A study on direct credit flow in agriculture and allied activities

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Abstract
Access to finance is critical for the growth of agriculture. Increase in credit enables the farmers to use inputs on time and in desired quantity. The study analyzed the flow of direct institutional credit in agriculture & allied activities both short & long term and in different lending agency based on secondary data. The period of study was from 1970-71 to 2016-17. The analysis revealed that the growth rate of direct credit flow in agriculture was 15 percent in the study period indicating continuous increase in direct credit. Analysis of direct credit flow in lending agencies for a period of 2000-01 to 2016-17 revealed that the growth rate was 24 percent in case of regional rural banks and 23 percent for commercial banks indicating increase in coverage of institutional loan. This study indicates that the credit flow for direct loans has increased and the trend should be continued.

Keywords: Direct credit, agriculture credit, loan waiver, regional rural banks, cooperative societies, commercial banks

1. Introduction
The most important pre requisite in the agricultural sector is the need to encourage farmers to make long term investment (Doubling Farmers’ Income Vol. 2). And investment comes from credit flow in agriculture and allied activities. Credit gives the strength to invest in inputs, machinery, post-harvest activities and also improves marketing conditions. The farmers’ dependence on the borrowed amount for investment is more than 50 per cent across all the states, and is relatively higher in the developed states standing at more than 90 per cent in Andhra Pradesh, Kerala, Tamil Nadu, Punjab, Karnataka, Maharashtra and Madhya Pradesh (Doubling Farmers’ Income Vol. 2). With savings being negligible among the small farmers, agricultural credit appears to be an essential input along with modern technology for higher productivity (Das et al.). Agriculture credit sector includes formal and informal sector. Formal sector means, credit obtained through lending institutions such as commercial banks, rural banks, cooperatives, micro financing institutions etc. while informal sector includes the credit obtained from money lenders, pawn brokers, friends etc. The government of India has been circulating ample amount of credit in agriculture sector through direct and indirect loans. Direct credit means credit given to individual farmers, Self Help Group or other group of farmers for agriculture and allied activities by banks. NABARD is the apex agency for agricultural credit. Banks were nationalized in 1969 and regional rural banks were opened in 1975 in order to increase the coverage of rural people in the formal sector. The budget target in agricultural credit was 8.5 lakh crore in 2014-15 and has been increasing every with a target to hike it by 10 percent in next fiscal to 11 lakh crore as per budget 2018. The present study thus deals with the trend of direct credit flow in agriculture and allied activities to understand the credit flow and contribution of different lending agencies in this.

2. Material and Methods
The study is based on secondary data. The data was collected for a period of 1970-71 to 2016-17. Time series data on direct credit flow in agriculture was collected from India state website.
Also direct credit flow to lending agencies like cooperatives, regional rural banks and commercial banks was collected for agency wise trend analysis. Time series data was analyzed using compound annual growth rate using LINEST formula in MS Excel. The method for calculating Compound Growth Rate (CGR) from the log linear equation can be derived as follows-

\[ \text{CGR in percentage} = \left[ \frac{(\text{Antilog} \ b - 1) \times 10}{\text{where, Log} (1 + r) = b} \right] \]

### 3. Results

#### 3.1 Growth trend in direct credit flow in agriculture and allied activities

The compound annual growth was calculated on direct credit flow in agriculture for both short term and long term credit. The study period was divided into five sub-periods- 1970-71 to 1979-80, 1980-81 to 1989-90, 1990-91 to 1999-2000, 2000-01 to 2009-10 and 2010-11 to 2016-17. Also growth trend was calculated for whole period of 1970-71 to 2016-17. The results of the growth trend is presented in table 1 below-

**Table 1: Growth rate of direct credit flow in agriculture and allied activities 1970-71 to 2016-17**

<table>
<thead>
<tr>
<th>Sub-period</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>To 1979-70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17.0</td>
</tr>
<tr>
<td>1979-80</td>
<td>17.0</td>
<td>2.6</td>
<td>15.0</td>
<td>23.5</td>
<td>-9.5</td>
<td>15.09</td>
</tr>
</tbody>
</table>

**Source:** calculated by author from India state data.

**Note:** data only of Regional rural bank and cooperatives considered from 2014-15.

The above table reveals that the growth of credit was highest in sub period IV i.e. 23.5 percent in 2000-01 to 2009-10. A negative growth was observed in sub-period V because from 2014-15 credit flow in cooperatives and regional rural banks was only considered. The reason for high credit flow was that after 1999 loan disbursed by SCARDB and PCARDB was also included and before that only PACSs were considered. The overall growth for period from 1970-71 to 2016-17 was 15 percent indicating incremental flow of credit in agriculture sector.

#### 3.2 Agency-wise trend in direct credit flow in agriculture and allied activities

Institutional credit is given by different agencies involved in rural banking like cooperatives, regional rural banks, commercial banks, micro finance institutions etc. For study purpose, three agencies were considered- regional rural bank, cooperatives and commercial banks. The compound annual growth rate calculated for each agency is presented in table 2 below

**Table 2: Growth trend in direct credit flow in different agencies from 2000-01 to 2016-17**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cooperative</th>
<th>Regional rural bank</th>
<th>Commercial bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGR</td>
<td>14.2</td>
<td>24.4</td>
<td>23.6</td>
</tr>
</tbody>
</table>

**Source:** calculated by author from India state data.

The above table reveals that for a period of 17 years i.e. 2000-01 to 2016-17 the growth was highest in regional rural bank with a growth rate of 24.4 percent while lowest was in cooperatives i.e. 14.2 percent. This indicates that since 2000-01 more direct credit has been disbursed by regional rural bank followed by commercial banks indicating success of regional rural banks and realization of its goal to increase coverage in weaker sections of rural community.

### 4. Discussion

The study on flow of direct institutional credit in agriculture and allied activities for a period of 1970-71 to 2016-17 showed positive results. The analysis revealed that the growth rate of direct credit flow in agriculture was 15 percent in the study period indicating continuous increase in direct credit. Analysis of direct credit flow in lending agencies for a period of 2000-01 to 2016-17 revealed that the growth rate of credit flow in cooperatives was 15 percent. The growth rate was 24 percent in case of regional rural banks and 23 percent for commercial banks indicating increase in coverage of institutional loan. This indicates that regional rural banks have increased their coverage in agricultural credit more as compared to other agencies. This study indicates that the credit flow for direct loans has increased and the trend should be continued.

### 5. Conclusion

Credit availability is crucial for input availability, marketing decisions, plant protection etc. Availability of credit ensures that the requirements of farming are met on time. It also saves the farmers from exploitation by the non-institutional credit sources. These sources charge high amount of interest rates, and farmers fall in the vicious circle of debt repayment. Institutional credit is a tool to save farmers from such situation. More the coverage of institutional credit better the condition of farmers.

### 6. References