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INSTITUTIONAL CREDIT FLOW IN NORTH EASTERN REGION: ISSUES AND SOLUTIONS

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In every Union Budget, the agriculture credit target is being raised and surpassed subsequently. Since long, credit accessibility has been a major issue of Indian agriculture, predominantly identified by large presence of small and marginal farmers (86%) due to shrinking landholding size caused by population explosion. The credit intensity (ratio of agriculture credit to agriculture output value) has been rising as a consequence of continuous effort of improving credit accessibility. Though the volume of credit has been increasing over the decades, its quality, reach and impact on agriculture has not improved much while regional and inter-state disparity is wide and sharp in the country. Because of wide presence of traditional farming like Jhum cultivation, NER ingested the least institutional credit for agriculture. The region is trapped in a vicious circle where one disadvantage generates another that keep the region agriculturally underdeveloped and remain deficient in institutional credit. There is a wide difference among NE states as far as infrastructure, credit stream, industrialisation, and other financial and non-financial parameters are taken under consideration. Among the regions, Southern region (10.68%) has the highest growth for crop loan and NER (36.15%) reported the highest growth for term loan. However, crop loan contracted by 2.44 per cent in NER during 2013-14 to 2019-20. The highest share of total credit of the country goes to Southern region in both 2013-14 (40.46%) and 2019-20 (43.95%) whereas NER has negligible share in both the periods (0.60 % and 0.85%, respectively). Out of total Ground Level Credit (GLC) flow in NER, 65.31 per cent share was received by Assam alone in 2019-20. In addition, Assam's GSA as percentage of total Geographical Area stands as 51.8 per cent in 2019 as compared to national average of 37.7 per cent while Arunachal Pradesh has just 2.9 per cent. The credit- deposit ratio of Assam is also higher than the regional average of NER. This paper looks at the credit scenario in NER and tries to identify the major constraints in credit flow and solutions thereof.

INTRODUCTION:

Financing of Agriculture needs to be differentiated from the mainstream commercial finance because of certain factors that are specific to agriculture sector. Agriculture continues to be influenced by agro-climatic factors and natural resource endowments with high seasonality in activities. Therefore, control over conditions of production are limited. In India, small and marginal farmers constitute around 86% (Agriculture Census 2015-16). Stable conditions of agricultural production require heavy investment in supporting infrastructure. Farmers need short-term finance to meet the cropping requirements like seeds, fertilisers, pesticides, insecticides, labour, etc. They also need long-term finance for land improvements, creation of irrigation facilities, purchase of farm machinery and equipment, etc.

The journey of institutional credit in agriculture started with the enactment of the Co-operative Societies Act in 1904. The establishment of RBI in 1935 reinforced the process of institutional development for agricultural credit, then followed nationalisation of banks (1969), establishment of Regional Rural Banks (1975) and setting up of National Bank for Agriculture & Rural Development (1982) which further carry forwarded the institutionalisation of agriculture credit in India. Commercial Banks, Regional Rural Banks and

Cooperative Banks are the three major Rural Financial Institutions providing credit for agriculture. The structure of credit outlets and trend of credit flow have witnessed a significant change and commercial banks have emerged as the major source of institutional credit in recent years. Non-institutional credit accounted for 93 per cent of the total credit requirements in 1951-52 and institutional sources accounted for only 7 per cent of the total credit needs in that year. The All India Debt and Investment Survey (1981) estimated that the share of non-institutional sources had slumped to about 37 per cent in 1981; the share of institutional share rose to 65 per cent in 1991. The next decade witnessed decline in institutional share to 61 per cent in 2002-03, and a slight increase to 64 per cent in 2013. As per NAFIS 2016-17, around 72 per cent availed loan from institutional sources.

The eight NE states, viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura are growing fast, reducing their dependence on agriculture, and generally prospering, but the growth is not creating enough jobs and livelihood opportunities. There is a wide disparity among NE states in terms of resource allocation, infrastructures, credit flow, industrialisation, and other socio-economic parameters. After independence, geographical isolation due to partition of undivided India,

ceasing of cross border trade due to foreign policy issues and internal disturbance in few areas, the region is now identified as one of lowest achievers in economic development process with backward agriculture in most parts of the area. The region needs more spotlight on foundation from the financial plan. Poor basic infrastructure particularly transportation and health areas has been a significant formative issues in the region notwithstanding special attention. Nascent industrialisation and negligible private enterprises in the region bring about high joblessness rate with government occupations overwhelming the significant bit of formal business. The region has the lowest institutional credit flow in the country with less than 1 per cent share during 2019-20. The farmers in this region are mostly following the traditional agricultural practices characterized by "low-input-low-output" situation. The demand for agricultural loan is expected to be induced by the availability and adoptability of suitable modern agro-technologies. However, the advancement of modern agro-technologies in this region is very slow and is severely constrained by topographical features (primarily hilly area with large forest coverage). The present paper aims to analyse the institutional credit flow in NER, identify the issues and suggest strategies to overcome the challenges

DATABASE AND METHODOLOGY:

The study is primarily based on the secondary data compiled from diverse sources. The data have been collected from Handbook of Statistics on Indian States, RBI (2020) for Gross Sown Area, Cash Deposit Ratio, Kisan Credit Card, Agriculture Net State Domestic Product and Real Sector Indicators, Ground Level Credit (GLC) from NABARD Ensure Portal, NABARD Annual Reports and State Focus Papers (2020-21) of North eastern states; and indebtedness and other data from Situation Assessment Survey 2013, Agriculture Census 2015-16, NABARD All India Rural Financial Inclusion Survey (NAFIS) 2016-17, published research papers, etc.

The data have been analysed using simple tabular techniques, percentage change, absolute percentage difference & Compound Annual Growth Rates (CAGR).

RESULTS AND DISCUSSION:

Flow of Institutional Agricultural Credit: Institutional credit flow to regions in general and NE states in particular from 2013-14 to 2019-20 was analysed. The accessibility to institutional credit is the highest in the Southern region where the level of agricultural development is also higher and the least in NER. The less developed states are trapped in a vicious cycle. Low credit flow obstructs modernisation of technology and adversely impact the private capital investment, which in

turn lowers the productive capacity of the agricultural sector and results in lower productivity and production. Consequently, the absorptive capacity for agricultural credit is adversely impacted.

Table 1 demonstrates that All-India credit disbursement has been growing at CAGR of 6.16 per cent, 22.19 per cent and 11.07 per cent for crop loan, term loan and total loan, respectively during 2013-14 and 2019-20. Among the regions, Southern region (10.68%) has the highest growth for crop loan and NER (36.15%) reported the highest growth for term loan, However, crop loan contracted by 2.44 per cent in NER during the period. It is observed that the share of term loan is decreasing at All-India level but its share is increasing in NER. On the other hand, the declining share of investment credit indicates that farmers seem to borrow more to meet their input needs to continue agricultural operation, thereby, falling in the long-term capital formation for agriculture in the country. The highest share of total credit of the country goes to Southern region in both 2013-14(40.46%) and 2019-20 (43.95%) whereas NER has a negligible share in both the period (0.60 % and 0.85% respectively).

Table 2 depicts that all the NER states have significant growth in term loan while only three states namely, Sikkim, Nagaland and Meghalaya have growth in crop loan. Meghalaya has negligible

growth of credit during the period. For Mizoram which witnessed the largest contraction (-16.65%) in crop loan among NE states, its Urban Cooperative Bank has witnessed a decline in its CD ratio in recent years and the bank is unable to lend to its affiliated PACS since most of the PACS are unviable which has adversely impacted short term credit flow (State Focus Paper 2020-21) . In Meghalaya, achievement under total agricultural disbursements was just 5 per cent of the target in 2019-20 which indicates banks are not able to lend due to risk factors and low absorptive capacity. In terms of percentage share to total credit flow in NER, there is highly skewed credit distribution in favour of Assam (65.31%) and Tripura (24.14%) demonstrating that 89.45 per cent of the credit flow to these two states only in 2019-20. Tripura has large expansion in its credit share among NE states during the period.

Agriculture Credit Per Hectare of GSA: The agricultural credit per hectare of Gross Sown Area (GSA) has shown an increasing trend with a tremendous rise in recent years in India. It has increased from around ₹0.37 lakh in 2013-14 to ₹0.71 lakh in 2019-20, that is, a percentage increase of 90.75 per cent at all-India level (Table 3). In 2013-14, NER (₹0.06 lakh) had around 44.7 percent lesser credit flow per ha than the national average credit flow, whereas Southern region (₹1.05 lakh)

Table1
Regional Growth and Percentage Share of Credit in India

Region	CAGR(2013-14 to 2019-20) (%)			Share (%)					
	Crop Loan	Term Loan	Total Loan	Crop Loan		Term Loan		Total Loan	
				2013-14	2019-20	2013-14	2019-20	2013-14	2019-20
Northern	3.73	24.72	8.70	20.95	22.46	16.64	17.37	22.98	20.39
NER	-2.44	36.15	21.01	0.74	0.26	1.10	1.70	0.60	0.85
Eastern	0.55	27.04	11.76	7.37	6.13	9.87	14.29	7.70	9.45
Central	4.41	22.56	8.62	20.10	15.84	10.90	11.69	15.19	14.15
Western	2.15	19.30	9.15	11.68	9.19	18.22	14.16	13.07	11.22
Southern	10.68	30.36	13.89	39.15	46.13	43.27	40.78	40.46	43.95
All India	6.16	22.19	11.07	100	100	100	100	100	100

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal.

Table 2
Growth and Percentage Share of Credit in NE States

NE States	CAGR (2013-14 to 2019-20) (%)				Share (%)					
	Crop Loan	Term Loan	Total Loan	Crop Loan		Term Loan		Total Loan		
				2013-14	2019-20	2013-14	2019-20	2013-14	2019-20	
Arunachal Pradesh	-2.27	23.99	11.26	1.34	1.28	1.13	0.86	1.46	0.94	
Assam	-3.40	39.67	21.94	65.24	71.92	58.19	63.85	68.85	65.31	
Manipur	-9.00	28.75	17.46	2.35	1.55	2.86	2.88	3.98	2.64	
Meghalaya	1.77	0.66	0.97	6.83	6.96	4.32	0.59	6.20	1.74	
Mizoram	-16.65	43.05	25.86	1.46	0.60	1.80	1.59	2.95	1.41	
Nagaland	6.94	26.20	16.38	2.53	4.91	2.46	1.79	2.55	2.35	
Sikkim	7.66	26.38	16.67	1.94	3.31	1.76	1.07	1.04	1.47	
Tripura	-5.18	32.94	22.58	18.30	9.49	27.48	27.37	12.97	24.14	
NER	-2.44	36.15	21.01	100	100	100	100	100	100	
All India	11.46	8.20	10.26	-	-	-	-	-	-	

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal.

had about 140 per cent higher than that of the country's average. In 2019-20 0.89 per ha. average credit flow ranged from ₹1.85 lakh in Southern region to ₹0.18 lakh in NER in 2019-20 which was around 261 per cent and 26 per cent of the all-India average respectively. These averages also indicate that NER is the most credit deficient area followed by Central Region in the country. It can also be seen that NER (-8.9%) is the only region having contraction in crop loan flow per ha. in percentage terms. However, the region witnessed 171.76 per cent change in total credit per ha largely lifted by 383.27 per cent change in term loan during the period.

Table 4 reveals that the difference between All-India and NER in terms of agriculture credit flow per ha. has increased by around 73% (₹21993) in 2019-20 as compared to 2013-14. In 2013-14, credit flow per ha in NE states ranged from ₹0.20 lakh(Tripura) to ₹0.02 lakh(Arunachal Pradesh) which were around 54% and 5% of the national average, respectively. The highest among the NE states, Tripura (₹0.59 lakh) has 17% average credit flow per hectore lesser than the country's average and the remaining states have much lower credit per ha than the national average in 2019-20. Thus, the low share of credit in NER is corresponded by low average credit flow per GSA ha in all states of the region except Tripura. The performance of banks against the norms set by RBI to fulfil national goals

in respect of Priority Sector, Agriculture and Weaker Sections during the last four years has been encouraging in Tripura.

Agriculture Credit Flow Per Account:

Another tool to see credit disparity and deficiency among regions and states is credit flow per account. Among the regions, Northern had the highest credit flow per account (₹0.95 lakh) followed by Western (₹0.92 lakh), while the national average was ₹0.54 lakh in 2013-14 (Table 5). NER (₹0.27 lakh) had just around 52% of the national average. In 2019-20, the difference of average credit flow per account against the national average of ₹1.02 lakh is acute in case of NER (₹0.73 lakh) and Eastern (₹0.66 lakh). In view of glaring disparities in the distribution of agricultural credit across regions, it can be deduced that the benefits of institutional credit have largely accrued to the relatively prosperous regions.

It may be seen from Table 6 that Arunachal Pradesh (₹0.93 lakh) had the highest credit flow per account whereas Assam (₹0.24 lakh) & Tripura (₹0.26 lakh) had the lowest in 2013-14, that is, the former had around 58 per cent higher and the latter's had 45 per cent and 49 per cent lower than that of the national average. In 2019-20, only Arunachal Pradesh (₹1.91 lakh), Manipur (₹1.29 lakh) and Sikkim (₹1.21 lakh) have higher average than the national figure. In general, it is also clearly visible that crop loan is contracting while term loan is largely expanding in NER.

Table 3
Agriculture Credit Flow Per Hectare of Gross Sown Area (GSA) by Region

Region	Credit Flow/Ha. (in ₹) 2013-14			Credit Flow/Ha. (in ₹) 2019-20			Percentage Change Between 2013 and 2019		
	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan
Northern	33115	7277	40392	44609	23736	68345	34.71	226.17	69.20
NER	3653	3120	6773	3328	15078	18406	-8.90	383.27	171.76
Eastern	38754	18140	56894	51168	82085	133254	32.03	352.52	134.21
Central	16087	3498	19585	23070	11713	34784	43.41	234.89	77.60
Western	17730	9419	27150	21574	22871	44445	21.68	142.80	63.70
Southern	65372	23705	89077	114779	69796	184575	75.58	194.43	107.21
All India	27832	9220	37052	41874	28803	70678	50.46	212.39	90.75

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal & Handbook of Statistics on Indian States, RBI, 2020.

Table 4
Agriculture Credit Flow Per Hectare of Gross Sown Area (GSA) in NE States

NE States	Credit Flow/ha (in ₹) in 2013-14				Credit Flow/ha (in ₹) in 2019-20				Percentage Change Between 2013 & 2019		
	Crop Loan	Term Loan	Total Loan	GSA ha	Crop Loan	Term Loan	Total Loan	GSA ha	Crop Loan	Term Loan	Total Loan
Arunachal Pradesh	1041	749	1790	908	2773	3681	3681	-12.72	270.08	105.67	
Assam	3766	2869	6635	3782	15215	18997	18997	0.42	430.33	186.31	
Manipur	1262	1310	2572	757	6377	7134	7134	-40.03	386.76	177.39	
Meghalaya	5281	2857	8138	4902	1878	6779	6779	-7.17	-34.28	-16.69	
Mizoram	1822	1912	3734	679	8170	8849	8849	-62.73	327.36	137.00	
Nagaland	1177	976	2153	2078	3429	5507	5507	76.63	251.16	155.78	
Sikkim	3324	2579	5903	5156	7558	12714	12714	55.08	193.11	115.38	
Tripura	8827	11320	20147	4167	54483	58650	58650	-52.79	381.31	191.11	
NER	3653	3120	6773	3328	15078	18406	18406	-8.90	383.27	171.76	
All India	27832	9220	37052	41874	28803	70678	70678	50.46	212.39	90.75	

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal & Handbook of Statistics on Indian States, RBI, 2020.

Table 5
Agriculture Credit Flow PerAccount by Region

Region	Agriculture Credit Flow/Account (In ₹) in 2013-14			Agriculture Credit Flow/Account (In ₹) in 2019-20			PercentageChange Between 2013-14 & 2019-20		
	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan
Northern	97613	83198	94658	131494	271367	160165	34.71	226.17	69.20
NER	43212	18451	26704	39367	89170	72571	-8.90	383.27	171.76
Eastern	39764	17525	28310	52502	79306	66307	32.03	352.52	134.21
Central	51227	44388	49855	73463	148651	88545	43.41	234.89	77.60
Western	87332	101184	91687	106266	245678	150094	21.68	142.80	63.70
Southern	46545	45048	46137	81723	132634	95599	75.58	194.43	107.21
All India	57269	45273	53726	86164	141428	102484	50.46	212.39	90.75

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal.

Table 6
Agriculture Credit Flow Per Account in NE States

NE States	Agriculture credit Flow/Account (In ₹) in 2013-14			Agriculture Credit Flow/Account (In ₹) in 2019-20			PercentageChange Between 2013-14 & 2019-20		
	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan
Arunachal Pradesh	67753	190017	92732	59133	703221	190722	-12.72	270.08	105.67
Assam	38649	16005	23979	38812	84878	68655	0.42	430.33	186.31
Manipur	130427	28753	46558	78216	139960	129148	-40.03	386.76	177.39
Meghalaya	56607	125374	70108	52546	82390	58406	-7.17	-34.28	-16.69
Mizoram	213686	26108	45672	79648	111574	108244	-62.73	327.36	137.00
Nagaland	18686	104662	29781	33006	367535	76173	76.63	251.16	155.78
Sikkim	70164	44437	56001	108814	130252	120616	55.08	193.11	115.38
Tripura	61473	18173	26286	29019	87471	76520	-52.79	381.31	191.11
NER	43212	18451	26704	39367	89170	72571	-8.90	383.27	171.76
All India	57269	45273	53726	86164	141428	102484	50.46	212.39	90.75

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal.

While Arunachal Pradesh has around 86 per cent higher than that of the national, Assam's average is around 49% lesser in terms of credit flow per account. Notably, small and marginal farmers (SMF) share is about 86 per cent of total account in Arunachal Pradesh in 2019 but only around 43 per cent of total credit is availed by SMF. On the other hand, Assam has much better coverage of SMF by allocating around 63 per cent of credit to about 78 per cent accounts shared by SMF. Thus, high average of credit flow per account of Arunachal Pradesh is mainly due to higher allocation of credit to larger farmers. In terms of percentage change, Tripura (191.11%) has the highest percentage change while Meghalaya (-16.69%) witnessed contraction during the period. We must be careful that number of accounts has

been increasing in India mainly due to introduction of Kisan Credit Card (KCC), but NER has dismal performance in KCC implementation. Thus, disparity in credit flow per account in NER as compared to national average is hidden by non-corresponding growth in account with credit disbursement.

Performance of Agricultural Credit:

One way to analyse the performance of agricultural credit is to look at the ratio of agricultural credit to state agricultural value added. The Southern region (281.79%) stand out with a substantially higher share of agricultural credit followed by the Northern region (166.42%) while NER (30.48%) has the least ratio in 2019-20 (Table 7). It is to be noted that the Southern States have a much more active cooperative

Table 7
Ratio of Agriculture Credit Flow to Agriculture NSDP by Region

Region	GLC/Agri. NSDP Ratio (%) in 2013-14			GLC/Agri. NSDP Ratio (%) in 2019-20			Difference (2013-14 - 2019-20) (%)		
	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan
Northern	72.80	36.00	108.80	108.62	57.80	166.42	35.82	21.80	57.62
NE Region	11.40	13.00	24.30	5.51	24.97	30.48	-5.89	11.97	6.18
Eastern	28.00	21.80	49.90	32.37	51.93	84.31	4.37	30.13	34.41
Central	43.70	18.80	62.50	47.95	24.35	72.30	4.25	5.55	9.80
Western	41.40	49.70	91.10	45.25	47.96	93.21	3.85	-1.74	2.11
Southern	106.90	62.60	169.50	175.23	106.56	281.79	68.33	43.96	112.29
All India	58.00	36.30	94.30	80.67	55.49	136.16	22.67	19.19	41.86

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal & Handbook of Statistics on Indian States, RBI, 2020.

movement, and hence their share of agricultural credit is likely to be even higher. The Eastern region and NER clearly get a very low share. A look at the region-wise credit intensity in 2013-14 and 2019-20 gives us a view that agriculture credit distribution is highly skewed where some regions/ states have lofty credit inflow which indicates outflow of credit from agriculture sector, i.e., used for other than intended purpose. The Report of Internal Working Group to review agricultural credit, (RBI, 2019) found that in some states (Tamil Nadu and Kerala), credit disbursal to the farm sector was higher than their agricultural gross domestic product (GDP). This indicates the possibility of diversion of credit for non-agricultural purposes.

Table 8 demonstrates that Credit/ Agri NSDP in all NE states are significantly low in both the years as compared to national average. Noticeably, all NE states except Sikkim witnessed fall in the ratio for crop loan indicating acute institutional crop loan deficiency, thereby, declining credit absorption in NER. Therefore, criteria of crop loan eligibility is needed to modify to enhance its flow since the region is mostly hilly and agriculture is at nascent stage of commercialisation. As per NAFIS 2016-17, the farmers in NER have dismally low utilization of crop insurance scheme and KCC. Product innovation and adoptable delivery mechanism are required to be devised for the region.

Table 8
Ratio of Agriculture Credit Flow to Agriculture NSDP in NE States

NE States	GLC/Agri. NSDP Ratio (%) in 2013-14			GLC/Agri. NSDP Ratio (%) in 2019-20			Difference (2013-14 - 2019-20) (%)		
	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan	Crop Loan	Term Loan	Total Loan
Arunachal Pradesh	3.50	3.90	7.40	1.47	4.48	5.95	-2.03	0.58	-1.45
Assam	12.80	13.80	26.60	6.29	25.31	31.61	-6.51	11.51	5.01
Manipur	6.00	11.70	17.70	1.55	13.11	14.66	-4.45	1.41	-3.04
Meghalaya	15.80	14.90	30.70	7.79	2.98	10.77	-8.01	-11.92	-19.93
Mizoram	17.60	14.20	31.80	1.46	17.57	19.03	-16.14	3.37	-12.77
Nagaland	5.40	5.40	10.80	4.70	7.76	12.46	-0.70	2.36	1.66
Sikkim	5.00	4.10	9.20	6.62	9.71	16.33	1.62	5.61	7.13
Tripura	10.90	17.70	28.60	4.73	61.89	66.62	-6.17	44.19	38.02
NER	11.40	13.00	24.30	5.51	24.97	30.48	-5.89	11.97	6.18
All India	58.00	36.30	94.30	80.67	55.49	136.16	22.67	19.19	41.86

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal & Handbook of Statistics on Indian States, RBI, 2020

Change in Composition of Credit by Institution:

The recent years striking feature of the agricultural credit scene in India is the wide regional disparities in the disbursement of agricultural credit by scheduled commercial banks. Table 9 demonstrates that at All-India level, percentage share of Co-operative banks in terms of credit disbursement have declined significantly, Regional Rural Banks (RRBs) have negligible change while Commercial Banks (CBs) have gained the largest share during 2013-14 to 2019-20.

CAGR of credit disbursement is the lowest for Co-operative Banks (4.63%) while CBs (12.51%) and RRBs (12.25%) have significant growth during the period. Eastern region (13.26%) has the highest credit growth for Co-operative Banks. followed by Southern region (12.02%) whereas Northern region (-2.04%) has contraction. The percentage share reduction of Co-operative banks in Southern Region is negligible while Northern and Western regions, witnessed significant drop in its share. Co-operative Banks is playing the least role in NER, i.e., 4.07 per cent share in 2019-20.

In case of RRBs, Southern region (16.11%) has the highest growth followed by NER (13.06%) while national average is 12.25 per cent during 2013-14 to 2019-20. Eastern and NER have reported contraction in credit disbursement share by RRBs. In

case of CBs, NER (20.06%) followed by Eastern region (18.53%) have the highest growth. The percentage shares clearly indicates that CBs are leading in credit disbursement to agriculture while Co-operative Banks are declining and RRBs are stagnant.

From Table 10, it can be observed that Nagaland has the highest growth (30.90%) in co-operative banks' credit disbursement during 2013-14 to 2019-20 which resulted in significant gain in percentage share. Thus, excluding Nagaland and Manipur, co-operative banks' share has declined in the remaining NE states. However, it must be noticed that Nagaland's share of investment credit in the total agriculture credit is declining. Agency-wise analysis of targets and achievements in Nagaland shows that Commercial Banks achieved 46.02 per cent of their lending targets, the Nagaland State Co-operative Bank achieved 109.14 per cent and Nagaland Rural Bank at 32.43 per cent in 2019-20. Thus, Co-operative Banks are performing well in Nagaland that is reflected in higher change in its share. On the other hand, Sikkim (-7.22%) and Meghalaya (-4.68%) witnessed contraction in credit disbursement by co-operative banks during the period. It may be concluded that there was a huge contraction in deposits of State Co-operative Bank of Sikkim in 2016-17.

Table 9
Performance of Institutional Credit Agencies by Region

Region	Co-operative Banks				RRBs				CBs			
	CAGR (%)	Change (%)	Share (%)		CAGR (%)	Change (%)	Share (%)		CAGR (%)	Change (%)	Share (%)	
			2013-14	2019-20			2013-14	2019-20			2013-14	2019-20
Northern	-2.04	-11.64	22.71	11.86	11.86	95.89	9.74	11.27	11.54	92.53	67.55	76.87
NER	7.19	51.65	7.30	4.07	13.06	108.83	18.75	14.41	20.06	199.57	73.96	81.52
Eastern	13.26	111.07	18.17	16.38	8.14	59.94	26.49	18.09	18.53	177.37	55.34	65.53
Central	2.21	13.99	18.80	12.07	10.21	79.23	18.21	18.38	11.88	96.12	62.99	69.56
Western	1.19	7.38	25.38	16.64	9.36	71.10	4.10	4.29	10.65	83.54	70.52	79.07
Southern	12.02	97.59	8.89	8.48	16.11	144.97	8.97	10.60	12.63	104.13	82.15	80.92
All India	4.63	31.18	16.43	11.30	12.25	100.03	11.32	11.87	12.51	102.85	72.25	76.83

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal & Handbook of Statistics on Indian States, RBI, 2020.

In case of RRBs, Mizoram (25.26%) has the highest growth whereas Arunachal Pradesh (-20.20%) has contraction in credit disbursement during the period. The Mizoram Rural Bank is the only rural bank sponsored by State Bank of India operating in the state which has the largest network of bank branches in Mizoram. The agriculture advances, grew at the rate of 21.55 per cent against total growth rate of 167.84 percent achieved during 2017-18. Thus, RRBs have the dominant role in Mizoram over Co-operative Banks and CBs.

Arunachal Pradesh has witnessed declining trend in both deposits and disbursement of RRBs in recent years. In 2019-20, Commercial Banks accounting for around 94 per cent of credit in the state, followed by Arunachal Pradesh Rural Bank (APRB) at 4.2 per cent and Arunachal Pradesh State Co-operative Banks Ltd (AP St CAB) at 1.8 per cent. During the last 5 years, APStCAB Ltd had a share in the total advances at 6.1 per cent to 7.5 per cent and APRB had a share in the range of 3.5 per cent to 4.1 per cent. Thus, Co-operative banks and RRBs are playing minimal roles in Arunachal Pradesh. Moreover, RRBs have also significant share in Meghalaya and Tripura as compared to the national average. As stated, CBs have leading role in all NE states except Mizoram, especially in Sikkim (96.23%), Arunachal Pradesh (93.25%), and Assam (90.67%) in terms of percentage share of credit

disbursement in 2019-20. In terms of CAGR, Tripura (25.20%) has the highest expansion in credit disbursement while Meghalaya (-5.32%) saw contraction during the period. The main reason for Meghalaya's credit disbursement contraction may be attributed to high decline in Credit Deposit (CD) ratio of CBs in recent years. The overall CD ratio in the State dropped to 33.81 per cent in 2018-19 from the level of 38.03 per cent in 2017-18. Against the national average at 75.6 per cent for all commercial banks and the minimum stipulated requirement of 60 per cent, Meghalaya's continuously low CD ratio is indeed a matter of serious concern. There were as many as 12 commercial banks with CD ratio of less than 20 per cent.

Credit Deposit Ratio: A well-known fact is that NER has been deficient in the use of banking capital. One way to reveal the extent of deployment of credit out of deposits is the CD ratio i.e., the ratio of credit extended by the banks to the deposits generated in any region. A low ratio indicates the lack of offtake of credit either because of lack of demand (due to low level of commercial activity) or low credit worthiness of borrowers. Table 11 clearly depicts that Southern region has the highest CD ratio of 80.20 per cent and 99.70 per cent ratio in 2014 and 2019, respectively for RRBs. This shows high credit absorptive capacity in the region. NER reported the lowest CD

Table 10
Performance of Institutional Credit Agencies in NE States

NE States	Cooperative Banks				RRBs				CBs			
	CAGR (%)	Change (%)	Share (%)		CAGR (%)	Change (%)	Share (%)		CAGR (%)	Change (%)	Share (%)	
			2013-14	2019-20			2013-14	2019-20			2013-14	2019-20
Arunachal Pradesh	5.06	34.49	7.51	4.91	-20.20	-74.17	14.63	1.84	16.21	146.33	77.86	93.25
Assam	4.63	31.23	0.80	0.37	8.67	64.66	15.58	8.96	20.78	210.47	83.62	90.67
Manipur*	*	*	0.02	13.85	13.82	117.43	6.67	5.23	15.75	140.50	93.31	80.92
Meghalaya	-4.68	-24.98	17.09	15.39	4.45	29.82	18.62	29.01	-5.32	-27.96	64.29	55.60
Mizoram	14.31	123.08	9.78	9.21	25.26	286.19	42.35	69.01	1.27	7.84	47.87	21.78
Nagaland	30.90	403.16	23.53	46.29	-4.90	-26.01	1.89	0.55	10.53	82.34	74.58	53.17
Sikkim**	-7.22	-36.22	12.72	3.77	*	*	0.00	0.00	15.51	137.48	87.28	96.23
Tripura	1.19	7.38	21.09	7.78	18.02	170.24	30.84	28.63	25.20	285.10	48.07	63.59
NER	7.19	51.65	7.30	4.07	13.06	108.83	18.75	14.41	20.06	199.57	73.96	81.52
All India	4.63	31.18	16.43	11.30	12.25	100.03	11.32	11.87	12.51	102.85	72.25	76.83

*Manipur's data starts from 2015-16 as there was no disbursement in 2013-14 and 2014-15 by Co-operative banks.

**Sikkim has no credit disbursement from RRBs during the period.

Sources: IBA, SLBC, NABARD & NABARD Ensure Portal & Handbook of Statistics on Indian States, RBI, 2020.

Table 11
Cash Deposit Ratio of Regional Rural Banks and Commercial Banks-
Region-wise

Region	CD Ratio- Regional Rural Bank (%)			CD Ratio- Commercial Bank (%)		
	2004	2019	Difference	2004	2019	Difference
Northern	42.90	68.20	25.30	54.80	84.50	29.70
NER	37.30	39.80	2.50	29.80	40.40	10.60
Eastern	38.40	47.20	8.80	41.80	41.40	-0.40
Central	37.00	55.20	18.20	35.60	49.50	13.90
Western	45.80	62.50	16.70	72.00	98.10	26.10
Southern	80.20	99.70	19.50	68.50	90.60	22.10
All India	46.80	66.70	19.90	58.20	78.30	20.10

Source: Handbook of Statistics on Indian States, RBI, 2020

ratio of 37.30 per cent and 39.80 per cent in both the years. Northern region has witnessed the highest improvement in CD ratio for both RRBs and CBs. In the case of CBs, Western region leads in both the years closely followed by Southern region. While NER has significantly improved the CD ratio of CBs but it is still the lowest in the country (Table 11).

Table 12 demonstrates that CD ratio of RRBs was higher than the national average of 46.80 per cent only in Arunachal Pradesh (58.90%) and Manipur (51.60%) in 2014 while all the states have lower than the all-India average (66.70%) in 2019. This shows a declining trend of CD ratio of RRBs in NER, especially in Arunachal Pradesh (-28.8%), Nagaland (-9.1%) and Manipur (-7.2%). On the other hand, CD ratio-CBs are significantly lower than the national average in both the years. In 2014, CD ratio-CBs ranged

from Mizoram (34.80%) to Nagaland (15%) as compared to all-India average of 58.20 per cent while it ranged from Manipur (49.40%) to Arunachal Pradesh (23%) as against the country's average of 78.30 per cent in 2019. Meghalaya (-7.7%) has contraction in CD ratio-CBs. The lower C.D. ratio in the NER (about half the national average) implies low off take of the deposits generated in the region.

Examination of the bank-wise CD ratios revealed that the performance of Co-operative Banks for different states in the NER was better as compared to Commercial Banks and Regional Rural Banks. The CD ratio of Co-operative Banks, RRBs and CBs in Arunachal Pradesh were 129.14 per cent, 23.99 per cent and 24.08 per cent, respectively in 2017 while these were 104.37 per cent, 27.82 per cent and 23.76 per cent, respectively in 2019. In Sikkim, CD ratio

Table 12
Cash Deposit Ratio of Regional Rural Banks and
Commercial Banks in NE States

NE States	CD Ratio-Regional Rural Bank (%)			CD Ratio-Commercial Bank (%)			Indebtedness (%)		
	2004	2019	Difference	2004	2019	Difference	SAS 2012-13	NAFIS 2016-17	Difference
Arunachal Pradesh	58.90	30.10	-28.8	16.10	23.00	6.9	19.10	73.66	54.56
Assam	38.40	40.80	2.4	31.80	44.30	12.5	17.50	35.42	17.92
Manipur	51.60	44.40	-7.2	31.60	49.40	17.8	23.90	60.44	36.54
Meghalaya	26.10	32.80	6.7	34.60	26.90	-7.7	2.40	36.15	33.75
Mizoram	40.60	47.40	6.8	34.80	36.80	2.0	6.20	39.00	32.80
Nagaland	38.50	29.40	-9.1	15.00	35.40	20.4	2.50	32.78	30.28
Sikkim	NA	NA	-	22.40	28.40	6.0	14.30	35.11	20.81
Tripura	34.10	38.50	4.4	25.20	41.70	16.5	22.90	50.68	27.78
NER	37.30	39.80	2.5	29.80	40.40	10.6	-	-	-
All India	46.80	66.70	19.9	58.20	78.30	20.1	51.90	52.50	0.60

Source: Handbook of Statistics on Indian States, RBI, 2020, Situation Assessment Survey 2012-13, NSSO, MoSPI& NAFIS 2016-17

for Co-operative was 79.40 per cent against 40.6 per cent of CBs in 2017 while that of Co-operative expanded to 52.30 per cent and CBs to 87.5 per cent in 2019. Overall, CD ratios of Co-operative Banks has been the highest in all NE states except for Sikkim in 2019 and Tripura in 2018.

Indebtedness: Another measure that shows low borrowing in NER is indebtedness as given in table 12. Credit accessibility is a persistent issue in NER in particular and in India in general. NE states have the lowest indebtedness ranging from as low as Meghalaya (2.4%) to as high as Manipur (23.9%)

as compared to national average of around 52 % as per SAS 2012-13. This indicates low borrowing by farmers in NER. However, the indebtedness scenario drastically changed as reported by NAFIS 2016-17 as compared to national average of 52.5%. However, only Arunachal Pradesh (73.66%), Assam (60.44%) and Tripura (50.68%) have indebtedness higher than the country's average, that is, majority of the states have low borrowing in NER. Lengthy process for sanction of loans by institutions, demand for collateral security, and short term (crop) loan were cited as reasons for seeking

loans from non-institutional sources (NAFIS 2016-17). This also implies that indebtedness is widely varied in India as well as in NER.

Population Per Bank Branch: All-India population per bank branch stands at 7179 in 2019 and for NE states, it ranges from as high as in Manipur (10753) followed by Nagaland (10471) to as low as in Mizoram (3783) followed by Sikkim (3993) (Table 13). Thus, given scattering of population in NER due to rough hilly terrains, disparity is low in this parameter. However, number of bank branch service may not necessarily lead to credit flow and absorption as disbursement mainly

depends on business interest and credit recovery potential.

Real Sectors Scenario: Table 13 shows some real sector factors which are the cause and effect of low credit flow in NER. Fertilizers consumption has been the lowest in NER which ranges from 2.1 kg /ha in Arunachal Pradesh to 47.3 kg /ha in Meghalaya as compared to national average of 123.4 kg /ha. This resulted in low productivity of food grains in NE states where all except Tripura (2709 kg/ha) has lower than the national average (2129 kg/ha). Agriculture utilization of land in NER is much lower in most of the states. Assam (51.8%) has the highest land utilization

Table 13

Population Per Branch and Agriculture Real Sector Scenario in NE States

NE States	Per ha Consumption of Fertilizers (N+P+K)-(kg/ha)	Estimates of Yield-Total Food grains (kg/ha.)	GCA as % of Total Geographical Area	Percentage Irrigated (NTA/NSA x100)	Population Per Bank Branch (2019)*
Arunachal Pradesh	2.10	1687	2.90	24.90	7020
Assam	41.26	1857	51.80	10.50	9567
Manipur	34.67	1726	17.20	18.0	10753
Meghalaya	47.30	1846	15.30	28.30	6490
Mizoram	22.88	1629	6.90	11.0	3783
Nagaland	34.71	1629	30.20	25.30	10471
Sikkim	2.90	1616	19.20	15.60	3993
Tripura	46.11	2709	46.30	31.00	5210
All India	123.40	2129	37.70	36.60	7178

Note: *Bank branch includes that of commercial banks and Regional Rural Banks. NSA stands for Net Sown Area & NIA for Net Irrigated Area

Sources: Handbook of Statistics on Indian States, RBI, 2020.

for agriculture followed by Tripura (46.3%) as these two states have the highest plain areas in NER. Whereas the remaining states which have high percentage of hilly terrains have lower land utilization than the national average (37.7%). Among NE states, Arunachal Pradesh (2.9%) and Mizoram (6.9%) have dismally low land utilization. NER has rich water bodies comprising of numerous streams, ponds, lakes and rivers and is the highest receiver of monsoon rainfall in India. However, Irrigation in NER ranges from 31percent in Tripura to 10.5 percent in Assam which is much lower than the national average of 36.6% especially when water availability is taken into account. This indicates untapped potential of water bodies and below-optimum ground water utilization in the region. By increasing

the irrigation coverage, the region can benefit by higher crop rotation and diversification. Thus, the real sector factors demonstrate that the region has huge untapped potential, however, credit deficiency is one the reasons for dismal performance of the region. It also shows low public investment and capital formation in agriculture in the region.

Performance in Kisan Credit Card Scheme:

The Kisan Credit Card (KCC) scheme, introduced in 1998, aimed at providing adequate and timely credit support. The number of operative KCC is approximately 65.2 million as on 31 March 2020(RBI) and as per Agriculture Census 2015-16 the number of land holdings were approximately 145 million, which implies that only 44.57 per cent of farmers possessed operative

Table 14
Performance of Kisan Credit Card Scheme (All Agencies)

Region/ State	Number of Operative KCCs (in '000')	Amount Outstanding under Operative KCCs (₹ cr)	Coverage of Operative KCC (%)	Average Outstanding/ Operative KCCs (₹)	Percentage Share (No.)	Percentage Share (Out-standing)
Northern	10692	190626.5	83.46	178289	16.38	27.35
NER	1143	5182.7	27.42	45343	1.75	0.74
Eastern	10867	53361.3	34.68	49104	16.65	7.66
Central	18584	191379.2	48.00	102981	28.47	27.46
Western	8243	91783.1	39.81	111347	12.63	13.17
Southern	15752	164684.8	40.68	104549	24.13	23.63
All India	65281	697017.6	44.57	106774	100	100

Source: The Report on Trend and Progress of Banking in India, 2019-20, RBI & Agriculture Census 2015-16

KCCs (Table14). If we consider the case of farmers having more than one (1) KCC, then the figure will be lower. On the other hand, as per NAFIS Survey 2016-17, 4.6 per cent of agricultural households hold more than one card and taking all agricultural households together while only 10.5 per cent of agricultural households were found to have a valid KCC. Moreover, KCCs coverage is the lowest in NER while Northern Region has the highest in terms of coverage and average outstanding per operative KCC. The national average is around 135 per cent higher than that of NER. Hence, there is a need to take measures to improve the penetration of KCC by banks across the country. As per the latest report of Internal Working

Group on Agriculture Credit, RBI stated the conventional credit product of the KCC seems to have outlived its utility. It has no doubt served the purpose of improving credit penetration but the time has come to overhaul/redesign it completely.

Among NE states, Tripura has the highest KCCs coverage while Sikkim has the lowest followed by Arunachal Pradesh (Table 15). In Tripura, 4 per cent of All Agricultural Households have a Valid Kisan Credit Card. Among all Eligible Agricultural Households, that is, households having more than 0.4 ha land and who took loan for agricultural purposes from a bank, 14 percent reported having a Kisan Credit Card (NAFIS 2016-17).

Table 15

Performance of Kisan Credit Card Scheme in NE states (All Agencies)

NE States	Coverage of Operative KCC (%)	Average Outstanding/ Operative KCCs (₹)	Percentage share of Outstanding Among NER (%)
Arunachal Pradesh	10.60	65167	1.51
Assam	27.03	51981	74.32
Manipur	16.61	52840	2.55
Meghalaya	27.54	48969	6.05
Mizoram	20.05	61222	2.13
Nagaland	14.25	50071	2.71
Sikkim	8.39	54833	0.63
Tripura	43.79	20873	10.11
NER	27.42	45343	100
All India	44.57	106774	-

Source: The Report on Trend and Progress of Banking in India, 2019-20, RBI & Agriculture Census 2015-16

While 1% of All Agricultural Households have a Valid Kisan Credit Card in Sikkim. Among all Eligible Agricultural Households, that is, households having more than 0.4 ha land and who took loan for agricultural purposes from a bank, 41 per cent reported having a Kisan Credit Card. In Arunachal Pradesh, only 1 per cent of All Agricultural Households have a Valid Kisan Credit Card. Among all Eligible Agricultural Households, that is, households having more than 0.4 ha land and who took loan for agricultural purposes from a bank, none reported having a Kisan Credit Card. Thus, it is clear that those farmers having valid KCCs is dismally low in NER as compared to the national average. In addition, both disbursement and coverage of small and marginal farmers under KCCs is negligible in NE states

MAJOR CONSTRAINTS TO CREDIT FLOW IN NER:

New pang based on the study, following are the major constraints to credit flow in NER:

1. **Low Recovery Rate:** Most of NE states are having poor recovery rate especially for Co-operative Banks and Commercial Banks. The average 3 years (2016 to 2018) recovery rate in Nagaland is 25% and in Arunachal Pradesh it is 37.10%. Noticeably, co-operative banks, which have the highest CD ratio, have corresponded by the lowest recovery rate in most of the states.
2. **Dismal Credit-Deposit Ratio:** Low absorption of deposits generated in the region. Southern region has the highest CD ratio of 80.2 per cent and 99.7 per cent ratio in 2014 and 2019, respectively for RRBs. NER reported the lowest CD ratio of 37.30 percent and 39.80 per cent in both the years respectively. It has the lowest utilization of KCC and insurance claim. KCC average outstanding debt/operative debt of NER (₹6.94 crore) is much lower than the national average (₹19.27 crore) for CBs, while average outstanding disbursement/operative for total (all) agencies, is ₹5.2 crore for NER against the ₹10.7 crore of national average.
3. **High Rainfall Zone with Lowest Irrigation Coverage:** The region's percentage of irrigated area is much lower than the national average. NER has rich water bodies comprising of numerous streams, ponds, lakes and rivers and is the highest receiver of monsoon rainfall in India. However, Irrigation in NER ranges from Tripura (31%) to Assam (10.5%) which are much lower than national average of 36.6 per cent especially when water availability is taken into account. This indicates untapped potential of water bodies and below-optimum ground water utilization in the region.
4. **Subsistence Agriculture and Community Ownership of Land:** NE Region has the lowest consumption of fertilizers (N+P+K) in the country corresponded by low agriculture productivity which indicates subsistence agriculture

which leads to low level of commercialisation of agriculture. Fertilizers consumption has been the lowest in NER that ranges from 2.1 kg /ha in Arunachal Pradesh to 47.7 kg/ha in Meghalaya as compared to national average of 123.4 kg/ha. This resulted in low productivity of food grains in NE states where all except Tripura (2709 kg/ha) has lower than the national average (2129 kg/ha).The region is known to have community ownership, therefore, credit grant has been hampered by lack of formal land records.

CONCLUSION AND POLICY SUGGESTIONS:

Hill agriculture in NER of India is severely constrained by high risk and uncertainty arising out of various factors. Under the prevailing conditions, the expectation of steady and assured income from agriculture has been found quite limited; hence, failed to attract considerable private investment. The data clearly demonstrated that the region is receiving or absorbing the lowest agricultural credit in the country. This also indicate low capital formation in agriculture in the region corresponded by low credit flow, low investment-capacity as well as low risk-bearing ability of farmers. Therefore, the prevailing risk and uncertainty situation compels them to operate at low-input and low-output subsistence farming with low volume of marketable surplus. Rural financial institutions face difficulty in financing the hill agriculture because

of low recovery rate and increasing non-performing assets(NPA) for agricultural loans. Non-availability of reliable agricultural database (time series as well as cross-section) on area, production and yield, and cost of cultivation is the major impediment in implementing the crop insurance scheme effectively and efficiently which resulted in poor performance of crop insurance scheme in the region. Moreover, the improved network of banking facilities across the region and the role of commercial bank credit in all sectors including agriculture has increased but has not benefited all sections of the farmers in all areas in an equitable manner. It is vital to look at the region contrastingly in regard to funding. Unique consideration regarding NER will empower it to stay up with the remainder of the country concerning developmental arena. The lagging NE states must be the major elements in the policy to uplift the region for inclusive and balanced growth and development.

The following suggestions are identified to enhance agriculture credit flow in NER:

- 1. Regional Disparity in Credit:** It has been observed that some states are getting higher credit as a proportion of their agricultural output value(Gross/Net State Domestic Product), indicating the possibility of diversion of credit for non-agricultural purposes. In contrast, this credit to Agri-NSDP ratio is particularly low for states in the central, eastern, and north-

eastern regions of the country. It is recommended that the priority sector lending norms should be reviewed and suitable measures should be introduced for improving the credit off-take in these regions. As per NAFIS 2016-17, the farmers in NER have dismally low utilization of crop insurance scheme and KCC. Criteria of crop loan eligibility is needed to modify to enhance its flow since the region is mostly hilly and agriculture is at nascent stage of commercialisation. Product innovation and adoptable delivery mechanism are required to be devised for the region.

2. Credit for Small and Marginal Farmers:

Small and marginal farmers hold 86 per cent of the operational landholdings and have 47 per cent share in the total operated area. However, only 41 per cent of such farmers could be covered by banks. The working Group on Agriculture Credit (2019) recommended that the lending target for small and marginal farmers should be revised from the existing 8 per cent to 10 per cent as a short term policy. Farmers' Producer Organisation (FPO) and Joint Liability Groups (JLGs) are needed to be promoted more in NER to raise the credit worthiness of these farmers.

3. Land Reforms: The Working Group to Review Agriculture Credit, RBI noted that in the absence of a

proper land leasing framework and lack of records, landless labourers, sharecroppers, tenant farmers, and oral lessees face difficulty in accessing institutional credit. NER, where community ownership of land is largely found, lack proper record of land ownership especially for small & marginal farmers. This is one of the major reasons obstructing credit flow. States having highly restrictive land leasing frameworks or lacking proper land ownership records should be encouraged to adopt reforms based on the Model Land Leasing Act suggested by NITI Aayog and the Andhra Pradesh Land Licensed Cultivators' Act, 2011.

4. Modernising Agriculture:

Modernising and raising productivity per unit of land will be the main engine of agricultural growth as NER has huge potential to increase cultivable land area. Various measures like increasing yields, diversification to higher value crops, and developing value chains to reduce marketing costs and promoting new technologies and reforming agricultural research and extension are require. Introduction and promotion of high value horticulture crops such as kiwi, walnut, apple, coffee, orange, etc., are needed. Marketing infrastructure for agri-produce has to be developed to reap the benefits of diverse agro climatic zones in NER.

5. Improving Recovery Rate: Most of NE states are having poor recovery rate especially for co-operative banks and commercial banks. The average 3 years (2016 to 2018) recovery rate in Nagaland is 25 per cent and in Arunachal Pradesh is 37.10 per cent. Noticeably, co-operative banks which have the highest CD ratio is corresponded by the lowest recovery rate in most of the states. An effective banking culture must be developed to enhance the bankability and reduce the lending risk since generally, banks' incentive is business interest, that is, without recovery potential, banks will be apprehensive towards lending.

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