

## **Trend and Growth of Flow of Credit to Agriculture after 1991 in India**

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**Abstract:** Agriculture in India is at a crossroads and major challenge of the policy makers is to reverse the trend of deceleration in agricultural growth which is directly associated with the declining of public investment in agricultural research and development, fragmentation of holdings, lack of infrastructure and structured markets, outdated technology and inappropriate input pricing policies of the government. The crisis of agricultural stagnation needs immediate attention and treatment on the part of planners and policy makers. Recognizing the continuous deceleration of agricultural growth, the present study attempts to analysis the trend and growth of flow of credit to agriculture after 1991 in India. The study based on secondary sources of data compile from several sources, revealed that structure of credit outlets has witnessed a significant change and commercial banks have emerged as the major source of institutional credit to agriculture in recent years, but the declining share of investmental credit in total credit may constrain the sustainable growth of agriculture in India. The situation calls for concrete efforts to augment the flow of credit to agriculture, alongside to exploring the new innovations in the farming practices, product design and methods of delivery through better use of technology and related processes. Facilitating credit through processor, NGO's and input dealers that are vertically integrated with farmers for providing them critical inputs or processing their produce, could increase the credit flow to agriculture significantly.

**Keywords:** Institutional Credit, Agricultural Productivity, Sustainable Deployment and Inclusive Growth

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### **I. Introduction**

Agriculture is still the lifeline and soul of majority of the people in India. Mahatma Gandhi, 1901 rightly said that "India lives in its villages". A large proportion of the population in India is rural agricultural and allied sector based and solely depends upon the agriculture for a livelihood creation. Therefore, an enhanced and stable growth of the agriculture & allied sector is important, as it plays a vital role not only in generating purchasing power among the rural population by creating on-farm and off-farm employment opportunities but also through its contribution to livelihood creation and ensuring the price stability in the country as whole. Although the share of agriculture in real GDP in India has been declined below one-fifth, but it continues to be an important sector of economy as it employs around 52 per cent of the workforce. The growing adult population in India demand large and incessant rise in agricultural production. Per capita availability of food, particularly cereals and pulses, in recent years has fallen significantly. As a result, slackening growth of agriculture during last decade has been a major policy concern.

The importance of farm credit as a critical input for agricultural growth in India is reinforced by the unique and decisive role of Indian agriculture in the macroeconomic framework and poverty alleviation. Recognizing the importance of agriculture sector in India's over all development, the Government and the Reserve Bank of India (RBI) have played a vital role in creating a broad-based institutional framework for catering to the increasing credit requirements of the sector. Most of Agricultural policies in India have been reviewed from time to time to maintain pace with the changing requirements of the agriculture sector, which forms an important segment of the priority sector lending of scheduled commercial banks (SCBs). The Approach Paper to the Eleventh Five Year Plan in India has set a target of 4 per cent for the agriculture sector within the overall GDP growth target of 9 per cent. In this context, the need for affordable, sufficient and timely supply of institutional credit to agriculture has assumed critical importance. It is in this backdrop that the present paper tries to find out the trend and growth of flow of credit to agriculture after 1991 in India. The entire paper is divided into four segments. The second part explains the review of literature related to institutional credit in India. The third part tries to explain the Assessment of Progress in Agricultural Credit in India. The fourth and the last part are given to the concluding observations.

### **II. Review Of Literature:**

Rosegrant and Evenson (1995) studied the total factor productivity and sources of long-term growth in Indian agriculture using data envelopment analysis (DEA) a non-parametric technique. In this study Tornqvist-

Theil TFP indices were computed for 271 districts which were covering around 13 states in India for the period 1956 to 1987. The study examines the sources of productivity growth, including public and private investment, and estimates the rates of return to public investments in agriculture. The results showed that significant TFP growth in the Indian crops sector was produced by investments -- primarily in research -- but also in extension, markets, and irrigation. It seems from study that the Government of India is not over investing in agricultural research and extension which is important pillar for agriculture growth in India.

Sarbajit Chaudhuri (2001) studied the interaction of formal and informal credit markets in backward agriculture using mathematical tools by establishing Nash equilibrium. The paper considers two alternative ways of formulating a credit subsidy policy (1) through an increase in the aggregate volume of formal credit supplied to the borrowers, keeping the formal sector interest rate at a reasonable level; and (2) through a decrease in the rate of interest charged on this type credit. The paper shows that if a credit subsidy policy is undertaken via the first path, it is actually able to lower the informal sector interest rate and improve both the agriculture productivity and welfare of farmers.

Abhiman Das, Manjusha Senapati, Joice John (2009) studied the impact of agricultural credit on agricultural production using econometric tools by estimating Arellano-Bond Regression. They use Dynamic Panel Data Analysis with instrumental variables for the period 2001 to 2007. The analysis suggests that the direct agriculture credit amount has a positive and statistically significant impact on agriculture output and its effect is immediate. In particular, change in per capita agriculture direct credit (amount outstanding) by one per cent will lead to increase in per capita agriculture output by 0.11 per cent. This shows a strong effect of direct credit on agriculture output.

### **III. Assesment Of Progress In Agricultural Credit In India:**

In India a multi-agency approach comprising co-operative banks, scheduled commercial banks and RRBs has been followed for purveying credit to agricultural sector. The policy of agricultural credit is guided mainly by the considerations of ensuring adequate and timely availability of credit at reasonable rates through the expansion of institutional framework, its outreach and scale as also by way of directed lending. Over the time, a spectacular progress has been achieved in terms of the scale and outreach of institutional framework for agricultural credit.

**1. Agricultural Credit Discernible Trend:** in India one of the major achievements in the post-independent is widening the spread of institutional machinery for credit and decline in the role of non-institutional sources, notwithstanding some reversal in the trend observed particularly in the 1990s. The share of institutional credit, which was little over 66.3% in 1991, increased manifold to over 68.8 per cent in 2010, reflecting concomitantly a remarkable decline in the share of non institutional credit from around 30.6 per cent to about 29.7 per cent during the same period (Table-1)

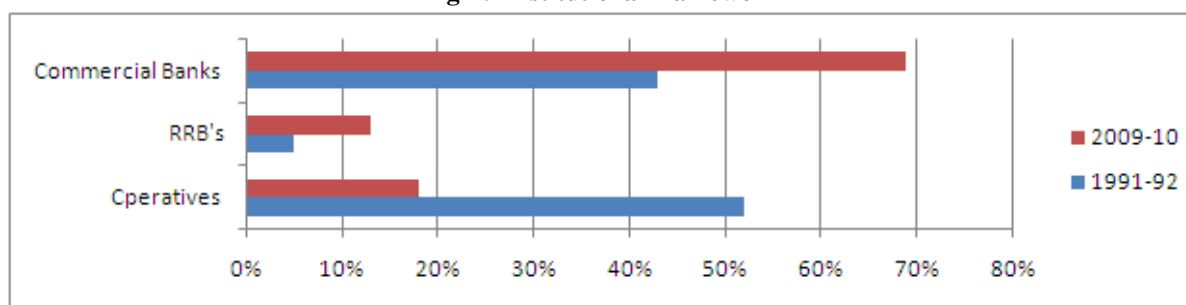
**Table-1: Relative Share of Borrowing of Cultivator Households from Different Sources (Per cent)**

Sources	1991	2002	2010
Non-institutional sources of which	<b>30.6</b>	<b>38.9</b>	<b>29.7</b>
Money Lenders	17.5	26.8	21.9
Institutional of which	<b>66.3</b>	<b>61.3</b>	<b>68.8</b>
Cooperative Societies/Banks	23.6	30.2	24.9
Commercial Banks	35.2	26.3	25.1
Unspecified	<b>3.1</b>	-	<b>1.5</b>
Total	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: All India Debt and Investment Survey and NSSO.

In India the efforts to increase the flow of credit to agriculture seems to have yielded better results in the recent years as the total institutional credit to agriculture recorded a growth of around 14 per cent during 1991-92 to 2008-09. In terms of total credit to agriculture, the commercial banks recorded a considerable growth (from around 43 per cent to about 69 per cent), while cooperative banks registered a fall (over 52 per cent to over 18 per cent) during the above period. There is a considerable increase in RRBs from five percent to 13 per cent as shown in (Fig-1).

Fig-1: Institutional framework



The Compound Annual Growth (CAGR) of loans issued through direct finance to agriculture and allied activities witnessed a growth of 19.57% with a coefficient of variation C.V. of 100.29% from 1991 to 2010 from all institutions. The highest growth was registered in case of RRBs (26.63%) and Scheduled commercial banks (22.59%) over the period. On the other hand in case of loans outstanding to direct finance to agriculture and allied activities, the CAGR of all institutional sources was calculated as 15.81% with a C.V as 85.58% from 1991 to 2010. The highest growth of outstanding credit was registered in case of RRBs (19.08%) and Scheduled commercial banks (17.14%) over the period (table-2)

Table-2: Direct institutional credit for agriculture and allied activities Total (short term and long term) (Rs. crore)

Year	Loan Issued					Loan Outstanding			
	Cooperatives	State govts	SCBs	RRBs	Total (2 to 5)	cooperatives	SCBs	RRBs	Total (7 to 9)
1	2	3	4	5	6	7	8	9	10
1990-91	4819	359	4676	335	10188	10531	17032	1753	29316
1991-92	5797	339	4806	596	11538	12176	16981	1984	31142
1992-93	6484	3389	4960	698	12530	13769	18288	2206	34263
1993-94	8484	377	5400	752	15013	15316	19113	2560	36988
1994-95	9876	407	7408	1083	18773	16810	20920	3009	40738
1995-96	12483	554	9274	1381	23692	19126	23427	3467	46020
1996-97	13254	668	10675	1748	26345	20556	26327	4038	50921
1997-98	14159	858	11537	2103	28656	21390	28445	4683	54518
1998-99	15099	420	14663	2515	32697	22199	29819	5389	57408
1999-00	25678	520	16350	2985	45534	41950	33442	5991	81383
2000-01	27295	487	16440	3966	48187	46135	38270	7249	91654
2001-02	30569	443	18638	4546	54195	52110	45106	8286	105502
2002-03	34040	-	25256	5879	65175	59064	53804	10261	123129
2003-04	40049	-	36203	7175	83427	71403	68103	11721	151228
2004-05	45009	-	48367	11927	105303	78822	95519	16709	191050
2005-06	48123	-	80599	15300	144021	82327	135603	21510	239439
2006-07	54019	-	115266	20228	189513	89443	169018	27452	285913
2007-08	57643	-	113472	23838	194953	65666	202796	33216	301678
2008-09	58787	-	160690	26499	245976	64045	256119	37367	357531
2009-10	74938	-	188263	34640	-	76480	315436	46282	-
<b>CAGR</b>	<b>15.50</b>	<b>-1.59</b>	<b>22.59</b>	<b>26.63</b>	<b>19.57</b>	<b>12.69</b>	<b>17.14</b>	<b>19.08</b>	<b>15.81</b>
<b>S.D</b>	<b>21248.6</b>	<b>848.6</b>	<b>56162.2</b>	<b>10237.1</b>	<b>71561.7</b>	<b>27614.7</b>	<b>88534.4</b>	<b>13355.4</b>	<b>104031.5</b>
<b>C.V</b>	<b>724.45</b>	<b>115.45</b>	<b>125.79</b>	<b>121.73</b>	<b>100.29</b>	<b>62.81</b>	<b>109.74</b>	<b>104.69</b>	<b>85.58</b>

SCBs: Scheduled Commercial Banks RRBs: Regional Rural Banks

Source: 1. Reserve Bank of India. S.D.(Standard Deviation) and C.V( Coefficient of Variation)

## 2. National Bank for agriculture and Rural Development

The Compound Annual Growth (CAGR) of loans issued through indirect finance to agriculture and allied activities witnessed a growth of 30.91% with a coefficient of variation C.V. of 92.77% from 1991 to 2010 from all institutions. The highest growth was registered in case of a Scheduled commercial banks (40.81%) and cooperatives (31.00%) over the period. On the other hand in case of loans outstanding to indirect finance to agriculture and allied activities, the CAGR of all institutional sources was calculated as 24.32% with a C.V as 91.08% from 1991 to 2010. The highest growth of outstanding credit was registered in case of cooperatives (28.67%) and Scheduled commercial banks (19.98%) over the period (table-3)

**Table-3:** Indirect institutional credit for agriculture and allied activities total (short term and long term)  
(Rs. crore)

	Loan Issued					Loan Outstanding				
	Cooperatives	SCBs	RRBs	REC	Total (2 to 5)	Cooperatives	SCBs	RRBs	REC	Total (7 to 8)
1	2	3	4	5	6	7	8	9	10	11
1990-91	1727	200	9	709	2645	2355	1189	24	4524	8092
1991-92	2002	198	7	588	2795	2487	1433	39	4875	8834
1992-93	2073	158	5	474	2709	2591	1552	40	5175	9391
1993-94	10076	332	0	692	11101	13412	2099	33	5655	21199
1994-95	12337	583	0	967	13887	16517	2866	33	6192	25607
1995-96	17371	1036	1	829	19237	17406	3674	35	6629	27744
1996-97	18927	1271	1	787	20986	19704	4986	49	7151	31890
1997-98	19972	1904	6	1093	22976	20817	6335	13	7799	34963
1998-99	20818	1997	8	2203	25026	22022	8117	25	8842	39006
1999-00	82186	3431	7	3051	88675	67361	12968	29	12189	92547
2000-01	91337	3967	.	4109	99413	79567	18825	.	14185	112578
2001-02	84092	7990	.	4722	96803	89092	18238	.	15936	123266
2002-03	92152	6261	.	6607	105019	92920	23690	.	16506	133116
2003-04	93566	8936	.	6017	108519	102307	28520	.	18305	149132
2004-05	114132	21728	.	7441	143301	110132	36071	.	21062	167265
2005-06	122067	27751	.	7489	157307	119932	57175	.	24564	201671
2006-07	135740	38766	.	10733	185239	136392	82564	.	31262	250218
2007-08	145778	40278	.	12953	199009	147982	93443	.	38615	280040
2008-09	.	73721	.	17157	.	.	110702	.	50653	.
2009-10	.	82839	.	21132	.	.	145554	.	65979	.
<b>CAGR</b>	<b>31.00</b>	<b>40.81</b>	<b>-</b>	<b>22.82</b>	<b>30.91</b>	<b>28.67</b>	<b>19.98</b>	<b>-</b>	<b>13.34</b>	<b>24.32</b>
<b>S.D</b>	<b>51793</b>	<b>24770.5</b>	<b>3.5</b>	<b>5943.8</b>	<b>67240.8</b>	<b>51005.1</b>	<b>43009.3</b>	<b>9.9</b>	<b>16732.6</b>	<b>86854.3</b>
<b>C.V.</b>	<b>87.43</b>	<b>153.22</b>	<b>80.32</b>	<b>108.33</b>	<b>92.77</b>	<b>86.37</b>	<b>135.19</b>	<b>31.18</b>	<b>91.42</b>	<b>91.08</b>

SCBs: Scheduled Commercial Banks

RRBs: Regional Rural Banks

Source: 1. Reserve Bank of India ( in Case of SCBs)

2. National Bank for Agriculture and Rural Development (in case of RRBs And cooperatives)

3. Rural Electrification Corporation Ltd. ( In Case of REC).

The Sectoral deployment of gross bank credit reveals that the share of agriculture since the second half of 1990s has ranged between 11-12 per cent. As at end March 2010, the share agriculture sectoral deployment of gross bank credit stood at around 13 per cent (Table-4).

**Table-4:** Sectoral Deployment of Gross Bank Credit (Rupees crore)

Sectors	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2009-10
Gross Bank Credit	258991	300283	342012	400818	469153	536727	669534	764383	1040909	1445837	2045897
A. Priority Sector	84880	99507	114611	131827	154414	175259	24609	263834	381476	509910	876459
I. Agriculture	31442	34869	39643	44381	51922	60761	73518	90541	125250	172279	267840
Share of Agriculture in Total	12.14	11.61	11.59	11.07	11.07	11.32	10.98	11.84	12.03	11.92	13.09
II. Small Scale Industries	35944	43508	48483	52841	56002	57119	60394	65855	74588	90239	209675
III. Other Priority Sector	17494	21130	26494	34362	46490	57299	77697	107438	181638	247379	379450
B. Industry	102604	117350	130516	147319	162837	172324	235168	247210	352304	458808	698560
Share of Industry Total	39.62	39.08	38.16	36.75	34.71	32.11	35.12	32.34	33.85	31.75	32.57

Source: Report on Trend and Progress of Banking in India, Various issues.

**2. Equity in Institutional Credit to Agriculture:** In India a skewed distribution of institutional credit across regions has been found to persist. In view of glaring disparities in the distribution of agricultural credit across regions, it is argued that the benefits of institutional credit have largely accrued to the relatively prosperous regions and richer sections within each region (Table-5). The extent of variations in the distribution of institutional credit can be gauged from the fact that the institutional credit per hectare in 2007-08 in Assam (Rs 1979) was about one-eighth of the national average (Rs 15936) and about 3 per cent of Kerala (Rs 56890). There seems to be a direct relationship between institutional credit flow and the level of agricultural development. For instance the level of institutional credit is higher in states like Haryana (Rs 34012/ha), Kerala (Rs 56890/ha), Punjab (Rs 46593/ha), Tamil Nadu (Rs 52427/ha), and low in states like Assam (Rs 1979/ha), Bihar (Rs 8880/ha), Madhya Pradesh (Rs 9627/ha), Orissa (Rs 6370/ha), Rajasthan (Rs 6673/ha), etc

**Table -5:** Distribution of institutional agricultural credit across major states of India (Rs / ha)

States	1990-91	2000-01	2007-08
Andhra Pradesh	1120	4604	23441
Assam	54	311	1979
Bihar	233	1075	8880
Gujarat	501	2809	12626
Haryana	482	2964	34012
Himachal Pradesh	207	2555	19490
Jammu & Kashmir	191	764	7893
Karnataka	546	3432	15448
Kerala	2766	7666	56890
Madhya Pradesh	320	698	9627
Maharashtra	387	1352	12138
Orissa	319	479	6730
Punjab	856	5352	46593
Rajasthan	158	667	6673
Tamil Nadu	2857	9403	52427
Uttar Pradesh	376	1529	29065
West Bengal	329	1708	14025

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All India	549	2169	15936
Coefficient of variation	121.88	94.15	80.71

Source: Report of Advisory Committee on Flow of Credit to Agriculture and Related Activities from Banking System, RBI, Mumbai, 2004.

However, the study reveals that the regional disparities in the distribution of institutional credit seem to have declined over time in India. The coefficient of variation in the distribution of institutional credit across states was 122 per cent in 1990-91 which declined to 94 in 2000-01 and further to 81 per cent in 2007-08. But, 81 per cent is quite a significant level which reveals that the regional disparities in institutional credit flow do exist and are still a part of rural credit system.

The distribution of institutional credit across farm-size categories is also skewed (Table-6). Though, the majority of farmers (82%) in India possess less than two hectares of land, they together account for only 50 per cent of the institutional credit; while 18 per cent of the farmers having more than two hectares of land, account for 49 per cent of the institutional credit. The skewed distribution of institutional credit in agriculture seems to emanate from the skewed distribution of land. It may be mentioned that 18 per cent of these farmers operate about 53 per cent of the total cultivable land in the country.

**Table-6:** Distribution of Direct Institutional Agricultural Credit by SCBs to farmers according to size of land holdings short term and long term (Number of accounts in thousands; Amount in Rs. crores)

Period	Up to 2.5 acres				Above 2.5 acres to 5				Acres Above 5 acres				Total	
	No. of Accounts	share %	Credit amount	share %	No. of accounts	share %	Credit Amount	share %	No. of accounts	share %	Credit amount	share %	No. of Accounts	Amount
1982-83	1304	50.72	290	29.69	652	25.36	211	21.60	616	23.96	476	48.73	2571	977
1990-91	1960	48.06	1181	30.17	1219	29.89	952	24.36	899	22.05	1782	45.52	4078	3915
2000-01	2382	40.79	3740	25.77	1860	31.85	3642	25.09	1599	27.38	7135	49.16	5841	14516
2008-09	8544	38.85	34267	24.43	6641	30.20	33280	23.73	6811	30.96	72753	51.86	21996	140300

Source: RBI, Report on Currency and Finance (various issues)

The share of farmers having up to 2.5 acres of land, in total institutional credit has declined from 29.69 per cent in TE 1982-83 to 24.43 per cent in TE 2008-09. However, the share of farmers operating 2.5 to 5 acres of land has increased from 21.60 per cent in TE 1982-83 to 23.73 per cent in TE 2008-09. The share of large farmers, operating greater than 5 acres of land, in institutional credit has increased from 48.73 per cent in TE 1982-83 to 51.86 per cent in TE 2008-09.

**3. Progress in Kisan Credit Card Scheme:** The Kisan Credit Card (KCC) Scheme was introduced in 1998-99 to facilitate farmers' access to short-term credit from the formal financial institutions. The credit under this scheme is sanctioned in proportion to the size of owned land, but there is some flexibility for the farmers cultivating leased-in land, in addition to their owned holding. The KCC scheme has made a rapid progress and till 31 March, 2009, about 80.8 million KCCs have been issued by the co-operative banks, commercial banks and RRBs (Table-7). The share of co-operative banks and commercial banks in distribution of KCCs was 44 per cent and 43 per cent, respectively; the remaining 14 per cent was issued by RRBs. The growth in distribution of KCCs has been phenomenal. The distribution of KCCs grew at the rate of 44 per cent per annum; the highest growth rate (75%) was witnessed by RRBs. The distribution of KCCs by cooperative banks grew at the rate of 46 per cent per annum during this period. The KCCs issued by the commercial banks witnessed an annual growth rate of 42 per cent during this period.

**Table-7:** Progress in the Distribution of Kisan Credit Cards (Agency-wise)

Year	Cooperative Banks	Regional Rural Banks	Scheduled Commercial Banks	Total
1998-99	0.16	0.01	0.62	0.78
1999-00	3.75	0.18	1.99	5.91
2000-01	9.36	0.83	5.38	14.56
2001-02	14.8	1.66	8.45	23.90
2002-03	19.38	2.62	11.15	32.14
2003-04	24.26	3.89	14.24	41.39
2004-05	27.82	5.62	18.64	51.07



2005-06	30.42	6.87	22.8	59.08
2006-07	32.72	8.28	27.61	67.59
2007-08	34.81	10.05	32.21	76.05
2008-09	35.87	11.26	33.67	80.80
Share In Total	<b>44.39</b>	<b>13.894</b>	<b>41.67</b>	<b>100</b>
CAGR (%)	<b>45.87</b>	<b>75.27</b>	<b>42.12</b>	<b>44.25</b>

Source: NABARD and Economic Survey

The higher growth rate witnessed in the distribution of KCCs is reflected in higher density of KCCs. On an average, two-thirds of the farming households possess KCCs in India. However, the distribution of KCCs has depicted a significant variation across states. The distribution of KCCs and its intensity in terms of per unit farming household and per unit farm size is presented in (Table-8).

**Table-8: State-wise Distribution of Kisan Credit Cards: 2008**

States	No. Of KCCs Issued		Intensity of KCC	
	(millions)	No/Households	No/Hectars	
Andhra Pradesh	12.17	<b>1.06</b>	<b>0.85</b>	
Assam	0.34	<b>0.13</b>	<b>0.11</b>	
Bihar	3.06	<b>0.26</b>	<b>0.45</b>	
Gujarat	2.46	0.58	0.25	
Haryana	2.19	1.44	0.62	
Himachal Pradesh	0.25	0.28	0.26	
Jammu And Kashmir	0.07	0.05	0.07	
Karnataka	4.21	0.59	0.34	
Kerala	2.76	0.42	1.76	
Madhya Pradesh	5.90	0.56	0.27	
Maharashtra	7.19	0.59	0.36	
Orissa	4.22	1.04	0.83	
Junjab	2.02	2.02	0.50	
Rajasthan	4.37	0.75	0.21	
Tamil Nadu	4.87	0.62	0.70	
Utter Pradesh	14.62	0.65	0.78	
West Bengal	2.69	0.40	0.49	
<b>All India</b>	<b>80.80</b>	<b>0.67</b>	<b>0.51</b>	

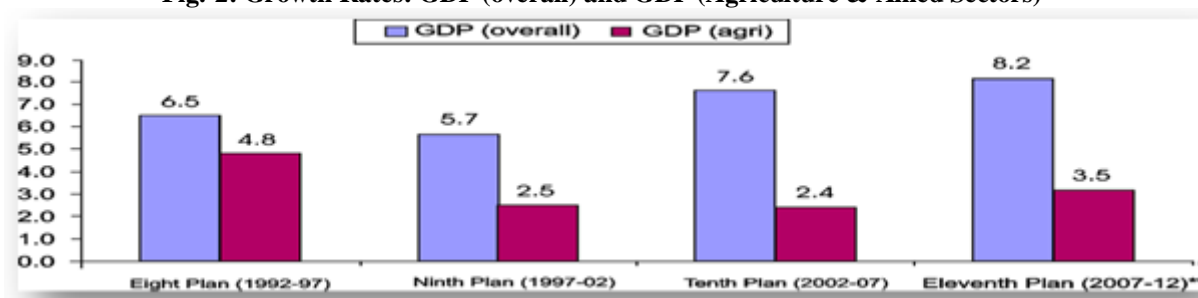
Source: NABARD and Agriculture Census Division Ministry Of agriculture, New Delhi

The highest intensity in distribution of KCCs was observed in Punjab (2.02). The distribution of KCCs was more than two-times the number of operating households in Punjab. Some other states which have distributed more number of KCCs than the number of farming households are: Haryana (1.44), Andhra Pradesh (1.06) and Orissa (1.04). The performance of states like Assam, Bihar, Himachal Pradesh and Jammu & Kashmir in distribution of KCCs has been dismal. For instance, only 5 per cent of the farming households in Jammu & Kashmir and 13 per cent in Assam have obtained KCCs. In Bihar and Himachal Pradesh, only about one-fourth of the farming households have received KCCs. The density of KCCs in terms of operational area varied from 0.07 / ha in Jammu & Kashmir to 1.76 / ha in Kerala.

**4. Agricultural Production:** Since agriculture forms the resource base for a number of agro-based industries and agro-services, it would be more meaningful to view agriculture not as farming alone but as a holistic value chain, which includes farming, wholesaling, warehousing (including logistics), processing, and retailing. Further, it may be noted that in the last two Five Year Plans, it is clearly mentioned that for the economy to grow at 9 per cent, it is important that agriculture should grow at least by 4 per cent per annum. Achieving an 8-9 percent rate of growth in overall GDP may not deliver much in terms of poverty reduction unless agricultural growth accelerates. At the same time 'growth with inclusiveness' can be achieved only when agriculture growth accelerates and is also widely shared amongst people and regions of the country.

**5. Growth Performance of Agriculture:** The growth performance of the agriculture sector has been fluctuating across the plan periods (Fig-2). It witnessed a growth rate of 4.8 per cent during the Eighth plan period (1992–97). However, the agrarian situation saw a downturn towards the beginning of the Ninth plan period (1997–2002) and the Tenth plan period (2002–07), when the agricultural growth rate came down to 2.5 percent and 2.4 percent respectively. This crippling growth rate of 2.4 percent in agriculture as against a robust annual average overall growth rate of 7.6 per cent for the economy during the tenth plan period was clearly a cause for concern. The trend rate of growth during the period 1992-93 to 2010-11 is 2.8 percent while the average annual rate of growth in agriculture & allied sectors-GDP during the same period is 3.2 percent.

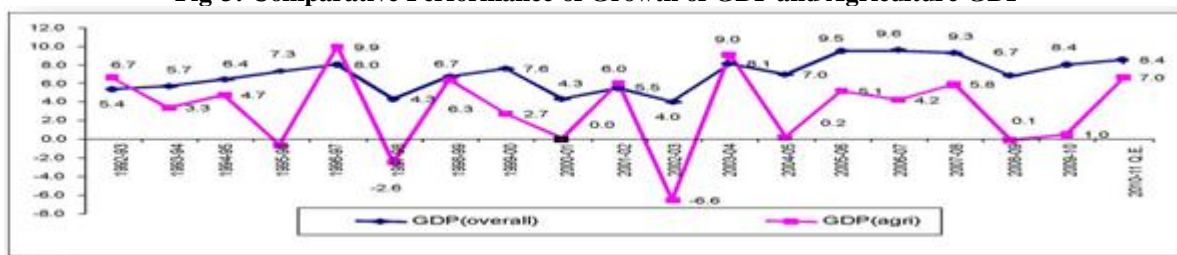
Fig-2: Growth Rates: GDP (overall) and GDP (Agriculture & Allied Sectors)



Note: \* Figures for the Eleventh Plan show growth rates for the first four years of the Plan. Source: CSO.

The Eleventh Plan had sought to reverse the deceleration of agricultural growth which occurred in the Ninth Plan and continued into the Tenth Plan. It has some success in that foodgrain production touched a new peak of 250.42 million tonnes in 2011-12. Agricultural GDP growth has accelerated to an average 3.9 percent growth during 2005-06 to 2010-11, partly because of initiatives taken since 2004. The increasing divergence between the growth trends of the total economy and that of agriculture & allied sectors suggests an under performance by agriculture (Fig-3). It is also significant that unlike the overall economic growth pattern, agricultural performance in India has been quite volatile (the Coefficient of Variation (CV) during 2000-01 to 2010-11 was 1.6 compared to 1.1 during 1992-93 to 1999-2000).

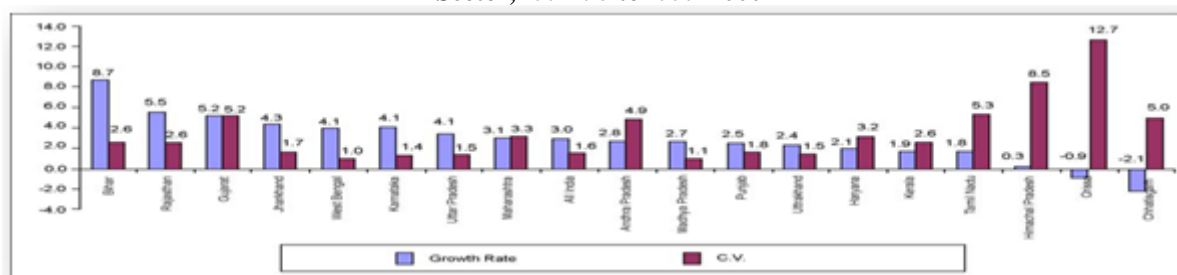
Fig-3: Comparative Performance of Growth of GDP and Agriculture GDP



Note: Figures are at 2004-05 prices. Source: CSO.

**6. Regional Variations in Growth:** The Indian agriculture growth pattern has been highly varied at the state level. Since agriculture is a state subject, the overall performance of the agriculture sector in India largely depends on what occurs at the state level. There is a wide variation in the performance of different states. During 2000-01 to 2008-09, the growth performance of agriculture in Rajasthan (8.2%), Gujarat (7.7%) and Bihar (7.1%) was much higher than that of Uttar Pradesh (2.3%) and West Bengal (2.4%). The recent dynamics of erstwhile poor performing states like Orissa, Chhattisgarh and Himachal Pradesh showing strong growth in agriculture can be seen from Fig.-4& fig-5

Fig-4: Average Annual Growth Rate (%) of Gross State Domestic Product from Agriculture & Allied Sector, 1994-95 to 1999-2000

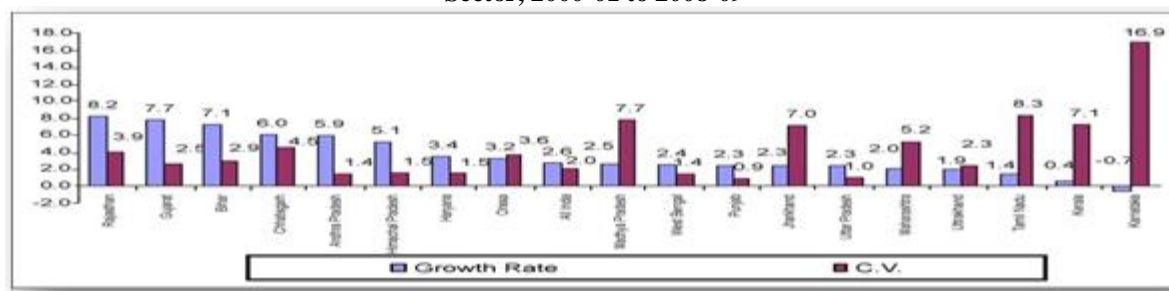


Source: CSO.

Note: GSDP estimates are at 1993-94 prices



**Fig.-5: Average Annual Growth Rate (%) of Gross State Domestic Product from Agriculture & Allied Sector, 2000-01 to 2008-09**



Source: CSO.

Note: GSDP estimates are at 1999-2000 prices.

**7. Crop-Specific Growth:** During 2010-11, foodgrains production was 244.78 million tonnes, comprising of 121.14 million tonnes during Kharif season and 123.64 million tonnes during the Rabi season. As per 2nd advance estimates for 2011-12, total foodgrains productions estimated at a record level of 250.42 million tonnes which is 5.64 million tonnes higher than that of the last year production. Production of rice is estimated at 102.75 million tonnes, Wheat 88.31 million tonnes, coarse cereals 42.08 million tonnes and pulses 17.28 million tonnes. Oilseeds production during 2011-12 is estimated at 30.53 million tonnes, sugarcane production is estimated at 347.87 million tonnes and cotton production is estimated at 34.09million bales (of 170 kg. each). Jute production has been estimated at 10.95 million bales (of 180 kg each).

Growth in the production of agricultural crops depends upon acreage and yield. Given the limitations in the expansion of acreage, the main source of long-term output growth is improvement in yields. A comparative picture in average annual growth rates of area, production, and yield of different crops for two periods 1990-91 to 1999-2000 and 2000-01 to 2010-11 is given in Table-9.

**Table -9: All India Average Annual Growth Rates of Area, Production and Yield of Principal Crops (%)**

Crops/Crop Groups	1990-91 to 1999-2000			2000-01 to 2010-11		
	A	P	Y	A	P	Y
Rice	0.70	2.09	1.36	-0.39	1.32	1.47
Wheat	1.62	4.52	2.87	0.57	1.39	0.73
Maize	0.85	2.24	1.37	2.68	7.12	4.13
Coarse Cereals	-2.42	-0.08	2.03	-0.13	5.0	4.64
Total cereals	-0.12	2.29	2.38	-0.09	1.82	1.69
Gram	0.88	3.86	2.97	4.31	6.39	1.19
Tur	-0.45	1.89	2.03	2.58	1.89	-0.65
Total Pulses	-0.91	1.06	1.82	2.30	4.02	1.21
Total Food Grains	-0.27	2.19	2.43	0.34	1.95	1.37
Groundnut	-2.25	-2.40	-0.30	-1.08	13.13	12.76
R&M	2.28	4.82	2.96	2.76	6.26	2.72
Soya bean	11.01	16.37	4.67	4.15	8.31	4.17
Oilseeds	0.75	2.53	1.76	1.27	7.00	5.18
Sugarcane	2.25	3.16	0.91	1.95	2.12	0.03
cotton	1.42	0.93	-0.54	2.66	12.12	9.15

Note: A: Area, P: Production, Y: Yield

Source: Directorate of Economics & Statistics, Ministry of Agriculture.

In the case of wheat, the growth in area and yield have been marginal during 2000-01 to 2010-11 suggesting that the yield levels have plateau for this crop. This suggests the need for renewed research to boost production and productivity. All the major coarse cereals display a negative growth in area during both the periods except for maize, which recorded an annual growth rate of 2.68 per cent in the 2000-01 to 2010-11 periods. In pulses, gram recorded a growth of 6.39 percent in production during the same period driven by expansion in the area under cultivation. Soybean has recorded a high rate of growth in production in both the periods, driven primarily by expansion in area under cultivation.

#### IV. Conclusion And Policy Recamendations

To conclude it can be said that the provision of extending formal credit to agriculture should be the central to the concern of policy makers, planners and development economists, because the significance of agriculture sector in India is not restricted to its contribution to GDP, employment and livelihood creation only, but on account of its complementarily with other sectors of the economy. It has far reaching ability to impact

poverty alleviation and rural development of the economy. There are several areas of importance for the agriculture sector growth. These include, among others, enhancing public sector investment in research apart from effective transfer of technology along with institutional reforms in the research set up to make it more accountable and geared towards delivery, conservation of land, water and biological resources, the development of rainfed agriculture, the development of minor irrigation, timely and adequate availability of inputs, support for marketing infrastructure, an increase in flow of credit particularly to the small and marginal farmers of the economy.

### **1. Major Findings of the Study**

1. The share of institutional credit, which was little over 66.3% in 1991, increased manifold to over 68.8 per cent in 2010, reflecting concomitantly a remarkable decline in the share of non institutional credit from around 30.6 per cent to about 29.7 per cent.
2. A skewed distribution of institutional credit across regions has been found to persist. In view of glaring disparities in the distribution of agricultural credit across regions, it is argued that the benefits of institutional credit have largely accrued to the relatively prosperous regions and richer sections within each region.
3. Agriculture witnessed a growth rate of 4.8 per cent during the Eighth plan period (1992–97). However, the agrarian situation saw a downturn towards the beginning of the Ninth plan period (1997–2002) and the Tenth plan period (2002–07), when the agricultural growth rate came down to 2.5 percent and 2.4 percent respectively. This crippling growth rate of 2.4 percent in agriculture as against a robust annual average overall growth rate of 7.6 per cent for the economy during the tenth plan period was clearly a cause for concern.
4. The increasing divergence between the growth trends of the total economy and that of agriculture & allied sectors suggests an under performance by agriculture. It is also significant that unlike the overall economic growth pattern, agricultural performance in India has been quite volatile (the Coefficient of Variation (CV) during 2000-01 to 2010-11 was 1.6 compared to 1.1 during 1992-93 to 1999-2000).

**2. Policy Recommendations:** in India several committees in the recent past have come out with many suggestions and policy recommendations to improve the flow of institutional credit in rural areas. These include Expert Committee on Rural Credit (V.S. Vyas), Committee on Agricultural Credit through Commercial Banks (R.V. Gupta), Committee on Cooperatives (Vikhe Patil), and Advisory Committee on Flow of Credit to Agriculture (V.S. Vyas) etc. The government has implemented several of the suggestions made by these committees. However, based on the analysis of current status and identification of concerns in the study, some suggestions are as follows:

1. As the basic problem with rural borrowers is of repayment, efforts should be made to provide a complete package consisting of both financial and non-financial help to the borrowers to make the best use of credit, improve their repayment capacity.
2. Bank officials should try to maintain personal relationship with the borrowers and also motivate them to enhance their earnings and repayment of loans.
3. In case of term-loans, necessary arrangement should be made to provide working capital finance which is necessary to make the investment productive.
4. Procedure for loan disbursement could be made simple so that it may not be difficult for the less-educated and illiterate households to access institutional financing agencies for credit
5. It has been observed that the incidence of overdue in the rural credit system has been increasing over the years and has been steadily eroding the financial soundness of the system. There is an urgent need to check overdues and nonperforming assets (NPAs) to improve recovery performance of RFLs.

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