

An Analysis of Agriculture Debt and Credit Activities with Agriculture Land Use Pattern and Crop Production of Various Crops

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Abstract

Agriculture credit from Cooperative bank is a main financially incredible Support in rural area of India. There has an inter-relationship between production of crops and expenditure for farm practices. Expenditure of agriculture has depending on the flow of credit. Hence it has very interesting to find out the association between production of crops and used of credit. From the past some years it has been noticed that the rainfall consistency is not stable and varied significantly. Those fluctuation creates many problems in the agriculture during the process of generate maximum production of various crops. In various sources of credit Cooperative banks are the friendly source for farmer for to get money during uncertain rainfall. This Research paper has analyzed and determines the fluctuation in agriculture produce of various crops and their relation with financial activities by farmer. This paper has been displaying the relationship of agricultural credit supply, crop productions and land use pattern during the various years and provides the conclusions. This paper analyzing the Secondary data from 1980-81 to 2014-15

Introduction:

Agriculture is a backbone of Indian economy. As per 2011 census, about 68.8 percent of the population occupied in rural areas and depending directly or indirectly upon agriculture and agri-allied sector for their livelihood. The contribution of agriculture sector in economy is continuously declining after 1950. In 1950-51 Agricultural shares in total economy was 42.85 percent, its come down to 13.94 percent in 2014-15. But industrial and service sector are found positive progress in the economy. In 1950-51, industrial and service sector covers 11.37 and 35.48 percent share in the economy respectively. After 65 years of development in 2013-14, industrial and service sector acquired 18.70 and 67.36 percent share in the economy respectively. From the data it has indicating that the industrial and service sectors are positively increasing but Agriculture has not showing positive progress like other two sectors. On the basis of constant prices of gross domestic products agricultural compound annual growth rate (CAGR) for the 65 years are found 3.10 percent only. Besides of agriculture sector, industrial and service sectors compound annual growth rate (CAGR) remarkably indicated with the figures of 5.79 and 6.03 respectively.

Over the decades, the agricultural credit system has improved through cooperative credit societies at various levels, expansion of rural branches of commercial banks, and setting up of regional rural banks. Between 2004-05 and 2014- 15, institutional credit to agriculture increased from Rs.1,25,309crores to Rs. 8,45,328 crores, registering a compounded annual growth rate of 24 per cent. It is noteworthy that the flow of

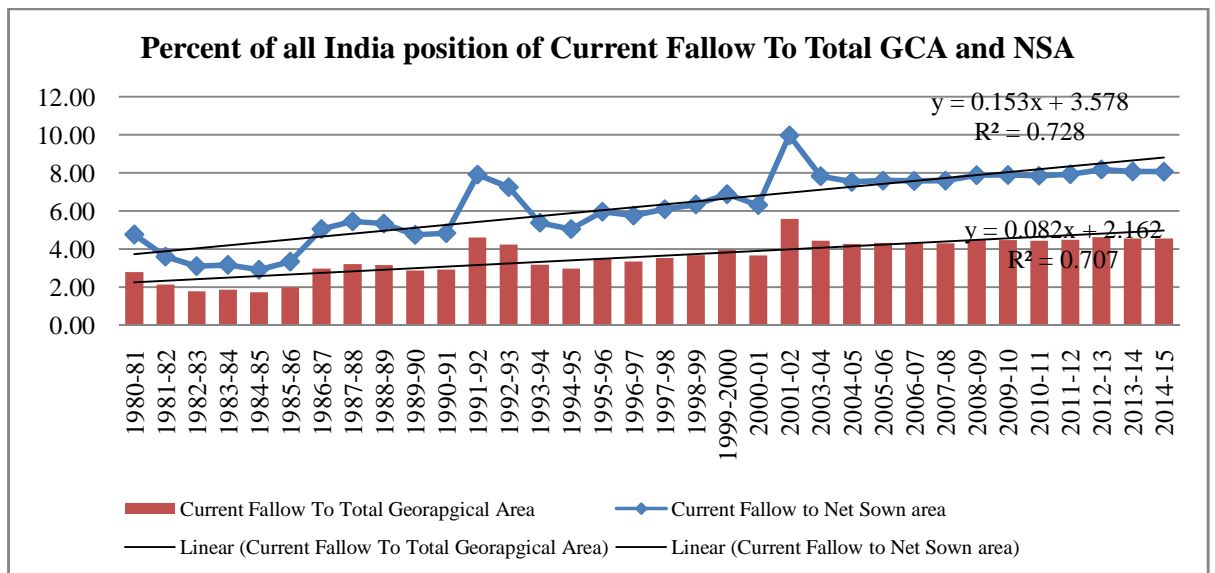
agricultural credit has not just increased over the years but has consistently exceeded the target. During 2015-16, against a target of Rs. 8,50,000crores, more than 70 per cent of the credit has been disbursed by December, 2015 (GOI)

Various articles published on the topic of cooperative credit societies and agriculture credit. Dr.S.S. Kalamkar Published an Article under a Title of “Progress of Agricultural Credit Societies in Maharashtra” and statement that The primary agricultural credit co-operative societies are considered to be the pillars of the entire cooperative **edifice**. The PACSs continue to be the main source of agricultural credit to the farmers in rural areas. D. Sudarsana Murthy, P.V. Narasaiah, B. Mohan worked on AGRICULTURAL CREDIT BY REGIONAL RURAL BANKS: AN EMPIRICAL STUDY and they suggested that The Government of India has to provide some schemes to improve the share of RRBs in agriculture credit by institutional agencies and Refinancing facility to RRBs should be made available at subsidiary interest rates by sponsoring bank and NABARD to improve agricultural credit deployment. R.V. Suganya published article under a title of A Study on Agriculture Credit by Commercial Banks in Thiruvallur District and It is suggested that investment of agricultural sector has to be improved by public sector, which has high motive level in private sector and Farmer need more time to pay their loan amount and extension of repayment period in terms of successive crop failure due to natural calamities also is required. Form these articles it has observed that the agriculture credit are a very important factor in the agriculture.

Methodology:

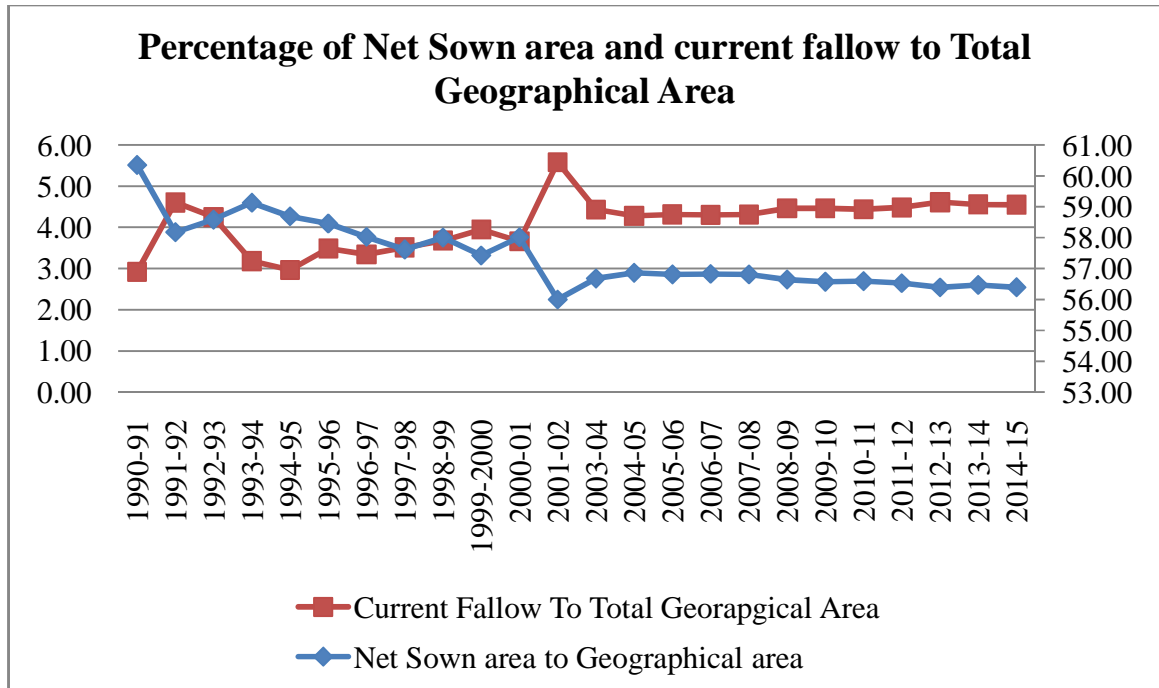
Secondary data has used for to do analysis of the topic. Data have collected from the NASCOB and Agriculture Department. Time series approach has adopted for this paper.

Data Interpretation and Results:



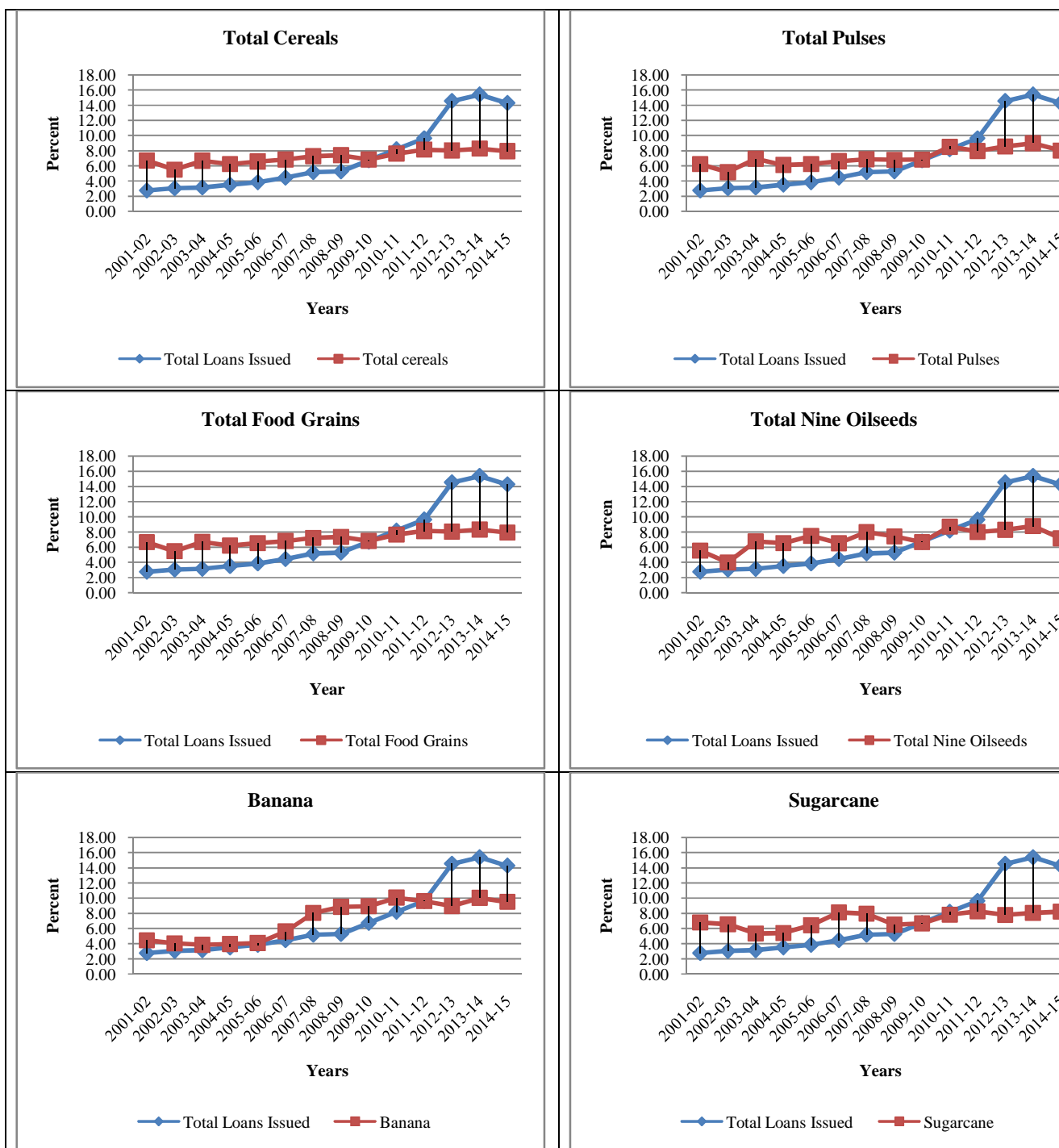
Source: secondary Data LUS pattern Ministry of Agriculture.

Geographical area cannot change ever but the sown area and current fallow land can change due to the results in fluctuation of rainfall. Sizes of current fallow lands are the one type of indications of the progress and development of agriculture. Above graphical presentation are indicating the percent of current fallow to net sown area and geographical area. Current fallow to geographical area was 2.79 in 1980-81 it has become almost double in 2014-15 with a percent of 8.07. Same like that current fallow to geographical area was 2.79 percent it has increased to 4.55 percent in 2014-15. It means that Fallow land has increasing but not in significant rate.



Above graph are indicating the relation between current fallow and geographical area. It has been indicating that the current fallow and the sown area has inverse relationship. In 1990-91 Net sown area to geographical area was 60.36 percent which come down to 56.39 percent. In 1990-91 current fallow to geographical area was 2.92 percent which has increased to 4.55 percent.

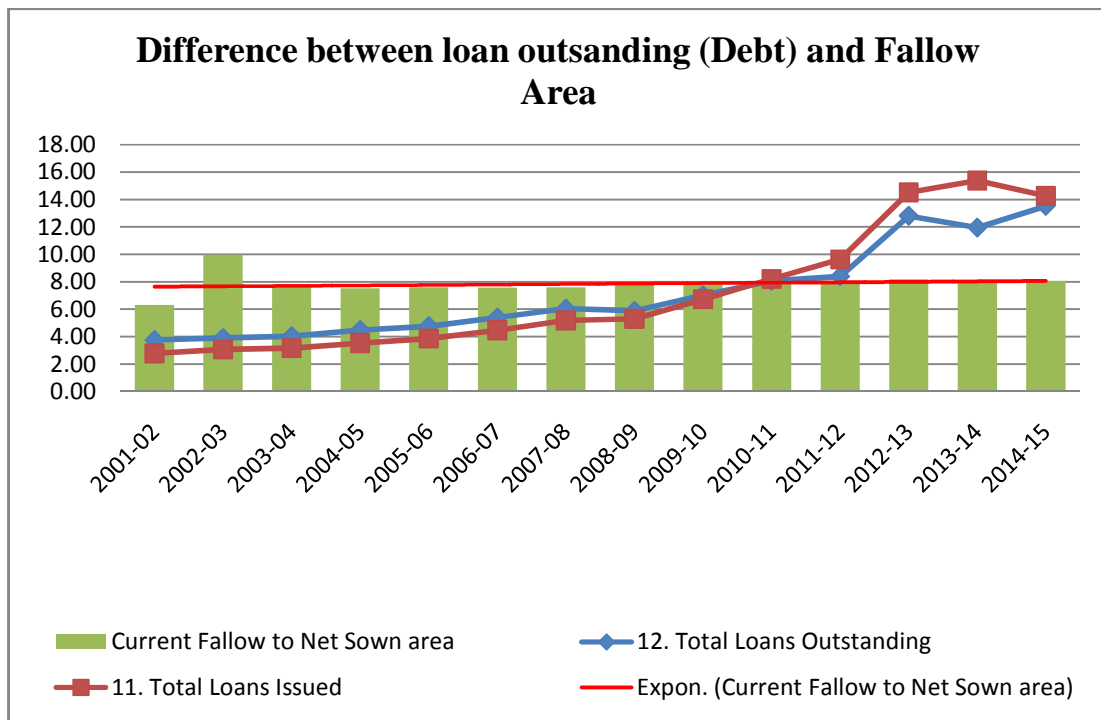
Year wise trend of issued of loans and production of various crops in annual percent share with 2001-02 to 2014-15



Source: Loan issued NABSCOB and Production. Directorate of Economics and Statistics, Ministry of Agriculture

Above graphical presentation are indicating the movements of issued agricultural loan and the production of various crops. It has been indicating that the production is not changed as like as the variation in loans movement during the years of 2001-02 to 2014-15. Production of various crops from agriculture is not fluctuating as much as compare to loans provided to farmer. It has noted that the demand for loanable funds are increasing but the agricultural production are not increasing as like as loanable funds improvement.

It has found that after 2010-11 movements in loanable funds has been varying significantly than production of various crops. It has been concluding that the farmer is demanding more loans to bank for to complete need of agricultural financial activities.



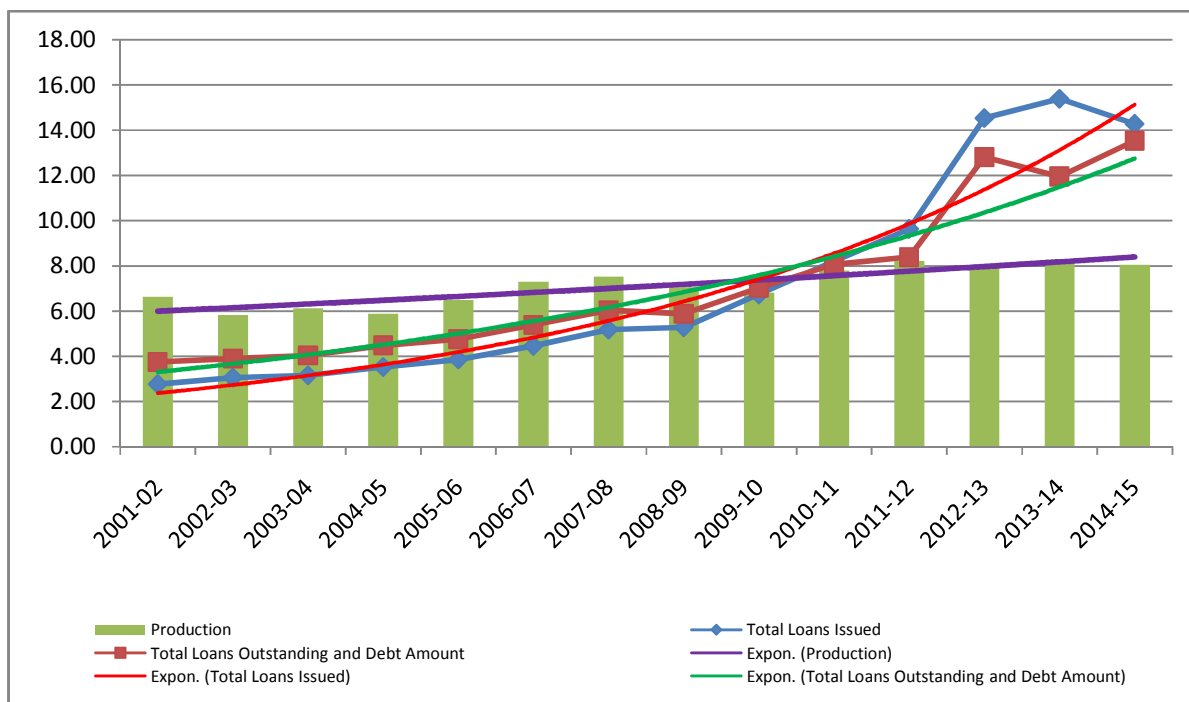
Above graphical presentation are indicating the fluctuations between financial and agricultural activities. It has been indicating that the total loan issued and total outstanding are increasing but the ratio of current fallow to net area sown are not varying. During recent years agricultural input cost are increasing. So demands for loanable funds are also increasing. Farmer is not interested to keep their land as a fallow land due to shortage of funds or increasing input cost of agriculture only. They are approaching to banks for more funds for to complete needs of agri- inputs. This graph has been indicating that fallow land is not increasing significantly but loan outstanding are increasing. It means farmer are cultivating agriculture constantly but due to increasing cost of cultivation and less market price for produce of agriculture, borrowed amount cannot repay to banks by farmer.

Year wise Percent share of Total Loan Issued, Debt Amount and Overall Production of the Agriculture Crops of India

	Total Loans Issued	Total Loans Outstanding and Debt Amount	Production
2001-02	2.76	3.75	6.64
2002-03	3.05	3.90	5.83
2003-04	3.15	4.03	6.11
2004-05	3.52	4.48	5.89
2005-06	3.85	4.76	6.49
2006-07	4.45	5.39	7.30
2007-08	5.17	6.03	7.53
2008-09	5.28	5.89	7.05
2009-10	6.73	7.03	6.82
2010-11	8.20	8.07	7.80
2011-12	9.63	8.39	8.21
2012-13	14.53	12.81	8.01
2013-14	15.39	11.95	8.27
2014-15	14.28	13.53	8.05
	100.00	100.00	100.00
Exponential Growth Rate	14.26	10.38	2.59
Variance	20.87599	11.44972	0.750118

Table number 1 has indicating the exponential growth rate and percent share about financial activities and overall agricultural production of India. In 2001-02, the total loan issued, total debt and productions share was 2.76, 3.75 and 6.64 percent which has increased to 14.28, 13.53 and 8.05 respectively. Variance indicates the fluctuation in the data, highest variance found about to the total loans issued with percentage of 20.87. Debt amount carries variances value of 11.45 percent (it has indicating that the activities of loan issues are more than the debt amount.). Productions variances are very less which is found with 0.75 percent. Here is a need to improve the agriculture production.

Year wise Trend of Total Loan Issued, Debt Amount and Overall Production of the Agriculture Crops of India



Above graph are indicating the trend in the production, total loan issued and debt amount. It has been remarking that the loan issues trend are increasing with total loans outstanding. Year wise data are indicating that the total debt amount was greater than the amount of loan issued but this situation has changed after 2009-10. After 2009-10 total debt amount became less compare to the amount of issued loans, due to increases supply of funds through loans.

Conclusion:

- Recent year’s inflation has increasing rapidly and beside of that input cost is also increasing for agriculture.
- Production in agriculture is not increasing significantly. There are some crops which are showing improvement for per hector production due to use of HYV seeds, pesticides and fertilizer. Side by side demands for loanable funds are also increasing.
- Cooperative Banks are providing loans to farm practices but profit from the agricultural marketed produce are less so profit is less and so farmer is not able to repay the borrowed amount to bank.
- Many research reports are indicated that main reason behind less profit from agricultural marketed produce is that the per quintal market price is less than the expected price but the cost of cultivation are not decreasing.

- It has negative sign in agriculture development that the Fallow lands are slightly increasing in Geographical area and Net sown area. There is an inverse relationship between Net sown area and current fallow it means if current fallow increases then the Net sown area are decreasing.
- After study of relation between provided loan amount and production it has discovered that the demand for loanable funds has been increasing but the production not increasing.
- Current fallow are slightly increasing in the Net sown area but loan outstanding or Debt amount significantly increases.
- Exponential Growth Rate of issued loans has higher than the Loans outstanding it means cooperative banks are focusing to provide loans in agriculture. Debt amounts exponential growth are increases during 2001-02 to 2014-15 with 10.38 percent are a sign of poor return from agriculture to cooperative banks due to productions exponential growth rate of 0.75 percent only.
- Trend of issued loans and outstanding loanable amounts are increasing with compare to the agriculture production status. Here government has need to approach to development policy for agricultural improvement of production and returns about to marketed output.
- Though the government has provided debt waive and relief scheme for agriculture but it has sort time solution only. For a long time government should provide permanent scheme for agriculture profit surety.
- A large number of farmers have under of 1 ha. Holding. and many of them approach to co-operative societies for loanable funds for agriculture. Those farmers are mainly dependent on agriculture. So if they don't get good market price for their agriculture produce then they cannot survive agriculture economy for long time as well as cooperative banks also.

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