Analysis of institutional credit for dairy farming in Karnataka:
A study of Shimoga Milk Zone

KB Vedamurthy, JP Dhaka and Smita Sirohi

Received: 30 October 2014/Accepted: 26 April 2015

Abstract  Rising income and population has led to increase in demand for milk. However, with present rate of growth in dairy sector, it is not possible to reach the estimated demand. Therefore, to lift the growth to higher trajectory, there is an urgent need to increase the productivity of animals. One of the strategies which can help achieve this task is adequate institutional credit support, which enables the farmers to invest in modern technologies. In this context present study was conducted in Shimoga Milk Zone of Karnataka to examine the pattern of dairy credit disbursement recovery performance and utilization. The study found that credit extended to dairy sector was critically low in comparison with its contribution to the economy. There was 50% shortfall in achieving their set targets of credit disbursement to this sector. The recovery of the credit was also very much low in comparison to other sectors. Analysis of utilization pattern clearly brings out that large amount of credit was diverted for unproductive purposes. Therefore, the study brings out the need of strategic policy for providing higher credit to dairy sector and also monitoring of the credit for better utilization which will further lead to better recovery.

Keywords: Credit disbursement, utilisation, recovery

Introduction

Institutional credit played a very important role in the development of agricultural sector. As a result of credit, Indian agriculture has developed over time and showed all signs of resilience to natural shocks like droughts and famines. It acted as a means to provide control over resources to enable the farmers to acquire the required capital for increasing agricultural production. Credit also played an important role by facilitating technological upgradation and commercialization of agriculture. The success of Green Revolution in Indian agriculture to a large extent laid on institutional credit support to agriculture in terms of expansion in inputs like fertilizers, irrigation, private sector capital formation, etc. Institutional credit has even a greater role to play in a country like India where 80% of the farmers are small and marginal who operate 36% of the land and are unable to generate enough farm surpluses to re-invest (Sidhu and Singh, 2006).

Though India continues to be top producer of milk in the world with 137.7 million tonnes in 2012-13 (GOI, 2014a), it has to continuously improve upon the average annual growth rate (4.8%) achieved during the XI FYP (GOI, 2013a) so as to meet the future demand. The only way this can be achieved is through improving the productivity of our animals. To increase the productivity, most important tool is investment, both public and private. While government should invest in the area of research, infrastructure, breeding, etc., private investment can take care of purchase of animals, feed, veterinary care etc.

But, the government expenditure on animal husbandry and dairying has always been very low with compound annual growth rates of -2.6% since 1970-71 to 2003-04. This share in total gross capital formation in agriculture was nearly 3% in 1970s, declined to 2% during 1990s and further to 0.5% in 2000 (Dastagiri, 2010). The share of private sector investment (including household sector) in agriculture is higher and growing faster than public sector investment (Gulati and Bathala, 2002). Given that 75-80% dairy farmers belong to landless and marginal category, the substantial private household investment cannot be expected on their own. It is to be induced through quality and timely credit. But the present scenario is contrary to the expectation, where credit extended to animal husbandry and dairying is critically low with only 4-5% of the total institutional credit flowing to
Another issue which is closely related to disbursement is the repayment. Timely repayment of credit is essential for the proper functioning of the credit institution and maintaining the credit cycle. Therefore, better repayment is associated with higher disbursement. Given that milk has a well organized market under the cooperative setup and provides the year round income, higher repayment is expected in dairy sector. However, if credit is to be repaid in stipulated period, it must generate sufficient income and help in economic upliftment of the borrower households. For this to happen, it is most important to use the credit for the economic activity. On the contrary, if credit is used for unproductive purposes, the chances of borrower becoming defaulter increase. Misutilisation of agricultural credit has been quoted as one of the main reason for defaulting in repayment of loan by Pandey and Muralidharan (1977), Pradhan and Sharma (1981), Gupta et al. (1983), George et al. (1984).

By and large, studies in the past have been more elaborative on all the above issues of credit in crop sector. However, there are no comprehensive studies related to credit in animal husbandry and dairy sector. The present study would help the policy makers, administrators and the planners to formulate realistic credit policy in dairy sector to enhance milk production. In this backdrop, the present study was conducted

a) to examine the pattern of dairy credit disbursement and recovery performance in the study area, and

b) to study utilization pattern of dairy credit by sample households.

Methodology and Data

The present study was conducted in Shimoga Milk Zone(SMZ) of Karnataka, which includes three districts, namely, Davangere, Shimoga, Chitradurga. This zone was selected because it needed higher capital requirement for modernizing dairy farming and the available infrastructure to supply the credit was also higher compared to other zones (Karamathullah, 2003). The first objective uses, the secondary data regarding planned and actual disbursement and recovery of credit from District Credit Plan (DCP) documents with lead bank offices of respective districts of SMZ. The data for credit disbursement was obtained for financial year (FY) 2002 to 2008, while for recovery data was collected from FY 2001 to 2008.

The second objective was based on primary data collected from sample households through multistage sampling during July-Dec 2006. Out of three districts of SMZ, Chitradurga district was selected randomly. Two talukas, namely Chitradurga and Holalkere were again selected randomly from this district. Out of six blocks of the Chitradurgataluka, two hoblies namely, Chitradurga Kasaba and Bharamasagara were selected randomly. Similarly two hoblies, namely Holalkere Kasaba and B.Durga were selected randomly from Holalkeretaluka. Subsequently, two villages from each of the hoblies were selected randomly. Thus eight villages were finally selected for the present investigation. A complete enumeration of the eight selected villages was carried out. Then the borrowers of dairy loan were classified according to their institutional source of financing. The total sample of 160 borrowers was selected according to probability proportion to the number of borrowers from different sources. The final sample consisted of 63 borrowers from Commercial Banks (CBs), 36 borrowers from Regional Rural Banks (RRBs) and 61 borrowers from Self Help Groups (SHGs).

Results and Discussion

Disbursement of credit

Total institutional credit is mainly disbursed in three heads, namely Priority Sector (PS), Non Priority Sector (NPS) and the other non-specified. Priority Sector lending includes, lending to agriculture and allied activities, Non-Farm Sector (NFS) and Other Priority Sectors (OPS). Among priority sector, the subject of interest in this study is the agricultural and allied sector. Within agriculture, credit is extended to Crop Husbandry, Minor Irrigation, Land Development, and Farm Machinery, Plantation and Horticulture and others. In case of allied sectors, the credit is lent to Animal Husbandry, fisheries, forestry and others. Credit to Animal Husbandry includes Dairy Development, poultry farming, sheep, goatry and piggery.

During the study period, there was a two and half times rise in the total credit disbursed in the zone. The credit to PS increased three folds in this period. The credit extended to agriculture sector as a whole, also registered an increase of more than three folds. Table 1 presents the disbursement of institutional credit to crop sector, dairy sector, and all the other sectors in the agriculture taken together along with their share in total agriculture. On an average, during 2001-02 to 2007-08, out of total `9239 million extended to agriculture sector, `7139 amounting to 77% was extended to crop sector alone. In the same period, average credit extended to dairy sector was a meager, `88 million accounting for only 1% of agricultural credit. During first three years under study, the share of this sector was more than 1% which later came down under 1% except in the last year. In the FY 2006, its share was abysmally low at 0.65%.

Generally, dairying is considered to be an activity which generates family income and provides year round employment opportunity. This activity provides for uniform distribution of resources and income across the land holding categories. In
Karnataka milk alone contributes more than 10% of value of agriculture and allied output (GOI, 2013b). The zone under study, with higher female bovine population and better banking network was expected to have higher share of credit to dairy sector. However, on the contrary, the share of this sector in the credit is too little. In the wake of existing and anticipated demand for dairy products, the dairy sector needs to be strengthened with sufficient credit support. Therefore, there is an urgent need to consider a holistic view of agriculture and extend credit support to dairy sector. It assumes even greater significance in a situation where access to institutional credit by small and marginal farmers is minimal and money lender is regaining his grip in the rural credit market (NSSO, 2005).

A perusal of Table 2 reveals that within priority sector lending, the target was fully achieved under agriculture with achievement ranging from 92% to 123%. Within agriculture sector the performance in the crop sector was very impressive. Achievement was more than the target in all the years with average achievement of 119% in the period. However the performance of dairy sector was gloomy. Achievement in this sector was as low as 30% in 2006 and never reached even 75% of the target. On an average only 2% of agricultural credit was planned to be disbursed to dairy sector. Even this lower target was half achieved (52.24%). From above discussion, it may be inferred that, dairy sector was highly neglected in terms of achieving the set target. Repeated neglect of this sector in terms of institutional lending does not augur well with the objective of inclusive growth. In a way opportunity to achieve equitable and balanced growth is being missed. While credit planning is important for development of any sector, it is also more important to firmly act upon the plans to achieve the set goals.

### Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Crop Sector</th>
<th>Dairy Sector</th>
<th>Other sectors</th>
<th>Total Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>3628 (77.62)</td>
<td>49 (1.05)</td>
<td>997 (21.33)</td>
<td>4674 (100)</td>
</tr>
<tr>
<td>2002-03</td>
<td>4320 (78.01)</td>
<td>69 (1.25)</td>
<td>1149 (20.75)</td>
<td>5538 (100)</td>
</tr>
<tr>
<td>2003-04</td>
<td>4555 (80.63)</td>
<td>64 (1.13)</td>
<td>1030 (18.23)</td>
<td>5649 (100)</td>
</tr>
<tr>
<td>2004-05</td>
<td>6757 (79.21)</td>
<td>79 (0.93)</td>
<td>1694 (19.86)</td>
<td>8530 (100)</td>
</tr>
<tr>
<td>2005-06</td>
<td>8720 (74.59)</td>
<td>111 (0.95)</td>
<td>2859 (24.46)</td>
<td>11690 (100)</td>
</tr>
<tr>
<td>2006-07</td>
<td>10444 (75.70)</td>
<td>89 (0.65)</td>
<td>3263 (23.65)</td>
<td>13796 (100)</td>
</tr>
<tr>
<td>2007-08</td>
<td>11552 (78.08)</td>
<td>155 (1.05)</td>
<td>3088 (20.87)</td>
<td>14795 (100)</td>
</tr>
<tr>
<td>Average</td>
<td>7139 (77.28)</td>
<td>88 (0.95)</td>
<td>2011 (21.77)</td>
<td>9239 (100)</td>
</tr>
</tbody>
</table>

Figures in parentheses are per cent to total agricultural credit has been assessed with the existing demand and projected level of development oriented credit. Thus, under DCP the target of lending is set for each sector and then efforts are done to achieve them. An important feature of DCP since FY 2006-07 was the revision in the process of its preparation by recognizing the Potential Linked Credit Plan (PLP) of National Bank for Agriculture and Rural Development (NABARD) as the base document for rural credit planning by the RBI. It is therefore important to assess if the targets set for each sector has been achieved.

### Table 2

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Crop sector</th>
<th>Dairy sector</th>
<th>Agri.</th>
<th>NFS</th>
<th>P S</th>
<th>NPS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>118.78</td>
<td>52.24</td>
<td>105.3</td>
<td>97.5</td>
<td>105</td>
<td>114.4</td>
<td>106.46</td>
</tr>
<tr>
<td>Minimum</td>
<td>103.37</td>
<td>29.61</td>
<td>92.17</td>
<td>85.58</td>
<td>96.5</td>
<td>97.75</td>
<td>96.67</td>
</tr>
<tr>
<td>Maximum</td>
<td>134.98</td>
<td>73.91</td>
<td>123.4</td>
<td>110.13</td>
<td>114.9</td>
<td>140.95</td>
<td>117.41</td>
</tr>
</tbody>
</table>

Note: NFS-Non Farm Sector; PS Priority Sector, NPS-Non Priority Sector
Recovery of credit

Credit should not be considered as a charity or a government subsidy. Credit is a financial service given for a specified period of time as stipulated by the terms of contract. Recovery of the credit is very much crucial to maintain the credit cycle and a healthy business. Performance in terms of targeted recovery of the credit financed from all the agencies in the zone during 2000-01 to 2007-08 is presented in the table 3. On an average, recovery in the total credit disbursal was 71.89% of the target over the period of 8 years. Average recovery in the NPS (79.6%) was better than that of PS (70.48%). However, the gap in demand and recovery was increasing faster in NPS (19.8%) compared to PS (5.75%). Since credit disbursed to agriculture sector forms the larger portion in the PS lending, the recovery rate for this sector was also similar to that of PS. Like in disbursement, there was a clear contrast in recovery performance among crop and dairy sectors. While recovery in the crop sector was the highest with 77.13% ranging from 71.84 to 81.74%, for dairy sector it was one among the lowest with 47.92% recovery rate. The recovery rate in this sector was ranging from as low as 35.62% to 60.52% in different years. Given the year round income and employment generation capacity, higher recovery is expected in the dairy sector. But contrary to expectation this is the one of the sector which yields lowest recovery rate in this region.

However, on positive side, unlike in any other sectors, the gap between demand and recovery is decreasing at an average rate of 7.51% a year indicating better recovery performance in recent times.

Dairy credit utilisation

One of the major factors which decide the quantum of recovery is the utilisation pattern of the credit; the same is presented in the table 4. On an average only 36% of the credit was used...
for purchasing animals and rest was diverted. Similar observation was made by Singh (2003), where only 43% of the credit was used to purchase animals. In the present study area, remaining 64% of the credit was diverted for other uses such as lending to others at higher interest rate (12.61%), food and other consumption (10.01%), house repair (9.75%), children education (8.23%), social ceremony (8.08%) etc. Diversion of credit was highest in case of large farmers (82.88 %) followed by landless (72.72%) and small farmers (68.00%). Utilisation pattern across the agencies presented in table 5 reveals that highest diversion of credit was by SHGs (77.2%), followed by borrowers from RRBs (72.10%) and commercial banks (46.9%). The utilization pattern of SHGs show that nearly 21% of the total credit used for lending to others at higher rate of interest. Similar trend was reported by Sudarsan (2012) and Kohansal et al., (2009). They observed that micro money lending has become the livelihood option of at least some of the SHGs members. With such usages, the very purpose credit is defeated. High magnitude of diversion of credit to other purposes bound to result in lower repayment sooner than later. Therefore, there is urgent need to monitor the credit for its proper utilization, hence better repayment.

Policy Implications

The findings show that there exists a paradoxical phenomenon where a sector contributing significantly to states income and employment receives only handful of credit support. The task for policy makers is twofold. One, this growing sector should be supported through adequate credit to induce private investment and there by improve the productivity of animals and also meet the expected future demand for milk. Two, as dairy sector is dominated by landless and marginal farmers, the issue of accessibility of credit need to be closely tackled. For bankers, there is need for closer monitoring for better utilization of dairy credit so that it generates enough income and help farmer to repay the credit in time.

References

Gol, (2014a) Minutes of the meeting of technical committee of direction for improvement of animal husbandry statistics held on 24th & 25th July, 2014, Yashada, Pune, Maharashtra