs and Commercial Banks (CBs) under crop loans was 57.36 per cent, 5.85 per cent and 36.80 per cent, respectively during 1995-96. However, the share of CBs has increased to 64.00 per cent in 2021-22 and that for RRBs had improved significantly (15.17 per cent) in 2021-22, whereas the share of cooperative banks declined significantly to 20.83 per cent. The share of short-term credit decreased from 65.93 per cent in 1995-96 to 59.02 per cent in 2021-22 (Figure 1). During the same period, the highest growth was witnessed under RRBs (23.83 per cent) followed by CBs (22.47 per cent) and Cooperative Banks (13.75 per cent).

As we know, long-term credit has been the major driving force of the private sector capital formation in agriculture (PSCFA). With the concerted efforts of Rural Financial Institutions, operationalization of Small Finance Banks, Non-banking Financial Companies-Micro Finance Institutions (NBFC-MFIs), refinance support from NABARD under Long Term Rural Credit Fund (LTRCF) to RRBs and Rural Cooperative Banks, Area Development Scheme of NABARD, etc., the investment credit/long term credit in agriculture sector has been exceeding the targets for the past four consecutive years. The share of long-term credit in total institutional credit flow to agriculture has been rising steadily, and exceeded 40 per cent mark in 2018-19. The share of long-term credit, which stood at 22.48 per cent in 2011-12, has increased to 40.98 per cent in 2021-22 (Figure 2). During the period 1995-96 to 2021-22, the long-term credit, which adds to the capital formation in the primary sector, increased at the CAGR 19.24 per cent. During this period, total agricultural credit grew at the CAGR of 19.53 per cent (Table 3). This can also be seen in the increase registered in the share of private sector in Gross Capital Formation in Agriculture sector to 85.69 per cent in 2020-21 from 56 per cent in 1980-81.

Table 3. Flow of Institutional Credit to Agriculture Sector in India

(Rs.in crore)

Year	Short-Term (ST) Credit				Medium Term/Long Term (MT/LT) Credit				Total Credit (ST+MT/LT)			
	Coop. banks	RRBs	Comm. Banks	Total	Coop. banks	RRBs	Comm. Banks	Total	Coop. banks	RRBs	Comm. Banks	Total
1995-96	8331	849	5345	14525	2148	532	4827	7507	10479	1381	10172	22032
1996-97	9328	1121	6549	16998	2616	563	6234	9413	11944	1684	12783	26411

1997-98	10895	1396	8349	20640	3190	644	7482	11316	14085	2040	15831	31956
1998-99	12544	1710	9622	23876	3413	750	8821	12984	15957	2460	18443	36860
1999-00	14845	2423	11697	28965	3518	749	13036	17303	18363	3172	24733	46268
2000-01	16583	3245	13486	33314	4218	974	14321	19513	20801	4219	27807	52827
2001-02	18829	3777	17904	40510	4777	1077	15683	21536	23605	4854	33587	62046
2002-03	19707	4775	21104	45585	4010	1295	18670	23975	23716	6070	39774	69560
2003-04	22697	6088	26192	54976	4262	1493	26249	32005	26959	7581	52441	86981
2004-05	27261	10010	38791	76062	4163	2394	42690	49247	31424	12404	81481	125309
2005-06	34997	12712	57640	105350	4788	2511	67836	75135	39786	15223	125476	180485
2006-07	38622	16631	92846	148099	3858	3804	73639	81301	42480	20435	166485	229399
2007-08	43294	21133	116966	181393	4964	4179	64121	73264	48258	25312	181087	254657
2008-09	40230	22413	147818	210461	5961	4352	81133	91446	46191	26765	228951	301907
2009-10	56946	29802	189908	276656	6551	5415	95892	107858	63497	35218	285800	384514
2010-11	69038	38121	228391	335550	9083	6172	117486	132741	78121	44293	345877	468291
2011-12	81829	47401	266928	396158	6134	7049	101688	114871	87963	54450	368616	511029
2012-13	102592	55957	314950	473500	8611	7724	117540	133875	111203	63681	432490	607375
2013-14	113574	70697	364164	548435	6390	11956	163342	181687	119964	82653	527506	730123
2014-15	130350	89326	415736	635412	8119	13157	188640	209916	138469	102483	604376	845328
2015-16	143803	101579	419931	665313	9492	17681	223024	250197	153295	119261	642954	915510
2016-17	131880	105001	452576	689457	10878	18215	347205	376298	142758	123216	799781	1065756
2017-18	136102	119790	497322	753214	14219	21426	347205	382850	150321	141216	844527	1136064
2018-19	142750	125654	483805	752209	9591	24013	471017	504620	152340	149667	954823	1256830
2019-20	148287	138069	538795	825151	9080	27257	531241	567579	157367	165326	1070036	1392729
2020-21	179267	156369	558121	893757	11415	33643	636583	681641	190682	190012	1194704	1575398
2021-22	229093	166782	703804	1099679	14127	37398	712160	763685	243220	204180	1415964	1863363
CAGR (%)	**13.75**	**23.83**	**22.47**	**19.56**	**6.35**	**19.13**	**20.86**	**19.24**	**12.82**	**22.75**	**21.83**	**19.53**

Source: Department of Agriculture, Cooperation & Farmers Welfare and NABARD.

Figure 1: Agency-wise Share of Short Term Credit (%)

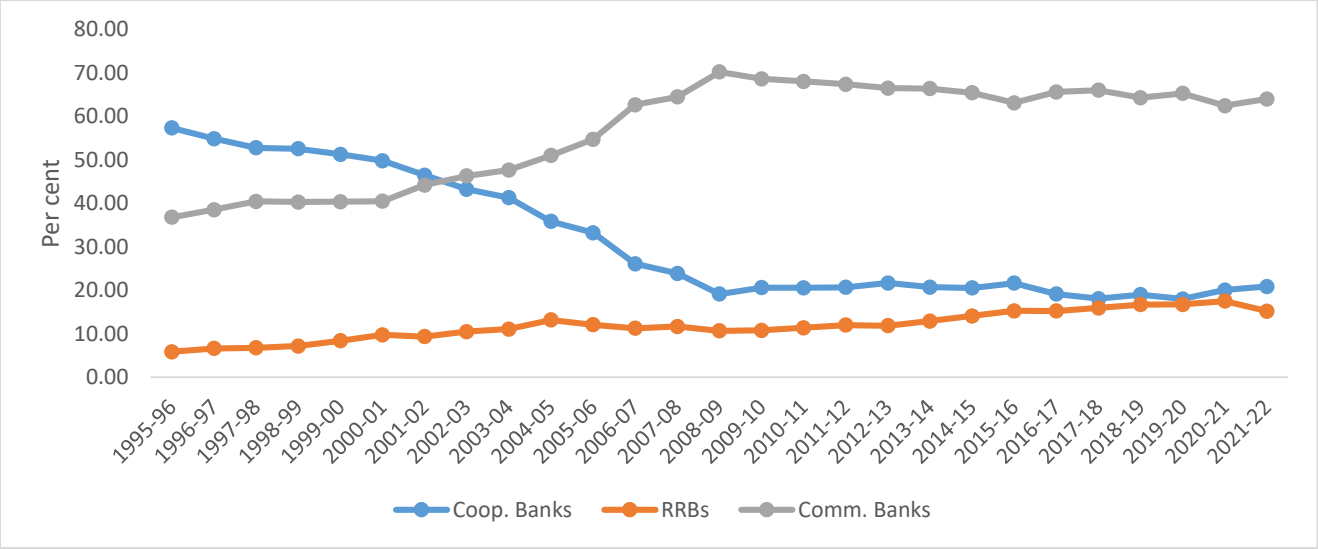


Figure 2: Agency-wise Share of MT/LT Credit (%)

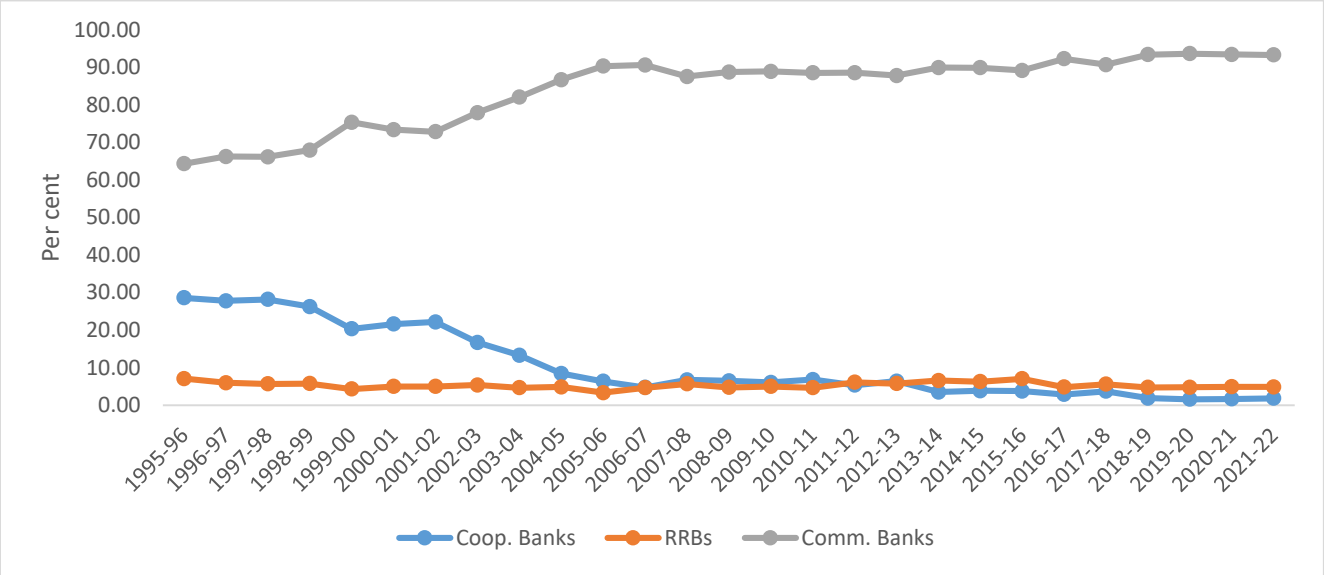
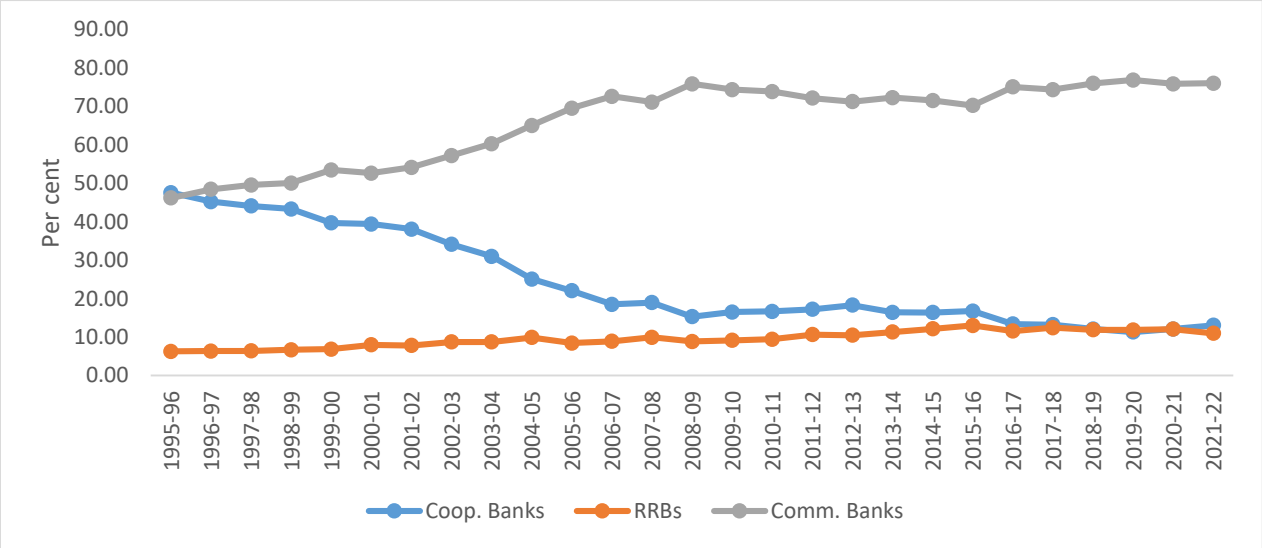


Figure 3: Agency-wise Share in Total Credit (ST+MT/LT) (%)



Enhancing Credit Penetration: Kisan Credit Card (KCC)

KCC has emerged as the crucial product in enhancing the access and penetration of crop loans to the agriculture households that were previously outside the ambit of institutional credit structure. While the KCC structure has vastly improved the crop loan dispensation to agriculture, there exist large scale disparities in KCC penetration across regions. There are states where coverage of farmers is at a low level and in others multiple cards seem to have been issued to households. States such as Punjab and Haryana have more than one card issued per farm holding, whereas Bihar has less than one in five farm holdings issued

with KCC. In the north-east region, coverage is much lower than the all-India average (Table 4)

A surprise is the low coverage of KCC in Tamil Nadu (24.5%) and Kerala (14.2%) compared to Karnataka (86%), when seen in the context of normally high-credit penetration in these. The popularity of gold loans in these states might be a reason for the low KCC penetration.

Table 4. Credit Delivery through KCC

State	Operational Holdings ('000)	Active KCC ('000)	% Active KCC to Holdings	Average Loan per KCC (Rs.)
Haryana	1628	2,264	139.07	200335
Himachal Pradesh	997	392	39.32	169035
Jammu & Kashmir	1417	1,009	71.21	64599
Punjab	1093	2,244	205.31	242985
Rajasthan	7655	6,615	86.41	127947
Assam	2742	737	26.88	50951
Arunachal Pradesh	113	9	7.96	68913
Meghalaya	232	61	26.29	47588
Mizoram	90	25	27.78	76564
Manipur	150	18	12.00	56327
Nagaland	197	28	14.21	52507
Tripura	573	256	44.68	20249
Sikkim	72	7	9.72	48471
Gujarat	5321	2,892	54.35	180223
Maharashtra	15285	6,868	44.93	81006
Goa	75	14	18.67	81421
Uttar Pradesh	23822	11,281	47.36	104658
Uttarakhand	881	606	68.79	117339
Madhya Pradesh	10003	6,274	62.72	108746
Chhattisgarh	4011	1,766	44.03	48435
Karnataka	8681	4,823	55.56	95562
Kerala	7583	1,863	24.57	143559
Andhra Pradesh	8524	4,605	54.02	113526
Tamil Nadu	7938	2,973	37.45	66816
Telangana	5948	4,260	71.62	93477
Puducherry	34	16	47.06	109450
Odisha	4866	4,338	89.15	44536
West Bengal	7243	3,712	51.25	36753
Bihar	16410	2,771	16.89	62737
Jharkhand	2803	925	33.00	48524
Total	**146454**	**73,770**	**50.37**	**102092**

Source: Author's calculation based on data from Agriculture Census 2015-16 and Trends and Progress in Banking 2021-22, RBI.

Disparities in Credit Dispensation

Regional Disparities

Despite the rapid growth witnessed in the credit disbursal to the agriculture sector, it is pertinent to note that this growth has not been equal across regions. Infact, among the striking features of the agricultural credit scheme in India are the regional disparities in the disbursement of agricultural credit by RFIs. Regional imbalance in the distribution of

agriculture credit has persisted over the years. In 2021-22, the Southern Region had the largest share(47.13%) followed by the Northern Region(16.27%), Central Region(12.84%), Western Region(12.18%), Eastern Region(10.83%) and Northeast Region (0.76%).

Incidentally, the share of Southern Region in the total agriculture credit flow has increased continuously from the year 2016-17 whereas the share of other regions except Eastern and Northeast Regions has decreased from 2013-14 to 2021-22 (Table 4 and Figures 4 and 5). This indicates a persistent and deeper regional imbalance of the credit flow across regions in the country. North Eastern, Southern, Eastern, Western, Northern and Central Regions have grown at the CAGR of 18.37 per cent, 14.01 per cent, 13.12 per cent, 9.92 per cent, 6.27 per cent, and 8.70 per cent, respectively during the period 2013-14 to 2021-22 and that for all India was 11.03 per cent.

Table 5. Region-wise Credit Flow to Agricultural Sector in India

(Rs.in crore)

Region	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	CAGR (%)
Northern Region	167813 (22.98)	202479 (23.95)	216919 (23.69)	232847 (21.85)	256991 (22.10)	270197 (21.50)	283945 (20.39)	269899 (17.13)	303191 (16.27)	6.27
North Eastern Region	4345 (0.60)	4453 (0.53)	5833 (0.64)	8773 (0.82)	10273 (0.88)	11172 (0.89)	11809 (0.85)	16502 (1.05)	14085 (0.76)	18.37
Eastern Region	56217 (7.70)	80013 (9.47)	103673 (11.32)	86860 (8.15)	96751 (8.32)	113792 (9.05)	131668 (9.45)	151007 (9.59)	201727 (10.83)	13.12
Central Region	110929 (15.19)	133118 (15.75)	153289 (16.74)	156476 (14.68)	167096 (14.37)	171261 (13.63)	197015 (14.15)	223109 (14.16)	239168 (12.84)	8.70
Western Region	95420 (13.07)	106981 (12.66)	107934 (11.79)	136787 (12.83)	136374 (11.73)	151115 (12.02)	156206 (11.21)	185151 (11.75)	227017 (12.18)	9.92
Southern Region	295398 (40.46)	318284 (37.65)	327862 (35.81)	444013 (41.66)	495132 (42.59)	539292 (42.91)	612087 (43.95)	729731 (46.75)	878175 (47.13)	14.01
India	**730123 (100)**	**845328 (100)**	**915510 (100**	**1065756 (100)**	**1162617 (100)**	**1256830 (100)**	**1392729 (100)**	**1575398 (100)**	**1863363 (100)**	**11.03**

Source: NABARD Data Bank (various issues) and Ensure Portal, NABARD.
Note: Figures in parentheses indicate the share in Total GLC.

Figure 4: Region-wise Share in GLC in 2013-14

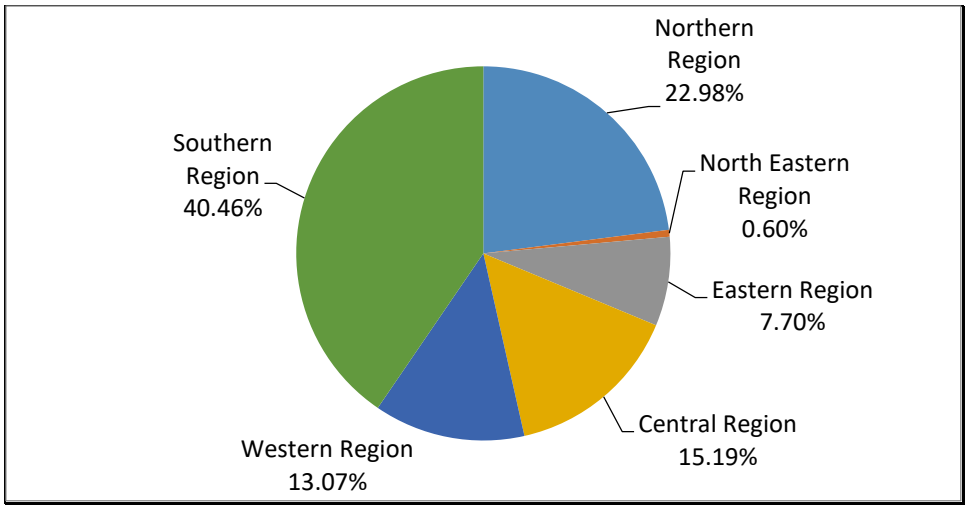
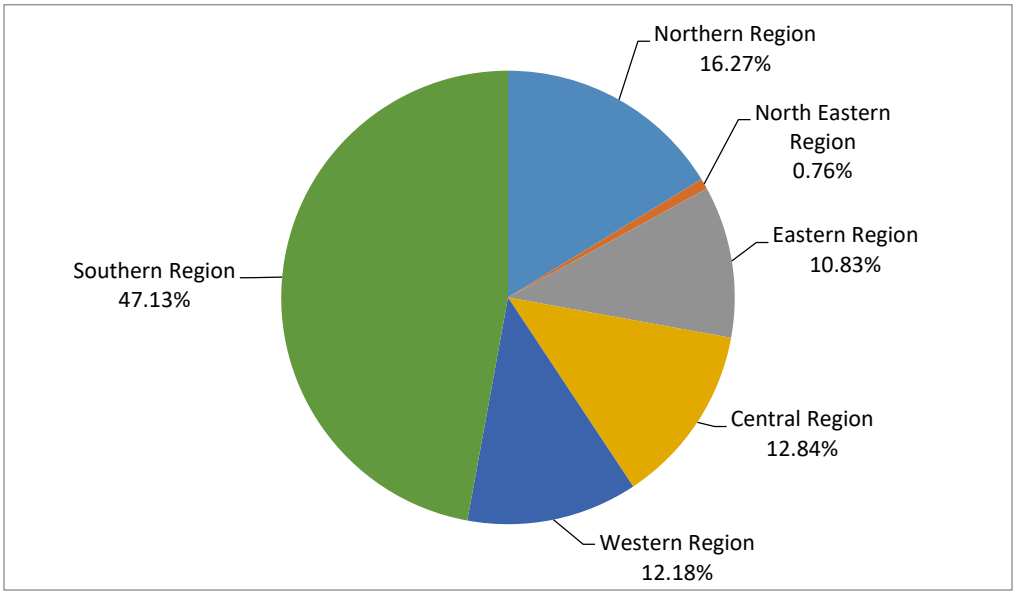


Figure 5: Region-wise Share in GLC in 2021-22



The significantly better performance of the Southern region is often attributed to its higher credit absorption capacity mainly because of better infrastructure facilities, better outreach and credit availability, leading to improvement in its share. In terms of credit disbursement per hectare also there existed large disparities across regions with Southern Region having Rs.259554 credit disbursement per hectare which is significantly higher than the national average of Rs.93210 (Table 6). Similarly, the region-wise average amount of loan disbursed per account was highest in Southern Region for small and marginal farmers and all farmers and same for lowest in North Eastern Region, both for all farmers and small and marginal farmers.

Table 6. Region-wise Average Loan Disbursement per Account during 2021-22

(Amount in Rs.)

Region	**Average loan amount of all Farmers**	**Average loan amount of SF/MF**	**Agriculture credit disbursement per ha.**
Northern Region	152025	105692	72991
North Eastern Region	70250	58980	21756
Eastern Region	78668	55267	84035
Central Region	101921	73309	40829
Western Region	164714	94283	63983
Southern Region	129580	108592	259554
All India	**122099**	**90836**	**93210**

Source: Authors calculated based on NABARD Data Bank (various issues) and Ensure Portal, NABARD.

Region-wise and Agency-wise Average Share in Agriculture Credit

The region-wise disparities exist across agencies with commercial banks agriculture extending 47.67 per cent of the total credit to Southern region followed by Northern region with only 18.83 per cent (combined credit disbursement for the period 2017-18 to 2021-22). The region-wise disparities in agriculture credit disbursement are even greater for commercial banks in terms of crop loans (Short-term) disbursement where 50.55 per cent of total short-term loans disbursed are in the Southern region. The disbursement patterns by RRBs are also similarly skewed in favor of Southern region. However, it is pertinent to note that in terms of regional credit disbursement spread, Cooperative Banks are found most equitable, especially when it comes to crop loan disbursement (Table 7).

Table 7. Region-wise and Agency-wise Average Share in Agriculture Credit Disbursement Between 2017-18 to 2021-22 (%)

Region	Cooperative Banks			RRBs			Commercial Banks			Total Agri. Credit		
	ST	LT	TL	ST	LT	TL	ST	LT	TL	ST	LT	TL
Northern	22.55	13.97	21.96	21.70	5.78	19.00	21.92	15.63	18.83	22.01	15.10	19.23
North Eastern	0.07	2.09	0.21	0.30	3.88	0.91	0.32	1.69	1.00	0.27	1.81	0.89
Eastern	16.37	12.15	16.08	9.50	35.61	13.92	3.24	12.50	7.80	6.78	13.66	9.54
Central	15.03	4.01	14.26	24.54	3.33	20.95	14.30	11.07	12.71	16.13	10.53	13.88
Western	16.73	28.55	17.55	5.71	1.44	4.99	9.67	14.41	12.00	10.36	14.06	11.84
Southern	29.24	39.23	29.94	38.25	49.95	40.23	50.55	44.69	47.67	44.46	44.84	44.61
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: Authors calculated based on Data on Ensure Portal, NABARD.
Note: ST=Crop Loan and LT= Long Terms and TL=Total Loan.

Regional Disparities: Agriculture Credit vis-a-vis Real Indicators in Agriculture

Empirical evidence indicates that there is a growing disconnect between the real sector parameters and regional distribution of agriculture credit. For example, the Central region of the country accounts for 28.77 per cent of the Gross Sown Area (GSA), 34.75 per cent of Gross Irrigated Area (GIA), 33.24 per cent of foodgrains,27.92 per cent of oilseeds, 29.14 per cent of vegetables and 21.73 per cent of fruits and with a cropping intensity of 149 per cent accounts for hardly 13.88 per cent of the agriculture credit disbursed. Among all the regions in the country, the Northern region has the highest cropping intensity (178 per cent) and with 20.96 per cent share in GSA and 25.35 per cent in GIA accounts for hardly 19.23 per cent of agriculture credit disbursed. The share in credit of Eastern region is quite low compared to its share in GSA and GIA. The Southern region accounts for around 16.96 per cent GSA and 14.56 per cent GIA, respectively but accounted for the highest share (44.61 per cent) of agricultural credit disbursed during the same period (Table 8). The increased share of Southern region may be because of better infrastructure facilities, better outreach, and credit delivery outlets (Kumar, 2021). The situation is improving marginally in the last few years with an increasing share of Eastern and North Eastern regions due to the special initiatives taken by the NABARD. It may be concluded that the distribution of real sector variables calls for a much better distribution of agriculture credit across region.

Table 8. Regional Distribution of Agriculture Credit and Real Sector Indicators

(%)

Region	Credit Disbursement@	Gross Sown Area#	Gross Irrigated Area#	Cropping intensity#	Foodgrains*	Oilseeds*	Vegetables*	Fruits*	Gross Value Added*	Ratio of Agri Credit to Agri GVA (2021-22)	Share in rural/ semi urban branches (As on 31-3-2022)
Northern	19.23	20.96	25.35	177.53	25.45	24.7	9.06	6.95	9.14	96.26	16.77
North Eastern	0.89	3.22	0.97	140.98	2.90	1.24	3.46	4.84	2.23	18.51	3.97
Eastern	9.54	12.08	13.37	143.99	16.69	4.97	30.09	12.19	9.51	59.49	19.42
Central	13.88	28.77	34.75	148.94	33.24	27.92	29.14	21.73	16.12	41.05	21.71
Western	11.84	17.97	10.99	125.19	6.97	30.57	13.45	20.46	9.37	68.24	11.83
Southern	44.61	16.96	14.56	131.35	14.74	10.6	14.52	33.70	13.01	173.96	26.28
India	**100**	**100**	**100**	**143.16**	**100**	**100**	**100**	**100**		**50.91**	**100**

Source: Authors compilation using data from the Handbook of Statistics on Indian Economy, RBI 2021 and Ensure Portal of NABARD.
Note: # Indicates average of five years (2013-14 to 2017-18), * Indicates average of five years (2015-16 to 2019-20 and @ Indicates average of five years (2017-18 to 2021-22).

Credit Penetration

Credit Deposit (C-D) ratio is seen as a crucial indicator of the credit absorption capacity of a region. The ratio depicts the ability of the bank to generate loans (credit out of the deposits). Table 9 depicts the C-D ratio across different regions for scheduled commercial banks in the country. The indicator reflects two important parameters for these regions: i. level of banking penetration and ii. ability of banks to mobilise credit in these regions.

It is pertinent to note that C-D ratio at the All-India level stood at 72.1 per cent (2022) and has remained 76.6 on an average during the last decade (2012-22). However, we observe large disparities at the regional level. Southern (87.6 per cent), Northern (77.7 per cent) and Western (77.5 per cent) regions have a high for the year 2022 and this trend has been consistent for the past decade. On the other hand, Eastern (44.7 per cent), North-Eastern (46.4 per cent) and Central (53.1 per cent) regions have a low C-D ratio for the year 2022 and throughout the past decade. The regions with low C-D ratio should attempt to diversify their loan portfolio to improve their credit penetration.

Table 9. Region-wise Credit-Deposit Ratio of Scheduled Commercial Banks According to Place of Utilisation (As at end-March) (%)

Region	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Northern Region	62.2	74.9	83.4	89.6	89.5	93.6	91.8	87.4	79.1	81.9	87.1	85.7	78.2	77.7
North-Eastern Region	44.6	39.1	36.3	37.8	35.3	36.6	35.2	39.3	38.2	41.0	41.9	42.2	46.1	46.4
Eastern Region	50.4	53.5	53.3	52.5	52.2	51.1	48.4	46.8	43.0	44.1	43.3	44.0	43.9	44.7
Central Region	45.8	51.0	50.9	50.7	53.6	51.8	51.3	53.2	48.7	50.5	52.1	51.6	51.3	53.1

Western Region	71.8	74.7	74.1	80.7	79.9	80.3	80.9	88.3	88.5	90.0	90.4	86.7	78.1	77.5
Southern Region	83.9	94.8	98.3	99.3	99.3	97.4	92.4	92.1	86.6	93.2	94.2	91.6	86.3	87.6
All India	**66.0**	**73.3**	**75.6**	**79.0**	**78.8**	**79.0**	**77.1**	**78.4**	**73.8**	**76.7**	**78.3**	**76.5**	**71.7**	**72.1**

State-wise Agriculture Credit Disbursement

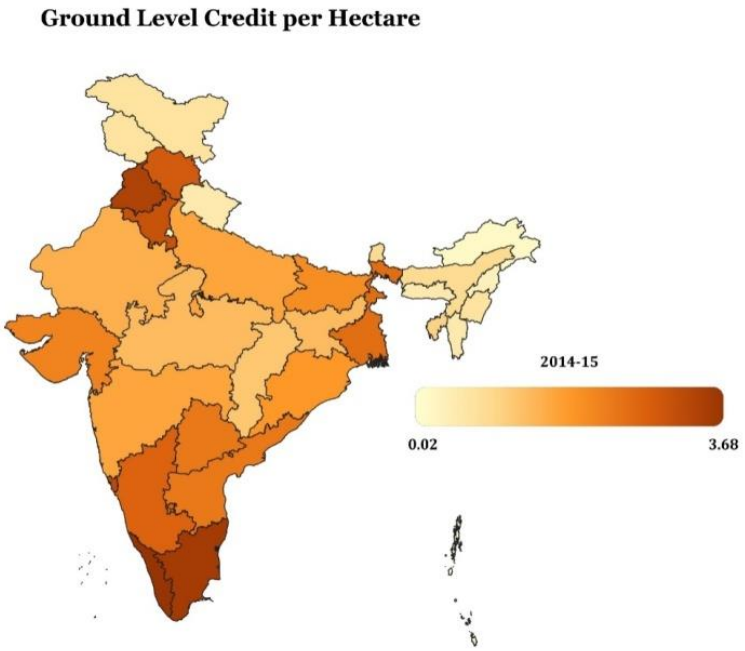
The disparity in credit dispensation can also be seen for credit disbursed per ha across different states. The credit disbursements in the Southern States has intensified in the last 6 years and overall credit disbursement per ha has increased. At the All-India level, credit disbursement has increased from Rs.44,000/ha (2014-15) to Rs 93,000/ha (2021-22) (Table 10 and Figures 6a, 6b).

Table 10. Agriculture Credit per Hectare (Rs.lakh/ha)

States	2014-15	2021-22
Andhra Pradesh	0.38	2.77
Arunachal Pradesh	0.02	0.04
Assam	0.08	0.23
Bihar	0.32	1.16
Chhattisgarh	0.14	0.35
Goa	0.88	0.97
Gujarat	0.37	0.84
Haryana	0.60	1.02
Himachal Pradesh	0.51	0.93
Jammu & Kashmir	0.07	1.23
Jharkhand	0.21	0.48
Karnataka	0.48	1.16
Kerala	3.68	4.42
Madhya Pradesh	0.21	0.35
Maharashtra	0.28	0.53
Manipur	0.07	0.09
Meghalaya	0.06	0.09
Mizoram	0.06	0.16
Nagaland	0.04	0.05
Odisha	0.30	0.93
Punjab	0.94	0.96

Rajasthan	0.25	0.48
Sikkim	0.08	0.14
Tamil Nadu	1.77	5.68
Telangana	0.38	1.46
Tripura	0.09	0.65
Uttar Pradesh	0.28	0.45
Uttarakhand	0.06	0.89
West Bengal	0.42	0.63
All India	**0.44**	**0.93**

Figure 6a: Per hectare Credit Disbursement Across States (2014-15) (Rs. per ha)



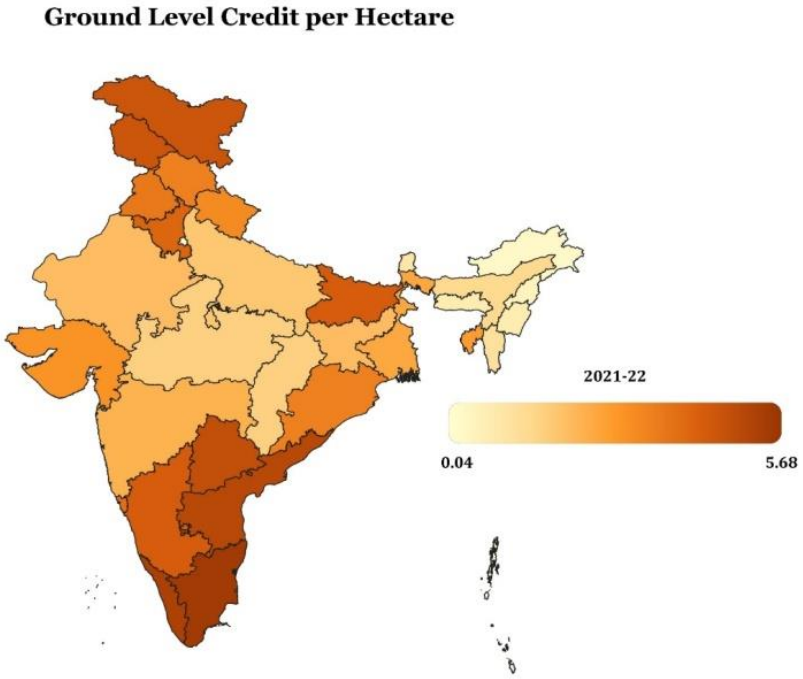


Figure 6b: Per hectare Credit Disbursement Across States (2021-22) (Rs. per ha)

Agricultural Credit vis a vis Agri-GVA

The share of agricultural credit as a proportion of Agricultural Gross Value Added (AgGVA) which has been continuously increasing from 34.02 per cent in 2011-12 to 47.03 per cent in 2021-22 (Table 11). The agricultural credit as proportion of total GVA, which had increased from 6.30 per cent in 2011-12 to 8.72 per cent in 2020-21, declined marginally to 8.01 per cent of total GVA in 2021-22. The agricultural credit per ha of gross cropped area has shown an increasing trend with continuous rise during the study period. It has increased from Rs.26100 per ha in 2011-12 to Rs. 93210 per ha in 2021-22. More than three-fold increase has been registered in nominal terms during the same period.

Table 11. Ratio of Direct Agricultural Credit (Disbursements) to Agricultural Gross Value Added (AgGVA)

Year	Agricultural Credit/Total GVA (%)	Agricultural Credit/AgGVA (%)	Agricultural Credit per ha (Rs.)
2011-12	6.30	34.02	26100
2012-13	6.60	36.26	31273
2013-14	7.05	37.90	36333

2014-15	7.35	40.38	42612
2015-16	7.28	41.10	46460
2016-17	7.63	42.31	53234
2017-18	7.54	41.29	58451
2018-19	7.32	41.48	62870
2019-20	7.59	41.47	69668
2020-21	8.72	43.65	78805
2021-22	8.72	47.03	93210

Source: Authors calculations based on GLC data from NABARD, Agricultural Statistics at a Glance (2021) and RBI.

These indicators point that growth in agriculture credit is displaying a positive and upward trend, however, the issues related to disparities in credit disbursement across regions and landholding size require immediate policy interventions.

Disparities by Landholding Size: Coverage of Small and Marginal Farmers

Disparities in credit disbursement occur not just across region but also on the basis of size of landholdings, with the marginal and small farmers (SMF) being persistently excluded. Data also reveals, that although SMF have a share of 76.8 per cent in loan accounts with Commercial Banks, their share in loan disbursed by Commercial Banks is at a lower level of around 53.4 per cent during 2021-2022 (Table 12). This is mainly on account of lower loan amount sanctioned for the SMF as against other farmers. Cooperative Banks and RRBs are lending a relatively higher share of 63.8 per cent and 72.4 per cent, respectively, of their total lending to small and marginal farmers in the country. The average loan disbursement per account for SMF was Rs.90836 and it varies from Rs.69728 by Cooperative Banks to Rs.121439 by RRBs during 2021-22.

Table 12. Ground Level Credit Flow to Agriculture-Share of Small and Marginal Farmers

Year	Agency	No. of accounts (Lakh)			Loan disbursed (Rs.in crore)			Average loan amt of SF/MF (Rs.)
		Total	SF/MF	Share of SF/MF (%)	Total	SF/MF	Share of SF/MF (%)	
2013-14	Com. Banks	385.2	232.5	60.4	527506	201296	38.2	86579
	Coop. Banks	321.4	206.5	64.1	119964	69352	57.8	33585
	RRBs	99.3	66.6	67.1	82653	51359	62.1	77116
	Total	805.9	505.6	62.7	730123	322007	44.1	63739
2014-15	Com. Banks	426.2	195.4	45.9	604376	197540	32.7	101095
	Coop. Banks	306.9	202.8	66.1	138471	78736	56.9	38824
	RRBs	120.5	87.8	72.9	102483	70390	68.7	80171
	Total	853.6	486.0	56.9	845328	346666	41.1	71286
2015-16	Com Banks	441.6	210.2	47.6	642954	200346	31.2	95312

	Coop. Banks	324.2	232.9	71.8	153295	97999	63.9	42078
	RRBs	133.2	97.3	72.8	119261	81653	68.5	84178
	Total	899.6	540.4	60.7	915510	379998	41.5	70318
2016-17	Com. Banks	664.2	482.5	72.6	799781	362675	45.4	75166
	Coop. Banks	269.5	190.1	70.5	142758	89178	62.5	46911
	RRBs	137	99.0	72.3	123216	82496	67	83329
	Total	1071	771.6	72.6	1065755	534351	50.1	69252
2017-18	Com. Banks	732.7	556.9	76.0	871080	389866	44.8	70009
	Coop. Banks	254.6	183.7	72.2	150321	98109	65.3	53401
	RRBs	144.6	104.9	72.5	141216	92482	65.5	88191
	Total	1132	845.5	74.7	1162617	580457	49.9	68655
2018-19	Com. Banks	850.1	631.8	74.3	954823	428063	44.8	67753
	Coop. Banks	255.5	192.9	75.5	152340	106849	70.1	55405
	RRBs	149.8	106.7	71.3	149667	98749	66.0	92539
	Total	1255	931.4	74.2	1256830	633661	50.4	68036
2019-20	Com. Banks	942.7	711.8	75.5	1070036	505849	47.3	71069
	Coop. Banks	260.3	196.0	75.3	157367	109754	69.7	55991
	RRBs	156.0	111.1	71.2	165326	108125	65.4	97357
	Total	1359.0	1018.9	75.0	1392729	723728	52.0	71034
2020-21	Com. Banks	1073.7	764.0	71.2	1194704	610505	51.1	79912
	Coop. Banks	294.6	224.8	76.3	190682	136465	71.6	60695
	RRBs	163.5	114.6	70.1	190012	124171	65.3	108311
	Total	1531.8	1103.4	72.0	1575398	871140	55.3	78947
2021-22	Com. Banks	1068.5	822.5	77.0	1415964	756821	53.4	92018
	Coop. Banks	290.1	222.7	76.8	243220	155254	63.8	69728
	RRBs	167.5	121.8	72.7	204180	147900	72.4	121439
	Total	1526.1	1166.9	76.5	1863363	1059976	56.9	90836

Source: NABARD Data Bank (various issues) and Ensure Portal, NABARD.

As per Agri-census 2015-16, 86.58 per cent farmers are small and marginal farmers (SMF) having less than 2 ha. of land holding owning about 47 per cent of area. Further, 17.3 per cent of total number of landholdings are tenant holdings. However, credit disbursement to SMF is disproportionately low. For all agencies taken together, 76.5 per cent of the total agricultural loan accounts belong to the SMF category, but they received only 56.9 per cent of the total credit disbursed to agriculture during 2021-22 (Table 13 and Figure 7).

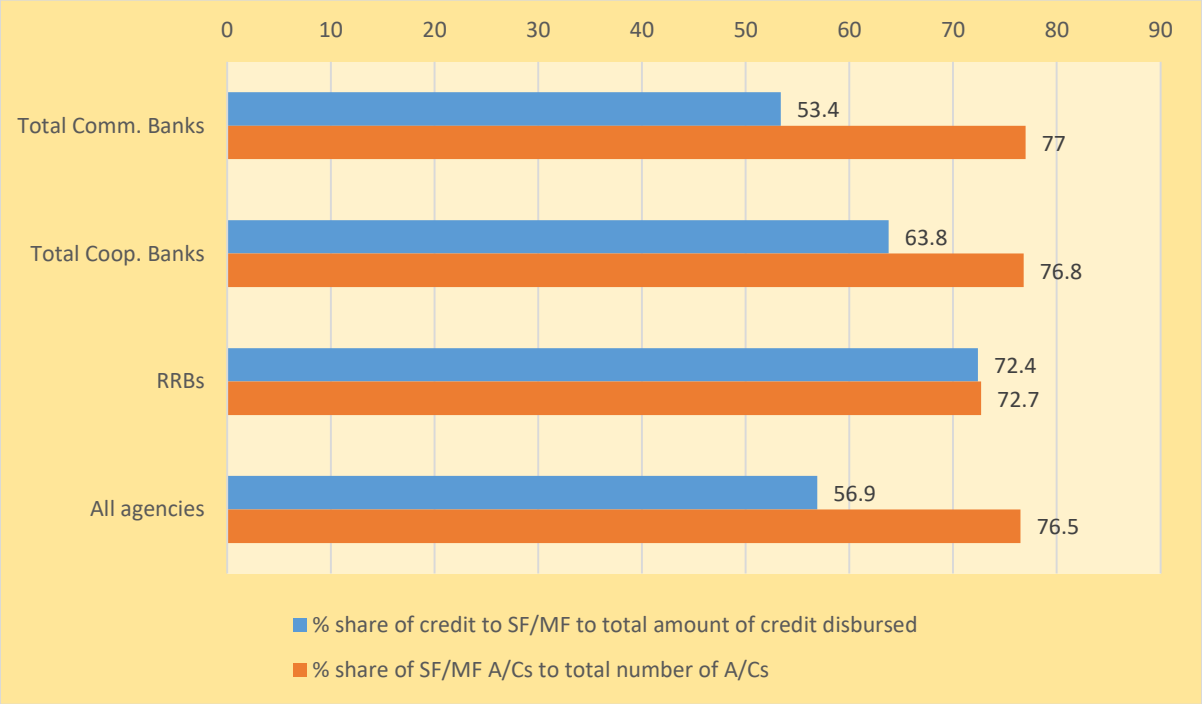
Table 13. Agency-wise Credit Disbursal to SMF Accounts during 2021-22

(Disbursement in Rs. crore, Account in lakh)

Sr. No.	Agency	Total Disbursement	Of which Credit disbursed to SF/MF	SF/MF share to total amount of credit disbursed (%)	Total No. of A/Cs	Of which A/Cs pertaining to SF/MF	% Share to total number of A/Cs

(i)	Public Sector CBs	9,37,998	5,34,375	57.0	626.5	477.2	76.2
(ii)	Private Sector CBs	4,51,250	2,05,657	45.6	389.4	312.0	80.1
(iii)	Small Finance Bank	26,716	16,790	62.8	52.5	33.3	63.4
	Total Comm. Banks	14,15,964	7,56,821	53.4	1068.5	822.5	77.0
(iv)	SCB/DCCBs	2,40,861	1,53,359	63.7	287.9	221.3	76.8
(v)	SCARDB/PCARDB	2,359	1,896	80.4	2.2	1.4	64.4
	Total Coop. Banks	2,43,220	1,55,254	63.8	290.1	222.7	76.8
(vi)	RRBs	2,04,180	1,47,900	72.4	167.5	121.8	72.7
	Total	**18,63,363**	**10,59,976**	**56.9**	**1526.1**	**1166.9**	**76.5**

Figure 7: Agency-wise Share of Disbursement to SF/MF in 2021-22



Incidence of Indebtedness

Low scale and low productivity characterise Indian agriculture. Around 86 per cent of the country's operational landholdings are less than 2 ha, while 68 per cent of farm households live on less than 1 ha. Furthermore, irrigation is unavailable to more than half of the land under agriculture. Surplus from unprofitable crop farming is insufficient to invest in modern agriculture, which necessitates the acquisition of farm machinery and the usage of purchased inputs such as seed, fertiliser, agri-chemicals, diesel, and hired labour. Hence, farmers avail loans to meet cultivation expenses (working capital), invest on farms and meet their consumption requirements. According to the NSO's Situational Assessment Survey (SAS) 2019, indebted agricultural households decreased from 52.0

per cent in 2012-13 to 50.2 per cent in 2018-19. However, among indebted agricultural households, 82.9 per cent were landless, marginal and small farmers.

Table 14 depicts the level of indebtedness (on basis of landholding size) amongst the agricultural households in the 11 states that we have selected for the 6 regions. As stated earlier, the level of indebtedness decreases as the size of landholding decreases. The disparities are the sharpest in the state of West Bengal where 93.8 % of the indebted farmers were marginal farmers. Similarly, in Bihar, 83.8 % of the indebted farmers were marginal farmers. In the states of Maharashtra and Andhra Pradesh the disparity is relative less stark with semi medium farmers have more than 1/5 of the indebted category households.

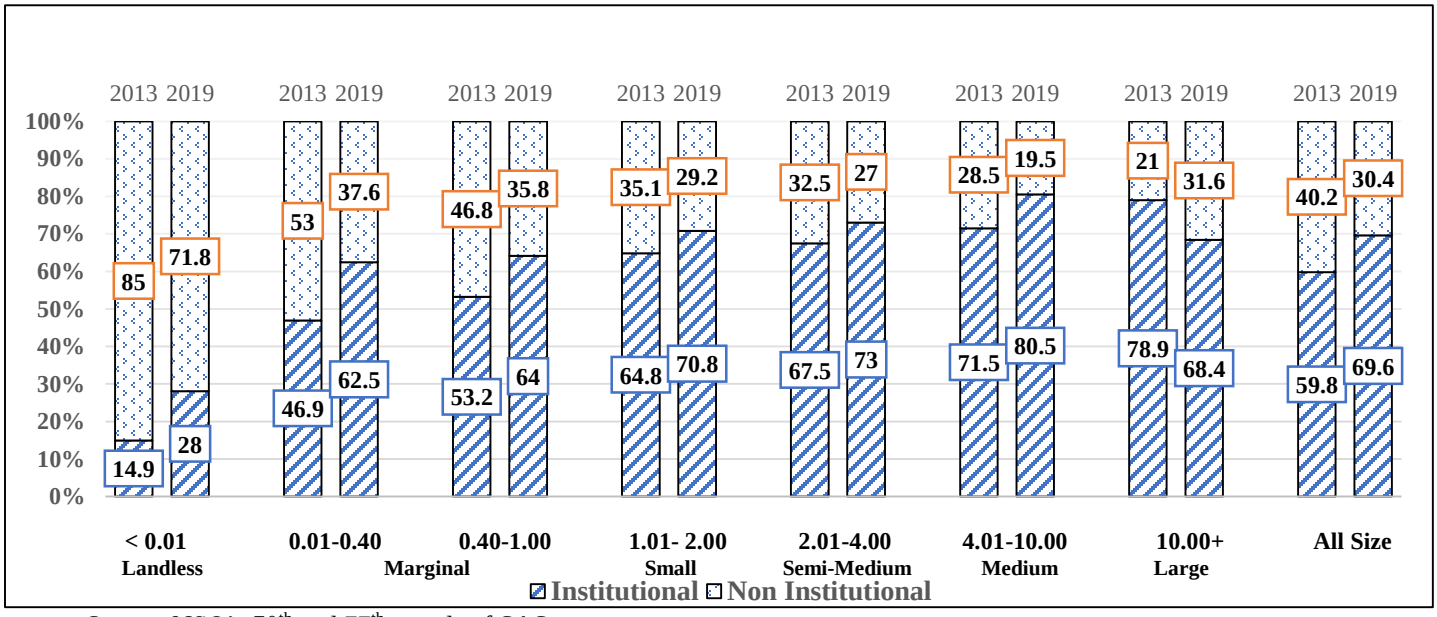
It is also important to highlight that not only the level of indebtedness is higher amongst the small and marginal farmers, what is a bigger concern is their greater dependence on non-institutional sources for their credit needs. Even though formal credit sources have expanded their reach and their proportion of agri credit has increased considerably year on year, the 77th round survey results show a major disparity in institutional loan distribution across the land size classes. It is clear that agri households with small land sizes have a larger reliance on informal sources of financing. Except in the case of the largest farms (>10.00+ hectare), SAS data demonstrate a link between farm size and access to institutional finance, with reliance on non-institutional loan sources such as money lenders and relatives growing as land holding decreases (Figure 8). Institutional sources (SCBs, RRBs, Co-operative societies, co-operative banks, SHGs, and other institutional agencies) provided Rs.64 of the Rs.100 taken by agricultural households with land between 0.40 and 1.00 hectares, while institutional sources provided Rs 81 of the Rs.100 taken by the agricultural households with land between 4.01 and 10.00 hectares.

Table 14. Percentage Distribution of Indebted Agricultural Households by Size Class of Land Possessed for Selected States

State	% of Marginal Indebted Agricultural Households	% of Small Indebted Agricultural Household	% of Semi-Medium Indebted Agricultural Households	% of Medium Indebted Agricultural Households	% of Large Indebted Agricultural Households
Uttar Pradesh	77.5	13.9	6.6	1.9	0.1
Maharashtra	40.3	30.3	20.2	8.2	1.1
Madhya Pradesh	45.0	27.9	17.5	8.8	0.9
Rajasthan	47.1	24.8	17.2	9.8	1.2
Karnataka	47.9	26.2	18.1	7.2	0.5
Andhra Pradesh*	52.1	24.5	18.1	3.6	1.6
Telangana*	40.3	30.9	21.5	6.9	0.5
Bihar	83.8	11.7	4.1	0.2	0.2
West Bengal	93.8	5.1	1.0	0.1	0
Punjab	47.8	18.6	18.6	13.6	1.4
Odisha	72.7	20.0	6.1	1.1	0.1
All India	62.7	20.2	12.0	4.5	0.6

Source: Situation Assessment Survey of Agricultural Households (Jan-Dec 2019), National Statistical Office (NSO).

Figure 8: % Share of Loans from Institutional and Non-Institutional Source

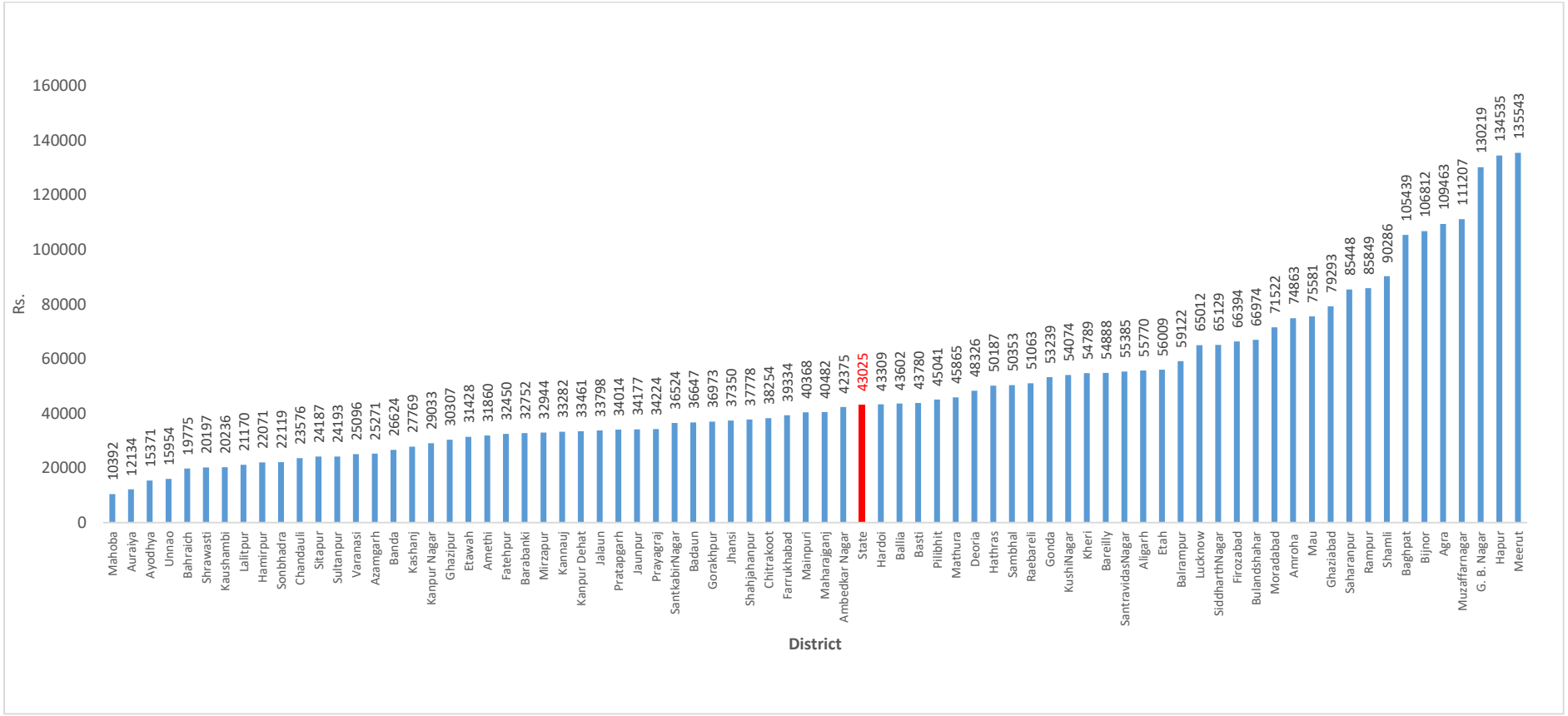


Source: NSO's 70th and 77th rounds of SAS

Understanding Intra-state Disparities: A District Level Analysis

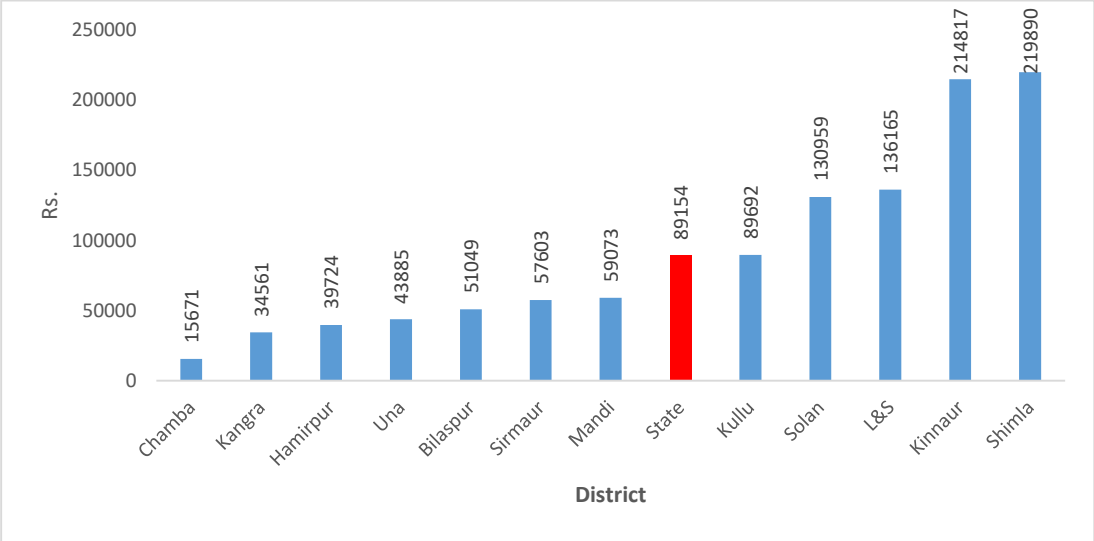
At the sub regional level, it is observed that the disparities exist not only across states but in some states the intra state disparities are even sharper. To better understand these intra-state disparities, we bring out a district level analysis of credit disbursement per hectare in 09 states across different regions in the country. A case in point is that of Uttar Pradesh where sharp differences can be observed in the agriculture credit/ha disbursed across districts. There emerges a clear pattern where credit absorption of districts of western Uttar Pradesh are significantly higher than districts in western Uttar Pradesh. The starkness of this disparity is highlighted when we compare credit dispensation in districts like Mahoba (Rs.10932/ ha) and Auraiya (Rs.12134/ha) with that of districts like Meerut (Rs.135543/ha) and Hapur (Rs.134535/ha). Only 35 districts out of 75 had per hectare credit above the state figure (Rs.43025/ha) (Figure 9a).

Figure 9a: District-wise Agriculture Credit/ha in Uttar Pradesh (Rs.)



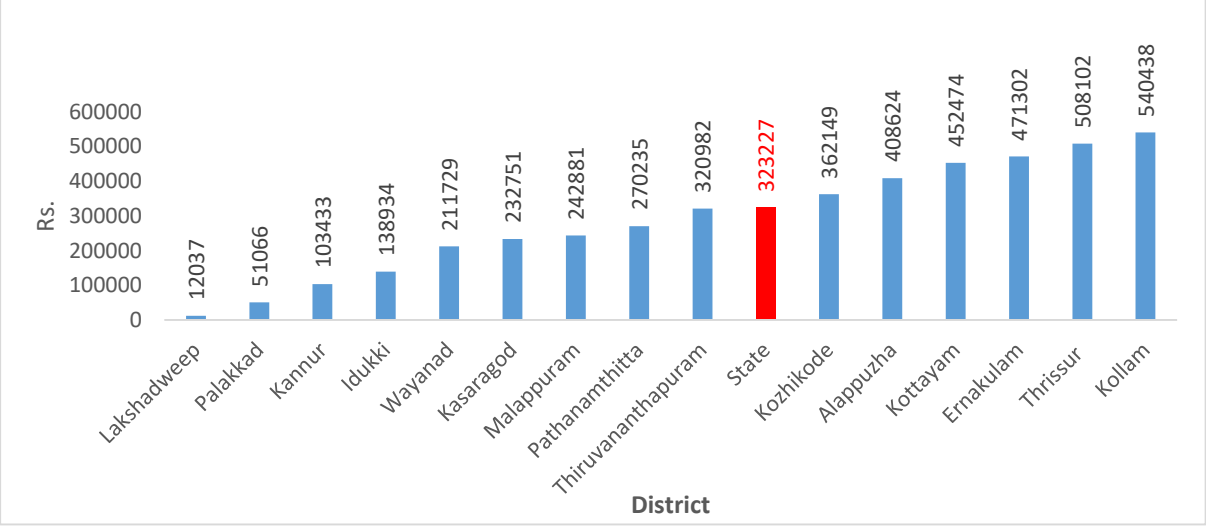
A similar picture is drawn from almost all major states. In the state of Himachal Pradesh bulk of the credit is being directed to districts like Kinnaur, Shimla, Lahaul & Spiti and Solan, whereas districts like Chamba, Kangra and Hamirpur only receive a miniscule amount of credit per ha. The credit disbursement to the districts was lowest at Chamba (Rs.15671/ha) and highest in Shimla (Rs.219890/ha). Out of the 12 districts, 7 received credit much lower than the state average (Rs.89154/ha) (Figure 9b).

Figure 9b: District-wise Agriculture Credit/ha in Himachal Pradesh (Rs.)



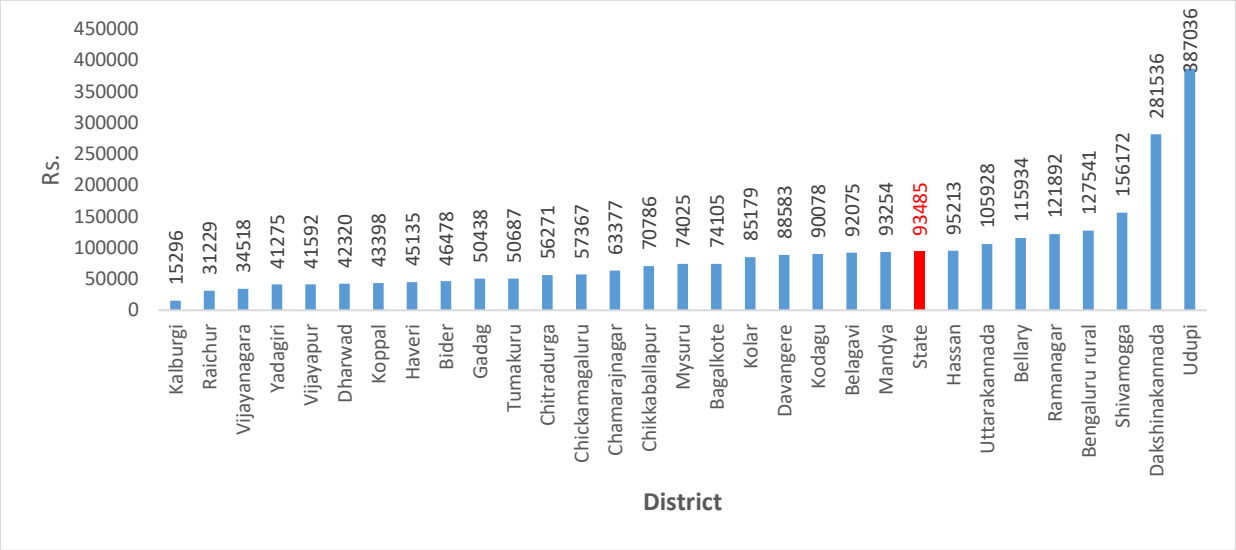
A similar intra state disparity is observed even in the Southern states of Kerala and Karnataka. For the state of Kerala, credit disbursement per ha was the lowest in Palakkad (Rs.51066/ha) and highest Kollam (Rs.540438/ha). Out of the 14 districts, 8 districts received credit lower than the state average (Rs.323227/ha) (Figure 9c).

Figure 9c: District-wise Agriculture Credit/ha in Kerala (Rs.)



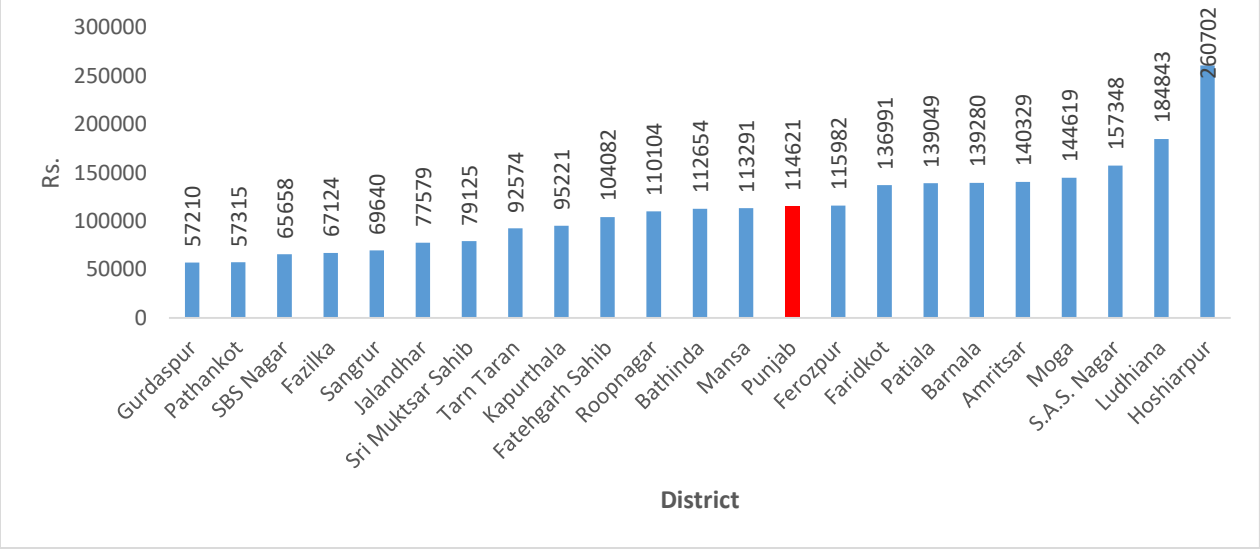
Similarly in Karnataka, a wide variation was observed in the level of credit disbursement. Kalburgi district (Rs.15296/ha) received the lowest credit with Udupi (Rs.387036/ha) receiving the highest credit. Out of the 30 districts, 22 were receiving credit below the state average level (Rs.93485/ha) (Figure 9d).

Figure 9d: District-wise Agriculture Credit/ha in Karnataka (Rs.)



Punjab is another state where credit disbursement per ha is relatively better distributed across the different districts across the state. Punjab also has a comparatively high off take in per ha credit with an average disbursement of Rs.114621/ha. Gurdaspur district has received the lowest credit dose of Rs.57210/ha with Hoshiarpur district receiving the highest dose with Rs.260702/ha (Figure 9e).

Figure 9e. District-wise Agriculture Credit/ha in Punjab (Rs.)

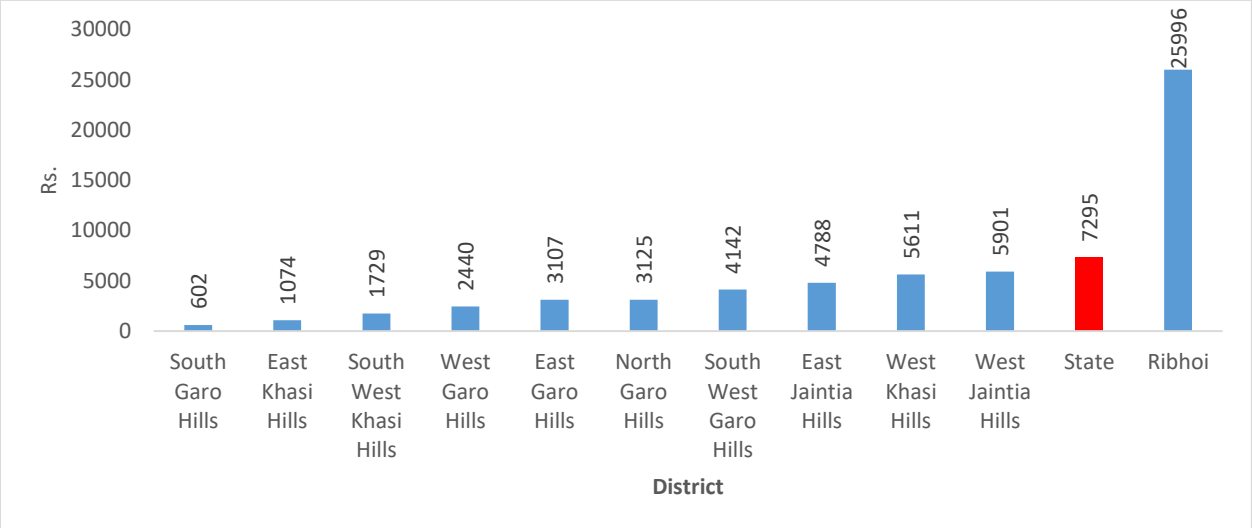


In the state of Gujarat, the average credit disbursement per ha stood at Rs.61371/ha, with Surat receiving Rs.185385/ha and Dangs receiving only Rs.3111/ha. Out of 33 districts, 19 districts received credit dosage less than the state average (Figure 9f).

Figure 9f: District-wise Agriculture Credit/ha in Gujarat (Rs.)

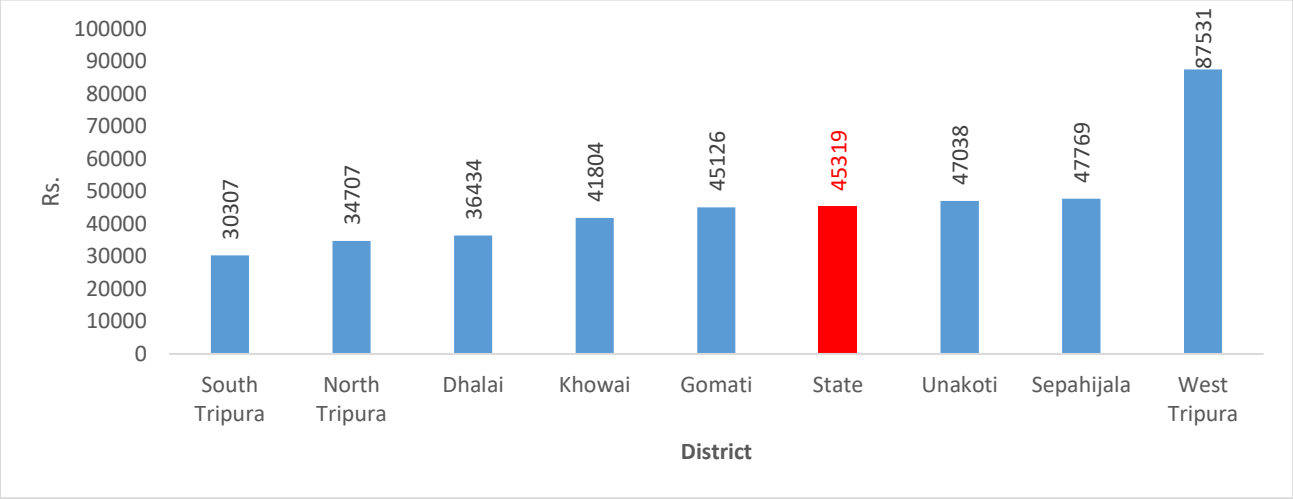
In the North- Eastern states of Meghalaya the average credit disbursement per ha is both very low (average disbursement Rs.7295/ha) and unequally distributed. The range of credit disbursement was from only Rs.602/ha in South Garo hill district, whereas Ribhoi received an average credit disbursement of Rs.25996/ha (Figure 9g). The high credit disbursement in Ribhoi has actually pulled up the average credit disbursement in the state with all other districts receiving credit lower than the state average.

Figure 9g: District-wise Agriculture Credit/ha in Meghalaya (Rs.)



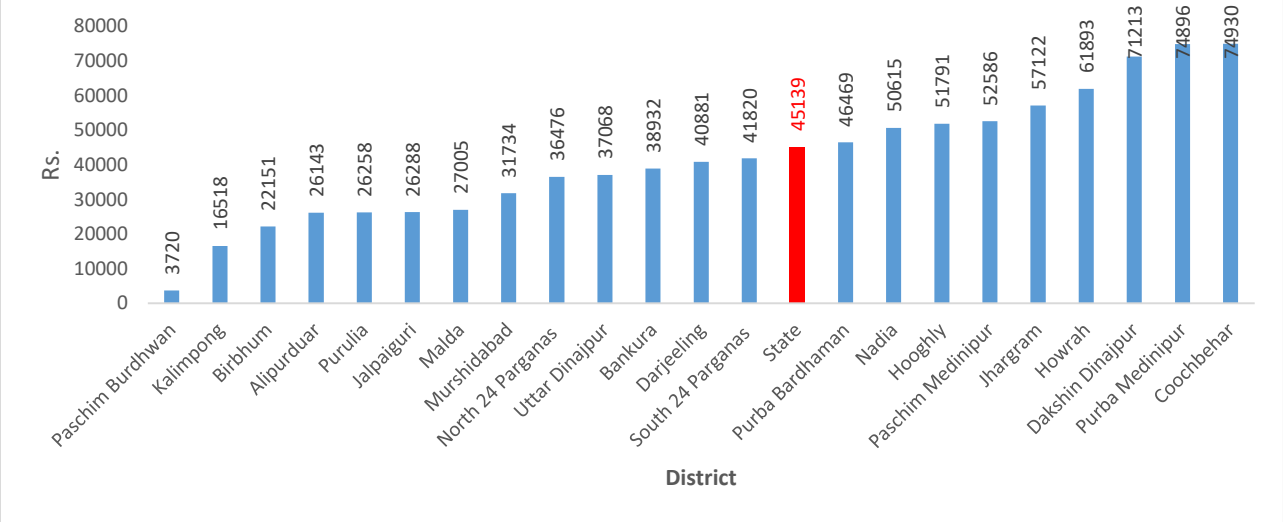
However, in the state of Tripura while the per ha credit offtake is small (Average: Rs 45319/ha) it is relatively equally distributed across the districts, with South Tripura district receiving the lowest (Rs 30307/ha) and West Tripura receiving the highest dose of credit (Rs 87531/ha) (Figure 9h).

Figure 9h. District-wise Agriculture Credit/ha in Tripura (Rs.)



The state of West Bengal displays a fairly equal distribution in credit disbursement to agriculture. However, the average credit disbursement remains low (Rs.45139/ha) and the Paschim Burdwan district being an outlier receiving the lowest only (Rs.3720/ha) (Figure 9i).

Figure 9i: District-wise Agriculture Credit/ha in West Bengal (Rs.)



The district wise analysis of the 9 states brings out the level of disparities that exist at the state level. This analysis brings out the importance on developing credit products which are suited to local needs. With the emergence of digital lending tools, there has now emerged a greater possibility to provide flexible tailor made credit products to improve credit penetration in the credit starved districts.

Conclusion and Policy Suggestions

Conclusion

The relative share of institutional agencies in total cash debt of cultivator households increased from 7.3 per cent in 1951 to 66.3 per cent in 1991 and subsequently decreased to 58.4 per cent in 2012 and in 2018-19 it increased to 67.1 per cent. The total institutional credit to agriculture sector has increased more than 5.5 times during 2008-09 to 2021-22. In total credit, the ratio of crop loans remains high as compared to term loan, crop loan decreased from 69.71 per cent in 2008-09 to 59.01 per cent in 2021-22. As per the latest All-India Debt and Investment Survey 2019, the share of institutional credit and non-intuitional credit in 2018 was 67.10 per cent, 32.90 per cent, respectively. It was found that the households with higher landholdings carry higher debt burden as compared to the households with lower landholdings in the state (AIDIS, 2019). The per hectare credit flow indicates that at the all India there was an impressive increase from Rs.26100 in 2011-12 to Rs.93210 in 2021-22.

However, there exists wide inter-regional disparities with Southern region accounting for the bulk of the credit disbursement to agriculture followed by the Northern, Western, and Central regions. The disparities are well highlighted in terms of credit per hectare as are indicated by the range of Rs.21756 per hectare in NER to Rs.259554 per hectare in Southern region. During 2021-22, in the total disbursement, the share of NER in total agricultural credit was less than one per cent. This low coverage of agricultural credit in NER is because of the total cultivable area in NE states being only about 2.74 per cent of the total gross cropped area of the country. Moreover, community ownership of land is prevalent in most of the NE States. These two factors affected the intake of Kisan Credit Card (KCC) loans in the NER as these loans are given against land documents (Kumar, 2021). Except Southern region, all other regions had per hectare credit flow below the national figure. The accessibility of institutional credit is higher in the Southern region due to the better infrastructure facilities, better outreach and credit delivery outlets. It is a vicious cycle operating in less developed regions. Less availability of credit influences adversely the adoption of modern farming techniques and private capital investment, which in turn lowers the productive capacity of the agricultural sector and results in lower productivity and production, and also pushes the farmers to borrow from the non-institutional sources. Consequently, the demand for agricultural credit for short and long-term purposes is dampened. Thus, the inter-regional disparities across the region in the disbursement of agricultural credit by the Rural Financial Institutions is very significant. Therefore, it warrants attention of the policymakers for mitigating regional, inter-regional and inter-district disparities.

The ratio of agricultural credit to AgGVA varied from 18.51 per cent in NER to 173.96 per cent in Southern region and this ratio for the all India is 50.91 per cent. The credit deposit (C-D) ratio varied from 44.7 per cent in Eastern to 87.6 per cent in Southern region and this ratio for India is 72.1 per cent. There was huge disparities in per hectare agriculture credit in inter districts and intra-districts observed. Similarly, the analysis brought the prevalence of large disparities in intra state credit disbursement. The 09 states that have

been analysed in the paper, present to us that each state has large variance in the credit flow across the districts which requires focused attention to bring in convergence. There is need to increase the agricultural credit flow in the credit starved and special focused districts/regions in the country to achieve sustainable agriculture growth and contribute more towards attaining the status of Atmanirbhar Bharat.

Policy Suggestions

Enhancing Outreach of Rural Financial Institutions

- Due emphasis should be given on improving the health of the rural financial institutions in the regions/districts with low credit disbursement. Recent initiatives by GoI like recapitalization of RRBs, introduction of scheme for PACS computerisation, etc. will go a long way in strengthening the rural financial institutions in these regions/districts.
- To ensure better convergence of efforts towards enhancing ground level credit flow, it is imperative that institutions and forums like State Level Bankers Committee (SLBC), District Level Review Committee (DLRC) and Block Level Bankers' Committee (BLBC) are effectively and efficiently utilized. The review and monitoring mechanism should be strengthened particularly in such districts where the Credit-Deposit (C-D) ratio is low.
- There are approximately 7.3 crore active Kisan Credit Cards (KCCs) as on 31 March 2021 against a total of 14.5 crore operational holdings in India. We need to sensitise all ground level bank officials to saturate all eligible & willing farmers with KCCs.

Addressing Demand side Challenges

- A renewed push towards enhancing the financial literacy amongst farmer communities is needed. Greater number of financial literacy campaigns in rural areas especially in backward districts will provide for greater awareness and access to credit products.
- There is a need to channelize more term loan to allied activities in agriculture (dairy, poultry, fishing, etc.) contributing around 40 per cent of agricultural output but availing only 6 to 7 per cent of agriculture credit.
- From the year, 2021-22, a separate specific target is being allocated for GLC to the allied sector (animal husbandry and fisheries). The target is proposed to be further increased to Rs.1.26 lakh crore for the year 2022-23 (up from Rs.0.61 lakh crore in 2021-22). This along with measures like special saturation drive by GoI for Kisan Credit Card for allied sector will serve as essential measures to enhance the credit demand for the allied sector.
- Due emphasis should be given for strengthening ground level community institutions like Self Help Groups (SHGs), Joint Liability Groups and Farmer Producers Organisations (FPOs). These institutions play a critical role in group model financing and infusion of credit culture through greater emphasis on community participations. The present initiatives of promoting SHGs under National Rural Livelihood Mission and creation of 10,000 FPOs (Central Sector

Scheme) are initiatives which will go a long way in promoting credit penetration through the group mode financing.

Addressing Structural Issues

- Lack of land records is one of the reasons for low penetration of credit flow in agriculture. Therefore, Govt. of India, should push state governments to complete the digitisation process and updating of land records in a time bound manner.
- In order to simply the documentation process, state governments should give access to banks to digitised land records in order to verify land title and create charge online. Banks should not insist on submission of land title documents in such cases.
- Greater credit demand in the states may be created through promotion of crop diversification schemes and shifting of cropping pattern towards high value (less water guzzling) crops. Schemes on crop diversification need to be scaled up and implemented across states and districts.

Tapping into the Digital Revolution

- It is important that the existing network of Business Correspondent/Business Facilitators (BC/BFs) is channelized along with tailor made easily accessible credit products. To fully utilize the digital penetration, App/UPI-based lending products need to be explored.
- With more than 500 million Indians connected to the internet, primarily through smartphones, the impact of digital governance can be more direct and beneficial. The Budget announcement of setting up of 75 digital banking units, once operationalized, would go a long way in furthering the interest of excluded regions and excluded sections of society.
- The operations of so-called 'digital banks'/ 'neo banks' formulation should be covered under Reserve Bank's regulations. 'Digital-only' Non-Banking Financial Companies can be encouraged and bank-FinTech partnerships may be streamlined.

Addressing Infrastructural Bottlenecks

- To enhance the credit absorption capacity of potential borrowers, investment in rural infrastructure is a sine qua non. Therefore, corpus of Rural Infrastructure Development Fund (RIDF) should be increased and state governments, especially in regions/districts with low credit disbursement, should be sensitised to allocate a larger portion of their borrowing from RIDF for the purpose of absorbing funds for rural infrastructure development in their state.
- We should also gradually increase the allocation of RIDF in Central, Eastern and North Eastern states over a period of time.
- Due focus should be given on developing the requisite micro-infrastructure (like watersheds, irrigation channels, WADI in tribal areas, etc.) which serve as critical linkages between major infrastructure projects and the farmers' fields.

Addressing Anomalies in Crop Loaning System in Southern India

- During last 8 years, agriculture credit disbursement has been growing at Annual Average Growth Rate (AAGR) of 5.04 per cent and 8 per cent in Northern and Central regions, respectively, yet their share in agriculture credit has been decreasing. This is because of the rapid growth in crop loans disbursed in Southern region, predominantly due to high Agricultural Gold Loans, wherein the quantum of loan is delinked from the Scale of Finance. As per the RBI's Internal Working Group on Agriculture Credit (2019), the incidence of crop loans outside KCC is very high (71 per cent) in Southern States viz., Tamil Nadu, Andhra Pradesh, Kerala and Karnataka. In Tamil Nadu, the extent of crop loans disbursed outside of KCC is around 88 per cent.
- Thus, the crop loan sanctioned is much higher than the actual credit requirement. This ultimately leads to diversion of funds and consequently high incidence of indebtedness. Therefore, in order to curb the mis-utilisation of interest subsidy, banks should provide crop loans, eligible for interest subvention, only through KCC mode.
- There is a need to address the issue of sanctioning of agricultural loans against gold as collateral. Presently such loans are not separately flagged in core banking solution (CBS) platform of banks. Hence, banks should develop an MIS to flag agricultural loans sanctioned against gold as collateral in CBS in order to segregate such loans for effective monitoring of end use of funds.

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