Brief on
Crop credit flow in Maharashtra, India with special reference
to post rainy season sorghum

S. More, G. Basavaraj, P. Parthasarathy Rao and V. Phokarkar

INTRODUCTION
Agriculture is being increasingly recognized as a commercial activity. Modern farm technology is to a great extent capital intensive and needs more use of production prerequisites and quality inputs. Agriculture credit is thus required by farming community for various activities like land development, minor irrigation, farm mechanization and for purchase of inputs in cultivation of annual and perennial crops.

Agriculture finance means the supply of and demand for funds in agricultural sector or use of capital in agriculture. Agriculture finance/credit is said to be the lifeblood of modern farming for increasing production. To meet the credit requirement, various credit policies of the Government have ensured the flow of bank credit to be made available for financing various farm related activities in the form of short-term/long-term credit loans. The brief here looks at the various options of credit availability to farmers cultivating annual crops and more specifically with sorghum in Maharashtra.

Sorghum (Sorghum bicolor, Monch) a dual purpose crop is cultivated for its grain which is used for human consumption as well as for fodder that is used as livestock feed. Sorghum is the third most important food grain in India (Kleih). Sorghum, in India is grown both as rainy-season (kharif) crop, June to October and as post rainy season (rabi) September to February. The cultivation of the crop is concentrated in few States like Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Rajasthan which account for bulk of the area under the crop (98 percent). During 2007, the rainy-season sorghum accounted for 45 per cent of the area and 52 per cent of the production of all-India area and production while post rainy season sorghum accounted the rest i.e., 55 per cent of the area and 48 per cent of the production. The area and production of post rainy season sorghum is more specialized with only three states i.e., Maharashtra, Karnataka and Andhra Pradesh together accounting for 90 per cent of the area and 98 % production under post rainy season sorghum.

In Maharashtra, sorghum is grown mainly as rainfed crop during both the seasons i.e., Kharif and Rabi (post rainy season). Maharashtra has the highest area and production of post-rainy season sorghum in India. During 2007-08, post-rainy season sorghum was cultivated on an area of 2877 thousand hectares in Maharashtra with production of 2119 thousand tons. Productivity levels are however low at 597 kg/ha\(^1\). With in Maharashtra in Marathwada region (Jalna, Beed, Aurangabad, Lathur, Parbhani and Nanded) Rabi sorghum one is one of the major crop cultivated, and accounts for 35 per cent of area and

---

\(^1\) Higher yield of kharif sorghum of 1081 kg/ha is attributed to use of hybrids and improved cultivars grown under improved production technology.
41 per cent of production of rabi sorghum in Maharashtra. Rabi sorghum cultivated in Maharashtra is utilized primarily for food consumption because of its superior quality compared to kharif sorghum and this is reflected in its higher grain price compared to kharif sorghum. Fodder (Kadbi) obtained of rabi sorghum also fetches high price because of its palatability as livestock feed livestock.

**INPUT REQUIREMENT FOR RABI SORGHUM CULTIVATION**
Rabi sorghum cultivation generally starts during the second fortnight of September and ends in March-April. The seed to grain conversion of rabi sorghum is approximately 180 days. Seed (10 kg per hectare), farm yard manure (FYM 10-12 cartloads), NPK fertilizers (40 kgs each of N, P and K), plant protection chemicals (Endosulphan and Atrataf), irrigation (3-4 if the farmer has irrigation) and labor (human and bullock) are the major input requirement for cultivation of rabi sorghum. If required and available supplementary irrigation during acute moisture stress would help maintain its yield.

**CREDIT REQUIREMENT FOR RABI SORGHUM CULTIVATION**
Credit requirement for cultivation of rabi sorghum are the direct costs for purchasing inputs mainly seed, fertilizer and plant protection chemicals. Since rabi sorghum is an annual crop with cultivation to harvesting window of 180 days, the credit requirement for rabi sorghum is of short term.

The average cost of cultivation (cost C which includes both actual and imputed costs) of rabi sorghum in Maharashtra works out to Rs. 15,000 per hectare. (Report of cost of cultivation of scheme, 2008-09, Government of Maharashtra).

**SOURCES OF CREDIT**
Flow of agricultural credit in India is classified into institutional and non-institutional categories. The figure below presents a schematic representation of flow of credit from these two sources.

**CREDIT FLOW FOR RABI SORGHUM IN MAHARASHTRA**
Several agriculture advance scheme are available for sorghum cultivator from different institutional and non-institutional credit agencies, and a few important ones are are stated below:

A. **Short and Medium term loan**: Crop loan, produce marketing loan, Kisan credit card scheme (KCC), National agricultural insurance scheme (NAIS)
B. **Long term loan**: Agricultural term loans

**INSTITUTIONAL SOURCE COOPERATIVES**
Agriculture credit system in Maharashtra is no different from other parts of the country. Though there are many sources of credit made available, in Maharashtra, the general source of borrowing by farmers for short term credit for annual crop like rabi sorghum is primarily through co-operatives which falls under institutional credit. State level co-operative banks disburse loans to Primary Agricultural Co-operative Credit Societies (PACS) through District Central Co-operative Banks (DCC). Hence, the entire flow of
credit to the farmers depends on PACS which are linked to DCC banks which are federated to State Co-operatives Banks. The State cooperative Banks in turn gets funds for agricultural credit from National Bank for Agricultural and Rural Development (NABARD) through RBI.
A DCC bank at the beginning of the agricultural year decides on the scale of finance for agricultural and horticultural crops under its jurisdiction. The scale of finance is based on the cost of cultivation of individual crops provided by Government of Maharashtra for the period under consideration. Accordingly, for *rabi* sorghum the scale of finance is fixed at Rs. 10,000 per hectare for the agricultural year of 2010-2011. The loan is extended in the form of direct finance to farmers with a repayment period not exceeding 18 months. The loan will be given at an interest rate of 6 per cent per annum. To avail crop loan for sorghum cultivation, needy farmers may contact nearest commercial bank or primary agricultural credit cooperative society along with necessary document i.e. 8-A and 7/12 land record.

**KISAN CREDIT CARD**
State Bank group’s like SBH, SBI issues the kisan credit card to provide timely and adequate credit to farmers to meet their short term production credit needs (cultivation expenses) besides, meeting contingency expenses, and expenses related to ancillary activities through simplified procedure facilitating loan as and when required. All agriculture clients having good track record for the last two years are eligible to apply for Kisan Credit Card from commercial banks.

The credit limit of Kisan Credit Card is based on operational land holding, cropping pattern and ancillary and contingency need of farmer for the full year. The minimum credit limit is Rs. 3000 per hectare and withdrawal can be made by easy and convenient withdrawal slips. The credit is a revolving cash credit limit with any number of withdrawals and repayment, and limit is valid for three years subject to annual review. No collateral securities are required to avail loan facility. This scheme also covers personal insurance against death or permanent disability for maximum amount of Rs.50,000 and Rs.25,000 respectively.

**NATIONAL AGRICULTURAL INSURANCE SCHEME**
Scheme is available to all farmers (loanee and non-loanee) irrespective of the size of their holding. This scheme is introduced mainly to provide insurance coverage and financial support to the farmers in the event of failure of any the notified crops as a result of natural calamities, pests and diseases attack. The secondary object of the scheme is to encourage the farmers to adopt progressive farming practices, high value inputs and high technology in agriculture. It also aims to stabilize farm incomes, particularly in disaster years. General Insurance Corporation of India is the implementing agency. This scheme covers all food crops, oilseeds and annual commercial/ horticultural crops.

**NON-INSTITUTIONAL SOURCES:**
Money lenders, traders/commission agents are the major sources of credit from non-institutional category for cultivation of *rabi* sorghum. Farmers take credit from traders / commission agents and sell the produce to the same traders after harvest of the crop. Money lender also provide credit to needy sorghum cultivators at an interest rate of 24-30 per cent per annum where the scale of loan is not fixed. Credit is extended to sorghum
cultivator based on their relation and mutual understanding with money lenders. Repayment of loan is done immediately after harvest.

**OTHER FORM OF LOANS**
Credit is also available in other forms for sorghum cultivation and marketing. Produce marketing loan, National Agricultural Insurance Scheme and credit against receipt of private warehouse. In case of produce marketing loan, credit is extended in the form of direct finance to farmers with a repayment period not exceeding 18 months whereas in case of National Agricultural Insurance Scheme financial support is provided to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests and diseases attack which is implemented by General Insurance Corporation of India (GIC). The sum insured in this case may extend to the value of threshold yield and consequently production on the area insured. Credit is also extended to farmers against receipt of private warehouses and cold storage unit for a maximum period of twelve months and maximum loan limit of 10 lakhs not exceeding 65 to 80 per cent of the prevailing value of the agriculture produce stored.

**CONSTRAINTS IN AGRICULTURE CREDIT FLOW**
Some of the major drawbacks of institutional and non-institutional credit to agriculture are non availability of credit on time and insufficient credit to farmers. The drawbacks are summarized below.

- Agriculture crops are season bound and hence loans are to be disbursed before the start of the season. Because of the delay in disbursement of loan, a farmer diverts funds obtained from other crops to *rabi* crops (sorghum, chickpea and wheat) and in-turn utilizes the money obtained from selling produce of the *rabi* crop during kharif season. Because of the rotation cycle, in case of a failure of crops farmer will be put under pressure for repayment of the loan and also chances of farmer becoming defaulter is very high. Once the farmer becomes a defaulter, he will not be able to get loan renewal.

- The loan amount available for *rabi* crops like sorghum, chickpea and wheat in itself is very low as compared to high value crops like cotton, sugarcane and soyabean. The scale of finance fixed by DCC bank for *rabi* sorghum is Rs. 3000 per acre. This acts as a disincentive for farmers to apply for a loan for *rabi* crops like sorghum.

- Farmer has to declare the cropping pattern that would be followed under 7/12 record during the month of May to the revenue department for the latest agriculture year. Based on the 7/12 record, crop loans are provided by the co-operative banks. Once the farmer declares that he is going to put his area under sorghum cultivation, the loan amount to be obtained will be low which discourages farmer to put on official records that he would be cultivating sorghum. Hence, farmer officially declares on records that he is going to cultivate high value crops (cotton, soybean) and the loan obtained which is generally delayed (August – September) will be utilized for *rabi* crops.
- Apart from this, the borrower has to submit no dues from all the scheduled commercial bank existed in the region which is a time consuming process.
- Under non-institutional credit, high rate of interest is the major drawback.

**RECOMMENDATIONS TO OVERCOME THE LIMITATIONS**

- Currently farmers are issued Kisan Credit Card (KCC) valid for a period of one three years. Since the procedure for issuing KCC is lengthy, farmers can be issued KCC which is valid for a longer period.
- Increase in scale of finance for *rabi* sorghum as the current credit provided for *rabi* sorghum is too low which discourages the farmer to apply for *rabi* crop loans
- A special counter could be opened during the season in all scheduled commercial banks with special staff for quick processing of loan applications helps in timely and adequate disbursement.
- Today a lot of intra bank services are taking place with common understanding related to credit and debit activities. These type of services could be extended to agricultural activities like getting no dues information to reduce farmers burden.
<table>
<thead>
<tr>
<th>Bank</th>
<th>Application Details</th>
<th>Document Required</th>
<th>Security</th>
<th>Loan amount with interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBM</td>
<td>• 6 page application form&lt;br&gt;• Loan requirement &amp; purpose&lt;br&gt;• Land holding&lt;br&gt;• Source of income&lt;br&gt;• Land details&lt;br&gt;• Resource endowment&lt;br&gt;• Asset &amp; liabilities</td>
<td>• 7/12, 8-A, 6-D entry&lt;br&gt;• search report&lt;br&gt;• ration card &amp;photo&lt;br&gt;• bank account&lt;br&gt;• Project report&lt;br&gt;• Plan &amp; estimate for development work</td>
<td>• Primary- Crop&lt;br&gt;• Collateral- owned land</td>
<td>• Crop loan- 7% interest upto 3 lakh&lt;br&gt;• Medium term-Base rate (9.5%)+0.75= 10.25 % /annum&lt;br&gt;• Long term- base rate- 11.25 % upto 1-2 lakh&lt;br&gt;• 13% &gt;2-10 lakh&lt;br&gt;• 12% - more than 10 lakh</td>
</tr>
<tr>
<td>SBI</td>
<td>• 5-6 page application form</td>
<td>• 7/12, 8-A&lt;br&gt;• Search report&lt;br&gt;• Land holding details&lt;br&gt;• Photo &amp; address proof&lt;br&gt;• Guarantor&lt;br&gt;• Project report, plan &amp; estimate</td>
<td>NA</td>
<td>• Crop loan - 7% interest&lt;br&gt;• Medium term – 12 %&lt;br&gt;• Long term – 13 % and more</td>
</tr>
<tr>
<td>Union Bank of India</td>
<td>• 3 page application form&lt;br&gt;• Bio data of farmer&lt;br&gt;• Branch recommendation&lt;br&gt;• Request letter</td>
<td>• 7/12, 8-A&lt;br&gt;• Hypothecation of goods, crop, livestock, poultry, fishery etc&lt;br&gt;• Deed of guarantor&lt;br&gt;• Two guarantor with asset &amp; credit worthiness&lt;br&gt;• Photo with address proof&lt;br&gt;• No dues certificate&lt;br&gt;• Search report&lt;br&gt;• Bank account&lt;br&gt;• Quotations</td>
<td>• Primary Mortgage- Purpose of loan taken&lt;br&gt;• Secondary mortgage - Own land</td>
<td>• Priority sector loan&lt;br&gt;• Agriculture&lt;br&gt;• Non-agriculture&lt;br&gt;• Non-priority sector&lt;br&gt;• Direct agricultural loan&lt;br&gt;• Indirect agricultural loan</td>
</tr>
<tr>
<td>Bank</td>
<td>Application Form</td>
<td>Documents Required</td>
<td>Other Requirements</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
<td>--------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>DCCB</td>
<td>1 page</td>
<td>• Project report, plan &amp; estimate&lt;br&gt;• 7/12, 8-A&lt;br&gt;• Land holding&lt;br&gt;• Guarantor if farmer does not have land&lt;br&gt;• Project report, plan &amp; estimate&lt;br&gt;• Photo&lt;br&gt;• Quotation for machinery</td>
<td>NA</td>
<td>• Medium term – 12-13%&lt;br&gt;• Self help group – 4%</td>
</tr>
</tbody>
</table>

---

2 DCCB=District Central Cooperative Bank, SBM=State Bank of Mysore, SBI=State Bank of India