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Trends and Patterns in Agriculture Credit in India: A District Level Analysis of Uttar Pradesh

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Abstract

Agricultural credit in itself is not an input but it helps in creating environment for the adoption of modern production technology and encouraging private investments on the farms. A large number of institutional agencies are involved in the disbursement 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, agricultural credit disbursement in the country increased from Rs.46268 crore in 1999-2000 to Rs.1392729 crore in 2019-20 at a compound annual growth rate (CAGR) of 19.81 per cent and that for Uttar Pradesh increased from Rs.29056 crore in 2008-09 to Rs.117444 crore in 2019-20 at a CAGR of 15.96 per cent. The per hectare credit flow indicates that in Uttar Pradesh there was an impressive increase from Rs.15431 in 2011-12 Rs.43718 in 2019-20. However, there exists wide inter-district disparities as are indicated by the range of Rs.13862 per hectare in Banda district to Rs.186787 per hectare in Meerut district. Only 34 districts out of the 75 had per hectare credit flow above the state figure. Thus the inter-districts disparities across the state in the disbursement of agricultural credit by the Rural Financial Institutions is very significant. Therefore, it warrants attention of the policy makers for mitigating regional and inter-district disparities. The ratio of agricultural credit to Gross District Domestic Product (GDDP) varied from 4.14 per cent in Sant Ravidas Nagar to 125.53 per cent in Gautam Budh Nagar district and this ratio for the state is 14.20 per cent as compared to the 46.73 per cent for all India. While the ratio of agricultural credit to GDDP in 29 districts was more than the state average, 46 districts have less than the state average. The credit deposit (C-D) ratio varied from 20.11 per cent in Azamgarh district to 88 per cent in Sambhal district and this ratio for state is 51.60 per cent. The C-D ratio in 37 districts was less than the state average. There is need to increase the agricultural credit flow in the credit starved districts/regions (Bundelkhand and Eastern Region) in the state to achieve sustainable agriculture growth and contribute more towards attaining the status of AatmaNirbhar Bharat. Study concludes that the access and distribution of agricultural credit is skewed in favour of better endowed districts/regions and within the same region tilted towards better off agricultural households.

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Introduction

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 55.4 per cent in 1950-51, now stands substantially reduced to only 17.8 per cent in 2019-20 (Economic survey, 2020-21). This sector provides livelihood to about 70 per cent of the total population and generates employment for 54.6 per cent of the country's work force (Economic Survey 2020-21). In Uttar Pradesh also, agriculture dominates the economy and it provides employment to 59.2 per cent of the working population and contributes about 24 per cent GVA of the state. Uttar Pradesh has the highest contribution (13.2%) in the value of output of agriculture in the country. While the State's foodgrain, sugarcane, oilseeds and milk production accounts for 18.55 per cent, 50.16 per cent, 10.16 per cent and 18.43 per cent of the country's production, respectively during 2019-20 (Economic Survey, 2020-21), its share in agricultural credit disbursement was only 7.82 per cent in 2019-20.

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. The Policy lays emphasis on augmenting credit flow at the ground level through credit planning, adoption of region-specific strategies and rationalization of lending Policies and Procedures. These policy measures have resulted in the increase in the share of institutional credit of the rural households. 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). For the period from 1999-2000 to 2019-20, compound annual growth rate (CAGR) of agriculture credit was 19.81 per cent. However, ground level credit (GLC) increased by only 10.81 per cent during 2019-20 over the previous year. In terms of outreach of credit, during 2019-20 around 13.59 crore agricultural accounts had been financed as compared to 12.55 crore financed by all the agencies taken together during 2018-19. The main objective of the study is to analyse the trends and patterns in agricultural credit, issues and concerns for district-wise disparities and suggest measures to overcome these constraints.

Data and Methodology

The study is based on the secondary data compiled from various published sources. The data on gross cropped area (GCA), agricultural gross state value added (AgGSVA) and gross state domestic product (GSDP) were compiled from the Handbook of Statistics on Indian States (2020), Reserve Bank of India (RBI). The data on agricultural credit were collected from the Pocket book on Agriculture and Statistics, published by the Department of Agriculture and Co-operation, Ministry of Agriculture and Farmers Welfare, Government of India (GoI), NABARD Annual Reports, Indiatat website and various issues of the Economic Survey, published by the Ministry of Finance, GoI. Data on Credit Flow in Agriculture sector in Uttar Pradesh and district-wise credit flow in agriculture were compiled from the State Focus Papers of Uttar Pradesh, the Potential linked Credit Plan of Uttar Pradesh (2020-21) and the SLBC Agenda of Uttar Pradesh. Data on Gross District Domestic Product (GDDP) and district-wise Gross Cropped Area (GCA) were compiled from the Directorate of Economics and Statistics, State Planning Institute, Department of Planning, Government of Uttar Pradesh, NABARD All India Rural Financial Inclusion Survey (NAFIS) 2016-17 and the Published Research papers. 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 and Ministry of Statistics and Programme Implementation. 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

The distribution of outstanding debt holdings by credit agencies, available from the beginning in 1951, shows that the institutional credit agencies have increasingly emerged as dominant holders of household debt over the years, replacing the age-old non-institutional agencies (Table 1). The bulk of the household debt from institutional sources has been accounted for by co-operative societies and commercial banks. A significant rise is seen in the relative share of co-operative societies from 3.5% in 1951 to 28.6% of the total rural household debt in 1981, which slipped somewhat thereafter and fluctuated in all the subsequent survey periods. The role of commercial banks appears commendable; they had constituted meagre share of 0.3% of total credit in 1961, that is, before bank nationalisation, which rose to 2.2% in 1971. With the formulation of policies for priority sectors, nationalisation of banks, formation of RRBs, etc. resulted significant rise in the share of institutional credit in 1971-1981. A sharp rise in the share of commercial banks is seen in the subsequent decades, as they accounted for 33.7% of the total rural debt in 1991, and also remained until then, as the single most important source of credit. In the following decades, the relative importance of commercial banks has gone down with their share falling to 25% in 2012. Thus, the observed reduction in the overall share of institutional credit agencies in total rural debt

from 64% in 1991 to 56% in 2012 can be largely attributed to the dwindling role of commercial banks in relative terms. As per NABARD All India Rural Financial Inclusion Survey (NAFIS), the institutional source has emerged as a dominant source to 70 per cent of loan. Still, 40 per cent of the cultivator households are reported to have taken loan from informal sources.

Table 1: Distribution of Household Cash Loans by Credit Agency, All-India: 1951 to 2016 (in %)

Credit Agencies	1951	1961	1971	1981	1991	2002	2012	2016
	Rural							
	All Households							
Institutional Agencies	7.2	17.3	29.2	61.2	64.0	57.1	56.1	69.1
Government	3.7	6.6	6.7	4.0	6.1	2.3	1.2	
Co-operative Society/Bank	3.5	10.4	20.1	28.6	21.6	27.3	24.8	5.7
Commercial Bank incl. Regional Rural Bank		0.3	2.2	28.0	33.7	24.5	25.1	36.6
Insurance			0.1	0.3	0.3	0.3	0.2	0.2
Provident Fund			0.1	0.3	0.7	0.3	0.1	0.3
Financial corporation/institution						1.1	0.6	1.3
Financial company						0.6	1.1	1.3
Self-help group-bank linked							1.9	12.4
Self-help group-NBFC							0.3	11.3
Other Institutions			0.0		1.6	0.7	0.7	
Non-Institutional Agencies	92.8	82.7	70.8	38.8	36.0	42.9	43.9	41.6
Landlord	3.5	1.1	8.6	4.0	4.0	1.0	0.7	5.2
Agricultural Money Lender	25.2	47.0	23.1	8.6	7.1	10.0	5.0	11.5
Professional Money Lender	46.4	13.8	13.8	8.3	10.5	19.6	28.2	
Traders/Input supplier	5.1	7.5	8.7	3.4	2.5	2.6	0.1	0.1
Relatives and Friends	11.5	5.8	13.8	9.0	5.5	7.1	8.0	24.7
Doctors, lawyers etc.					0.2	0.3	0.5	0.1
Others Sources		7.5		4.9	3.0	2.3	1.4	
Sources not specified	1.1		2.8	0.6	3.3			
	Cultivator							
Institutional Agencies		18.4	31.7	63.2	66.3	61.1	58.4	74.5
Government		6.7	7.1	3.9	5.7	1.7	1.1	
Co-operative Society/Bank		11.4	22.0	29.8	23.6	30.2	25.2	6.0
Commercial Bank incl Regional Rural Bank		0.3	2.4	28.8	35.2	26.3	27.7	46.2
Insurance			0.1	0.4	0.2	0.3	0.2	0.3
Provident Fund			0.1	0.3	0.5	0.2	0.1	0.5
Financial corporation/institution						1.0	0.5	0.7
Financial company						0.7	1.2	1.0
Self-help group-bank linked							1.5	10.6
Self-help group-NBFC							0.2	9.2
Other Institutions					1.1	0.7	0.8	
Non-Institutional Agencies		81.6	68.3	36.8	33.7	38.9	41.7	39.8
Landlord		0.9	8.1	3.7	3.7	0.9	0.7	
Agricultural Money Lender		48.1	23.0	8.3	6.8	9.9	5.5	10.8
Professional Money Lender		13.8	13.1	7.8	10.7	16.9	26.0	
Traders/Input supplier		7.1	8.4	3.1	2.2	2.6	0.1	0.1
Relatives and Friends		5.2	13.1	8.7	4.6	6.2	7.7	22.7
Doctors, lawyers etc.					0.2	0.4	0.4	0.1
Others Sources		6.5	2.6	4.5	2.4	2.0	1.3	
Sources not specified				0.7	3.1			

Source: All-India Debt and Investment Survey, Various Issues and NABARD Occasional Paper 65 on Household Indebtedness and Assets Based: All-India Debt and Investment Surveys. For 2016, data compiled from NAFIS Report and total exceed 100% as a household may have taken loan from more than one source.

Share of Various Agencies in Ground Level Credit (GLC) Flow

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 11 per cent in 2019-20. 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 70.20 per cent in 2015-16. RRBs improved their share from 6.86 per cent in 1999-2000 to 13 per cent in 2015-16. It is also pertinent to observe that there is a substantial increase in the GLC disbursed by commercial banks during 2019-20 as compared to the previous year. While the share of commercial banks had increased to 76.83 percent in 2019-20 as compared to the previous year, that of RRBs and Cooperative Banks had declined when compared to the previous year (Table 2). The growth of agricultural credit disbursement has been significant over the years. The GLC disbursement grew at the rate of 19.81 per cent per annum with the highest growth rate of 22.93 per cent registered by the RRBs, followed by CBs (21.84%) and Cooperative Bbanks (12.97%). The agricultural advances/ GLC increased from Rs.46268 crore in 1999-2000 to Rs.1392729 crore in 2019-20 at a compound annual growth rate (CAGR) of 19.81 per cent.

Table 2: Agency-wise Credit Flow to Agriculture Sector in India
(Rs. 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
CAGR	12.97	22.93	21.84		19.81
CV (%)	66.27	94.85	89.26		85.92

Source: NABARD Data Bank (various issues) and Ensure Portal, NABARD.
Figures given in parentheses indicates the percentage.

Overall Growth and Outreach of Agricultural Credit

During 2019-20, the institutional credit flow to the agriculture sector in India was to the tune of Rs.13.93 lakh crore against the target of Rs.13.50 lakh crore, including Rs.8.25 lakh crore of short term credit and Rs.5.68 lakh crore of long term credit (Table 3). The agricultural credit disbursement in 2020-21 was Rs.15.22 lakh crore (Provisional) against the target of Rs.15.00 lakh crore. The agriculture credit target for the year 2021-22 has been fixed at Rs.16.50 lakh crore (Union Budget 2021-22). It may also be observed from the table that the share of Cooperative Banks, RRBs and Commercial Banks (CBs) under crop loans was 19.08 per cent, 10.65 per cent and 70.24 per cent, respectively during 2008-09. However, the share of Cooperative Banks and CBs has declined to 17.97 per cent and 65.30 per cent in 2019-20 and that for RRBs had improved significantly (16.73%) in 2019-20. The share of short term credit decreased significantly from 69.71 per cent in 2008-09 to 59.25 per cent in 2019-20. 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 40.75 per cent in 2019-20. During the period 2008-09 to 2019-20, the long term credit, which adds to the capital formation in the primary sector, increased at a faster rate (CAGR 18.9%) as compared to the short term credit (CAGR 13.4%). During this period, total agricultural credit grew at the CAGR of 15.17 per cent. With the concerted efforts of Rural Financial Institutions, operationalization of Small Finance Banks, 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. Among the agencies, highest growth was witnessed under RRBs followed by CBs and Cooperative Banks. Declining trend

seen in long term credit before 2014-15 was of concern to the policy makers, as term credit purveyed to finance long term investments led to private capital formation in farm mechanisation, minor irrigation structures including pump sets, land development, orchards, farm ponds, micro-irrigation, etc., in the country. As we know, long term credit has been the major driving force of the private sector capital formation in agriculture (PSCFA). There exists a high correlation between long term credit and private investment. This can also be seen in the increase registered in the share of private sector in Gross Capital Formation in Agriculture sector to 78 per cent in 2018-19 from 56 per cent in 1980-81.

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

(Rs.crore)													
Particulars/Agency	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	CAGR
I. Short-term (ST) Credit													
Co-operative Banks	40164	56946	69038	81829	102592	113574	130350	143803	131880	138348	142750	148287	12.75
RRBs	22413	29802	38121	47401	55957	70697	89326	101579	105001	119546	125654	138069	19.08
Commercial Banks	147818	189908	228391	266928	314951	364164	415736	419930	452576	497078	483805	538795	12.56
Other Agencies	66												
Sub Total (A)	210461	276656	335550	396158	473500	548435	635412	665312	689457	754972	752209	825151	13.44
II. MT/LT Credit													
Co-operative Banks	5802	6551	9083	6134	8611	6389	8119	9492	10878	12041	9591	9080	5.90
RRBs	4352	5415	6172	7049	7724	11956	13157	17681	18215	21413	24013	27257	19.57
Commercial Banks	81133	95892	117486	101688	117540	163342	188640	223024	347205	380077	471016	531241	19.50
Other Agencies	160												
Sub Total (B)	91447	107858	132741	114871	133875	181687	209916	250197	376298	413531	504620	567578	18.91
Total Credit (ST + MT/LT)													
Co-operative Banks	45966	63497	78121	87963	111203	119963	138469	153295	142758	150389	152340	157367	12.11
RRBs	26765	35217	44293	54450	63681	82653	102483	119260	123216	140959	149667	165326	19.14
Commercial Banks	228951	285800	345877	368616	432491	527506	604376	642954	799781	877155	954823	1070036	15.22
Other Agencies	226												
Grand Total (A+B)	301908	384514	468291	511029	607375	730122	845328	915509	1065755	1168503	1256830	1392729	15.17

Source: Department of Agriculture, Cooperation & Farmers Welfare, ST: Short Term, MT: Medium Term, LT: Long Term, P: Provisional

Regional Disparities in C-D Ratio

The credit-deposit ratio highlights the efficiency of the banks in mobilizing its deposits. The C-D ratio at the All India level has progressively improved from 66.0 per cent in 2005 to 78.3 per cent in 2019 (Table 4). However, there exists a large disparity at the regional level. The 2019 C-D ratio for states in the Eastern (41.4%), North-Eastern (40.4%) and Central (49.5%) reflects the inefficient credit mobilization in these regions. Whereas, Western (98.1%), Southern (90.6%) and Northern (84.5%) regions display a more efficient picture in terms of mobilization of deposits for credit deployment.

Table 4: Region/State-wise Credit-Deposit Ratio of Scheduled Commercial Banks in India

(In Percentage)

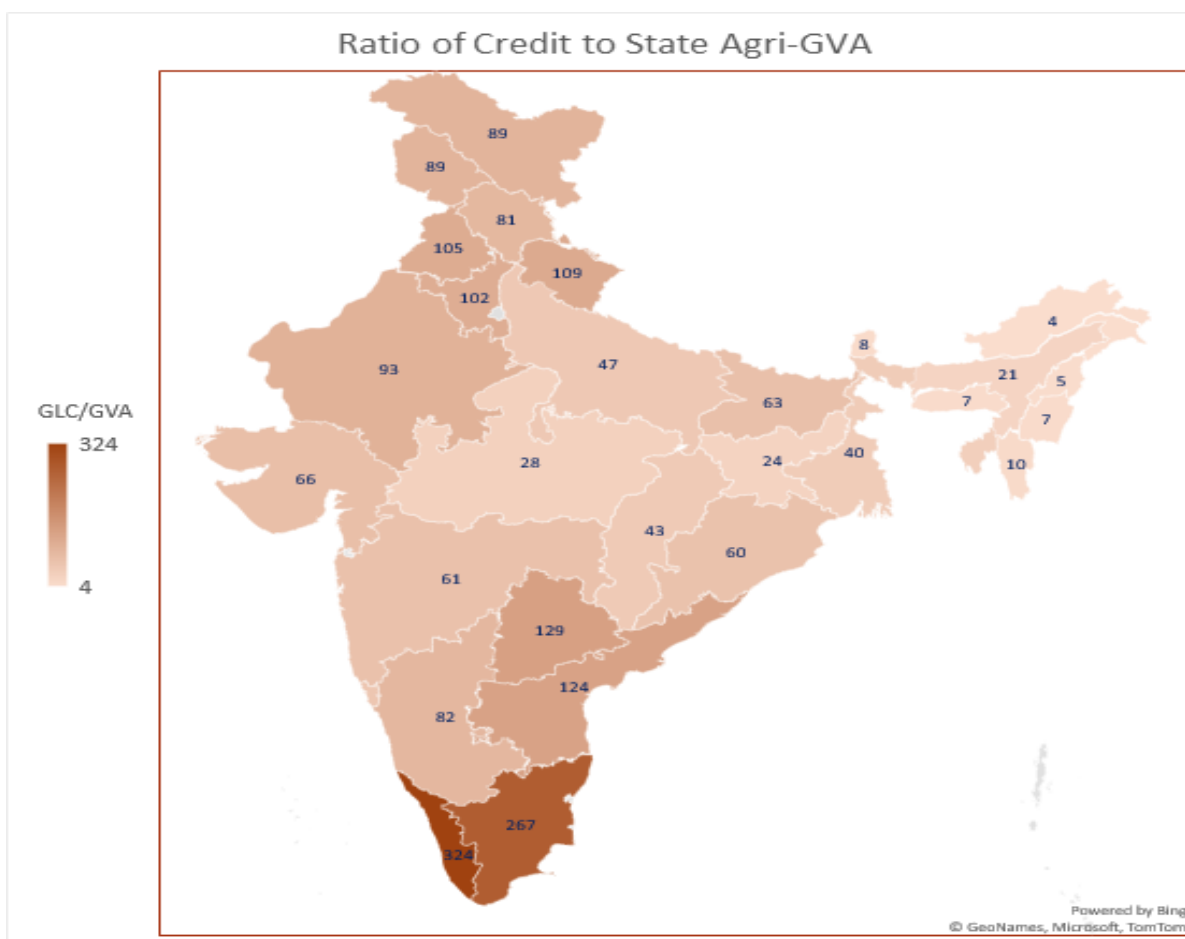
Regions/States/ UTs	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Northern	59.5	74.4	82.5	87.7	88.8	90.6	88.5	83.6	75.0	78.1	84.5
Haryana	51.4	63.3	71.7	79.4	76.5	78.1	75.8	69.9	59.1	58.6	61.1
Himachal Pradesh	36.3	42.2	41.6	38.9	35.1	35.8	35.3	32.9	29.7	31.1	30.8
J & K	46.7	46.4	38.1	33.8	36.9	40.1	42.2	44.2	39.8	42.9	45.5
Punjab	50.1	71.5	77.8	80.9	81.6	79.1	75.1	69.8	69.0	63.5	60.3
Rajasthan	68.7	88.4	90.4	90.9	92.6	87.1	86.2	72.4	67.8	76.6	81.4
Chandigarh	88.9	131.1	121.6	115.5	127.5	120.0	105.9	97.8	100.7	112.5	111.4
Delhi	62.4	74.6	86.8	95.6	97.7	103.7	102.6	100.4	88.3	94.1	107.4
North-Eastern	35.0	35.5	33.8	34.4	33.6	34.8	34.5	38.4	36.8	39.3	40.4
Arunachal Pradesh	22.0	27.5	23.7	23.9	21.8	23.7	26.8	29.0	24.0	25.0	23.0
Assam	35.3	37.8	36.5	37.7	37.2	37.7	36.7	42.2	40.3	42.6	44.3
Manipur	42.4	42.1	34.8	31.3	28.6	33.6	34.0	41.1	38.7	44.6	49.4
Meghalaya	43.6	25.6	24.4	25.8	24.0	27.4	25.9	24.8	25.9	27.2	26.9
Mizoram	47.8	53.2	46.0	38.9	35.3	37.8	37.8	40.1	36.4	35.8	36.8
Nagaland	22.9	30.3	26.1	27.2	28.4	31.0	32.7	34.1	31.5	34.7	35.4
Tripura	28.6	30.7	32.2	31.3	32.8	32.4	33.7	35.3	35.9	40.7	41.7
Eastern	45.5	50.8	51.4	50.7	49.4	49.0	46.5	44.9	41.0	41.6	41.4
Bihar	27.7	29.0	29.5	29.7	30.5	32.8	33.6	33.4	30.9	32.2	34.7
Jharkhand	29.6	35.1	34.4	33.9	32.1	31.8	29.6	29.6	27.1	27.7	27.7
Odisha	61.8	54.4	52.5	47.3	46.3	44.6	41.9	40.8	38.1	37.6	38.7
Sikkim	29.5	37.2	37.9	33.1	27.2	26.5	25.6	28.0	27.4	26.6	28.4
West Bengal	52.3	61.5	63.7	63.8	62.0	61.6	57.8	55.1	50.3	51.1	49.5
A & N Islands	26.8	36.5	38.1	38.5	38.6	39.1	40.1	44.2	38.5	39.4	41.9
Central	40.8	47.3	46.7	47.2	47.6	48.8	48.3	49.3	46.0	47.9	49.5
Chhattisgarh	43.6	52.3	52.3	53.6	53.8	59.5	61.6	63.5	62.4	63.2	63.3
Madhya Pradesh	54.7	60.6	55.6	56.6	58.2	60.4	54.8	61.2	60.9	65.1	67.9
Uttar Pradesh	37.9	43.3	44.0	44.0	44.1	44.6	45.4	44.6	40.0	41.2	42.7
Uttarakhand	24.3	33.7	35.4	35.6	34.8	35.6	34.5	34.9	34.3	36.4	37.6
Western	83.5	79.1	79.5	87.0	85.5	86.0	87.1	96.0	96.2	98.3	98.1
Goa	25.1	26.5	29.1	28.1	28.8	28.7	26.7	27.1	25.7	26.7	26.4
Gujarat	46.5	65.3	66.2	70.4	72.8	74.7	72.7	75.4	68.9	75.6	78.8
Maharashtra	94.9	82.9	83.0	91.8	89.4	89.8	92.0	102.9	106.0	106.9	105.2
D & N Haveli	34.8	60.0	34.8	30.1	37.1	40.8	35.3	35.8	36.5	43.5	56.1
Daman and Diu	11.5	20.2	21.3	17.4	19.1	21.9	24.3	22.9	23.5	27.5	26.6
Southern	78.1	92.7	94.5	95.5	97.1	94.9	89.9	89.3	84.2	90.5	90.6
Andhra Pradesh	74.8	105.1	109.7	111.3	112.0	111.3	105.3	106.0	101.1	112.6	121.6
Karnataka	73.8	77.6	72.7	71.4	71.9	71.0	67.7	70.1	67.0	69.7	69.7
Kerala	54.6	63.1	73.1	76.4	73.1	67.7	64.6	62.1	59.8	63.8	65.9
Tamil Nadu	101.2	113.8	115.1	116.9	123.3	121.8	119.0	113.7	105.8	113.5	110.3
Lakshadweep	9.7	7.3	8.7	9.7	9.9	8.6	9.1	10.5	8.4	8.3	8.1
Puducherry	38.3	57.2	62.7	71.5	83.3	77.9	71.5	67.1	63.9	63.8	66.7
Telangana	-	-	-	-	-	-	101.6	104.5	97.0	107.4	106.3
India	66.0	73.3	75.6	79.0	78.8	79.0	77.1	78.4	73.8	76.7	78.3

Source: RBI

Regional Disparities in Credit Dispensation

To analyse the disparity amongst the states, the ratio of State-wise total agricultural credit disbursed in relation to its agricultural Gross Value Added (GVA) have been plotted in Figure 1. This figure shows that some of the states are getting agri-credit higher than their agri-GVA indicating the possibility of diversion of credit for non-agricultural purposes. It also highlights the problem of regional disparity as states falling under central, eastern and north eastern regions are getting very low agricultural credit as percentage of their agri-GVA. Agricultural credit to gross value added from agriculture ratio was quite high in case of Kerala (324%), Tamil Nadu (267%), and Telangana (129 %) while it was very low in the States of Madhya Pradesh (28%), West Bengal (40%), Chhattisgarh (42%) and Uttar Pradesh (47%). It is evident that some States are getting agricultural credit more than agricultural Gross value added by crops, while some other States are not getting sufficient agricultural credit for various agricultural operations. These regional disparities may be addressed for balanced growth of agriculture sector in the country.

Figure 1: Ratio of Agricultural Credit disbursement to Agri-State Gross Value Added (in %)



Among the striking features of the agricultural credit scheme in India are the regional disparities in the disbursement of agricultural credit by RFIs. The correct way to evaluate the performance of agricultural credit is to look at the ratio of agricultural credit to State Gross Value Added. The average disbursement per farmer is Rs.102482 for all farmers and that for small and marginal farmers (Rs.71034) at the all India level, while it varies from Region to Region and state to state. Regional imbalance in the distribution of agriculture credit has persisted over the years. In 2019-20, the Southern Region had the largest share (43.95%) followed by the Northern Region (20.39%), Central Region (14.15%), Western Region (11.21%), Eastern Region (9.45%) and Northeast Region (0.85%).

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 2019-20 (Table 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 21.29, 13.93, 12.06, 8.96, 8.66, and 8.61 per cent, respectively during the period 2013-14 to 2019-20. The Southern Region has higher credit absorption capacity mainly because of better infrastructure facilities, better outreach and credit availability, leading to improvement in its share. During 2019-20, 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 (Economic Survey, 2020-21).

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

(Rs. crore)

Region	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	CAGR
Northern Region	167813 (22.98)	202479 (23.95)	216919 (23.69)	232847 (21.85)	256991 (22.10)	270197 (21.50)	283945 (20.39)	8.66
North Eastern Region	4345 (0.60)	4453 (0.53)	5833 (0.64)	8773 (0.82)	10273 (0.88)	11172 (0.89)	11809 (0.85)	21.29
Eastern Region	56217 (7.70)	80013 (9.47)	103673 (11.32)	86860 (8.15)	96751 (8.32)	113792 (9.05)	131668 (9.45)	12.06
Central Region	110929 (15.19)	133118 (15.75)	153289 (16.74)	156476 (14.68)	167096 (14.37)	171261 (13.63)	197015 (14.15)	8.61
Western Region	95420 (13.07)	106981 (12.66)	107934 (11.79)	136787 (12.83)	136374 (11.73)	151115 (12.02)	156206 (11.21)	8.96
Southern Region	295398 (40.46)	318284 (37.65)	327862 (35.81)	444013 (41.66)	495132 (42.59)	539292 (42.91)	612087 (43.95)	13.93
India	730123 (100)	845328 (100)	915510 (100)	1065756 (100)	1162617 (100)	1256830 (100)	1392729 (100)	11.19

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

Figures in parentheses indicates the share in Total GLC.

Coverage of Small and Marginal Farmers

Although the small and marginal farmers have a share of 75.5 per cent in loan accounts with Commercial Banks, their share in loan disbursed by Commercial Banks is at a lower level of around 47.3 per cent during 2019-2020 (Table 6). This is mainly on account of lower loan amount sanctioned for the small and marginal farmers as against other farmers. Cooperative Banks and RRBs are lending 69.7 per cent and 65.4 per cent, respectively of their total lending to small and marginal farmers in the country.

Table 6: Ground Level Credit Flow to Agriculture-Share of Small and Marginal Farmers

Year	Agency	No. of accounts (lakh)			Loan disbursed (Rs. 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

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

On an average, amount of loan disbursed per account was Rs.102482 as compared to Rs.71034 for small and marginal farmers (Table 7). The average amount of loan disbursed per account was less in Uttar Pradesh as compared to all India, both for all farmers and small and marginal farmers.

Table 7: Region-wise Average Loan Disbursement per Account during 2019-20

(Amount in Rs.)

Region/State	Average loan amount of all Farmers	Average loan amount of SF/MF
Northern Region	160165	95351
North Eastern Region	72571	61295
Eastern Region	66307	51592
Central Region	88545	61324
Western Region	150094	80636
Southern Region	95599	73520
Uttar Pradesh	93906	69689
All India	102482	71034

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

Banking Infrastructure Facilities in Uttar Pradesh

The banking network in the State, as on 31 March, 2020 comprised of 31 Commercial Banks (18 Public Sector Commercial Banks and 13 Private Sector Commercial Banks); 5 Regional Rural Banks (RRBs); Uttar Pradesh State Cooperative Bank (UPStCB) with 50 affiliated District Central Cooperative Banks (DCCBs) having 1260 branches (7251 PACS); 2 Small Finance Banks, and Uttar Pradesh Sahkari Gram Vikas Bank Ltd (UPSGVB) with 323 branches (Table 8). Banking services in the State are provided through a network of 18,937 branches, of which 13,241 branches (about 70%) are rural/semi urban branches. Bank of Baroda is the convener of the State Level Bankers' Committee (SLBC) in the State and 9

PSBs are Lead Banks in various districts in the State. Similarly, Micro Finance Institutions (MFIs) are also acting as important conduit for extending financial services to the microfinance sector by raising resources from Banks and other institutions and extending loans to individuals or members of SHGs/ JLGs. Beside 18937 brick and mortar branches, 18474 ATMs and 63179 CBS enabled banking outlets (BCs /Bank Mitra) also provided banking services in the state.

Table 8: Bank Branch Network in Uttar Pradesh

Agency	No. of Banks	No. of Branches			
		Total	Rural	Semi-urban	Urban/ Metro
Commercial Banks	31	12900 (68)	4683 (52)	3151 (75)	5066 (89)
RRBs	5	4287 (23)	3377 (37)	620 (14)	290 (5)
UPStCB	1	1260 (6)	574 (6)	428 (10)	258 (5)
UPSGVB	1	323 (2)	323 (4)	0	0
Others (SFBs)	2	167 (1)	57 (1)	28 (1)	82 (1)
Total	40	18937	9014	4227	5696

Source: State Level Bankers' Committee (SLBC) of Uttar Pradesh/State Focus Paper 2021-22, NABARD, Uttar Pradesh Regional Office, Lucknow.

Figures in parentheses indicate percentage to total.

Regional Disparity and Imbalances in Uttar Pradesh

Variations in resource endowment, climate, topography and historical, institutional and socio-economic factors, besides apathetic attitude and one size fit all policies over a period of time, have resulted not only in perpetuation of inter-district/regional disparity but even its intensification. In terms of agricultural development, the Bundelkhand region, followed by Eastern Uttar Pradesh were less developed regions compared to Western and Central regions of the state. This variation is causing lopsided development of the state and making policy formulation extremely difficult. A few economic parameters are presented in Table 9. The State contributed about 11 per cent in the total Real Gross Domestic Product of the country during 2020-20.

Table 9: Regional Variations in Uttar Pradesh

Particulars	Eastern (28 districts)	Western (30 districts)	Central (10 districts)	Bundelkhand (7 districts)
Population share (%)	39.98	37.17	18.00	4.85
Area share (%)	35.63	33.13	19.03	12.21
Literacy rate (%)	67.40	67.47	68.31	69.26
% of main worker in agriculture to total main workers	59.42	51.28	59.91	69.44
% of holdings of less than 1.0 hectare	84.95	72.16	79.15	54.55
Foodgrains productivity (qt./ha.)	24.63	30.07	26.36	16.96
% of net irrigated area to net area sown	78.06	95.00	85.18	58.26
Share in Gross State Domestic Products at Current Prices (%)	26.77	51.15	17.14	4.94
Per capita Income (Rs.)	31802	127562	56756	42620

Source: State Focus Paper 2021-22, NABARD, UP RO, Lucknow and Region-wise share in GSDP was calculated by the Author.

Agency-wise Analysis of GLC Flow in Uttar Pradesh

Agency-wise analysis of the GLC flow in UP shows that the share of CBs in total agricultural credit was 65.17 per cent, followed by RRBs (23.84%) and Cooperative Banks (10.99%) in 2009-10 (Table 10). Average share of agricultural credit to total priority sector lending decreased from 63.73 per cent in 2009-10 to 58.47 per cent in 2019-20. The total credit disbursement to agriculture sector in total disbursement under Priority Sector Lending (PSL) increased from Rs.29056 crore in 2009-10 to Rs.117444 crore in 2019-20, with CAGR of 16.81 per cent.

Table 10: Agency-wise and Broad Sector-wise Ground Level Credit Flow in Uttar Pradesh (Rs. crore)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	CAGR (%)
Commercial Banks	18936	22373	25709	31821	36756	48251	57157	66947	71116	72502	80051	16.60
RRBs	6927	7972	9431	10265	14696	18884	22971	21914	27180	26940	30182	17.10
Coop Banks+Others	3192	3896	4165	4855	4766	7262	7951	6427	7706	5161	6111	6.85
All Agencies (Agriculture Credit)	29056	34241	39305	46941	56219	74397	88079	95288	106002	104602	116344	15.91
Short term Credit	19616	21024	25549	31854	41375	55609	71042	75998	90639	87006	103688	20.03
Long Term Credit	9440	13217	13756	15086	14844	18788	17037	19290	15363	17596	13756	3.69
Total Agriculture Credit	29056	34241	39305	46941	56219	74397	88079	95288	106002	104602	117444	15.96
Non-Farm Sector (MSME)	9071	11461	10824	13248	19249	22440	22996	28137	46595	57809	71080	23.07
Other Priority Sector	7468	7133	8242	8663	10242	12381	12110	14026	15015	11699	12332	6.98
Total Priority Sector	45594	52835	58371	68852	85711	109218	123185	137451	167612	174110	200856	16.81

Source: State Focus Papers, NABARD, UP RO Lucknow and SLBC, UP.

Trends in Agricultural Credit Performance Indicators in Uttar Pradesh

The share of agricultural credit as a proportion of Agriculture Gross State Value Added (AgGSVA) which has been continuously increasing from 31.39 per cent in 2012-13 to 50.65 per cent in 2017-18, declined to 44.76 per cent in 2018-19 and increased thereafter to 47.87 per cent in 2019-20 (Table 11).

The agricultural credit as proportion of total Gross State Domestic Product (GSDP) which had increased from 5.43 per cent in 2011-12 to 7.74 per cent in 2015-16, declined continuously upto 2018-19 and increased later marginally to 6.54 per cent of GSDP in 2019-20. The agricultural credit per ha of gross cropped area has shown an increasing trend with continuous rise during the study period, excepting the year 2018-19. It has increased from Rs.15431 per ha in 2011-12 to Rs.43718 per ha in 2019-20. During the year 2018-19, it had reduced to Rs.38938 per ha. About three-fold increase has been registered in nominal terms during the period 2011-12 to 2019-20. These indicators suggest that the agricultural credit system is geared to face the challenges towards achieving the Hon'ble Prime Minister's vision of doubling of farmers' income and Aatmanirbhar Bharat, as availability of adequate and timely credit to the agricultural households/rural cultivators has increased substantially.

Table 11: Ratio of Agricultural Credit to GSDP, AgGSVA and GCA
(Current Prices)

Year	Agricultural Credit/GSDP (%)	Agricultural Credit/AgGSVA (%)	Agricultural Credit/GCA (Rs/ha.)
2011-12	5.43	31.66	15431
2012-13	5.71	31.39	18179
2013-14	5.98	34.60	21709
2014-15	7.35	47.59	28453
2015-16	7.74	49.94	33686
2016-17	7.39	49.75	36443
2017-18	7.26	50.65	39458
2018-19	6.27	44.76	38938
2019-20	6.54	47.87	43718

Source: Handbook of Statistics on Indian States (2019-20), RBI, State Focus Paper 2021-22, NABARD, Uttar Pradesh RO, Lucknow.

There are wide variations in the availability of agricultural credit (institutional credit) per hectare of gross cropped area (GCA) in different districts of Uttar Pradesh. Although on an average, agricultural credit disbursement per ha of GCA was Rs.43718 in 2019-20, it was as high as Rs.225557 in Sant Ravidas Nagar, Rs.186787 in Meerut, Rs.149086 in Ghaziabad, Rs.147487 in Hapur, Rs.132301 in Bhagpat, Rs.119854 in Gautam Budh Nagar, Rs.113324 in Agra, Rs.112201 in Bijnor, Rs.108158 in Rampur, Rs.102262 in Muzaffarnagar and Rs.102145 in Saharanpur and it was as low as Rs.13862 in Banda, Rs.14586 in Unnao, Rs.16793

in Shravasti, Rs.17502 in Chandauli, Rs.18068 in Auraiya, Rs.18035 in Kaushambi, Rs.18512 in Bahraich, Rs.19990 in Mahoba and Rs.23733 in Jalaun (Table 12). It may also be observed from the table that the agricultural credit disbursement per ha of GCA was more than the state average in 34 districts.

The accessibility of institutional credit is higher in the districts of the western region where the level of agricultural development is higher. Similar results were reported in the studies conducted earlier in 1980s (Rao, 1994) and in 2007 by Golait. There is a vicious cycle operating in less developed districts. 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 informal sources. Consequently, the demand for agricultural credit for short and long term purposes is dampened.

Table 12: District-wise Agricultural Credit Flow in Uttar Pradesh

Sr. No.	District	Credit Flow in Agri (Rs.lakh)	Agricultural credit /GCA (Rs./ha)	Sr. No.	District	Credit Flow in Agri (Rs.lakh)	Agricultural credit /GCA (Rs./ha)
1	Agra	484453	113324	39	Jaunpur	131198	26267
2	Aligarh	366500	64704	40	Jhansi	160547	32922
3	Allahabad/Pryagraj	208469	36350	41	Kannauj	83297	31524
4	Ambedkar Nagar	186718	64073	42	Kanpur Dehat	89176	28257
5	Amethi	74763	31094	43	Kanpur Nagar	111463	42304
6	Amroha	193183	68761	44	Kasganj	86006	31741
7	Auraiya	45278	18068	45	Kaushambi	36478	18035
8	Azamgarh	150320	29707	46	Kheri	518346	73259
9	Baghpat	230560	132301	47	Kushi Nagar	207062	60880
10	Bahraich	103885	18512	48	Lalitpur	122713	24464
11	Ballia	138759	39215	49	Lucknow	150042	75409
12	Balrampur	190109	52628	50	Maharajganj	133965	36299
13	Banda	65811	13862	51	Mahoba	54098	19990
14	Barabanki	209696	38842	52	Mainpuri	73909	22550
15	Bareilly	282499	52298	53	Mathura	332960	81896
16	Basti	127177	37480	54	Mau	132517	66814
17	Bijnor	467439	112201	55	Meerut	566600	186787
18	Budaun	301801	46971	56	Mirzapur	92869	28037
19	Bulandshahr	315912	58818	57	Moradabad	184363	58898
20	Chandauli	40864	17502	58	Muzaffarnagar	329352	102262
21	Chitrakoot	58602	32141	59	Pilibhit	191805	47614
22	Deoria	149918	45531	60	Pratapgarh	110922	29789
23	Etah	202578	61045	61	Rae Bareli	158694	42720
24	Etaah	79187	30877	62	Rampur	384870	108158
25	Faizabad/Ayodhya	109576	37613	63	Saharanpur	447798	102145
26	Farrukhabad	97613	42747	64	Sambhal	223506	59918
27	Fatehpur	120330	28165	65	SantKabeer Nagar	69936	33126
28	Firozabad	172251	56240	66	SantRavidas Nagar	230048	225557
29	Gautam Buddh Nagar	122096	119854	67	Shahjahanpur	218197	35946
30	Ghaziabad	113000	149086	68	Shamli	151581	89318
31	Ghazipur	121634	27307	69	Shravasti	32122	16793
32	Gonda	216850	48988	70	Siddharth Nagar	230048	60081
33	Gorakhpur	163260	41994	71	Sitapur	183501	27300

34	Hamirpur	88935	22734	72	Sonbhadra	68438	23515
35	Hapur	210847	147487	73	Sultanpur	75141	25716
36	Hardoi	257520	38102	74	Unnao	74038	14586
37	Hathras	119521	46801	75	Varanasi	120331	73159
38	Jalaun	114050	23733		State Total	1174439	43718

Source: Directorate of Economics and Statistics, (2020), District Domestic Products, Uttar Pradesh (2018-19), State Planning Institute, Department of Planning, Uttar Pradesh, Lucknow and Potential Linked Credit Plan 2021-22, NABARD, UP Regional Office, Lucknow.

Among the striking features of the agricultural credit scene in the State are the wide district-wise/regional disparities in the disbursement of agricultural credit by the Rural Financial Institutions. The correct way to evaluate the performance of agricultural credit to district agricultural value added. It is difficult to obtain the data. So, as the second best alternative, we can look at agricultural credit as a proportion of Gross District Domestic Product (GDDP) at current prices. The districts in the Western region of the State stand out with higher share of agricultural credit (Table 13). It may be observed from the table that 15 districts out of 75 districts in Uttar Pradesh together account for 44.38 per cent of the total GDDP, 36.73 per cent of the total agricultural credit disbursement and only 20.25 per cent of the GCA of the State. Gautam Budh Nagar accounts for the highest share of 9.19 percent in GDDP, followed by Lucknow (3.72%), Agra (3.43%), Allahabad (3.24%), Meerut (3.18%), Kanpur Nagar (3.15%), Ghaziabad (2.77%), Bareilly (2.67%) and Bulandshahr (2.19%) during 2018-19.

The ratio of agricultural credit to GDDP varied from 4.14 per cent in Sant Ravidas Nagar district to 125.53 per cent in Gautam Budh Nagar district and this ratio for the state is 14.20 per cent as compared to the 46.73 per cent for all India. While the ratio of agricultural credit to GDDP in 29 districts was more than the state average, 46 districts have less than the state average. There is need to increase the agricultural credit flow in the credit starved districts/regions (Bundelkhand and Eastern Region) in the state to achieve sustainable agriculture growth and contribute more towards attaining the status of Atmanirbhar Bharat. The total agricultural credit flow in the state was Rs.117444 crore in 2019-20 as compared to Rs.104602 crore in 2018-19, registering a growth of 12.28 per cent.

Table 13: District-wise Ratio of Agricultural Credit to GDDPs (Base Period-2011-12) at Current Prices

(Rs.crore)											
Sr. No.	District	GDDP	%	Credit Flow in Agri	Agricultural Credit to GDDP (%)	Sr. No.	District	GDDP	%	Credit Flow in Agri	Agricultural Credit to GDDP (%)
1	Agra	57175	3.43	4844.53	11.80	39	Jaunpur	18365	1.10	1311.98	14.00
2	Aligarh	32100	1.92	3665	8.76	40	Jhansi	19888	1.19	1605.47	12.39
3	Allahabad/Pryagraj	54129	3.24	2084.69	25.96	41	Kannauj	15355	0.92	832.97	18.43
4	Ambedkar Nagar	12114	0.73	1867.18	6.49	42	Kanpur Dehat	13729	0.82	891.76	15.40
5	Amethi	11769	0.71	747.63	15.74	43	Kanpur Nagar	52472	3.15	1114.63	47.08
6	Amroha	22903	1.37	1931.83	11.86	44	Kasganj	12474	0.75	860.06	14.50
7	Auraiya	9000	0.54	452.78	19.88	45	Kaushambi	9549	0.57	364.78	26.18
8	Azamgarh	21887	1.31	1503.2	14.56	46	Kheri	29556	1.77	5183.46	5.70
9	Baghpat	12061	0.72	2305.6	5.23	47	Kushi Nagar	18444	1.11	2070.62	8.91
10	Bahraich	16637	1.00	1038.85	16.01	48	Lalitpur	10399	0.62	1227.13	8.47

11	Ballia	13842	0.83	1387.59	9.98	49	Lucknow	62036	3.72	1500.42	41.35
12	Balrampur	9081	0.54	1901.09	4.78	50	Maharajganj	13573	0.81	1339.65	10.13
13	Banda	12372	0.74	658.11	18.80	51	Mahoba	8603	0.52	540.98	15.90
14	Barabanki	23990	1.44	2096.96	11.44	52	Mainpuri	13222	0.79	739.09	17.89
15	Bareilly	44543	2.67	2824.99	15.77	53	Mathura	22751	1.36	3329.6	6.83
16	Basti	13990	0.84	1271.77	11.00	54	Mau	12008	0.72	1325.17	9.06
17	Bijnor	31630	1.90	4674.39	6.77	55	Meerut	53098	3.18	5666	9.37
18	Budaun	23973	1.44	3018.01	7.94	56	Mirzapur	16090	0.96	928.69	17.33
19	Bulandshahr	36462	2.19	3159.12	11.54	57	Moradabad	30130	1.81	1843.63	16.34
20	Chandauli	9762	0.59	408.64	23.89	58	Muzaffarnagar	27455	1.65	3293.52	8.34
21	Chitrakoot	5088	0.30	586.02	8.68	59	Pilibhit	18109	1.09	1918.05	9.44
22	Deoria	14604	0.88	1499.18	9.74	60	Pratapgarh	13349	0.80	1109.22	12.03
23	Etah	14245	0.85	2025.78	7.03	61	Rae Bareli	16164	0.97	1586.94	10.19
24	Etaah	12884	0.77	791.87	16.27	62	Rampur	22120	1.33	3848.7	5.75
25	Faizabad/Ayodhya	15568	0.93	1095.76	14.21	63	Saharanpur	30992	1.86	4477.98	6.92
26	Farrukhabad	11979	0.72	976.13	12.27	64	Sambhal	14809	0.89	2235.06	6.63
27	Fatehpur	18612	1.12	1203.3	15.47	65	Sant Kabeer Nagar	7724	0.46	699.36	11.04
28	Firozabad	17928	1.07	1722.51	10.41	66	Sant Ravidas Nagar	9523	0.57	2300.48	4.14
29	Gautam Buddha Nagar	153263	9.19	1220.96	125.53	67	Shahjahanpur	23501	1.41	2181.97	10.77
30	Ghaziabad	46191	2.77	1130	40.88	68	Shamli	10985	0.66	1515.81	7.25
31	Ghazipur	16794	1.01	1216.34	13.81	69	Shravasti	4462	0.27	321.22	13.89
32	Gonda	16941	1.02	2168.5	7.81	70	Siddharth Nagar	13127	0.79	2300.48	5.71
33	Gorakhpur	28620	1.72	1632.6	17.53	71	Sitapur	27076	1.62	1835.01	14.76
34	Hamirpur	11769	0.71	889.35	13.23	72	Sonbhadra	14378	0.86	684.38	21.01
35	Hapur	15220	0.91	2108.47	7.22	73	Sultanpur	14287	0.86	751.41	19.01
36	Hardoi	20847	1.25	2575.2	8.10	74	Unnao	21421	1.28	740.38	28.93
37	Hathras	16722	1.00	1195.21	13.99	75	Varanasi	26377	1.58	1203.31	21.92
38	Jalaun	14292	0.86	1140.5	12.53		State Total	1668229	100	117444.4	14.20

Source: Source: Directorate of Economics and Statistics, (2020), District Domestic Products, Uttar Pradesh (2018-19), State Planning Institute, Department of Planning, Uttar Pradesh, Lucknow and Potential Linked Credit Plan 2021-22, NABARD, UP Regional Office, Lucknow.

District-wise Credit Deposit Ratio in Uttar Pradesh

With a view to reducing inter-regional imbalances in credit delivery and encouraging banks to deploy the bulk of rural and semi-urban deposit funds in those areas themselves, the public sector banks had been asked to achieve a credit-deposit (C-D) ratio of 60 per cent in their rural and semi-urban branches since March 1979. This target was subsequently extended to private sector banks also. There was no state-level target but the 60 per cent norm had emerged as a yardstick to judge banks' performance in backward states and districts. The overall C-D Ratio in the Uttar Pradesh was 51.60 per cent as compared to all India average of 78.30 per cent as on 31 March 2020 (Table 14). The C-D ratio varied from 20.11 per cent in Azamgarh to 88 per cent in Sambhal district. The C-D ratio in 37 districts was less than the state average.

Table 14: District-wise Credit Deposit Ratio in Uttar Pradesh

Sr. No.	District	C-D Ratio	Sr. No.	District	C-D Ratio
1	Agra	74.00	39	Jaunpur	25.51
2	Aligarh	52.98	40	Jhansi	43.00
3	Allahabad/Pryagraj	41.06	41	Kannauj	78.00
4	Ambedkar Nagar	40.68	42	Kanpur Dehat	46.00
5	Amethi	42.18	43	Kanpur Nagar	59.00
6	Amroha	80.00	44	Kasganj	75.69
7	Auraiya	32.15	45	Kaushambi	45.53
8	Azamgarh	20.11	46	Kheri	71.29
9	Baghpat	48.36	47	Kushi Nagar	37.25
10	Bahraich	61.57	48	Lalitpur	76.76
11	Ballia	33.02	49	Lucknow	45.00
12	Balrampur	46.71	50	Maharajganj	47.34
13	Banda	51.25	51	Mahoba	59.17
14	Barabanki	63.00	52	Mainpuri	61.21
15	Bareilly	53.85	53	Mathura	63.00
16	Basti	40.12	54	Mau	28.08
17	Bijnor	65.00	55	Meerut	55.14
18	Budaun	77.00	56	Mirzapur	44.73
19	Bulandshahr	56.00	57	Moradabad	66.00
20	Chandauli	39.53	58	Muzaffarnagar	72.00
21	Chitrakoot	52.43	59	Pilibhit	76.00
22	Deoria	29.79	60	Pratapgarh	33.16
23	Etah	59.00	61	Rae Bareli	48.80
24	Etaah	40.14	62	Rampur	73.64
25	Faizabad/Ayodhya	46.02	63	Saharanpur	71 .10
26	Farrukhabad	53.85	64	Sambhal	88.00
27	Fatehpur	40.00	65	Sant Kabeer Nagar	36.10
28	Firozabad	52.88	66	Sant Ravidas Nagar	40.46
29	Gautam Buddha Nagar	61.95	67	Shahjahanpur	67.75
30	Ghaziabad	51.99	68	Shamli	65.00
31	Ghazipur	27.24	69	Shravasti	52.67
32	Gonda	42.48	70	Siddharth Nagar	30.68
33	Gorakhpur	41.08	71	Sitapur	57.67
34	Hamirpur	67.66	72	Sonbhadra	40.10
35	Hapur	67 .94	73	Sultanpur	31.84
36	Hardoi	61.00	74	Unnao	40.50
37	Hathras	67.84	75	Varanasi	38.10
38	Jalaun	48.80		State Total	51.60

Source: Potential Linked Credit Plan 2021-22, NABARD, Uttar Pradesh Regional Office, Lucknow..

Indebtedness of Agricultural Households in Uttar Pradesh

As per the NAFIS Report 2016-17, 39.4 per cent of indebted agricultural households (AHHs) in Uttar Pradesh reportedly borrowed exclusively from institutional sources during the 2015. Further, while 55.7 per cent borrowed only from informal sources, 4.9 per cent of AHH borrowed from both the sources (Table 15). The probable reasons could be that their credit demand could be for consumption purposes or they could be tenant farmers, sharecroppers and landless labourer who are not able to offer collateral security to avail institutional credit or they are involved in unviable subsistence agriculture or bank don't find them credit worthy. Results reveal that AHHs in State are more dependent on non-institutional credit as compared to the all-India position in 2015. Further, NAFIS Report 2016-17 has revealed that AHHs avail credit from sources than banks such as NBFC/MFI, financial companies, financial corporations, provident fund, insurance, relatives, friends, moneylenders, landlords, etc.

Table 15: Proportion of Households that took any Loan in the 2015 by Type of Source in Uttar Pradesh

(In %)

Particulars	Agricultural Household (UP)
% Households that took Loan from Institutional Sources	39.4 (60.5)
% Households that took Loan from Non-Institutional Sources	55.7 (30.3)
% Households that took Loan from both, Institutional & Non-Institutional Sources	4.9 (9.2)

Source: NAFIS Report 2016-17.

Figures in parentheses indicates percentage share in India.

Preferred Sources of Loan for Agricultural Households in Uttar Pradesh

On examining the reported amount of loan taken, particularly for agricultural households, as per the size of land holdings, it was found that the households with higher landholdings carry higher debt burden as compared to the households with lower landholdings (Table 16).

Table 16: Average Amount of Loan Taken by Agricultural Households in the 2015 According to the Size of Landholdings

(In Rs.)

Particulars	Less than 0.01 ha	0.01- 0.40 ha	0.41- 1.00 ha	1.01- 2.00 ha	More than 2.0 ha	Average amount of Loan
From all Sources- Combined	57501 (77988)	63543 (76506)	67227 (82680)	97122 (119782)	1,72682 (20381)	76212 (107083)
From Institutional Sources	20805 (55260)	20073 (45001)	30360 (57039)	72383 (95731)	1,47846 (159482)	39221 (77473)
From Non- Institutional Sources	36696 (22728)	43470 (31504)	36867 (25641)	24739 (24051)	24,836 (44349)	36992 (29611)

Source: NAFIS Report 2016-17.

Figures in parentheses indicate percentage share in India.

Further, the average amount of loan per household, sourced from non-institutional sources was higher than that sourced from institutional sources in respect of agricultural households possessing less than 1 ha of land as compared to the agricultural households possessing more than 1 ha of land. While there was an increase in the debt burden with increase in land sizes, the households in the last category of more than 2 ha of land exhibited a sharp increase, with the loan amount from both institutional and non-institutional sources being almost double the amount taken by the households having land between 1 and 2 ha.

Share of Various Sources in the Total Loan taken by Agricultural Households

A detailed analysis of average amount of loan taken from various sources, and the percentage proportion of loan contributed by each source has been presented in Table 17.

Table 17: Main Sources used by Households that took any Loan in the 2015 by AHH (%)

Agency	Agricultural Household
Loans taken from Institutional Sources	
Co-operative Societies/Co-operative Banks	2.7 (6.0)
Commercial Banks/Regional Rural Banks	33.3 (54.0)
Bank-linked Self Help Groups	4.3 (4.1)
Other Self Help Groups/Non- Banking Financial Companies/MFIs	3.5 (4.9)
Loans taken from Non-Institutional Sources	
Relatives & Friends	43.5 (13.3)
Zamindar (Landlord)	10.0 (3.8)
Moneylenders	7.7 (9.4)

Source: NAFIS Report 2016-17.

Figures in parentheses indicate percentage share in India.

Purpose for Taking Loans in Uttar Pradesh

The households reporting off-take of loans in NAFIS were further inquired about the purpose for which each of the loans was taken. The purpose-wise distribution of loans has been presented in Table 18. Considering all loans taken by all agricultural households, meeting various medical expenses was cited as the most significant purpose, followed by capital expenditure for agricultural purposes, requirement for housing purposes, for meeting running expenses required for agricultural purposes. This is reflective of the fact that a sizeable proportion of the loans taken by agricultural households were sought for productive purposes which will help the rural households achieve better economic returns in the future.

Table 18: Purpose-wise Loans taken in the 2015 by Agricultural Households in Uttar Pradesh (%)

Purposes	Agricultural Households
To meet medical expenses	22.4 (17)
To meet sundry domestic needs	20.6 (32)
Running expenses for non-agri. Enterprises	11.0 (12)
For housing purposes	10.5 (21)
Running expenses for agri. Enterprises	13.4 (0)
Capital expenditure for agri. Enterprises	12.6 (0)
Capital expenditure for non-agri. Enterprises	5.0 (1)
For educational purposes	2.6 (6)

Source: NAFIS Report 2016-17.

Figures in parentheses indicate percentage share in India.

Issues and Concerns

1. Despite the significant developments achieved in terms of spread, network and outreach of rural financial institutions in the state, the quantum of flow of financial resources to agriculture continues to be inadequate. One of the major impediments constraining the adoption of new technological practices, land improvements and building up of irrigation and adoption of modern system of irrigation and marketing infrastructure has been the inadequacy of farm investment capital. Farmers seem to borrow more short-term credit in order to meet input needs to maintain continuity in agricultural operations without worrying much about long-term capital formation in the face of agricultural bountifulness. It might be the case from the supply side that short-term credit bears low credit risk, lower supervision and monitoring costs, and a better asset liability management.
2. The flow of investment credit to agriculture is constrained by host of factors such as high transaction costs, structural deficiencies in the rural credit

delivery system, issues relating to credit worthiness, lack of collateral in view of low asset base of farmers, low volume of loans with associated higher risks, high man power requirements, etc.

3. Large proportion of population in the lower strata, which is having major share in the land holdings, receives much less credit than its requirements. The growing disparities between marginal, small and large farmers continues to be a cause of concern. This observed phenomenon may be attributed, inter alia, to the “risk aversion” tendency of the bankers towards small and marginal farmers as against the large farmers, who are better placed in offering collateral.
4. The agricultural credit disbursement increased from Rs.18467 crore in 2006-07 to Rs.117444 crore in 2019-20 in the state, exhibiting significantly high growth of credit year after year. However, the impact on improving crop productivity and output has not been so satisfactory.
5. There is a significant disparity in the flow of agricultural credit among regions and districts in the state.
6. There is significant imbalance between short-term (88.29%) and long-term credit (11.71%) in Uttar Pradesh, between credit disbursed to agriculture and allied activities as also across components of agricultural term loans, viz. water resources, farm mechanization, forestry and waste land development, animal husbandry and fisheries, agriculture infrastructure, etc.
7. Difficulties experienced to easy and reliable access of institutional credit by small and marginal farmers, tenant farmers, sharecroppers, oral lessees, landless labourers, and households residing in hilly, desert, drought prone and most backward and vulnerable areas, in particular.
8. The problems on account of default of loan repayments leading to building up huge amount of NPA has become serious and malevolent.
9. The diversion of agricultural credit to non-agricultural purposes can be estimated by looking at agri-credit as percentage of the value of input requirements. The total short term credit to agriculture and allied sectors, as proportion of inputs requirements, GVO-GVA, was substantially above the 100 per cent for many states, like Tamil Nadu, Kerala and Punjab.
10. In order to ensure that credit in particular and financial services in general achieve their intended objectives, the need to create enabling policy environment and effective credit planning is greater now than before.

Conclusions

1. The relative share of institutional agencies in total cash debt of rural cultivators increased from 18.4 per cent in 1961 to 66.3 per cent in 1991 and subsequently decreased to 58.4 per cent in 2012. Further, Southern region continues to account for the bulk of the credit disbursement to agriculture followed by the Western, Northern and Central regions. The Southern region has higher credit absorption capacity mainly because of better infrastructure

facilities, better outreach and credit availability, leading to improvement in its share. During 2019-20, in the total disbursement, the share of North Eastern Region (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 (Economic Survey, 2020-21).

2. The total institutional credit to agriculture sector has increased more than 4 times during 2008-09 to 2019-20 in the Uttar Pradesh. In total credit the ratio of crop loans remains high as compared to term loan, crop loan increased from 67.51 per cent in 2008-09 to 88.29 per cent in 2019-20. As per the NAFIS Report 2016-17, the share of non- institutional credit, institutional credit and both the sources in 2015 was 55.7 per cent, 39.3 per cent and 4.9 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. The credit disbursed per hectare of GCA was only Rs.43718 at the state level as compared to Rs.70697 at all India level. The per hectare credit flow indicates that at the state level there was an impressive increase from Rs.15431 in 2011-12 Rs.43718 in 2019-20. However, there exists wide inter-district disparities as are indicated by the range of Rs.13862 per hectare in Banda district to Rs.186787 per hectare in Meerut district. Only 34 districts out of the 75 had per hectare credit flow above the state figure. The accessibility of institutional credit is higher in the districts in the western region where the level of agricultural development is also higher. It is a vicious cycle operating in less developed districts. 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 informal sources. Consequently, the demand for agricultural credit for short and long term purposes is dampened. Thus the inter-districts disparities across the State in the disbursement of agricultural credit by the RFIs is very significant. Therefore, it warrants attention of the policy makers for mitigating regional and inter-district disparities.
3. The ratio of agricultural credit to GDDP varied from 4.14 per cent in Sant Ravidas Nagar district to 125.53 per cent in Gautam Budh Nagar district and this ratio for the state is 14.20 per cent as compared to the 46.73 per cent for all India. While the ratio of agricultural credit to GDDP in 29 districts was

more than the state average, 46 districts have less than the state average. The credit deposit (C-D) ratio varied from 20.11 per cent in Azamgarh to 88 per cent in Sambhal district and this ratio for state is 51.60 per cent. The C-D ratio in 37 districts was less than the state average. There is need to increase the agricultural credit flow in the credit starved districts/regions (Bundelkhand and Eastern Region) in the state to achieve sustainable agriculture growth and contribute more towards attaining the status of AatmaNirbhar Bharat.

4. The regional disparities in agricultural credit flow are on account of multiple factors and would need a multi- stakeholder approach for increasing the credit flow in the unserved areas/sectors in general and particularly credit starved/Aspirational districts.

Policy Suggestions

1. Banks should be incentivised to lend in backward and credit starved regions to take care of uneven distribution of credit among different districts/regions in Uttar Pradesh.
2. NABARD should devise mechanism through which funds like RIDF could be earmarked for backward and credit starved regions/districts so that credit absorption capacity of farmers is enhanced.
3. The RBI needs to initiate steps to implement the recommendations of the Internal Working Group, viz. (i) Building up of an enabling ecosystem through digitization of land records (ii) Reforming of land leasing framework (iii) Creation of a national level agency to build consensus between the State Governments and the Central government with regards to agriculture related policy reform, etc.
4. There is need to channelize more term loans to allied activities in agriculture (dairy, poultry, fishing, etc.), which contributes around 40 per cent of agricultural output but avails only 6 to 7 per cent of agriculture credit.
5. Though the small and marginal farmers which constituted 92 per cent of the total operated holdings have 64.77 per cent share in the operated area of the state, only 44.94 per cent of them were covered by the Rural Financial Institutions (RFIs). In other words, the bulk of loans disbursed by RFIs, which formed a significant portion of farm credit, was cornered by other/larger land holders.
6. The Integrated Agricultural Credit Approach, linking credit with supplies (inputs) and services (technology, transport, storage, processing and marketing), to improve productivity and add value to the farm products need to be operationalized in the public-private-partnership mode.

7. The access and distribution of agricultural credit is skewed in favour of better endowed districts/regions and within the same region tilted towards better off agricultural households. The persistence of non-institutional sources is a matter of concern and concerted efforts need to be made to minimise their role in agricultural credit, particularly because their rates of interest are exploitative

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