

Equity in Indian Agricultural Credit Delivery

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Introduction

Institutional intervention in Indian agricultural credit system brought along with it the equity related issues onto the discussion tables in all fora, inter-farm-size class distribution being an important one among them. One of the avowed purposes of the institutionalization of agricultural credit system was to release the farmers from the clutches of the usurious moneylenders by providing cheaper and timely credit. Implicit in this objective was the intention to bring all the farmers in need of credit under the orbit of institutional credit. Commercial banks were nationalized, cooperatives were strengthened, Regional Rural Banks were established and a whole lot of agricultural policies credit programmes/policies were initiated and refined over time, the main strategy being the directed lending through priority sector lending targets. In spite of all these measures for strengthening the institutional rural credit network, the original objective of total inclusion remained elusive though with hardly 27 per cent of the farmer households having been covered by institutional credit sources (Thorat, 2007). While the marginal and small farmers received a share higher than they are entitled to as per their share in the area operated at the aggregate level (Gadgil, 1986), these sections of farmers still faced disadvantage relative to large farmers even in agriculturally developed deltaic regions (Satyasai, 1988), let alone the dry land and resource poor areas.

Nearly sixty years after Independence we are still grappling with the problem of financial exclusion of many rural households. Worst still, the share of institutional sources in the total of agricultural credit has declined to 57.5 per cent by 2001-02 (NSSO, 2003) after reaching a peak

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level of 66.3 per cent during 1991-92 as reported by All India Debt Investment Survey, 1991-92 (Mehrotra *et al*, 2009). Another dimension to the problem is inadequacy of credit provided by the credit institutions relative to the needs. Thus, the dimensions of financial inclusion or access to institutional credit relate to coverage of farmers by institutional credit sources, distribution of credit relative to farm-size class (equity) and credit flow relative to the needs.

In this paper, we address to the issue of inter-farm-size class equity in terms of coverage of farmers and distribution of credit amount. The hypothesis being tested is that the marginal and small farmers were not covered by formal agricultural credit system commensurate with their share in total number of farmers and that they did not get credit in tune with the area they operated.

Data and Methodology

Data Base

The present paper uses the data collected under Input Surveys conducted quinquennially by Agricultural Census Division, Ministry of Agriculture, Government of India. The data in Input Survey are collected through household enquiry in the selected villages (e.g., 7% in 2001-02 survey) from each stratum i.e. *taluka*. For the second stage sampling, four operational holdings from each size groups i.e. marginal, small, semi-medium, medium and large holdings are selected randomly. In this survey the sampling frame is the list of operational holdings excluding institutional holdings, covering only the resident cultivators of the selected village. The data from input surveys conducted during 1981-82, 1986-87, 1991-92, 1996-97 and 2001-02 are used for the analysis in this paper. We focused here only on all India level situation in this paper and state and district level analysis is underway. Since we are interested only in distribution, we did not make any price adjustments. The data on institutional credit pertain to the reference year and covers loans taken for agricultural purposes only.

Important Concepts and Definitions

Operational Holding (OH) : All land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location.

Technical Unit: The unit which is under the same management and has the same means of production such as labour force, machinery and animals.

Operated Area (OA): It would include both cultivated and uncultivated area, provided part of it is put to agricultural production during the reference period.

Institutional Holdings: Include government farms, sugarcane factories farms, cooperative farms, lands managed by trust would be treated as institutional and are not covered in input survey.

Resident Operational Holder: All the cultivators residing in a particular village and cultivating some land within the same tehsil are resident cultivators of that village irrespective of the fact whether they are cultivating land in that village or not.

Farm-size Classes: Farmers are classified based on operational area into marginal (less than 1 ha.), small (1 to 1.99 ha), semi-medium (2 to 3.99 ha), medium (4 to 9.99 ha) and large (10 ha and above) farm-size classes. While discussing credit data from RBI, the term ‘other farmers’ refers to those farmers other than marginal and small farmers, i.e., those holding 2 ha and above.

Analytical Techniques

We estimated growth rates using exponential form $Y_t = Ae^{rt}$ through OLS method after transforming original data into semi-log specification. We used both intercept and slope dummy variables for testing structural break between pre-Financial Sector Reforms, FSR, (1971-72 to 1990-91) and post-FSR (1991-92 to 2006-07) periods. The data for this analysis was culled from Reserve Bank of India (2009).

Index of access can be computed using the following formula:

$$(X_i/\Sigma X_i)/ (Y_i/\Sigma Y_i)$$

Where, X and Y are the two parameters like number of OH and number of borrowing OH which are compared for their relative distribution. An index value of less than one means less than due share to the farm-size class in question (Bakshi, 2008).

There are several measures of inequality. In this paper we computed Theil's index to measure inequality among m groups using the following formula (for more details on the index and its interpretation, see Conceição and Ferreira, 2000).

$$T' = \sum_{i=1}^m w_i \log \frac{w_i}{n_i}$$

Where, w_i = share of the i th size class in credit/number of households availing credit, and,
 n_i = share of i th size class in the area operated/population

We implicitly assume here that share of farmers covered by institutional agencies in a given size class should be in accordance with the proportion of farmers in that size class in the total number of farmers. The index will be closer to zero in such case which indicates more equitable coverage. Similar interpretation would be done in case of distribution of credit amount across size classes with reference to the distribution of operated area.

Results and Discussion

Credit Flow to Agriculture

Credit flow to agriculture increased manifold over time (Table 1). As per the Reserve Bank of India (2009), the flow of direct credit to agriculture, in nominal terms, increased from Rs.883 crore in 1971-72 to Rs.1,89,513 crore in 2006-07 i.e. over 214 times. Outstanding direct credit too increased substantially during the same period.

Table 1. Direct credit to agriculture, Source-wise

(Rs.crore)

Year	Flow of Direct Credit to Agriculture				Outstanding Direct Credit to Agriculture			
	Co-operatives	SCBs	RRBs	Total flow #	Co-operatives	SCBs	RRBs	Total
1971-72	769	99		883	1598	268		1865
1980-81	2029	1263	.	3436	4315	3043	180	7539
1990-91	4819	4676	335	10188	10531	17032	1753	29316
2000-01	27295	16440	3966	48187	46135	38270	7249	91654
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

includes loans by governments also; SCB : scheduled commercial bank; RRB : regional rural bank

Source: Reserve Bank of India (2009).

The direct credit flow grew at an average annual compound rate of 13.86 per cent during the 36 year period between 1971-72 to 2006-07 with cooperatives recording lower growth at 12.17 per cent compared to 18.18 per cent registered by commercial banks (Table 2). Outstanding credit showed similar pattern and extent of growth. The growth differential between pre-FSR (before 1991-92) and post-FSR (1991-92 onwards) period revealed and the growth rates for these two periods presented in Table 2 show that there was structural break between the two periods in direct credit flow. Growth of credit flow in post-FSR period was significantly higher at 18.08 per cent compared to 13.86 per cent in pre-FSR period. Direct credit outstanding did not grow significantly faster during the post-FSR period. Growth rates in real terms are positive as the growth rates in GDP deflator for agriculture and allied sectors of 7.94, 7.75 and 5.68 per cent, respectively, for the whole period, pre-FSR and post-FSR periods are much lower than the nominal growth rates in credit.

Table 2. Growth rates in direct credit to agriculture before and after Financial Sector Reforms (FSR) i.e., 1991-92 (nominal terms)

Agency	Annual Compound Growth rate (%)			Sign and Statistical significance (at 5%) of	
	Whole period (1971-72 to 2006-07)	Before FSR (1971-72 to 1990-91)	After FSR (1991-92 to 2006-07)	intercept dummy	Slope dummy
Flow of direct credit					
Coop	12.17	10.40	15.16	- S	+ S
Commercial Banks	18.18	23.67	20.26	- NS	- NS
Total	13.86	13.22	18.08	- S	+ S
Outstanding direct credit					
Coop	11.38	10.18	14.95	- S	+ S
Commercial Banks	16.08	21.72	15.18	+ NS	- S
Total	13.47	14.93	15.35	- S	+ NS
CAGR in GDP deflator [@] for agriculture and allied sectors (%)	7.94	7.75	5.68

[@] growth rate in GDP deflator is taken as the growth in prices and netting it out from nominal growth rates gives real growth rates

S: significant; NS : not significant

Source: Computed based on data from Reserve Bank of India (2009).

Inter-Size Class Equity in Credit Flow

Credit Flow From Scheduled Commercial Banks

Besides growth of credit flow, its distribution across different size classes of farmers has been of concern to academicians and policy makers all along. Several small farmer friendly interventions were made and small farmer coverage has been one of the key monitoring indicators for all the credit programmes. Table 3 gives the shares of different size classes of farmers in the total direct credit flow over last few decades. The share of marginal farmers in number of accounts declined from 51.69 per cent in 1980-81 to 41.55 per cent in 2006-07. The loss of their share in number of accounts was shared almost equally by the other two groups of farmers. However, their share in amount disbursed remained the same at around 25 per cent with some fluctuations in between. 'Other farmers' lost their share in amount by about 6 percentage points which was gained by small farmers.

Table 3. Shares of different size classes of farmers in the total direct credit flow (%)

Year(End-June)	Share in number of accounts (%)				Share in amount disbursed (%)			
	marginal	small	others	total	marginal	small	others	total
1980-81	51.69	22.56	25.75	100.00	24.88	16.59	58.53	100.00
1990-91	48.07	29.89	22.04	100.00	30.16	24.32	45.52	100.00
2000-01	40.79	31.85	27.36	100.00	25.76	25.09	49.15	100.00
2004-05	43.97	31.15	24.88	100.00	26.35	25.65	48.00	100.00
2005-06	40.54	29.73	29.73	100.00	25.06	26.25	48.69	100.00
2006-07	41.55	27.93	30.52	100.00	24.69	22.92	52.39	100.00

Source: Computed based on data from Reserve Bank of India (2009).

Table 4 gives linear trend in share of different size classes in direct credit flow. The estimates show that between 1980-81 and 2006-07 marginal farmers lost their share in number of accounts by 0.44 percentage point every year. Other farmers gained at the rate of 0.30 percent point annually, much faster than small farmers who gained by mere 0.14 point. However, in terms of amount, small farmers gained 0.11 percentage point almost offsetting the loss by marginal farmers. The gain by other farmers as a group is not significant.

Table 4. Linear trend@ in relative shares of different size classes of farmers in total direct credit flow from scheduled commercial banks

Farm-size class	Whole period	Pre-FSR	Post-FSR	Intercept dummy	slope dummy
Number of accounts (number)					
Marginal	-0.44	-0.41	-0.10	-S	+NS
Small	0.14	0.75	-0.15	+S	-S
Others	0.30	-0.35	0.25	-NS	+S
Amount (Rs.crore)					
Marginal	-0.14	0.28	-0.23	+S	-S
Small	0.11	0.67	-0.02	+S	-NS
Others	0.03 ^{NS}	-0.95	0.25	-S	+S

S : statistically significant at 5% ; NS : not significant at 5%

@ computed using the form: $Y=a+bTIME+cFSR+dFSR*TIME$ where TIME and FSR stand for time variable and dummy variable taking '0' for pre-FSR period and '1' otherwise.

Source: Computed based on data from Reserve Bank of India (2009).

The loss in share by marginal farmers was slower at 0.10 percentage point during post-FSR period (1991-92 to 2006-07) compared to 0.44 during the pre-FSR period (1980-81 to 1990-91). Small farmers who gained by 0.75 percentage point during the pre-FSR period lost by 0.15 point and the difference in the trend is statistically significant. Other farmers gained their share by 0.25 percentage point during post-FSR period against loss by 0.35 point during pre-FSR period.

The trends in share in amount disbursed revealed that marginal farmers lost their share in amount during the second period by 0.23 percentage point compared to annual gain of 0.28 point during the pre-FSR period. During the post-FSR period, other farmers gained the share lost by marginal farmers to the same extent leaving small farmers share stagnant.

Credit Flow From All Institutional Agencies

The analysis in the previous section was based on the data only for scheduled commercial banks. Hence, it gives a limited picture. Further, the classification of size classes is based on the information on land particulars available with the banks often leading to large farmers being classified as small farmers or marginal farmers. Also, all farmers other than marginal and small are classified as 'other farmers'. Hence, we compiled data from input surveys conducted every five years and the results are presented in this section. One limitation of the data from input surveys is that some major states were not covered in certain years. However, since we are

interested more in the distribution rather than the absolute amounts, the conclusions drawn would not be off the mark. Needless to say, the conclusions need to be taken with necessary caution.

Table 5 gives the data on distribution of operational holdings (OH) and number of OH which availed institutional credit at different points of time. The share of marginal farmers in total OH went up from 55.57 per cent in 1981-82 to reach a level of 60.61 per cent in 2001-02. On the other hand, the marginal farmers as a group accounted for 42.19 per cent of the OH who availed loans from institutional agencies in 1981-82 which rose to 51.10 per cent in 1991-92 only to reach the 1981-82- level by 2001-02. Thus, while number of marginal farmers in the total OH increased over time, their proportion in OH availing institutional credit declined after 1991-92 following a rise between 1981-82 and 1991-92. This implies decline in their share vis-à-vis their entitlement in availing institutional credit considering the increase in number of operational holdings over the years. The share of small farmers who borrowed from formal sources improved over time while that of medium and large farmers declined relative to decline in their share in number of OH.

Table 5. Size class-wise distribution of amount of institutional credit, All India

(per cent)

OH size group	1981-82		1986-87		1991-92		1996-97		2001-02	
	Share in total OH	Share of OH that availed Institutional credit in total	Share in total OH	Share of OH that availed Institutional credit in total	Share in total OH	Share of OH that availed Institutional credit in total	Share in total OH	Share of OH that availed Institutional credit in total	Share in total OH	Share of OH that availed Institutional credit in total
Marginal	55.57	42.19	57.24	42.08	57.15	51.10	60.73	43.03	60.61	41.99
Small	19.05	22.62	18.44	22.13	20.29	20.72	18.93	24.90	19.96	27.37
Semi-medium	14.23	19.13	13.91	20.26	13.72	16.85	12.46	18.49	12.39	19.34
Medium	8.93	12.86	8.35	12.53	7.29	9.33	6.48	11.17	5.92	9.69
Large	2.22	3.20	2.06	3.00	1.55	2.00	1.40	2.41	1.12	1.61
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Input Survey reports.

These trends can be better visualized in Figure 1 where one can observe that the share of marginal farmers in the OH who availed institutional credit was lower compared to their share in total OH in contrast to other size classes. Further, the hiatus between the solid (share in total OH) and dashed lines (share in borrowing OH) increased by 2001-02 compared to 1981-82.

This increase has adverse implication as the line showing the share in borrowing OH is inferior to the one showing the share in total OH throughout unlike in the case of small and semi-medium size classes.

Figure 1. Share of different farm-size classes in total number of OH and total number of borrowing OH

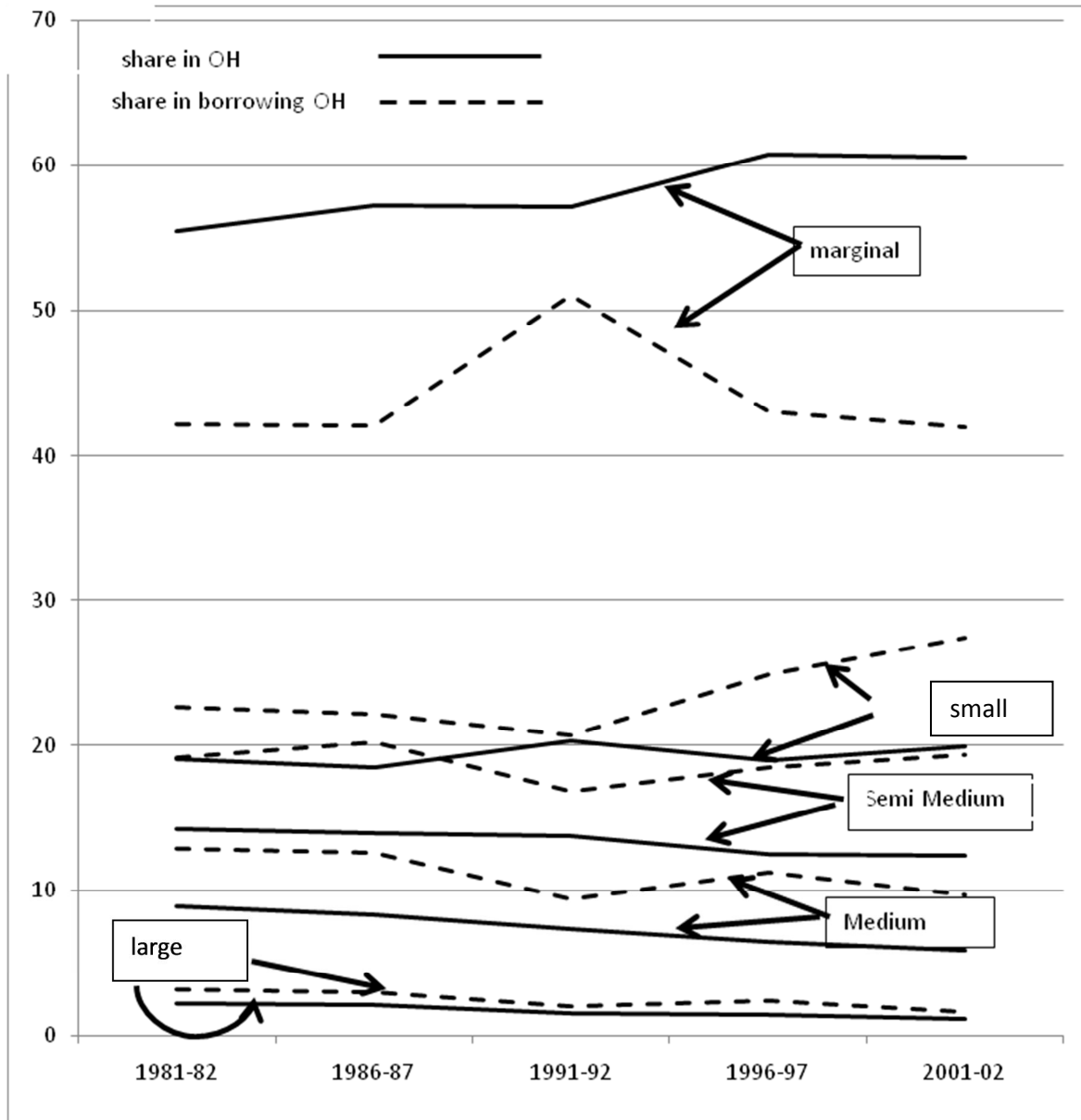


Table 6 gives data on the extent of coverage of different farm-size classes by institutional sources. Of the marginal OH, borrowing OH accounted for 17.53 per cent in 1981-82 which declined to 14.02 in 2001-02. This proportion is lower compared to the overall proportion

(23.09) for all operational holdings put together. Except for marginal farm-size class all other size classes have higher than the proportion of borrowing OH in the overall sample.

Table 6. Proportion of holdings availing institutional credit, size class-wise, All India

(Per cent)

OH size group	Proportion of OH availing institutional credit				
	1981-82	1986-87	1991-92	1996-97	2001-02
Marginal	17.53	14.78	15.68	9.50	14.02
Small	27.42	24.12	17.90	17.63	27.74
Semi-Medium	31.03	29.27	21.53	19.90	31.57
Medium	33.24	30.16	22.45	23.10	33.13
Large	33.19	29.40	22.49	23.04	29.38
Overall	23.09	20.10	17.53	13.41	20.24
Index of shares of marginal OH to total OH (base 1981-82=100)	100	87	92	59	87

In Table 7 we present index of access computed as the ratio of shares of each size class in the borrowing OH to their share in total OH. Higher the index, better is the access of the given class to the institutional sources. Medium and large farm-size classes of farmers have much better access as reflected in their higher index of access. The index is lower than one for marginal farm-size class which indicates that they enjoyed less than due access to institutional sources. The Theil index of inequality further indicates that the inequality, though not very high, increased over time (See Figure 2 also) from 0.038 to 0.072.

Table 7. Inequality in distribution of number of OH availing credit, All India

OH size group	Index of access				
	1981-82	1986-87	1991-92	1996-97	2001-02
Marginal	0.76	0.74	0.89	0.71	0.69
Small	1.19	1.20	1.02	1.32	1.37
Semi-Medium	1.34	1.46	1.23	1.48	1.56
Medium	1.44	1.50	1.28	1.72	1.64
Large	1.44	1.46	1.28	1.72	1.45
Theil's index of inequality	0.038	0.049	0.010	0.066	0.072

Till now we have discussed distribution of shares of borrowing OH relative to that of shares in total OH. Table 8 gives data on farmsize class-wise distribution of borrowings (amount) vis-à-vis that of operated area (OA). During 1981-82 the marginal farmers enjoyed a higher share in institutional credit amount (21.51 %) compared to their share (12.05 %) in operated area. At the same time, in spite of operating 23.02 per cent of area, large farmers as a group could get mere 9.16 per cent of the institutional credit. By 2001-02, though marginal farmers operated higher (by 6.65 percentage points) proportion of the area operated compared to 1981-82, their share in credit increased marginally by 2.07 percentage points to reach 23.58 per cent. Similar trend was observed in case of small farmers also. This points to inadequate coverage of the farmers ‘marginalised’ over the years.

Table 8. Size class-wise distribution of amount of institutional credit, All India

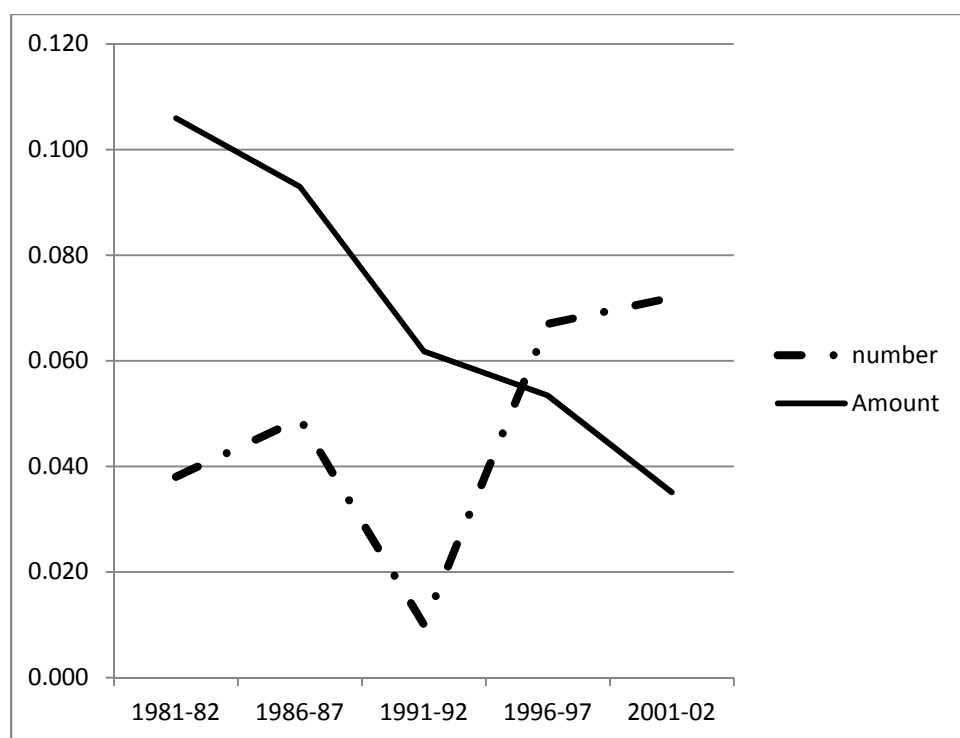
OH size group	1981-82		1986-87		1991-92		1996-97		2001-02	
	share in area	Share in Institutional credit	share in area	Share in Institutional credit	share in area	Share in Institutional credit	share in area	Share in Institutional credit	share in area	Share in Institutional credit
Marginal	12.05	21.51	13.39	25.51	14.86	24.6	17.42	26.4	18.70	23.58
Small	14.14	21.64	15.62	19.02	17.33	20.7	18.18	21.3	20.16	23.84
Semi-medium	21.15	22.81	22.28	23.66	23.16	24.2	23.20	23.2	23.95	25.09
Medium	29.64	24.88	28.65	22.99	27.20	21.5	25.73	22.0	23.97	21.45
Large	23.02	9.16	20.05	8.82	17.45	9.0	15.47	7.1	13.22	6.05
All	100.00	100.00	100.00	100.00	100.00	100.0	100.00	100.0	100.00	100.00

The index of access and Theil’s measure of inequality computed based on the data in the Table 8 are presented in Table 9. The estimates reveal that the index of access is higher than one for marginal and small farmers signifying that the adverse bias is not present in distribution of credit amount across farm-size classes. However, declining inter-class inequality (Figure 2) reveals that the favourable bias in favour of marginal and small farmers once prevalent during 1981-82 has faded over time.

Table 9. Inequality in distribution of amount of institutional credit with respect to that of area operated, All India

OH size group	Index of access				
	1981-82	1986-87	1991-92	1996-97	2001-02
Marginal	1.78	1.90	1.66	1.52	1.26
Small	1.53	1.22	1.20	1.17	1.18
Semi-Medium	1.08	1.06	1.04	1.00	1.05
Medium	0.84	0.80	0.79	0.85	0.89
Large	0.40	0.44	0.51	0.46	0.46
Theil's index of inequality	0.106	0.093	0.062	0.053	0.035

Figure 2. Trend in Theil's measure of inequality



Different agencies that purvey institutional credit for agriculture include cooperatives giving short and long term loans, commercial banks and regional rural banks. Overtime the shares of these agencies in the total amount remained more or less stable with 68.2 to 71.3 per cent of credit flowing from cooperatives and remaining portion being given by other agencies (Table 10). On an average, 65.5 per cent of the credit disbursed to marginal farmers came from cooperatives while 70.7 per cent came from them in case of large farmers.

Table 10. Shares of cooperatives and other agencies in total credit disbursed

Particulars	Cooperatives	CB+RRBs	Total
Year			
1981-82	68.2	31.8	100
1986-87	70.0	30.1	100
1991-92	61.6	38.4	100
1996-97	70.0	30.0	100
2001-02	71.3	28.8	100
Size class			
Marginal	65.5	34.5	100
Small	69.0	31.0	100
Semi-medium	69.0	31.0	100
Medium	67.8	32.2	100
Large	70.7	29.3	100
All OH	67.2	32.8	100

Detailed year-wise and agency-wise shares are given in Table 11 for different farm-size classes. PACS giving short term loans accounted for a higher proportion of institutional credit during 2001-02 compared to 1986-87. RRBs more or less contributed to the same extent, relatively. Share of commercial banks which peaked to 25.8 per cent in 1991-92 plummeted to 11.5 per cent in 2001-02. The decline, however, was to highest extent i.e. by 18.9 percentage points for marginal farmers compared to a fall of 9.4 to 12.0 percentage points for other farm-size classes. These results run counter to the argument that marginal and small farmers depend heavily on cooperatives while other categories of farmers depend relative more on commercial banks (Bandyopadhyay, 1984).

Notably, the share of RRBs in credit to large farmers increased from 6.9 per cent in 1991-92 to 19.0 per cent in 2001-02. Between the same points in time, the share of RRBs in credit to other categories of farmers too increased barring marginal farmers, where the share declined from 22.3 per cent to 16.4 per cent. These trends correspond to the policy change during 1990s to allow RRBs to lend to non-target population (i.e. large farmers).

Table 11. Source-wise distribution of loans availed from institutional credit, All India

OH size group	Sources of institutional credit				Total
	PACS	ARDB	CB	RRB	
1981-82					
Marginal	70.0	*	30.0	#	100.0
Small	66.8	*	33.2	#	100.0
SemiMedium	71.0	*	29.0	#	100.0
Medium	68.4	*	31.6	#	100.0
Large	64.0	*	36.0	#	100.0
All	68.9	*	31.1	#	100.0
1986-87					
Marginal	47.6	11.4	11.7	29.3	100.0
Small	63.0	9.8	21.1	6.2	100.0
SemiMedium	60.3	10.6	16.7	12.4	100.0
Medium	61.9	10.2	18.5	9.5	100.0
Large	64.5	13.6	17.7	4.2	100.0
All	56.1	10.8	16.0	17.2	100.0
1991-92					
Marginal	40.3	8.1	29.3	22.3	100.0
Small	55.9	9.8	21.7	12.6	100.0
SemiMedium	55.1	11.3	23.2	10.4	100.0
Medium	52.3	10.1	21.7	16.0	100.0
Large	55.8	14.2	23.1	6.9	100.0
All	47.6	9.3	25.8	17.3	100.0
1996-97					
Marginal	69.6	7.2	15.2	8.0	100.0
Small	62.7	6.2	21.4	9.7	100.0
SemiMedium	59.5	6.4	23.8	10.3	100.0
Medium	58.1	7.3	14.5	20.0	100.0
Large	60.4	11.2	11.5	16.9	100.0
All	64.5	6.9	18.1	10.4	100.0
2001-02					
Marginal	65.2	8.0	10.5	16.4	100.0
Small	62.8	8.2	12.3	16.6	100.0
SemiMedium	62.3	8.6	12.4	16.8	100.0
Medium	61.3	9.5	11.4	17.9	100.0
Large	58.4	11.5	11.0	19.0	100.0
All	63.5	8.4	11.5	16.7	100.0

PACS: Primary Agricultural Cooperative Societies; ARDB: Agricultural and Rural Development Banks (known as Land Development Banks); CB : Commercial Banks; RRB: Regional Rural banks.

* included in PACS and # included in CB.

Summary and Conclusions

This paper focused on the issue inter-farm-size class-wise equity in coverage by institutional sources of credit. The data were culled from RBI publications and reports of Input Surveys conducted once five years along with Agricultural Census. The Input Survey data pertained to five points in time, viz., 1981-82, 1986-87, 1991-92, 1996-97 and 2001-02. The data from RBI spanned over 1971-72 to 2006-07.

The direct credit disbursement to agriculture registered a long term annual growth of 13.86 per cent over the 36 year period between 1971-72 to 2006-07. The period after Financial Sector Reforms (i.e., 1991-92 onwards) showed a significantly higher growth rate at 18.08 per cent compared to 13.22 per cent for the period before FSR. The time series data on farm-size class-wise distribution of direct credit agriculture showed that the share of marginal farmers declined annually by 0.44 percentage point over time, with a slower pace during the post-FSR period. The real gainers in the share lost by marginal farmers appear to be the other farmers (with farm-size of 2 ha and above).

Share of marginal farmers in number of borrowing operational holdings is lower vis-à-vis their share in total number of operational holdings at all points in time studied. Number of marginal farmers increased over the years while their share in total borrowing members declined. Small farmers gained in share relatively. About 20.24 per cent of OH of all farm-size classes had access to formal source of credit (for agricultural purposes) in 2001-02, ranging from 14.02 per cent for marginal farmers to 33.13 per cent for medium farmers. Index of access and Theil's measure of inequality indicated that inequalities in distribution of borrowing OH across farm size classes increased over time.

Seen in terms of distribution of credit amount relative to that of area operated, the inequalities seem to have declined over the years. Marginal and small farmers enjoyed higher shares of institutional credit (43.15 per cent together) compared to their share in area operated (26.19 per cent) in 1981-82. After two decades, by 2001-02, their combined share in area increased substantially by 12.67 percentage points (to reach 38.86 per cent) while the share in credit increased minimally by 4.27 percentage points. The decline in inequality, thus, has an adverse connotation as the positive bias in favour of marginal and small farmers got eroded over time.

The conventional view that marginal and small farmers depend more on cooperatives while others prefer commercial banks is not fully supported by the data in hand. However, RRBs drifted away from marginal farmers by accounting for much higher share in credit to large farmers in 2001-02 compared to 1991-92, most likely as a result of the policy change during 1990s allowing them to lend to non-target population (i.e. large farmers). The results pertain to all India level aggregate data at different points in time. Further research is needed to study the patterns at state and district levels to understand the regional variation.

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Equity in Indian Agricultural Credit Delivery

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ABSTRACT

This paper focused on the issue inter-farm-size class-wise equity in coverage by institutional sources of credit. The data were culled from RBI publications and reports of Input Surveys conducted once five years along with Agricultural Census. The Input Survey data pertained to five points in time, viz., 1981-82, 1986-87, 1991-92, 1996-97 and 2001-02. The data from RBI spanned over 1971-72 to 2006-07.

The direct credit disbursement to agriculture registered a long term annual growth of 13.86 per cent over the 36 year period between 1971-72 to 2006-07. The period after Financial Sector Reforms (i.e., 1991-92 onwards) showed a significantly higher growth rate at 18.08 per cent compared to 13.22 per cent for the period before FSR. The time series data on farm-size class-wise distribution of direct credit agriculture showed that the share of marginal farmers declined annually by 0.44 percentage point over time, with a slower pace during the post-FSR period. The real gainers in the share lost by marginal farmers appear to be the other farmers (with farm-size of 2 ha and above).

Share of marginal farmers in number of borrowing operational holdings is lower vis-à-vis their share in total number of operational holdings at all points in time studied. Number of marginal farmers increased over the years while their share in total borrowing members declined. Small farmers gained in share relatively. About 20.24 per cent of OH of all farm-size classes had access to formal source of credit (for agricultural purposes) in 2001-02, ranging from 14.02 per cent for marginal farmers to 33.13 per cent for medium farmers. Index of access and Theil's measure of inequality indicated that inequalities in distribution of borrowing OH across farm size classes increased over time.

Seen in terms of distribution of credit amount relative to that of area operated, the inequalities seem to have declined over the years. Marginal and small farmers enjoyed higher shares of institutional credit (43.15 per cent together) compared to their share in area operated (26.19 per cent) in 1981-82. After two decades, by 2001-02, their combined share in area increased substantially by 12.67 percentage points (to reach 38.86 per cent) while the share in credit increased minimally by 4.27 percentage points. The decline in inequality, thus, has an adverse connotation as the positive bias in favour of marginal and small farmers got eroded over time. The conventional view that marginal and small farmers depend more on cooperatives while others prefer commercial banks is not fully supported by the data in hand. However, RRBs drifted away from marginal farmers by accounting for much higher share in credit to large farmers in 2001-02 compared to 1991-92, most likely as a result of the policy change during 1990s allowing them to lend to non-target population (i.e. large farmers). The results pertain to all India level aggregate data at different points in time. Further research is needed to study the patterns at state and district levels to understand the regional variation.

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