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# Outreach and Inclusiveness of Formal Agricultural Credit System: Some Reflections

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**Abstract**

This paper has analyzed the trends and concerns in the formal credit delivery system in India. There has been a signifcant improvement in the flow of institutional credit to agriculture over the years, the effect being more pronounced after the late-1990s. There has been both credit widening and deepening. Interestingly, credit widening has been experienced more for direct finance while credit deepening has been more prominent for indirect finance. Further, a tilt has also been noted towards indirect agricultural finance with its accompanying urbanization, which perhaps is an indication of increasing importance of credit in agricultural value chains beyond primary production. The paper has also examined inclusiveness of the agricultural credit delivery system, and has found that there exists a bias against smallholders, and the gap between large and small landholders in terms of the amount outstanding per account has widened.

**Key words:** Formal agricultural credit system, inclusiveness, urbanization, direct finance, Indirect finance, DACP

**JEL Classification:** Q14, Q18, G20, R51

## Introduction

It has been one of the enduring objectives of India's rural credit system to save the cultivators from the clutches of usurious and exploitative moneylenders by expanding the outreach and efficiency of the financial institutions. It took about half a century from 1930s to really turn the odds in favour of formal banking institutions and against the informal moneylenders. It was the nationalization of banks in 1969 and the subsequent spread of rural financial institutions that really made a difference in reducing the share of informal sources in agricultural credit; it declined to 30.6 per cent in 1991 from 92.7 per cent in 1951 (Mohan, 2006). However, in recent years, there appears to be a reversal in the trend towards informal sources. In 2002, the share of informal sources in the agricultural credit increased to 38.9 per cent, which is worrisome.

Agriculture in India is more than an occupation. It is indeed a way of life for more than half of the country's population. But, Indian agriculture has always remained dominated by smallholders who are often constrained by capital of their own or lack of access to institutional credit in their endeavour to transit from subsistence to commercial production systems. Now, the challenge is to improve agricultural productivity and profitability in the face of fragmentation of landholdings and degradation of land and water resources. Overcoming of this challenge requires an appropriate policy that may enable the farmers to enhance their access to technologies, inputs, services and finances.

Since 1980s, the agricultural sector has been a priority for lending by the formal financial institutions so as to ensure that the under-developed regions and under-privileged populations are not bypassed in the process of agricultural and rural development. Initially, no specific target was fixed for the priority sector lending, but it was suggested that the banks should

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aim to increase the proportion of their advances to priority sectors to at least 40 per cent by 1985. Sub-targets were also stipulated for different sectors within the priority sector (Reserve Bank of India, 2012). For agriculture, banks were advised to achieve direct agricultural lending of 15 per cent of their total bank credit by 1985, and thereafter, a gradual increase to 18 per cent by 1990. The sub-target for agriculture was further bifurcated in 1993 to a minimum of 13.5 per cent for direct loans and a maximum of 4.5 per cent for indirect loans (Reserve Bank of India, 2012a). The existing guidelines require that banks achieve total agricultural lending of 18 per cent of Adjusted Net Bank Credit (ANBC) or Credit Equivalent of Off-Balance Sheet Exposure (CEOBE), whichever is higher, within which indirect lending should not exceed 4.5 per cent. The priority sector lending for agriculture in this paper refers to this definition.

Some notable changes have been effected since early-1990s in the scope of direct[a] and indirect[b] finance, but more so in the indirect component. Starting 1994-95, banks were required to prepare special agricultural credit plans with prescribed annual growth rates and those fell short of their targets of priority sector had to deposit the difference in the Rural Infrastructure Development Fund (RIDF) of the National Bank for Agriculture and Rural Development (NABARD). NABARD later introduced the Kisan Credit Card (KCC) scheme in 1998, which has acted as a powerful tool for reducing the transaction costs to the banks as well as to farmers.

During the first half of the 2000s, agricultural sector came under stress on account of several factors including declining public sector investment, increased weather uncertainty and decline in real prices of agricultural commodities, besides a sluggishness in the flow of institutional credit. In 2004, a Comprehensive Credit Policy was introduced that focused on doubling of agricultural credit flow by 2007 and providing debt relief to farmers affected by frequent extreme weather events. An interest subvention scheme was introduced in *kharif* 2006-07 for crop loans and an Agricultural Debt Waiver and Relief Scheme (ADWDRS) was implemented in 2008. There have also been many changes in the scope of priority sector definition over time. The most recent revision was done in July 2012 after the recommendations of a Committee set up by the RBI in August 2011 to re-examine the existing classification and suggest revised guidelines with regard to priority sector lending classification and related issues. The definitions under the priority sector lending were recently changed and implemented in July 2012.

These financial interventions and changes in the definition of the priority sector might have influenced the flow of institutional credit to the agricultural sector, and its quotient of inclusiveness. This paper has analyzed (i) the trends in the outreach and intensity of the formal credit for the agricultural sector, and (ii) the inter-farm and inter-regional disparities in its allocation.

## Data

The results reported in the paper are based on the data compiled from various reports and publications of the RBI and its website. All the current figures related to the monetary parameters were converted into real terms by deflating them with a GDP deflator at 2004-05 prices. The term ‘credit’ in this paper refers to the amount outstanding and the growth rates to compound growth rates, unless specified otherwise.

## Trends in Institutional Lending to Agricultural Sector

The performance of priority sector lending in India has been noteworthy. Both, the number of accounts and amount outstanding under priority sector grew at an annual rate of 3.8 per cent and 15.2 per cent, respectively during the period 1997-98 to 2007-08. In this paper, our concern was on lending to the agriculture and allied activities within the priority sector, and in this case, the number of accounts grew at an annual rate of 5.2 per cent and the amount outstanding at 16.5 per cent. The amount outstanding per account grew at an annual rate of 10.8 per cent from ₹ 25452 in 1997-98 to ₹ 78646 in 2007-08.

The increasing level of formal debt may be perceived as a sign of modernization and growth, but at the same time, the absence of essential conditions to ensure that credit is being used in a judicious manner may also force the farmers to enter into the vicious debt traps. The probability of such a situation increases all the more in the case of technology fatigue, depleting natural resources and rising uncertainty over economic returns — a situation that has been staring India in its face in the recent past. Adequate access and appropriate

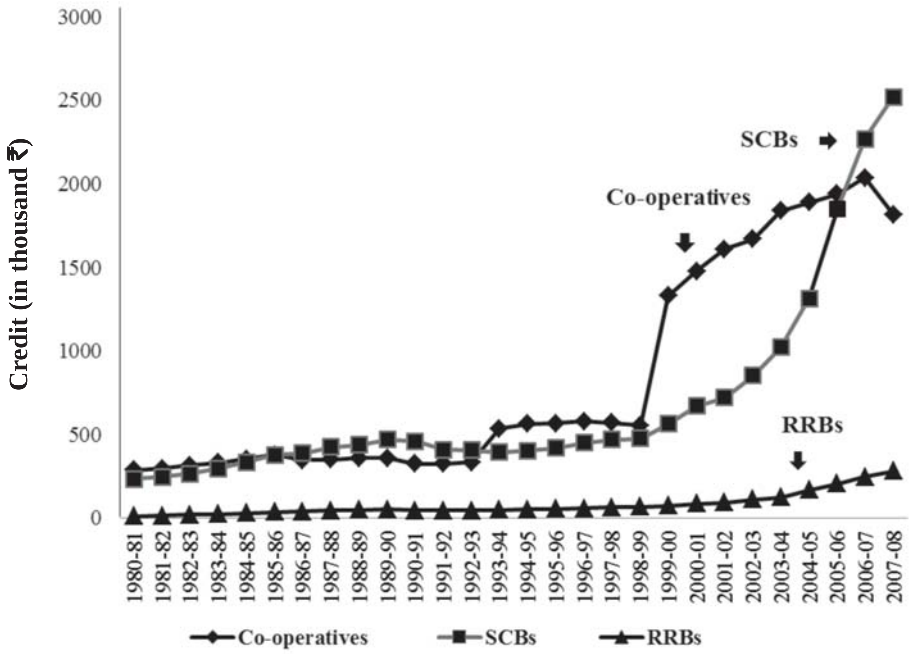


**Figure 1. Overall institutional credit for agriculture and allied activities: 1980-81 to 2007-08**
*Source:* Reserve Bank of India (2010-11), *Handbook of Statistics on Indian Economy*

absorption of credit by the farmers is indispensable for the long-term growth and sustainability of agriculture, and consequently for the overall economic growth.

The overall loan amount outstanding for agriculture and allied activities from all the institutional sources increased from ₹ 536356 million in 1980-81 to ₹ 4618584 million in 2007-08. But, it witnessed a significant increase after 1998-99 (Figure 1). The growth in overall agricultural credit, which was on a dwindling trend during the mid-1990s, picked up in the early-2000s and the trend continued up to 2006-07. A declining trend has, however, been observed in the past few years. Direct credit comprises a major proportion of the total formal agricultural credit. The amount outstanding of direct credit has been consistently higher than the indirect credit, except during 2000-02 when both direct and indirect credits were more or less similar in magnitude.

A closer look at the institutional expansion revealed that it mainly revolved around the expansion of Scheduled Commercial Banks (SCBs) and Regional Rural Banks (RRBs), accompanied by a decline in the share of co-operative banks in general. In terms of the 5-yearly average (Table 1), the share of co-operatives and RRBs increased in the total finance with a decline in the share of SCBs. However, there was an overall decline in the share of co-operatives accompanied with a rise in the shares of SCBs and RRBs. As can be clearly seen from Table 1, the share of direct finance of co-operative banks fell from 51.7 per cent during 1980-84 to 46.4 per cent during 2000-04, and then to 21.8 per cent in 2007-08. This was accompanied by a rise in the shares of both SCBs and RRBs. The RRBs came into existence in 1975-76 once it was realized that there was a need of a separate banking structure that could combine both the local rural feel of co-operatives and professionalism and resource base of SCBs.

The direct finance share of SCBs surged continuously overtaking the co-operative banks throughout the 1980s, followed by a marked reversal in the trend in the 1990s. This trend reversal was mainly a result of plummeting banking penetration as measured by the number of rural bank branches and average population per branch. With the onset of the financial sector liberalization, the RBI liberalized the policy for closure of rural bank branches on grounds of unviability and lack of profitability. Later, the central government provided financial support to public sector SCBs also to cleanse their balance sheets and recapitalize them. Similar kind of support was extended to the RRBs too. Despite this, the RRBs could not take off and witnessed

**Table 1. Share of institutional credit for agriculture and allied activities**

(in per cent)

| Period/Year | Direct finance | | | Indirect finance[1] | | | Total finance | | |
|---|---|---|---|---|---|---|---|---|---|
| | Co-operatives[2] | SCBs[3] | RRBs[4] | Co operatives | SCBs | RRBs | Co-operatives | SCBs | RRBs |
| 1980-81 to 1984-85 | 51.7 | 44.3 | 4.0 | 51.0 | 48.1 | 0.9 | 51.6 | 45.1 | 3.4 |
| 1985-86 to 1989-90 | 40.1 | 53.7 | 6.2 | 61.5 | 37.5 | 1.0 | 43.4 | 51.2 | 5.4 |
| 1990-91 to 1994-95 | 39.8 | 53.5 | 6.7 | 80.1 | 19.6 | 0.4 | 48.4 | 46.3 | 5.3 |
| 1995-96 to 1999-00 | 43.1 | 48.7 | 8.1 | 80.3 | 19.7 | 0.1 | 57.5 | 37.5 | 5.0 |
| 2000-01 to 2004-05 | 46.4 | 45.4 | 8.2 | 79.1 | 20.9 | 0.0 | 61.9 | 33.8 | 4.3 |
| 2005-06 | 34.4 | 56.6 | 9.0 | 67.7 | 32.3 | 0.0 | 48.6 | 46.3 | 5.2 |
| 2006-07 | 31.3 | 59.1 | 9.6 | 62.3 | 37.7 | 0.0 | 44.7 | 49.8 | 5.4 |
| 2007-08 | 21.8 | 67.2 | 11.0 | 61.3 | 38.7 | 0.0 | 39.3 | 54.5 | 6.1 |

Notes for Figure 1 and Table 1:

[1]Data on indirect finance of Regional Rural Banks (RRBs) were not available after 2000, and data on Rural Electrification Corporation (REC) have been excluded from the analysis.

[2]Since 1999-2000, the data are strictly not comparable with the earlier years as it covers not only *Primary Agricultural Credit Societies (*PACS) but also State Co-operative Agriculture & Rural Development Banks (SCARDBs) and Primary Co-operative Agriculture & Rural Development Banks (PCARDBs), while the earlier period covers PACS only. Data for loans from co-operatives since 1993-94 are not strictly comparable with the earlier period as many defaulters became non-defaulters with the implementation of Agricultural and Rural Debt Relief (ARDR) Scheme, resulting in an increase in the assistance from banks; introduction/stabilization of Lead Bank Returns (LBR); increase in the number of banks as also increase in the awareness and consequent improvement in the data maintenance and reporting system at the field level, resulting in an increase in the amount of loans reported in subsequent years.

[3]Data up to 1990-91 pertain to the period July-June and April-March thereafter. In case of Scheduled Commercial Banks (SCBs), data for all the years pertain to July-June period and refer to both short-term and long-term loans. In respect of outstanding loans by SCBs, data from 1991-92 onwards relate to priority sector advances as at end-March.

[4]RRBs came into existence in 1975-76.

*Source:* Reserve Bank of India (2010-11), *Handbook of Statistics on Indian Economy*

a stagnating scenario as they were still in the grabs of their incapacitating sponsor banks and lacked the requisite structural and policy level changes. The co-operative banking system — a major credit purveyor — was not provided with any such assistance on the grounds that their financial restructuring's responsibility was bestowed with the state governments (Satish, 2007).

The direct institutional credit of SCBs, which was growing at an annual rate of 16.9 per cent during 1980-90, declined to 7.8 per cent during 1991-99, but accelerated to 23.5 per cent during 2000-08. Similar was the case for RRBs (19.9% during 2000-08). This was the result of the conscious policy decision of 'Doubling of Agricultural Credit' in 2004-05. In an attempt to boost agricultural production and enable the farmers to cope with uncertain weather conditions, the central government had announced a credit package in June 2004 to double agricultural credit over a period of 3 years starting 2004-05 and 30 per cent growth of the credit flow to agriculture every year thereafter. The direct finance of the co-operatives, on the other hand, witnessed a less significant growth of 3.7 per cent during the post-2000 period and registered a negative growth of 10.5 per cent per annum after the announcement of the policy. Similarly, the indirect credit outstanding of SCBs picked up pace in the post-reform period. No inference, however, could be drawn for the RRBs due to the lack of availability of data on indirect credit after the year 2000. The indirect co-operative credit that had been rising at a rate of 44.2 per cent a year during 1991-99, suddenly dropped to 8.06 per cent during the period 2000-08. This declining share of co-operatives and an almost stagnation in the

**Table 2. Outstanding agricultural credit of Scheduled Commercial Banks: 1995-96 to 2010-11**

(No. of accounts in million, amount in real terms & in ₹ million, shares in per cent)

| Year | No. of accounts | Amount outstanding | Share of accounts in total accounts | Share of amount outstanding in total amount outstanding |
|---|---|---|---|---|
| | | **Direct finance** | | |
| 1995-96 | 23.8 | 353937 | 98.7 | 85.2 |
| 2000-01 | 19.5 | 495156 | 98.6 | 83.9 |
| 2004-05 | 26.0 | 907994 | 97.6 | 76.1 |
| 2006-07 | 32.4 | 1458420 | 97.8 | 74.5 |
| 2009-10 | 41.0 | 2026422 | 95.9 | 76.1 |
| 2010-11 | 44.3 | 2388668 | 95.1 | 82.0 |
| | | **Indirect finance** | | |
| 1995-96 | 0.3 | 61298 | 1.3 | 14.8 |
| 2000-01 | 0.2 | 94767 | 1.4 | 16.1 |
| 2004-05 | 0.6 | 285436 | 2.4 | 23.9 |
| 2006-07 | 0.7 | 499140 | 2.2 | 25.5 |
| 2009-10 | 1.7 | 637921 | 4.1 | 23.9 |
| 2010-11 | 2.2 | 524698 | 4.9 | 18.0 |

*Source:* Reserve Bank of India (various years), *Basic Statistical Returns of Scheduled Commercial Banks in India*

share of RRBs (that have a greater outreach at the grassroots level) will certainly have an influence, and will continue to do so if not seized at the earliest, on the inclusiveness factor of the agricultural credit delivery system.

The share of accounts under both direct and indirect finance of SCBs remained more or less constant up to 2008-09. The share of direct finance accounts declined from 98.2 per cent in 2008-09 to 95.1 per cent in 2010-11, whereas the share of indirect accounts rose from 1.8 per cent to 4.9 per cent. During 1995-2010, the total agricultural outstanding credit grew at an annual rate of 12.9 per cent with the direct component growing at 12.6 per cent and indirect counterpart growing at 14.3 per cent. Of the total credit outstanding of SCBs to agriculture, the share of indirect finance was 14.8 per cent in 1995-96 which increased to 25.5 per cent in 2006-07 and ultimately stood at 18.0 per cent in 2010-11 (Table 2). Both the categories, however, did grow at a faster rate during the Doubling of Agricultural Credit Policy Period (DACP). The share of direct finance in outstanding credit consistently increased from 2005 onwards. Post-2008-09, it declined by 1 percentage point and thereafter witnessed a sharp jump in 2010-11, which may be partly attributed to the implementation of the ADWDRS beginning 2008 and also to the considerable extension of the definition of direct finance after April 2007.

Ramakumar and Chavan (2007) have argued that the revival of agricultural credit had its roots in the early-2000s and was not just a result of the government's policy to double the supply of credit starting 2004-05. They have established that the high growth rate of credit to agriculture during the 2000s was due to a regular annual increase after 2000, and not just after 2004. A similar trend can also be seen if one looks at the annual percentage increase in the outstanding credit amount of direct and indirect finance of SCBs during the 2000s. In the past few years, it was found that the growth in the number of indirect accounts was much more pronounced post-2008-09 and the growth in amount outstanding of indirect finance was also higher. It was only in 2010-11 that the direct finance segment got the much-needed fillip and the growth in amount outstanding of indirect finance sharply slowed down. The annual percentage increase was higher for the indirect finance for 6 out of 10 years during the decade ending 2010-11. The increase was much more pronounced after 2008-09.

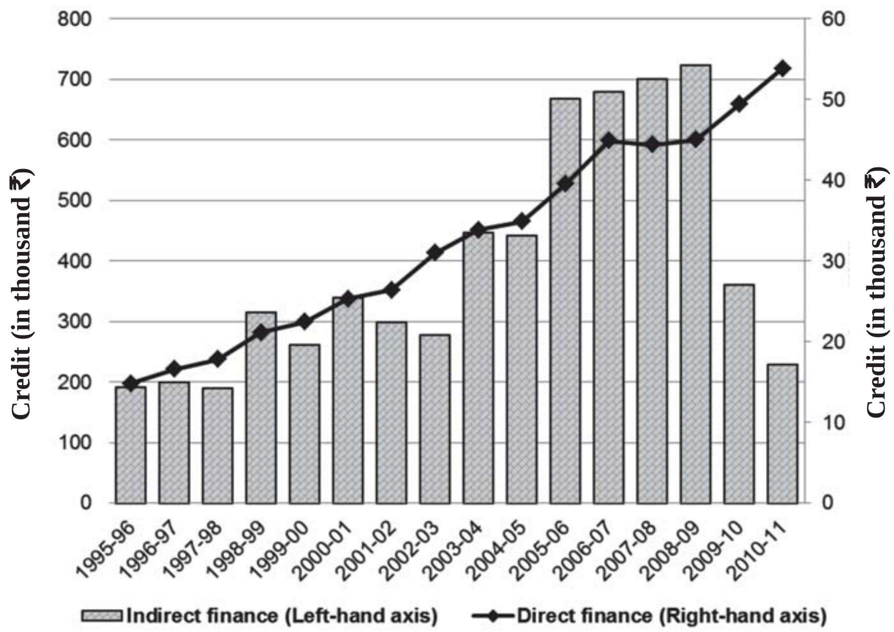


**Figure 2. Outstanding credit per account of Scheduled Commercial Banks in India: 1995-96 to 2010-11**

*Source:* Reserve Bank of India (various years), *Basic Statistical Returns of Scheduled Commercial Banks in India*

These trends have led to a lot of debate. Questions have been raised time and again as to why despite a rise in the credit level there has not been a proportionate rise in agricultural productivity? Why is it that even in the face of various debt waivers and relief schemes for agriculture, the credit flow is still distorted? Doubts were raised on the trends prevailing in agricultural credit and the reporting of numbers by the banks. It was also pointed out that this tilt of credit towards indirect finance in the recent years deserves some explanation (Rajshekhar, 2012). In a recent speech, the Governor of Reserve Bank of India has highlighted a few concerns (Subbarao, 2012). First, the cost of credit in India has remained high. Second, there is anecdotal evidence that some agricultural loans, contracted at a sub-market rate of interest because of the subvention, are being diverted to non-agricultural purposes. Such a trend effectively defeats the entire objective of having an interest subvention scheme, and emphasizes the need to correct this either by remodelling the subvention scheme or through tighter monitoring of the end-use of agricultural loans.

In terms of outstanding credit per account, the direct finance consistently increased from ₹ 14829 in 1995-96 to ₹ 53870 in 2010-11, while the indirect finance increased up to ₹ 723095 in 2008-09 and observed a decline thereafter, reaching ₹ 228330 in 2010-11 (Figure 2). The number of accounts has been rising more or less consistently for both direct and indirect finance. The annual growth in the number of accounts (13.1%) and amount outstanding (14.3%) of indirect finance of SCBs has been higher than that for direct finance (3.9% and 12.6%, respectively) during 1995-2010. During the DACP as well, the growth in amount outstanding was higher for indirect finance. In terms of amount outstanding per account, the growth was higher for direct finance for the entire period while for the DACP it grew at 15.4 per cent for indirect finance in comparison to 8.7 per cent for direct finance.

If one looks only at the period 2000-07, ignoring the last 3 years' available data, it is observed that the growth in amount outstanding per account was again higher for indirect finance than that for direct finance. Thus, credit widening was more pronounced for indirect finance while credit deepening was more prominent in the case of direct finance in the past one-and-half decades, i.e. 1995-2010. However, for the DACP credit widening was experienced more for accounts relating to direct finance while credit deepening was more pronounced in case of indirect finance.

The definitional scope of indirect finance has been altered from time to time in the past two decades.

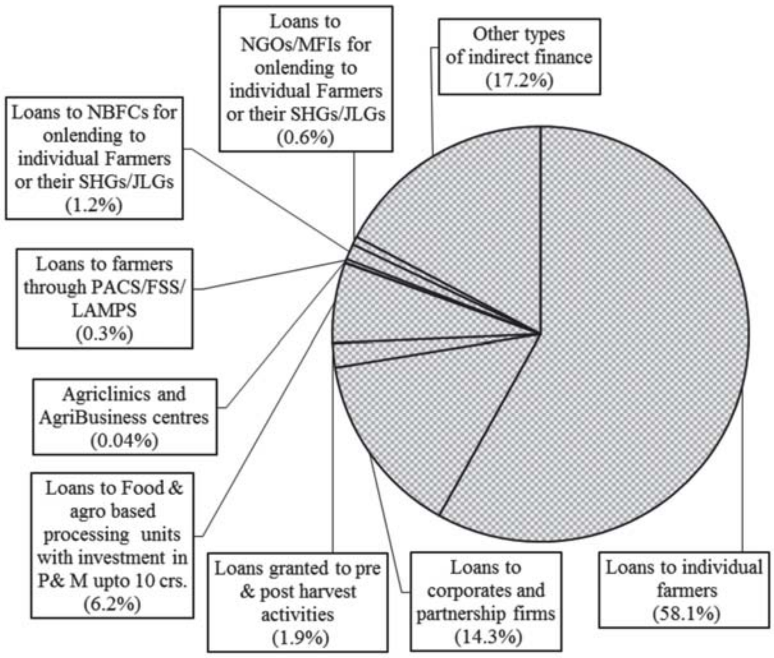


**Figure 3. Distribution of different types of agricultural outstanding advances of Scheduled Commercial Banks: 2009-10**

*Notes:* NBFCs-Non Banking Financial Companies; *PACS-Primary Agricultural Credit Societies*; FSS-Farmers Service Societies; LAMPS-Large Adivasi Multipurpose Primary Societies; SHG-Self-Help Group; JLG-Joint Liability Group; NGOs-Non Governmental Organizations; MFIs-Micro Finance Institutions; P&M-Plant and Machinery

*Source:* Reserve Bank of India (2009-10) *Statistical Tables Relating to Banks of India*

According to Subbarao (2012), during the second half of the 2000s, the indirect credit even exceeded its prescribed sublimit (4.5 per cent of ANBC) under the priority sector guidelines with a narrow margin. The expanding significance of indirect credit is probably a sign of growing needs of financing the entire value chain along with an increasing role of urban and metropolitan branches in rural financing (which will be discussed a little later) and widening of the scope of what constitutes indirect finance. Post-2004-05 and up to 2007-08, the share of traditional components of indirect finance is declining while that of ‘other types of indirect finance’ is increasing. In terms of the latest available data, one finds that the loans to individual farmers constitute the largest component of total agricultural advances, followed by other types of indirect finance category and loans to corporates and partnership firms (Figure 3).

## Agricultural Credit by Location and Type of Banks

This section presents the distribution of outstanding credit according to the locational taxonomy of the commercial banks. The analysis is based on a few selected years that have been chosen due to their significance in the agricultural credit delivery system. The classification of outstanding agricultural credit as per bank type reveals that the Nationalized Commercial Banks (NCBs) form a major component of all the SCBs, followed by RRBs and Other Commercial Banks (OCBs) in terms of the number of accounts (Table 3). A similar pattern was noted for these bank types in terms of the share in outstanding credit. However, this trend has changed since the early-2000s with the OCBs consistently gaining their share and the RRBs depicting stagnation in their share after 2006-07. In terms of the bifurcation between direct and indirect finance, the NCBs constitute a major share of all SCBs in the number of accounts pertaining to direct finance. A decline was observed in the same post-2006-07 with a rise in the number of direct accounts of OCBs after 2000-01. The share in amount outstanding of agricultural credit of NCBs in the total also comprised a major slice, followed by RRBs and OCBs. However, the indirect finance had a greater share than direct finance in the outstanding credit of NCBs. The NCBs’

**Table 3. Bank group-wise distribution of agricultural accounts and outstanding credit from all Scheduled Commercial Banks: 1995-96 to 2010-11**

| | Share in accounts (%) | | | Share in amount outstanding (%) | | |
|---|---|---|---|---|---|---|
| Year[1] | NCBs[2] | RRBs[3] | OCBs[4] | NCBs | RRBs | OCBs |
| | | | **Direct finance** | | | |
| 1995-96 | 71.5 | 26.5 | 2.0 | 82.2 | 14.1 | 3.7 |
| 2000-01 | 68.3 | 28.6 | 3.0 | 77.6 | 17.3 | 5.2 |
| 2004-05 | 67.1 | 29.1 | 3.9 | 75.4 | 16.7 | 7.9 |
| 2006-07 | 70.0 | 26.3 | 3.7 | 75.3 | 14.6 | 10.0 |
| 2009-10 | 67.3 | 25.9 | 6.8 | 73.1 | 14.4 | 12.5 |
| 2010-11 | 66.6 | 25.6 | 7.8 | 72.2 | 13.8 | 14.0 |
| | | | **Indirect finance** | | | |
| 1995-96 | 60.4 | 36.3 | 3.3 | 92.8 | 2.3 | 4.9 |
| 2000-01 | 54.8 | 38.9 | 6.3 | 88.7 | 2.1 | 9.3 |
| 2004-05 | 43.8 | 45.2 | 11.0 | 86.6 | 2.1 | 11.3 |
| 2006-07 | 46.8 | 43.8 | 9.4 | 82.9 | 1.9 | 15.3 |
| 2009-10 | 87.4 | 10.0 | 2.6 | 85.0 | 2.0 | 13.0 |
| 2010-11 | 91.8 | 6.1 | 2.1 | 85.2 | 1.5 | 13.3 |
| | | | **Total finance** | | | |
| 1995-96 | 71.3 | 26.6 | 2.0 | 83.7 | 12.4 | 3.9 |
| 2000-01 | 68.1 | 28.8 | 3.1 | 79.4 | 14.8 | 5.8 |
| 2004-05 | 66.5 | 29.5 | 4.0 | 78.1 | 13.2 | 8.7 |
| 2006-07 | 69.5 | 26.7 | 3.8 | 77.3 | 11.4 | 11.4 |
| 2009-10 | 68.1 | 25.2 | 6.7 | 75.9 | 11.5 | 12.6 |
| 2010-11 | 67.8 | 24.7 | 7.5 | 74.5 | 11.6 | 13.9 |

*Notes:* [1] Year as at end March

[2] Nationalized commercial banks (NCBs) include State Bank of India and its Associates and all nationalized banks. The bank group, 'Nationalized Banks' also includes the data of IDBI Bank Ltd.

[3] Regional Rural Banks (RRBs)

[4] Other Commercial Banks (OCBs) include foreign banks and private sector banks. 'Private Sector Banks' refer to Indian old and new private sector banks, which was previously (till 2008 volume) referred to as 'Other Scheduled Commercial Banks'.

*Source:* Reserve Bank of India (various years), *Basic Statistical Returns of Scheduled Commercial Banks in India*

share in the total was falling for both the number of accounts and amount outstanding and is often attributed to the accumulation of losses on account of mounting non-performing assets (NPAs). The share of outstanding credit of RRBs had more or less stagnated due to their excessive reliance on sponsoring banks and a lackadaisical approach on policy issues while the share of OCBs was rising with the indirect share being more pronounced. This could be attributed to the rapid expansion of bank branches in urban and metropolitan areas in the recent years and rising pressure on such banks to achieve their priority sector targets.

## Urbanization of Agricultural Finance

Another interesting but disquieting feature of the SCBs has been the urbanization of their agricultural finance. Table 4 portrays the location-wise classification of outstanding loans of all SCBs and the changes therein over the years. In terms of number of accounts, the rural and semi-urban bank branches had a larger share, followed by urban and metropolitan

**Table 4. Population group-wise distribution of agricultural accounts and outstanding credit of all Scheduled Commercial Banks in India: 1995-96 to 2010-11**

| | Share in accounts (%) | | | | Share in amount outstanding (%) | | | |
|---|---|---|---|---|---|---|---|---|
| Year[1] | Rural[2] | Semi-urban[3] | Urban[4] | Metropolitan[5] | Rural | Semi-urban | Urban | Metropolitan |
| **Direct finance** | | | | | | | | |
| 1995-96 | 64.7 | 29.4 | 5.3 | 0.7 | 56.5 | 31.2 | 8.2 | 4.0 |
| 2000-01 | 63.6 | 30.5 | 4.9 | 1.0 | 54.8 | 32.0 | 8.5 | 4.8 |
| 2004-05 | 64.7 | 30.0 | 4.7 | 0.6 | 52.9 | 31.4 | 10.0 | 5.7 |
| 2006-07 | 59.4 | 33.1 | 6.9 | 0.7 | 46.5 | 31.9 | 13.1 | 8.5 |
| 2009-10 | 57.7 | 33.4 | 7.7 | 1.3 | 45.6 | 31.9 | 14.4 | 8.1 |
| 2010-11 | 57.2 | 33.2 | 8.1 | 1.5 | 43.2 | 31.2 | 16.5 | 9.1 |
| **Indirect finance** | | | | | | | | |
| 1995-96 | 56.9 | 28.7 | 9.9 | 4.6 | 23.9 | 18.5 | 16.8 | 40.8 |
| 2000-01 | 54.2 | 29.5 | 12.7 | 3.5 | 14.3 | 15.6 | 20.8 | 49.3 |
| 2004-05 | 65.3 | 23.5 | 8.2 | 2.9 | 11.4 | 10.2 | 17.2 | 61.2 |
| 2006-07 | 60.7 | 25.9 | 9.3 | 4.2 | 9.1 | 8.1 | 16.2 | 66.6 |
| 2009-10 | 55.4 | 32.1 | 10.4 | 2.1 | 15.8 | 15.0 | 26.6 | 42.7 |
| 2010-11 | 53.2 | 34.9 | 10.8 | 1.2 | 13.6 | 19.0 | 27.1 | 40.2 |
| **Total finance** | | | | | | | | |
| 1995-96 | 64.6 | 29.4 | 5.3 | 0.7 | 51.7 | 29.3 | 9.5 | 9.5 |
| 2000-01 | 63.4 | 30.5 | 5.0 | 1.1 | 48.3 | 29.3 | 10.5 | 11.9 |
| 2004-05 | 64.7 | 29.9 | 4.8 | 0.6 | 43.0 | 26.4 | 11.7 | 19.0 |
| 2006-07 | 59.4 | 33.0 | 6.9 | 0.7 | 37.0 | 25.8 | 13.9 | 23.3 |
| 2009-10 | 57.6 | 33.4 | 7.8 | 1.3 | 38.5 | 27.9 | 17.3 | 16.4 |
| 2010-11 | 57.0 | 33.3 | 8.3 | 1.4 | 37.9 | 29.0 | 18.4 | 14.7 |

*Notes:* [1] Year as at end March

[2] Population groups of the banked centres presented are based on the 2001 Census. As such, the population group-wise data presented in the table are not strictly comparable with those of the years prior to 2006. Rural population group includes all the centres with population of less than 10,000

[3] Semi-urban group includes centres with population of 10,000 and above but less than 0.1 million

[4] Urban group includes centres with population of 0.1 million and above but less than 1 million

[5] Metropolitan group includes centres with population of 1 million and more

*Source:* Reserve Bank of India (various years), *Basic Statistical Returns of Scheduled Commercial Banks in India*

branches. A similar pattern was observed for amount outstanding, the only difference being that the share of metropolitan branches was higher than that for urban branches up until 2006-07. The share of amount outstanding in total agricultural bank finances was falling for rural banks, was more or less constant for semi-urban, and rising continuously for urban and metropolitan banks but with a marginal decline after 2009-10. The share of total agricultural credit supplied through rural and semi-urban bank branches declined from 51.7 per cent and 29.3 per cent in 1995-96 to 37.9 per cent and 29 per cent, respectively in 2010-11. Synchronously, the same augmented from 9.5 per cent in 1995-96 to 18.4 per cent and 14.7 per cent, respectively in 2010-11 for urban and metropolitan branches.

With reference to the number of accounts, the share of rural direct finance in total agricultural finance was more or less falling. On the other hand, the same was consistently increasing for semi-urban, and rising for urban and metropolitan branches. The share of rural direct outstanding credit in total bank credit was also falling consistently. The share of urban and metropolitan branches in terms of number of accounts and amount outstanding was higher for indirect finance than for direct finance. In the metropolitan branches, the share of indirect outstanding credit was in double digits while it was in single digits for direct outstanding credit and was on an average 45 per cent higher than the direct outstanding credit. All these facts highlight that a majority of the credit was being disbursed through non-rural branches. Further, it raises the following concerns:

- To which segments of the society is the credit flowing?
- Is it being used for the purpose for which it is advanced, viz. agriculture and allied activities?
- Are the intended beneficiaries really benefitting from it?

With regard to the share of direct outstanding agricultural credit in their total outstanding agricultural credit as per location and type of banks, it was found that the share of direct credit was falling for rural branches of all the bank types up to 2009-10. In the case of semi-urban branches, the share was falling up to 2006-07 and then increased after 2009-10 for RRBs and OCBs, while the same was falling up to 2004-05 and increased after 2009-10 for NCBs. The urban bank branches witnessed a decline in the share for NCBs while it stayed more or less constant during the 2000s for RRBs and OCBs up to 2006-07 and then witnessed a rise. The metropolitan branches of NCBs and RRBs have depicted a decline throughout the period until 2004-05 and then NCBs observed a rise thereafter, while the share of RRBs declined. On the other hand, OCBs were consistently rising during all points of time.

The urbanization of agricultural finance in recent years is once again reiterated by the fact that the share of direct outstanding agricultural credit in total outstanding agricultural credit of urban and metropolitan branches was increasing at a faster pace than that for the rural and semi-urban bank branches. The rise in the share was also more pronounced for urban and metropolitan branches of NCBs that act as a major credit purveyor among the banks. However, in the case of RRBs, the share had marginally increased for all the population groups with the rise being more pronounced for rural branches. A startling feature discernible from these recent trends is that the increase in share of direct agricultural outstanding credit of OCBs' branches was more or less visible for all location groups with the largest increase being witnessed in the rural branches, followed by metropolitan and urban branches while the semi-urban branches perceived a marginal decline.

## Inclusiveness of Formal Credit System

From the perspective of economic development, financial inclusion is highly desirable both from equity and efficiency angles. The approach paper for the Twelfth Five-Year Plan has also been aptly titled as *Faster, Sustainable and More Inclusive Growth* by the Planning Commission. The time has come to realize that the bottom of the pyramid doesn't just require credit but rather it needs to be made worthy of that credit. Given this, a coherent question that arises next is whether it is just the growth in credit flow that is important or an 'equitable' growth is needed. In this section, we have addressed this question and analyzed whether credit widening and deepening are taking place at the grassroots.

In an attempt to measure the inclusiveness of the formal agricultural credit system, we first analyzed the distribution of amount outstanding as per their credit limit size classes. The share of different classes in the total amount outstanding was computed using the average of the latest available data, i.e., 2008-09 to 2010-11. The credit limit range of '> ₹ 0.025 million and ≤ ₹ 0.2 million' accounted for 35.8 per cent of the total outstanding, followed by '> ₹ 0.2 million and ≤ ₹ 0.5 million (Figure 4). Surprisingly about 18 per cent of the outstanding agricultural credit fell in the category of '> ₹ 250 million'. A higher share of outstanding credit with large credit limits may be partly attributed to the share of indirect finance to agriculture. Initially, the share of direct finance in the total agricultural credit was found to be higher among all the small-sized credit limit classes but in the recent years the same was found to be increasing for large-sized classes. The significance of expanding directed lending (particularly direct finance) may lose its relevance unless this trend of shift away from small-sized loans towards large-sized loans is arrested.

Another aspect of inclusiveness is the access to credit by the smallholders who have been playing a vital role in food production and realization of food self-sufficiency. The RBI provides credit data for three farm-size classes, viz. marginal (< 2.5 acres), small (2.5–5 acres) and large farmers (> 5). But, these

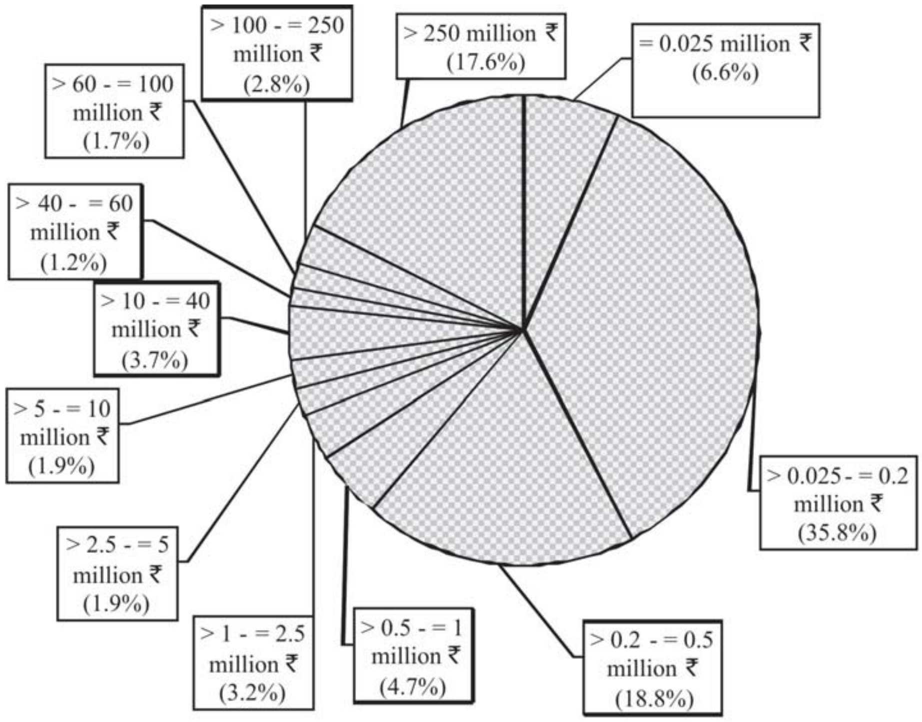


**Figure 4. Credit limit-wise share of total agricultural outstanding credit of Scheduled Commercial Banks**

*Notes:* Amount is in real terms and average of 3 years (2008-09, 2009-10, 2010-11)

*Source:* Reserve Bank of India (various years), *Basic Statistical Returns of Scheduled Commercial Banks in India*

statistics are made available with a substantial time lag and thus are only indicative in terms of the pattern of agricultural credit flow among these groups. To compute the share in landholdings and outstanding credit of Net Sown Area (NSA), data for 1995-96, 2000-01 and 2005-06 have been used for the corresponding time points of 1995-96, 2004-05 and 2008-09. According to the latest available data, marginal farmers constitute the largest proportion of total farmers. Their share in total landholdings had increased from 61.6 per cent in 1995-96 to 63.9 per cent in 2008-09, while that of small and large holdings had declined marginally. However, credit widening was not happening for marginal and small farmers, while it had happened in the case of large farmers. A fall in the share of marginal farmers in total accounts despite an increase in their numbers, and a more or less constant share for small farmers is indicative of a lackadaisical inclusive approach (Table 5).

A comparison of amounts outstanding per account by different size-classes of landholdings for direct finance has been depicted in Table 5. This amount was higher for the large farmers in comparison to marginal and small farmers, and the gap had increased over the years. It had widened rapidly after the 2000s and almost turned out to be huge during the DACP, which can be partly attributed to broadening of the definition of direct finance. An interesting feature also discernible from Table 5 is that credit deepening has been taking place for all the farm-size categories, which to some extent is a positive indication for the agricultural credit delivery system.

It may be noted that small farms have been proved to be more efficient than large farms (Chand *et al.*, 2011). The efficiency gains are due to the higher level of adoption of improved technologies, input usage, cropping intensity and diversification towards high-value crops. This suggests that the credit requirement of smallholders is expected to be more, when they move away from subsistence towards commercial production systems.

It is not just a balance between the direct and indirect finance, but also their distribution in a manner that is inclusive of poor regions that needs to be attained. From the analysis of regional distribution of

**Table 5: Direct finance to farmers by Scheduled Commercial Banks according to size of landholdings[1]**

| Year[2] | Share in accounts (%) | Share in amount outstanding (%) | Share in landholdings (%) | Amount outstanding per account (₹) | Amount per acre of NSA (₹/acre)[3] |
|---|---|---|---|---|---|
| | | | **Up to 2.5 acres** | | |
| 1995-96 | 41.9 | 24.2 | 61.6 | 12093 | 2732 |
| 2004-05 | 39.6 | 26.1 | 60.6 | 28086 | 8448 |
| 2008-09 | 36.4 | 27.4 | 63.9 | 40317 | 20038 |
| | | | **Above 2.5 to 5 acres** | | |
| 1995-96 | 32.1 | 24.0 | 18.7 | 15682 | 2436 |
| 2004-05 | 31.8 | 26.5 | 19.9 | 35340 | 7453 |
| 2008-09 | 29.8 | 27.3 | 18.6 | 48991 | 19283 |
| | | | **Above 5 acres** | | |
| 1995-96 | 26.1 | 51.8 | 19.7 | 41583 | 1616 |
| 2004-05 | 28.6 | 47.4 | 19.4 | 70564 | 4620 |
| 2008-09 | 33.8 | 45.3 | 17.5 | 71575 | 11459 |
| | | | **Total** | | |
| 1995-96 | 100 | 100 | 100 | 20933 | 1970 |
| 2004-05 | 100 | 100 | 100 | 42541 | 5915 |
| 2008-09 | 100 | 100 | 100 | 53476 | 14845 |

*Notes:* [1] Amount outstanding of direct finance refers to both short term and long term loans (in real terms)

[2] Year as at end June

[3] Share in landholdings & amount per acre of net sown area refers to years 1995-96, 2000-01, 2005-06 for our corresponding years 1995- 96, 2004-05, 2008-09 respectively.

*Sources:* 1. Reserve Bank of India (2010-11), *Handbook of Statistics on Indian Economy*

2. Government of India (various years), Agricultural Census Division

outstanding advances of SCBs, one finds that the Southern region has consistently accounted for a higher share of amount outstanding, followed by the Western, Northern, Central, Eastern and North-Eastern regions. Over the years, Southern region has lost its share and Northern region has gained, while the share of other regions has remained almost unchanged (Table 6). The low level of credit availability in the North-Eastern region indicates a lack of financial inclusion, which is due to the poor banking infrastructure there. The Southern region, which had the highest share in the outstanding advances, also had a share of 17.8 per cent in the country's rural population and 24.6 per cent in the country's total agricultural GDP in 2009-10. The share of the Northern region in country's agricultural GDP had also fallen during this period. The majority of states in the region observed a fall in their shares in terms of the amount outstanding in India's total agricultural advances with Rajasthan and Punjab witnessing a sharp fall.

Table 6 also reveals that the amount of outstanding advances per account had risen in all the regions with Northern and Western regions taking a lead. A similar pattern was observed for the outstanding advances per account for direct finance. All this points towards the fact that credit deepening was a common phenomenon across the regions; the effect, however, being more skewed towards the Northern and Western regions. All the states in the Southern region had a higher amount outstanding per acre compared to the national average, but in terms of amount per account these lagged behind. This trend is indicative of the fact that the Southern region had witnessed a higher level of credit widening than deepening.

The regional imbalance was also visible in terms of the share of direct outstanding advances in total

**Table 6. Region-wise distribution of total outstanding agricultural advances of Scheduled Commercial Banks**

| Region* | Share in amount outstanding (%) | | | Amount outstanding per account[1] (₹) | | |
|---|---|---|---|---|---|---|
| | 1996-97 | 2004-05 | 2009-10 | 1996-97 | 2004-05 | 2009-10 |
| Northern | 16.4 | 24.4 | 23.6 | 23241 | 99480 | 217243 |
| North-Eastern | 1.7 | 0.5 | 0.7 | 11221 | 21674 | 59512 |
| Eastern | 9.8 | 9.2 | 8.8 | 7057 | 37874 | 75693 |
| Central | 14.7 | 15.2 | 15.3 | 10804 | 36965 | 79969 |
| Western | 16.6 | 15.7 | 15.9 | 18750 | 75593 | 124111 |
| Southern | 40.7 | 35.0 | 35.7 | 11824 | 32405 | 62253 |
| All | 100 | 100 | 100 | 12463 | 44715 | 87405 |

*Notes:* [1] Amount is in real terms
*Northern region includes Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Chandigarh, Delhi;
North-Eastern region includes Assam, Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh, Mizoram;
Eastern Region includes Bihar, Jharkhand, Odisha, Sikkim, West Bengal, Andaman & Nicobar Islands;
Central region includes Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttarakhand;
Western region includes Gujarat, Maharashtra, Daman & Diu, Goa, Dadra & Nagar Haveli;
Southern region includes Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Pondicherry, Lakshadweep.

*Source:* Reserve Bank of India (2009-10), *Statistical Tables Relating To Banks of India*

agricultural advances of the region (Table 7). The share had decreased at the national level (from 84.6 per cent in 1996-97 to 68.6 per cent in 2009-10) and also for all the regions. The decline was more pronounced in the Eastern and Central regions. The direct outstanding advances per account increased from ₹ 10777 in 1996-97 to ₹ 60952 in 2009-10 at the national level, but again were more pronounced in the Northern and Western regions.

However, wide variations were observed in the distribution of formal credit across the states. Agriculture in the breadbasket of India, i.e. Punjab witnessed a decline in its share in the country's total agricultural GDP. A huge decline was also observed in terms of its agricultural share in Gross State Domestic Product (GSDP). This diminishing share of agricultural GDP in GSDP can be partly attributed to the technology fatigue and declining profitability in the state as has been widely discussed. A probable reason behind the declining share of agriculture in GSDP over the past few years could be the excessive supply of credit that seems to have gone to unproductive activities ultimately leading to indebtedness (Sidhu *et al*, 2008). A striking feature observed in the Northern region is that despite its low rural population, low shares in Gross Cropped Area (GCA), Gross Irrigated Area (GIA) and GSDP, its constituents, particularly Chandigarh and Delhi, witnessed high levels of amount outstanding per account and amount per acre. Such a trend needs to be dissected and has reemphasized the need to closely monitor the end users of agricultural loans.

In the Western region, Gujarat and Maharashtra were among the best performing states and received a significant share of the amount outstanding of total finance. This may be partly attributed to their good agricultural performance due to investment in agricultural infrastructure and greater farm diversification.

The Central region has witnessed a slight fall in its share in India's agricultural GDP. A similar pattern has been observed in the Eastern region as well. Uttar Pradesh with the highest share of rural population among all states had the largest share of GCA and GIA and was the best performing state in the Central region. All the states in the North-Eastern region had high shares of rural population in the states' population and agricultural shares in their respective GSDPs, but their shares in terms of outstanding advances, GCA, GIA and amount per acre of NSA were proportionately very low. The state-wise analysis reveals that credit deepening was taking place for a majority of the states. But what requires special attention is the question as

**Table 7. Region-wise distribution of direct outstanding agricultural advances of Scheduled Commercial Banks**

| Region | Share of direct amount outstanding from total finance (%) | | | Amount outstanding per account (₹) | | |
|---|---|---|---|---|---|---|
| | 1996-97 | 2004-05 | 2009-10 | 1996-97 | 2004-05 | 2009-10 |
| Northern | 84.4 | 60.0 | 56.3 | 19952 | 60453 | 125035 |
| North-Eastern | 88.2 | 85.3 | 79.9 | 10560 | 18987 | 48713 |
| Eastern | 88.3 | 80.9 | 66.3 | 6396 | 31583 | 52229 |
| Central | 90.5 | 90.4 | 76.9 | 10141 | 33883 | 62359 |
| Western | 72.6 | 60.5 | 64.1 | 13847 | 47263 | 80628 |
| Southern | 86.6 | 78.1 | 75.4 | 10389 | 26491 | 47569 |
| All India | 84.6 | 73.1 | 68.5 | 10777 | 33782 | 60952 |

*Notes:* Amount is in real terms

*Source:* Reserve Bank of India (2009-10), *Statistical Tables Relating To Banks of India*

to whether it was taking place at the micro level as well. This analysis, however, is beyond the scope of this paper and can be endeavoured in future research.

## Conclusion and Policy Implications

The credit flow to the agricultural sector has been improving over the years with the rise being more pronounced after 1998-99. The credit expansion story in India mainly revolves around the expansion of SCBs and more or less stagnant RRBs accompanied with a fall in the co-operative banks. This declining trend for the RRBs and co-operatives will certainly have an influence, if not seized at the earliest, on our agricultural credit delivery system. It is high time that the RRBs may be liberated from the clutches of their sponsoring banks and provided with the long-pending financial and administrative autonomy. The credit widening has been found to be more pronounced for indirect finance while credit deepening has been more prominent for direct finance. However, credit widening has been experienced more for accounts relating to direct finance, while credit deepening has been more pronounced in case of indirect finance during the DACP. In terms of the overall agricultural finance, a tilt has been observed towards indirect finance in recent years that deserves special attention. Effective linkages should be strived between the credit market and other players across the value chain. In terms of bank-wise distribution of agriculture credit, the share of NCBs has been falling on account of mounting NPAs while that of OCBs has been rising (with a more pronounced indirect share), probably due to the expansion of urban and metropolitan branches and rising pressure on such banks to achieve their targets. A discernible feature observed from the analysis is the tendency of urbanization of agricultural finance in recent years. It has been noted that the share of direct outstanding agricultural credit in total outstanding agricultural credit of urban and metropolitan branches is increasing at a faster pace. Moreover, the rise in the share has been more pronounced for urban and metropolitan branches of NCBs, which act as a major credit purveyor among the banks. In this backdrop, it is suggested that a clientele-based approach should be followed for setting up the lending targets.

With regard to the financial inclusiveness, it has been observed that the marginal and small farmers have a smaller share in credit in relation to number of holdings. There has been a widening of the gap between large and smallholders in terms of the amount outstanding per account. All this is indicative of a lackadaisical policy approach towards such farmers. In order to achieve equity in the agricultural credit delivery system, it is all the more imperative to focus attention on poor small landholders through innovations in product designs and delivery mechanisms. The analysis is not just reflective of the imbalance between direct and indirect finance, but has also highlighted the regional imbalances in the credit flow. A one-size-fits-all policy approach for our agricultural credit delivery system should not be attempted. Rather concerted efforts should be made towards making the system more flexible and suitable to the local socio-economic environment.

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## End-notes

[a] From 2007 onwards, loans given against the pledge or hypothecation of agricultural produce (including warehouse receipts) were extended to individual farmers, irrespective of whether they had sought crop loans or not. Also, one-third of loans given to corporates, partnership firms and institutions for agriculture and allied activities (dairy, fishery, piggery, poultry, bee-keeping, etc.) in excess of ₹ one crore in aggregate per borrower was considered as direct finance to agriculture.

[b] From 2007 onwards, two-thirds of loans given to corporates, partnership firms and institutions for agriculture and allied activities (dairy, fishery, piggery, poultry, bee-keeping, etc.) in excess of ₹ one crore in aggregate per borrower was considered as indirect finance to agriculture. Starting 2007, loans to food and agro-based processing units with investments in plant and machinery up to ₹ 10 crore were considered as indirect agricultural finance. Finance for hire-purchase schemes for distribution of agricultural machinery and implements, Loans to farmers through Primary Agricultural Credit Societies (PACS), Farmers' Service Societies (FSS) and Large-sized Adivasi Multi Purpose Societies (LAMPS). Loans to co-operative societies of farmers for disposing of the produce of members, financing the farmers indirectly through the co-operative system (other than by subscription to bonds and debenture issues) were present throughout 2007-12, barring 2008 wherein finance was provided by scheduled UCBs to NBFCs for hire-purchase schemes for distribution of agricultural machinery and implements. Loans to *Arthias* (commission agents in rural/semi-urban areas functioning in markets/mandies) for extending credit to farmers, for supply of inputs as also for buying the output from the individual farmers/ SHGs/ JLGs was present throughout 2007-12, with the exception of 2008. Fifty per cent of the credit outstanding under loans for general purposes under General Credit Cards (GCC) was considered as indirect finance after 2007. The limit of 50 per cent was removed for the years 2009-12. Such a category was non-existent in 2008. The deposits placed in Rural Infrastructure Development Fund (RIDF) with NABARD by banks on account of non-achievement of priority sector lending were considered for classification under indirect finance in 2007. However, the same was modified in 2009 and was completely removed after 2010. Loans granted to RRBs for on-lending to agriculture and allied activities sector and overdrafts, up to ₹ 25,000 (per account), granted against 'no-frills' accounts in rural and semi-urban areas were introduced in 2009. Loans sanctioned to NGOs which are SHG Promoting Institutions, for on-lending to members of SHGs under SHG-Bank Linkage Programme for agricultural purposes and a separate category for loans that didn't classify as direct or indirect finance were introduced in 2011. Some modifications were made in the sub-classification of loans that didn't classify as direct or indirect finance and a new category of loans that were eligible for classification as direct/indirect finance was added in 2012. Under this, it was decided that the credit under the Kisan Credit Card (KCC) Scheme would be treated as direct finance for agriculture.

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