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Agriculture Credit in the Post-Reform Period
Some Concerns

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Some Concerns

Surjit Singh*

In developing countries like India, the development of agriculture sector is important for variety of reasons. Agriculture is still a source of livelihood for majority of people in rural areas. It provides demand for industrial goods and in India whenever agriculture sector has grown at 3-4 percent; industrial sector has grown at 6 plus per cent. It has been observed that the required growth of productivity in agriculture means that more capital must be invested in it. Farmers need much more capital than they can afford to save. If agriculture has to develop, its appetite for capital should be satisfied. In agriculture, *capital* represents a host of items like machinery, livestock, irrigation systems, farm buildings, wells, etc. In fact, the more developed the agriculture, the more capital the farmers would demand. Credit is a condition that enables a person to extend his control over his ownership of resources. It represents mobilisation of the savings by intermediaries or government from the people and through such credit operations financial savings are transformed into capital. Though credit is not capital, the money obtained through credit provides a command over enough funds to exploit opportunities. It has been argued that credit itself would not contribute to agricultural growth unless other inputs are made available, along with credit. This is the paradigm of farm finance. The opinion has been expressed that credit plays the role of an accelerator for agricultural development provided it is adequate in quantity, cheap and development oriented. It has also been observed that at a certain stage in agricultural development, agricultural credit clearly does become a strong force for further improvement. The present paper thus looks at the agriculture credit in India in the post-reform period and raises some concerns.

Indian Agriculture: A View

Indian agriculture has undergone structural changes in recent times. The nature of Indian agriculture has geared towards small farms. In 1995-96 small and marginal farmers operated 36 per cent of cultivated area, a 11 per cent increase over 1990-91 (table 1). Given this trend, presumely has not only continued but accelerated.This meagre base of Indian agriculture is vulnerable (Vyas 2004).

* A revised version of the paper presented at the South Asia Regional Conference of IAAE on "Globalization of Agriculture in South Asia : Has it made a Difference to Rural Livelihoods?" Hyderabad, March 23-25, 2005.

Table 1 : Area Operated by Operational Holdings (million hectares)

Type of Holdings	1990-91	%	1995-96	%
Marginal	24.89	15.04	28.12	17.21
Small	28.82	17.42	30.72	18.81
Semi-medium	38.37	23.19	38.95	23.84
Medium	44.75	27.04	41.39	25.34
Large	28.65	17.31	24.16	14.79
All Holdings	165.48	100	163.35	100

Source: Indian Agriculture in Brief.

Table 2 : Area Under Food grains Across States (000 hectares)

States	TE 1990	TE 2002	Difference %
Andhra Pradesh	7944.83	7289.33	-8.25
Assam	3548.87	2834.60	-20.13
Bihar	2556.03	4770.03	86.62
Chhattisgarh	6626.43	4894.37	-26.14
Gujarat	4686.10	3256.77	-30.50
Haryana	4074.47	4277.27	4.98
Himachal Pradesh	869.17	831.00	-4.39
Jammu & Kashmir	881.47	889.83	0.95
Jharkhand	1843.17	1223.97	-33.59
Karnataka	7294.33	7540.63	3.38
Kerala	605.57	365.07	-39.71
Madhya Pradesh	12216.17	11401.80	-6.67
Maharashtra	14418.93	13272.30	-7.95
Orissa	6917.37	5318.93	-23.11
Punjab	5551.77	6231.10	12.24
Rajasthan	12358.73	11674.73	-5.53
Tamil Nadu	3962.97	3852.67	-2.78
Uttar Pradesh	18972.20	20084.03	5.86
Uttaranchal	979.70	992.13	1.27
West Bengal	6396.87	6632.30	3.68
India	127427.30	122021.87	-4.24

Source: Computed from CMIE, Agriculture February 2004.

Another aspect of Indian agriculture that requires mention (as articulated by Vyas 2004) is the significant changes in the output mix and thereby input mix (tables 2 and 3). These changes reflected in a shift in area from food grains to non-food grains, and within food grains from coarse cereals to finer cereals. During the nineties, the area under food grains has declined by over 4 per cent. The shift towards non-food grains is observed across states with the exception of Bihar, Haryana, J&K,

Karnataka, Punjab, Uttaranchal, Uttar Pradesh and West Bengal (table 2). The maximum shift way from food grain crops is visible in Kerala followed by Jharkhand, Gujarat, Orissa and Assam. In Bihar, 87 per cent increase in food grain crop acreage has been observed. In certain quarters, it is argued that sleeping giant has awoken. The decline in the area under coarse cereals is much sharp and is a widespread. Oilseeds, cotton, tobacco and sugarcane have gained at the expense of cereals in terms of area (Vyas 2004). These crops have strong links with the market. The credit requirement also goes up with these changes. Changes in cropping pattern towards such crops influence change in input structure. As the modern technology spreads (GM seeds), input requirement changes. The relative prices of inputs too have changed in the nineties as a result of reduction in subsidies on power fertilisers, etc. Farmers expend sizeable part of resources on purchased inputs. Table 3 shows that value of inputs have almost doubled from Rs. 55401 crore in 1993-94 to Rs.103555 crore in 1999-2000.

The farmers have to take recourse to credit to a much larger extent than in the past for purchase of inputs. The flow of SAO credit during the same period has improved from Rs.9752 crore to Rs.23694 crore, a 2.5 times increase. The crop loan from all financial institutional to agriculture covered 17.6 per cent of input cost in 1993-94 and about 23 per cent in 1999-2000. However, it has more or less been stagnant since 1996-97. This means that even today less than quarter of input cost is covered by formal sector credit. The result is that farmers have to depend on other sources of credit including own savings to meet more than three-fourth of the cost of material inputs (Singh 1999; Singh and Sagar 2004 for informal sector credit flow to agriculture).

Table 3 : Value of Inputs, Output and Credit (Rs. crore at Current prices)

Year	Value of Output	Value of Inputs	Flow of SAO Credit	4 as % of 3	4 as % of 2	3 as % of 2
1	2	3	4	5	6	7
1993-94	204874	55401	9752	17.60	4.76	27.04
1994-95	236607	63654	11932	18.75	5.04	26.90
1995-96	256698	72026	15273	21.20	5.95	28.06
1996-97	302744	74415	16956	22.79	5.60	24.58
1997-98	319586	83125	18632	22.41	5.83	26.01
1998-99	387546	93005	20601	22.15	5.32	24.00
1999-00	405576	103555	23694	22.88	5.84	25.53

Source: Vyas, 2004.

On the other hand credit, as a percentage of gross value of output has almost been around 5 per cent when inputs, as a percentage of value of output has fluctuated between 24 and 28 per cent. This situation warrants correction if agriculture has to continue its significant contribution to the economy.

Need for Credit

The demand for agricultural credit arises due to (a) lack of simultaneity between the realisation of income and act of expenditure, (b) lumpiness investment in fixed capital formation and (c) stochastic surges in capital needs and (financial) saving that accompany technological innovations.

This is the most significant factor contributing to the demand for credit. From the development perspective, both forms of agricultural credit viz., crop loans and the term loans are important in sustained absorption of technological innovations. Initial surge in technology adoption in India got a complimentary support from the institutional credit with term lending forming a major proportion of private fixed capital formation in agriculture. Because of variations in development and deployment of technology, the credit requirements across space and time keep changing. Some recent estimates (Planning Commission 1996) of demand for credit by the agriculture sector, considering the future potential and demands, for the Ninth Plan (1997-98 to 2001-02) put it at Rs.229750 crore (both short- and long-term). This meant a 16 per cent annual growth rate of credit flow during the plan. The short-term demand was put at Rs.149400 crore while that of long-term at Rs. 80350 crore. The Working Group had further put the share of small and marginal farmers at 47.25 per cent: 55.6 per cent for short-term and 31.7 per cent for long-term. The Task Force on Agricultural Credit (GoI 2001) provided estimates on the magnitude of demand for agricultural credit for the Tenth Plan. The demand for production credit was estimated to lie between Rs.86000 crore to Rs.122928 crore. The bulk of growth in demand is likely to come from the groups that presently receive little or no institutional finance. The diversification process shall add the spurt in demand as much as for investments in the post-harvest facilities, such as marketing yards, cold stores, warehouses and handling equipment. It is assumed that the annual growth rate of credit flow would be 24 per cent. All along it has been expected that as there is need to supply credit to small farmers to promote capital formation, due attention needs to be paid by credit institutions (for extensive review of these aspects See, Singh and Sagar 2004). With progressive change in technology in agriculture, the gradual exposure of agriculture to the international markets, promotion of agricultural exports, the role of horticulture crops, floriculture and agro- processing, storage and marketing, growing value addition in agriculture, demand for agricultural credit may increase manifold in future. The agriculture in the near future may become more capital intensive.

Recent Credit Flow to Agriculture

Since independence the Indian credit delivery system had two main players in the formal sector i.e., co-operatives and commercial banks. Co-operatives were more important but under social banking regime commercial banks began to spread. However, with the advent of financial sector reforms under liberalisation, the role of commercial banks is beginning to get redefined. Under Basel norms, banks have to adopt prudential norms and become more efficient in the process. Government of India also pumped in resources to put on rails the weak banks (Singh and Sagar 2004). However, formal-sector credit flow acted as a facilitator of green revolution since the mid- sixties. Agriculture lending became priority lending. Of the net bank credit 18 per cent was earmarked for agriculture. As banking sector spread to rural areas, credit flow increased. A slow down process started with reforms in the banking sector. Table 4 shows that in 1990-91 the priority sector lending to agriculture sector was Rs.16750 crore and it continuously increased to Rs.90541 crore by 2003-2004, a more than 5 times increase in credit flow to agriculture sector during the reform period. The growth in net bank credit has been almost 7 times during the same period. The priority sector lending itself has increased by more than 6 times. However, share of agriculture sector in total net bank credit that was 15.33 per cent in 1990-91 declined to 11.85 per cent by 2003-2004. In none of the years the target of 18 per cent has been fulfilled. Since 1996-97, the share did not even cross 12 per cent. This shortfall is a cause of concern and many committees and groups have commented on it. There are two major reasons for this sorry affair.

Table 4 : Priority Sector Lending to Agriculture (Rs.crore)

Year	Priority Sector	Agriculture	3 as % of 2	Net Bank Credit	3 as % of 5
1	2	3	4	5	6
1990-91	42915	16750	39.03	109298	15.33
1991-92	45425	18157	39.97	117443	15.46
1992-93	49832	19963	40.06	141800	14.08
1993-94	53880	21208	39.36	152501	13.91
1994-95	64161	23983	37.38	192424	12.46
1995-96	73329	27044	36.88	228198	11.85
1996-97	84880	31442	37.04	245999	12.78
1997-98	99507	34869	35.04	297265	11.73
1998-99	114611	39634	34.58	339477	11.68
1999-00	131827	44381	33.67	398205	11.15
2000-01	154414	51922	33.63	467206	11.11
2001-02	175259	60761	34.67	535063	11.36
2002-03	211609	73518	34.74	668576	11.00
2003-04	263834	90541	34.32	763855	11.85

Source: RBI. 2003-2004. Handbook of Statistics on the Indian Economy.

One, permission to public sector banks to park unspent funds to the tune of 1.5 per cent shortfall of agriculture sector priority sector lending in RIDF on which they have been earning assured interest (Singh 2001a) and second, addition of many new activities under priority sector lending like information technology sector etc. The ill- health of co-operative sector also complicated the matter (Singh 2003a; 2003b). Bankers have also become more cautious in lending to agriculture sector due to non-performing assets.

Delving further, table 5 shows the flow of institutional credit to agriculture. A structural change in credit flow is observed. Of the three players in rural finance, co-operatives had a share of 38.53 per cent at the start of economic reforms that went up to 61.82 per cent when financial sector reforms were initiated. Since then with the exception of 1997-98, a continuous decline in share of co-operative movement is witnessed. By 2003-04, the share reduced to 30.99 per cent. The main reason for this decline is ill health of the co-operative sector due to variety of reasons (Gulati and Bathla 2002; Singh 2001b; Singh and Sagar 2004). The share of commercial banks that include regional rural banks has almost touched the 1990-91 peak of 61.47 per cent in 2003-04. Regional rural banks had a share of 8.72 per cent in 2003-04 (a continuous increase since 1996-97). In absolute terms, the credit flow to agriculture sector improved from Rs.8846 crore in 1990-91 to Rs.86981 crore, almost 10 times increase over the period. In case of co-operative sector, the increase is 8 times compared to 10 times jump in commercial bank credit. It is also observed that there are wide variations in annual growth of credit flow to agriculture sector. It has been as low as 4.4 per cent in 1995-96 over 1994-95 and as high as 35.4 per cent in 1992-93 over 1991-92 (beginning of the financial sector reform period). Considering, the period 1992-93 to 1999-2000, per hectare credit has improved from Rs.818 in 1992-93 to Rs.2494 in 1999-2000 (table 6). This is three times increase during the period. The prime reason is the diversification agriculture and widening of priority sector lending.

Direct Credit

Agriculture sector requires credit for crop production and capital formation. The dependence for crop loan is largely on co-operative sector while commercial banks tries to satisfy demand for capital investment. Capital formation in agriculture over the years has slowed down for a variety of reasons (see Misra and Chand 1995; Karmakar 1998; Gulati and Bathla 2001). However, table 7 presents the flow of credit both in the short-term and long-term by institutions. The total loans issued to agriculture sector by RFIs have multiplied by 4 times since 1990-91. In case of co-operatives, the increase in credit flow has been from Rs.4819 crore in 1990-91 to Rs.18202 crore in 2001-02, about 3.8 times increase. Commercial banks in all the years had a lower contribution till 1998-99, a reversal took place thereafter. The growth in loans issued has been slightly higher than the co-operative sector. This period saw significant jump in lending by regional rural banks.

Table 5 : Institutional Credit to Agriculture (Rs. crore)

Years	Coop	RRBs	CBs	Total	Share in Total			Total
					Coop	RRBs	CBs	% Increase
1990-91	3408		5438	8846	38.53		61.47	
1991-92	5800		5402	11202	51.78		48.22	26.6
1992-93	9378		5791	15169	61.82		38.18	35.4
1993-94	10117		6377	16494	61.34		38.66	8.7
1994-95	11915		9197	21113	56.43		43.56	28.0
1995-96	10479		11563	22032	47.56		52.48	4.4
1996-97	11044	1684	12783	26411	41.82	6.38	48.40	19.9
1997-98	14085	2040	15831	31956	44.08	6.38	49.54	21.0
1998-99	15957	2460	18443	36860	43.29	6.67	50.04	15.3
1999-00	18363	3172	24733	46268	39.69	6.86	53.46	25.5
2000-01	20801	4219	27807	52827	39.38	7.99	52.64	14.2
2001-02	23604	4854	33587	62045	38.04	7.82	54.13	17.4
2002-03	24296	5467	41047	70810	34.31	7.72	57.97	14.1
2003-04	26959	7581	52441	86981	30.99	8.72	60.29	22.8
2004-05	24471	9176	52038	85686	28.56	10.71	60.73	

Note : Figures for 2004-05 are up to only December. From 1990-91 to 1995-96 data for RRBs included in CBs. Coop- co-operatives, RRBs- regional rural banks, CBs- commercial banks.

Source : **Economic Survey**, various years.

Table 6: Per Hectare Credit Flow to Agriculture (Rs.)

Year	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-00
GCA	185487	186420	188053	186561	189543	190570	192620	189740
Credit	15169	16494	21113	22032	26411	31956	36860	46268
Credit/Hec	817.79	889.23	1138.25	1187.79	1423.87	1722.82	1987.20	2494.41

Note : GCA- gross cropped area in thousand hectares and credit in Rs. crore.

Source : **Economic Survey**, various years and CMIE.

The crop loan delivered by co-operative sector has in all the years much higher than that delivered by commercial banks, but the gap has been narrowing over time. The short-term loans issued by co-operative sector increased by roughly 4 times when those by commercial banks by more than 6 times. This means that commercial banks have improved their performance vis-à-vis co-operative sector in case of short-term loans (on co-operative sector problems see Vyas and Singh 1995; RBI 2000). In case of long-term loans issued, the opposite has happened. In the recent years co-operatives have almost equally contributed to capital formation in agriculture. Table 8 shows that funds from co-operative sector have been mainly for short-term (more than 70 per cent in all the years with exception of two years) and remained almost constant. In case of commercial banks, in 1990-91 the share of short-term loans issued was 44 per cent that improved to 68 per cent by 2001-02. Regional Rural Banks observed an increase in share of short-term loans from 37 to 84 percent, a remarkable improvement. Table further reveals that as far as short-term loans are concerned, the contribution of co-operative sector has dwindled, a decline of 17.4 percentage points. Commercial banks and regional rural banks have compensated this decline in share. In case of long-term loans issued the share of co-operative sector has improved over the years. This means that reforms have impacted the structural change in credit flow to agriculture sector.

Table 7 : Direct Institutional Credit for Agriculture (Loan Issued) (Rs. 00' crore)

	Short-term				Long-term				Total				
Year	Coop	SCBs	RRBs	Total	Coop	SCBs	RRBs	Total	Coop	States	SCBs	RRBs	Total
1990-91	34.48	20.48	1.25	56.21	13.72	26.28	2.10	42.10	48.19	3.59	46.76	3.34	101.88
1991-92	39.34	23.41	3.37	66.12	18.63	24.65	2.60	45.88	57.97	3.39	48.06	5.96	115.38
1992-93	43.94	24.32	4.51	72.77	20.89	25.28	2.47	48.64	64.84	3.89	49.60	6.98	125.31
1993-94	60.39	28.60	4.76	93.75	24.45	25.40	2.76	52.61	84.84	3.77	54.00	7.52	150.13
1994-95	69.96	38.42	6.88	115.26	28.79	35.66	3.95	68.40	98.76	4.07	74.08	10.83	187.74
1995-96	92.43	46.28	8.49	147.20	32.40	46.47	5.32	84.19	124.83	5.54	92.74	13.81	236.92
1996-97	94.89	56.25	11.74	162.88	37.65	50.50	5.75	93.90	132.54	6.68	106.75	17.48	263.45
1997-98	100.84	62.33	14.57	177.74	40.75	53.04	6.45	100.24	141.59	8.58	115.37	21.03	286.57
1998-99	106.89	77.42	17.50	201.81	44.01	69.21	7.65	120.87	150.90	4.20	146.63	25.15	326.88
1999-00	113.84	95.05	22.85	231.74	47.31	68.45	7.00	122.76	161.15	5.20	163.51	29.85	359.71
2000-01	121.35	107.04	30.95	259.34	51.00	57.36	8.71	117.07	172.35	4.87	164.39	39.66	381.27
2001-02	129.23	126.61	38.10	293.94	52.79	59.77	7.36	119.92	182.02	4.59	186.38	45.46	418.45

Source: RBI.2003-2004.

Table 8 : Distribution of Institutional Credit (%)

	Share of Short-term Credit in Total Credit			Share in Short-term Credit			Share in Long-term Credit			Share in Total Credit			
Years	Coop	SCBs	RRBs	Coop	SCBs	RRBs	Coop	SCBs	RRBs	Coop	States	SCBs	RRBs
1990-91	71.55	43.80	37.43	61.34	36.43	2.22	32.59	62.42	4.99	47.30	3.52	45.90	3.28
1991-92	67.86	48.71	56.54	59.50	35.41	5.10	40.61	53.73	5.67	50.24	2.94	41.65	5.17
1992-93	67.77	49.03	64.61	60.38	33.42	6.20	42.95	51.97	5.08	51.74	3.10	39.58	5.57
1993-94	71.18	52.96	63.30	64.42	30.51	5.08	46.47	48.28	5.25	56.51	2.51	35.97	5.01
1994-95	70.84	51.86	63.53	60.70	33.33	5.97	42.09	52.13	5.77	52.60	2.17	39.46	5.77
1995-96	74.04	49.90	61.48	62.79	31.44	5.77	38.48	55.20	6.32	52.69	2.34	39.14	5.83
1996-97	71.59	52.69	67.16	58.26	34.53	7.21	40.10	53.78	6.12	50.31	2.54	40.52	6.64
1997-98	71.22	54.03	69.28	56.73	35.07	8.20	40.65	52.91	6.43	49.41	2.99	40.26	7.34
1998-99	70.83	52.80	69.58	52.97	38.36	8.67	36.41	57.26	6.33	46.16	1.28	44.86	7.69
1999-00	70.64	58.13	76.55	49.12	41.02	9.86	38.54	55.76	5.70	44.80	1.45	45.46	8.30
2000-01	70.41	65.11	78.04	46.79	41.27	11.93	43.56	49.00	7.44	45.20	1.28	43.12	10.40
2001-02	71.00	67.93	83.81	43.96	43.07	12.96	44.02	49.84	6.14	43.50	1.10	44.54	10.86

Source: Computed from table 7.

Credit by Farm Size

A number of scholars have attempted to assess inequity in the distribution of agricultural credit in the past (See Singh and Sagar 2004 for review of issues). Some scholars have pointed out that institutional credit forms small part of the credit needs of the small farmers. Others have argued that small farmers have received more than their proportionate share of total institutional credit vis-à-vis their share in land. Credit absorption is technology determined. What has been the situation during the reform era? Table 9 shows that share of small and marginal holdings in direct finance in 1990-91 was almost 55 per cent declined to 44 per cent in 2001-02. This is because the share of small and marginal holdings in number of accounts reduced from 78 to 56 per cent. This implies that the reforms have had adverse impact on formal sector lending on small and marginal farmers. This does not augur well for Indian agriculture. This is complicated by the fact that size of loan itself has gone up across holding sizes over the period. For instance, holdings up to 2.5 acres observed an increase in per farm finance from Rs.6024 in 1990-91 to Rs.16247 in 2001-02, a 170 per cent increase. In case of holdings of 2.5 to 5 acres, the average loan expended has improved from Rs.7813 in 1990-91 to Rs.22610 in 2001-02, a 190 per cent increase. The average loan issued in case of holdings beyond 5 acres increased from Rs.19824 to Rs.32130, only 62 per cent increase.

This means a slower growth in finance in large holdings compared to small and marginal holdings. These changes are reflective of changing cropping patterns as observed in an earlier section. The demand for institutional credit is thus increasing across farm sizes during the reform period.

Table 9 : SCBs Direct Finance to Farmers According to Size of Holdings (Disbursements)

	Accounts	Loans	Share in Total (%) Accounts	Loans	Accounts	Loans	Average Finance (Rs.per account) Holding Size (Acres)			
Year	Up to 2.5 acres		2.5 to 5.00 acres		Above 5.00 acres		Upto 2.5	2.5-5	Above 5	Total
1990-91	48.07	30.16	29.89	24.32	22.04	4.55	6024	7813	19824	9600
1991-92	45.42	28.79	31.43	24.87	23.15	4.63	6295	7858	19878	9930
1992-93	44.47	27.83	31.76	24.55	23.76	4.76	6257	7729	20035	9999
1993-94	42.68	28.79	30.35	25.80	26.97	4.54	6959	8768	17367	10315
1994-95	42.24	27.57	31.54	24.02	26.22	4.84	8325	9715	23548	12754
1995-96	37.38	26.14	31.18	25.50	31.44	4.84	9885	11560	21748	14137
1996-97	37.77	24.25	30.49	25.50	31.74	5.03	10485	13656	25856	16331
1997-98	39.44	24.01	33.95	25.32	26.62	5.07	10873	13319	33991	17856
1998-99	39.48	23.56	32.12	26.89	28.39	4.96	12075	16941	35328	20240
1999-00	40.42	23.82	32.30	24.74	27.28	5.14	14253	18528	45612	24188
2000-01	40.79	25.76	31.85	25.09	27.37	4.92	15697	19575	44632	24851
2001-02	38.43	26.70	27.73	26.81	33.84	4.65	16247	22610	32130	23386

Source: Computed from RBI. 2003-2004.

Scale of Credit

A related aspect to the above discussion is the scale of credit flow to agriculture sector. Scholars have been arguing that demand for institutional credit by various categories of Indian farmers is not large (Singh and Sagar 2004). Besides, changes are occurring since the inception of reforms. Table 10 reveals that commercial banks advances to agriculture sector are observing significant structure changes. We have noticed above that the average credit demand of the Indian farmers is well below Rs.25000. It is disturbing that since 1990-91, the share of borrowers in up to Rs.25000 is showing a significant declining trend, and it was 55 per cent in 1990-91 and 24 per cent in 2002-03. The gainers are those borrowing Rs.25000 to Rs.2 lakh, the share improved from 26 to 34 per cent while in case of those borrowing Rs.10 crore or more, the increase has been from just 1.7 per cent in 1990-91 to 14.4 per cent in 2002-03. Table also shows that the share of those borrowing Rs.2 lakh or more went up from 19.2 per cent to significant 42.1 per cent during the same period. This reinforces the above arguments that bias during the reforms of commercial banks is towards large borrower at the expense of small borrowers.

This also means that there is a visible shift in lending from crop production to agro-processing. This is a result of widening of priority sector in the recent times. The policy reform has also forced the banks to take care of bad debts and so made them reluctant lenders to small borrowers. Banker has become a cautious lender at the cost of Indian agriculture, which still supports 5.4 crore small and marginal farmers. This lowers the transaction costs and reduces NPA of banks. In this scenario, one really wonders how doubling of credit to agriculture sector (as expounded by the Finance Minister) will take place. Even if it is made possible the small and marginal borrowers will be bypassed by commercial banks. The recommendations of *Vyas committee* may help in augmenting credit flow to agriculture.

It has asked to waive margin/security requirements up to Rs.50000 for crop loans and up to Rs.5 lakh for agri-business and agri-clinics; dispense with the restrictive provisions of Service Area Approach; and aligning NPA norms for direct agricultural advances to the cropping seasons of short duration and long duration crops. What also is required is that restructuring/rescheduling of loans of farmers be allowed so that farmers become eligible for fresh loans. Need is also for rescheduling of the debts of farmers in arrears and making them eligible for fresh loans. On the pattern of industry, there should be one time settlement (OTS) for small and marginal farmers and then considering them for fresh loans. There should also be redemption of past debts from non-institutional lenders. This would help improve the present worrisome situation.

Table 10 : Distribution of Outstanding Credit of SCBs in Agriculture by Size

Sizeof Credit (Rs.)													
Years	Total	<25000	25000 -2 lakh	2-5 lakh	5-10 lakh	10-25 lakh	25-50 lakh	50 lakh -1crore	1-4 crore	4-6 crore	6-10 crore	10> crore	Above 2 lakh
1990-91	100	55.16	25.68	2.82	1.62	2.42	3.57	2.39	2.97	0.83	0.87	1.67	19.16
1991-92	100	55.22	25.69	2.65	1.39	2.01	2.74	2.07	3.37	0.78	0.95	3.12	19.08
1992-93	100	52.69	25.92	2.63	1.43	2.09	2.80	2.19	4.10	0.85	1.08	4.22	21.39
1993-94	100	53.19	26.08	2.88	1.60	2.41	2.85	2.11	3.91	1.07	0.99	2.90	20.73
1994-95	100	52.04	26.04	3.30	1.85	2.67	2.80	2.15	3.68	0.84	1.09	3.54	21.92
1995-96	100	49.48	25.38	4.11	1.68	2.60	2.71	2.33	4.47	1.30	1.09	4.85	25.14
1996-97	100	47.02	25.92	5.50	2.01	2.82	2.88	2.75	4.77	1.55	0.97	3.80	27.06
1997-98	100	46.18	26.77	6.59	1.88	2.61	2.66	2.47	4.60	1.35	1.66	3.23	27.05
1998-99	100	38.26	29.74	7.90	1.77	2.22	2.44	2.41	4.10	1.13	1.44	8.58	32.00
1999-00	100	35.19	32.41	9.79	1.91	2.33	2.23	2.09	3.77	1.38	1.50	7.39	32.39
2000-01	100	32.73	33.29	10.62	1.91	2.29	1.94	1.74	3.59	1.35	1.55	8.99	33.98
2001-02	100	26.05	32.59	11.45	2.44	2.61	2.29	2.30	4.68	1.56	2.23	11.80	41.36
2002-03	100	23.59	34.36	11.71	2.30	2.35	2.00	1.95	3.85	1.45	2.09	14.36	42.06

Source: Computed from CMIE 2004, Fenruary.

Regional Aspects of Agriculture Credit

From the onset of economic reforms, Indian agriculture had certain regions and sections that were bypassed by the formal sector financial institutions. What has happened to regional dispersal of credit during the reforms? We have seen in the first section that agriculture is observing changes across states and so the credit requirement should also be expected to change. Table 11 shows that regional imbalances continued to exist since the initiation of economic reforms. Four states viz., Andhra Pradesh, Karnataka, Maharashtra and Uttar Pradesh accounted for 41 per cent of all agriculture credit flow from commercial banks in 1990-91. The share of big four stood at 44 per cent in 2002-03, a gain of 3 percentage points. If we include Madhya Pradesh, Tamil Nadu, Punjab and Rajasthan, then these 8 states account for 71 per cent of all credit flow. The northeast region is largely bypassed region. Banks appear to be reluctant to lend there. Half the Indian States/union territories have a share of below one percent in credit. There is uneven flow of agricultural credit across states in India and this needs rectification.

Table 11 : Distribution of SCBs Credit Flow to Agriculture Across States (%)

States	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Andaman	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.04
AP	12.10	11.95	11.48	12.06	12.28	12.95	13.21	13.03	14.76	12.47	12.30	11.83	11.38
Arunachal	0.04	0.03	0.04	0.03	0.04	0.04	0.03	0.04	0.05	0.04	0.03	0.03	0.03
Assam	1.35	1.44	1.22	1.20	1.28	1.11	1.06	0.87	0.75	0.63	0.54	0.60	0.62
Bihar	5.11	4.87	5.17	5.38	5.54	4.95	4.72	3.95	4.20	3.12	3.35	3.32	2.69
Chandigarh	0.50	0.40	0.52	1.27	0.44	0.48	0.47	0.49	0.45	0.56	0.70	0.89	1.51
Dadra	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Daman	0.01	0.04	0.41	0.42	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00
Delhi	0.85	0.73	0.97	1.19	0.99	3.09	1.25	0.86	4.36	1.52	3.07	3.39	4.76
Goa	0.22	0.18	0.16	0.13	0.14	0.15	0.13	0.14	0.15	0.15	0.11	0.07	0.07
Gujarat	5.04	6.19	7.51	5.64	5.32	5.38	4.84	5.39	6.33	5.21	5.04	5.87	5.38
Haryana	4.48	3.99	3.91	4.02	3.77	3.46	3.62	3.43	4.16	3.79	3.67	4.28	4.11
HP	0.54	0.44	0.38	0.42	0.49	0.34	0.39	0.34	0.41	0.40	0.38	0.46	0.54
J&K	0.54	0.50	0.32	0.36	0.32	0.30	0.28	0.36	0.40	0.32	0.33	0.35	0.33
Karnataka	9.34	9.14	8.98	9.51	10.12	9.82	10.20	10.30	12.22	11.57	10.16	10.46	10.23
Kerala	4.31	4.20	4.11	4.25	4.58	4.46	4.43	4.84	5.24	4.66	4.80	4.20	4.03
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MP	6.44	6.29	6.48	6.41	5.61	6.05	6.45	6.99	7.81	7.01	6.77	6.65	6.47
Maharashtra	8.67	8.80	8.71	7.88	8.41	9.79	10.26	9.79	11.28	10.41	9.63	10.19	9.83
Manipur	0.06	0.05	0.05	0.05	0.06	0.05	0.07	0.06	0.07	0.04	0.05	0.03	0.03
Meghalaya	0.15	0.12	0.10	0.10	0.22	0.13	0.09	0.08	0.08	0.07	0.05	0.07	0.05
Mizoram	0.05	0.03	0.04	0.04	0.06	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.01
Nagaland	0.13	0.11	0.10	0.10	0.12	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.03
Orissa	2.38	2.22	2.24	2.40	2.40	2.38	2.27	2.53	2.36	2.06	1.98	1.94	1.70
Pondicherry	0.16	0.14	0.13	0.14	0.14	0.16	0.31	0.33	0.14	0.11	0.10	0.11	0.09
Punjab	6.54	6.38	5.83	6.14	6.42	5.80	5.77	5.06	7.15	6.79	6.86	6.28	6.24
Rajasthan	4.67	5.00	5.17	4.82	5.07	3.98	4.80	5.03	6.08	5.93	6.14	6.39	6.39
Sikkim	0.02	0.02	0.03	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
Tamil Nadu	10.96	10.85	10.44	11.14	11.08	11.58	11.68	12.43	11.97	9.48	9.00	7.90	8.21
Tripura	0.18	0.21	0.21	0.22	0.22	0.21	0.21	0.19	0.20	0.16	0.13	0.12	0.12
UP	11.85	11.49	11.14	11.28	11.68	10.00	10.32	10.68	12.21	11.01	12.11	11.48	12.25
WB	3.29	4.12	4.12	3.32	3.14	3.15	3.01	2.64	2.96	2.40	2.61	2.93	2.87

Source: Computed from CMIE data (Money and Banking, October 1999 and September 2004).

At the all India level, the credit per hectare by commercial banks has more than doubled between 1992-93 and 1999-2000 and has continuously increased (table 12). In most of the states there are yearly fluctuations. In 1992-93, 9 states (of 25) had per hectare credit of above the national level while in 1999-2000, 7 states exceeded the national average. The difference between the lowest and the highest average credit in 1992-93 was Rs.2919 and this gap widened by 1999-2000 to Rs.6441. This means that regional inequality in credit flow has increased during the reform period. This should be a cause of concern.

Table 12 : Per Hectare SCBs Credit By States (Rs.)

States	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Andhra Pradesh	1994	2591	2397	2860	3116	3785	3820	4370
Arunachal Pradesh	353	231	451	484	454	512	688	640
Assam	703	723	823	810	844	769	675	707
Bihar	1225	1314	1400	1424	1472	1393	1474	1426
Goa	2233	1878	2177	2661	2467	2899	3170	3988
Gujarat	1511	1215	1181	1538	1392	1704	2086	2342
Haryana	1480	1589	1576	1668	1885	1970	2323	2870
Himachal Pradesh	859	992	1263	1013	1293	1209	1508	1894
Jammu & Kashmir	664	775	753	810	819	1159	1299	1337
Karnataka	1603	1756	2102	2365	2616	3107	3501	4366
Kerala	2987	3210	3750	4189	4640	5754	6329	7081
Madhya Pradesh	600	591	564	693	801	946	1059	1220
Maharashtra	918	847	982	1323	1498	1588	1795	2125
Manipur	589	603	752	868	1094	1092	1083	955
Meghalaya	963	985	2318	1538	1176	1135	1015	1162
Mizoram	774	887	1323	724	761	779	741	989
Nagaland	1008	1087	1308	1154	1016	885	762	837
Orissa	528	566	615	708	875	1033	988	1100
Punjab	1710	1851	2081	2155	2328	2278	3260	3758
Rajasthan	568	575	621	583	734	794	1002	1403
Sikkim	479	660	468	503	528	607	622	686
Tamil Nadu	3272	3576	3934	5322	5723	6681	6372	6635
Tripura	1046	1085	1185	1404	1432	1386	1480	1485
Uttar Pradesh	961	1015	1132	1117	1249	1446	1685	1921
West Bengal	1069	879	899	1012	1049	1005	1124	1149
India	1194	1232	1327	1544	1669	1850	2123	2405

Source: Computed from CMIE data.

Interest Rates: The Issues

Demand is inversely related to average interest rate on crop loans. The demand for crop loans is inversely related to its price, i.e., average nominal interest rate on these loans, and so to the average farm size. It is often discussed in financial circles that agriculture is provided credit at subsidised rates. The reality is conflicting (see for details Singh and Sagar 2004). Desai and Namboodiri (2001) also point out that on interest rates for rural credit there is no subsidy (rates are positive in real terms). The reform period has observed higher rates being charged from farmers compared to the consumer goods sector customers. Table 13 shows that the agriculture sector lending during the period 1990-91 and 2002-03 has concentrated in the interest band of 12-16 per cent. There is no doubt that till 1996-97, the interest rates have been in the band of 14-17 per cent. The downward shift is due to removal of one tier in the co-operative sector. It reinforces the argument that deregulation of interest rates had no impact. It has led to increase in their levels as well as instability in them especially for small borrower (Singh and Sagar 2004). On average an Indian farmer pays higher rate of interest compared to consumer loan customer of commercial bank.

Table 13 : Distribution of Outstanding Credit of SCBs in Agriculture by Interest Rates

		Interest Rates (%)									
Years	Total	<6	6-10	10-12	12-14	14-15	15-16	16-17	17-18	18-20	20>
1990-91	100	1.47	2.50	13.96	34.59	33.22	4.33	5.91	2.67	1.11	0.23
1991-92	100	0.88	1.72	7.98	18.11	16.98	31.43	6.87	4.60	5.39	6.04
1992-93	100	0.52	1.23	5.11	11.58	8.27	38.56	7.56	9.96	9.61	7.60
1993-94	100	0.67	1.05	3.51	9.65	11.74	41.22	10.63	11.48	5.74	4.31
1994-95	100	0.81	1.05	3.07	8.44	23.27	31.17	13.95	9.72	5.09	3.44
1995-96	100	0.00	0.41	1.90	9.31	30.95	18.45	7.88	14.44	10.73	5.94
1996-97	100	0.02	0.34	1.70	7.44	37.48	13.73	8.33	12.78	13.02	5.17
1997-98	100	0.07	0.27	2.12	22.05	26.83	12.72	12.67	10.16	10.67	2.42
1998-99	100	0.05	1.44	4.74	24.95	12.40	15.22	17.81	11.72	9.72	1.95
1999-00	100	0.04	0.71	8.58	21.36	17.61	19.98	16.50	7.76	6.01	1.45
2000-01	100	0.04	0.56	11.57	25.24	19.73	16.73	14.38	6.66	3.83	1.27
2001-02	100	0.01	2.12	16.60	26.66	19.49	17.06	11.51	3.19	2.54	0.82
2002-03	100	0.01	5.30	18.28	32.62	18.35	11.57	9.61	1.36	2.20	0.70

Source: Computed from CMIE 2004.

Competing Sectors

There are many competitors for credit and when resources are mobilised at a cost then many considerations arise. In India, agriculture and industry have been the two major clients, but now other sectors like housing and trades are seeking their pound of flesh. There are not many studies that have tried to address this issue. The policy directions over the period have also favoured a few sectors like agriculture, small industries, weaker sections of the society etc. One of the principal objects of nationalisation of commercial banks was to bring about certain structural changes in the credit deployment. To begin with we look at the trends in the credit disbursement across sectors. Since the 1990-91 though the share of industry in gross bank credit has come down from 54.4 to 47.5 percent in 2001-2002, it is still the largest user of credit, table 14. The share of agriculture sector in gross bank credit was 14.8 per cent in 1990-91 and it declined to 11.8 per cent in 1999-2000 to recover to be 12.6 per cent in 2001-2002. It is surprising that in all the years under study, the share of other sectors has been higher than agriculture sector. The other sectors that include housing activities and other consumer loans are fast emerging as a major sector. The share of this sector has almost observed a 10-percentage point jump between 1990-91 and 2001-2002. The downward trend in the interest rates for these sectors contributed significantly towards this buoyancy. Thus structural change has occurred in credit deployment due to policy directions. It is argued that it is essential to allow for difference between the credit requirements of agriculture and commodity industry because the latter has relatively smooth flow of purchases of inputs and sales of outputs over the year. Agriculturists, on the other hand, systematically require to buy inputs and to commit themselves to payments several months before their products are harvested. This latter feature renders it inappropriate to view the ratio of inputs to outputs in commodity industry than in agriculture as justifying a larger ratio of credit to net product. It also suggests that even the criterion of same ratio of credit to NNP in each sector is too kind to commodity industry. Commodity industry, besides this, needs less credit per unit of output than agriculture because both input and output flows are smoother over the year (Singh and Sagar 2004). It is also organised in larger units with more access to internal savings and to the private capital market. It is also less liable to the draining of production credit towards the funding of slack season family consumption. Unlike agriculture, it seldom turns credit-financed inputs into *subsistence* products which are consumed by the family that owns the firm and which thus- however efficiently produced- do little to help repay trade credit.

Table 14 : Commercial Banks Credit Flow (%)

Year	Agriculture	Industry	Trade	Others	Total
1990-91	14.76	54.35	5.21	25.69	100
1995-96	12.18	56.26	5.39	26.17	100
1999-00	11.83	53.35	4.48	30.34	100
2000-01	12.10	50.99	4.16	32.75	100
2001-02	12.59	47.54	4.24	35.63	100

Source: RBI. Report on Trend and Progress in Banking. various years.

Kisan Credit Cards

The scope for dispensation of institutional credit to millions of farmers, for their seasonal agricultural operations, is enormous. The multi-agency approach introduced by the RBI no doubt had helped to augment the institutional credit flow for agriculture manifold, but the traditional systems and procedures, documentation, etc. adopted by the banking system have rendered availability of credit by the farmers rather cumbersome. Given the enormity of the credit requirements on the one hand and the vagaries of nature on the other, financing for agriculture has been a gigantic task for banks. The access to institutional credit for a large number of farmers, particularly small and marginal farmers continues to be a challenge to the Indian banking industry. The process of financial reforms also highlighted the need for innovative credit interventions from institutional agencies to support farmers. Any credit facility to the farmers should not only be timely, but also be available in adequate quantum besides ensuring an in-built flexibility. Against this backdrop, Kisan Credit Card (KCC) emerged as an innovative credit delivery mechanism to meet timely and hassle free production credit requirements of the farmers.

The KCC Scheme was introduced during 1998-99. It has reportedly smoothened the flow of credit to the farmers overcoming many of the problems arising out of procedural delays in sanction and release of loans. Farmers eligible for production credit of Rs.5000 and above can apply for a Kisan Card and a passbook or a card-cum-pass book is issued. Revolving cash credit facility involving any number of withdrawals and repayments within the credit limit is allowed. Credit limit is fixed after taking into account the entire production credit needs for the full year plus ancillary activities related to crop production. Limit is fixed on the basis of operational land holding, cropping pattern and scale of finance. It is proposed that allied activities and non-farm credit needs also should be considered. Each withdrawal has a repayment period of twelve months. The card is valid for 3 years subject to annual review. As incentive for good performance, credit limits could be enhanced to take care of increase in costs, change in cropping pattern, etc. Conversion/ re-scheduling due to natural calamity is permissible wherever warranted. The RBI norms are applicable for security, margin and rate of interest. There is flexibility in the system as card can be operated at the issuing branch or, at the discretion of the bank, through other designated branches or PACs in the case of cooperatives. Cash withdrawals through slips/ cheques accompanied by card and passbook are allowed. KCC are envisaged as improvement in the loan disbursement procedure making it less cumbersome. As at the end of 31 March 2004, 353 DCCBs, 192 RRBs and 27 Commercial Banks were participating in the scheme. The Kisan Credit Cards issued till September 2004 by all the banks increased to 4.356 crore from about 7.85 lakh as at the end of March 1998-99. Of the 4.356 crore KCC issued the share of commercial banks is 1.324 crore, the Cooperatives 2.586 crore and RRBs have issued 44.6 lakh cards. The total sanctioned amount is Rs.111459 crore that means on an average Rs.25587 per cardholder. The situation till September 2004 is presented in table 15. The pace of implementation of the scheme is significant in some states like Andhra Pradesh, Bihar, Punjab, Haryana, Karnataka, Maharashtra and Uttar Pradesh.

Table 15 : Number of KCC Issued and Amount Sanctioned **(Rs. crore and No. in lakh)**

Agency	1998-9		2003-04		Cumulative up to September 30, 2004	
	Cards	Amount	Cards	Amount	Cards	Amount
Coop. Banks	1.55	826	48.78	9855	258.6	5233
RRBs	0.06	11	12.74	2599	44.6	11265
Comm. Banks	6.24	1477	31.00	9331	132.4	34961
Total	7.85	2314	92.50	21785	435.6	111459

Source: GOI. (2001). Economic Survey 2000-2001 and 2004-05.

The in-house studies of NABARD reveal that KCC is meeting credit requirements of cultivation of crops for the whole year and also assuring availability of credit to the farmer whenever the credit is needed. KCC scheme has helped in making available adequate quantum of credit to the farmer, it provides flexibility to the farmer to draw cash from a branch other than issuing branch and to buy inputs from any supplier of his choice. There is reduction in quantum of interest to the farmer due to frequent drawl and repayment of loans. The transaction cost of the farmer for the loan from the bank is reduced. Besides, KCC provides insurance cover at a very low premium rate. However, banks are adopting cautious approach in extending facility to only those beneficiaries with good past track record. Some banks are not issuing cards to illiterate, rain fed and tenant farmers. Mono-cropping areas are also being excluded and there is insistence of opening of saving bank accounts before KCC is issued. Disbursement of kind component also in cash under KCC is perceived by co-operatives as a possible threat to the existing co-operative marketing structure of selling agri-inputs. As cash disbursement is done only at the DCCB branch level in some states, borrowers are required to travel long distances for drawl of cash from branches of DCCBs. Some banks still have apprehension that transaction cost and workload would increase and additional staff strength would be required at DCCB level. There is lack of uniform accounting procedure both at PACS as well as DCCB level. In some states, commercial banks/RRBs are levying costly service charges for loans of KC cards to farmers (Rs.100 to Rs.300). RRBs are charging 2 per cent commission in case of withdrawal from designated branches other than issuing branch. Besides, some states are levying stamp duty for loans under KCC and not for normal crop loans. Few banks have fixed minimum land holding as eligibility criteria for issue of KCC. Banks debit interest rate at half-yearly or quarterly basis amounting to compounding of interest under KCC accounts. Earlier, kharif and rabi loans were sanctioned separately and interest rates fixed on slab basis (up to Rs.25000 and above Rs.25000 and up to Rs.2 lakh etc), but after introduction of KCC, interest is charged at higher rate than earlier. Banks are still fixing the due dates for repayment of loans on the old pattern of lending. Over and above this, some banks are also insisting on land mortgage even for small loans and collateral securities in the shape of fixed deposit receipts, etc., before sanctioning the limit.

A more recent study shows that KCC has led to enhanced flow of credit to agriculture sector. It has also substantial reduced the exclusive borrowing from the informal sector for short-term needs, a significant saving in time spent on availing of short-term agricultural loans and an overall reduction in cost of credit delivery (Sharma 2005). There is, however, a need for fine tuning viz., restrictions imposed on the issuance of KCCs by security conscious banks; restrictions of the use of KCCs only at card issuing branches; non-availability of incentives/ rewards to borrowers for timely repayments; low credit limits to meet the farmers' requirements and low awareness level regarding the provision of the personal accident insurance scheme.

Conclusions

The era of economic reforms has led to structural changes in credit delivery system and credit flow to agriculture sector in India. Lower end borrowers are being biased against. Farmers still pay high interest rates despite the fact that there had been a tendency of interest rates to decline till recently. There is an increased tendency on the part of the bankers to go for large borrowers at the expense of crop producers. This would hurt the Indian agriculture in the long run. It was widely assumed that the liberalisation of financial sector would facilitate growth through a reduction in the degree of credit rationing which will follow the removal of interest rate and other restrictions. *It has been argued that* that strategy which simultaneously relaxes restrictions on the credit and tenancy market, in particular those relating to the security of land tenure, may yield greater benefits. The removal of these restrictions, which have had the effect of encouraging short-term leases in the past, would allow households to pool irrigation resources optimally through long-term tenancy contracts, and hence may significantly improve levels of rural income. Differences in behaviour among farmers facing similar technologies and risks would have to be explained by differences in their constraint sets such as access to credit, marketing, and extension etc. Since credit constraints have been widely postulated and since lack of borrowing by small holders is also frequently observed, this view has to be taken seriously. Why small farmers are more severely burdened by credit constraints than larger ones?

It has been argued that if merely availability and not costs were the problem, the moneylenders would have developed the rural sector long ago. It should be remembered that the small farmer operates under a low level of equilibrium and hence there is the danger that raising the cost of credit by even 2 to 3 percentage points may convert the viable farm into the nonviable farm. Obviously, a farmer who cannot afford the cost of exploiting his land rationally, by applying fertilisers and pesticides, cannot expect high returns. The Indian agricultural credit scene at this juncture reminds of what Joseph Stiglitz said that there are infinite number of charlatans out there willing to take other people's money and use it for themselves and on projects that are not good. There are four critical factors in the exercise of contexualisation of the rural credit in the future development strategy. They are food security, task of ensuring sustained agricultural growth in the coming years is far more daunting than what it was during the green revolution strategy, employment and a wide range of hi-tech segments have emerged recently in the rural sector as growth centres and these need full exploitation. It will be worthwhile to mention that in 2004, NPA of public sector banks due to agriculture sector was 14.44 per cent compared to 17.62 per cent due to small-scale industries (RBI 2005).

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