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## Research Paper

## Agricultural Policy and NPA Ratio in Maharashtra: An Analytical Study

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ABSTRACT	Manuscript Info.
<p>This study is based on the agricultural policies in Maharashtra and their impact on NPA levels. The NPA trend is analysed by studying agricultural loans, crop loans, and term loans in the state over a decade period of 2015–2024. The main reasons for the financial instability of farmers were found to be dependence on monsoon, fluctuations in market prices, wrong expectations based on loan waivers, management errors, and incomplete insurance coverage. The study found that loan waivers, interest subsidies, irrigation schemes, and insurance schemes have provided short-term relief, but long-term stability has not been achieved yet. The NPA level has been increasing steadily, especially during 2015–2020, while there has been some stability during 2020–24. The study concluded that ensuring production stability, encouraging regular loan disbursements, increasing financial literacy, expanding irrigation facilities and water conservation, and effective implementation of policies are necessary. These measures will improve the financial stability of farmers and keep the NPA ratio on agricultural loans in Maharashtra under control in the long term.</p>	<p>✓ <b>ISSN No:</b> 2584- 184X  ✓ <b>Received:</b> 06-08-2025  ✓ <b>Accepted:</b> 26-09-2025  ✓ <b>Published:</b> 30-10-2025  ✓ <b>MRR:3(10):2025;40-46</b>  ✓ <b>©2025, All Rights Reserved.</b>  ✓ <b>Peer Review Process:</b> Yes  ✓ <b>Plagiarism Checked:</b> Yes</p>
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**KEYWORDS:** Agricultural Policy, NPA, Loan Waiver Scheme, Crop Loan, Irrigation and Water Conservation, Financial Literacy, Maharashtra, Production Stability, Insurance Scheme, Market Management.

## INTRODUCTION

The agricultural sector has a very strong and decisive foundation in the structure of the Indian economy. Agriculture is the source of livelihood for a large section of the population. The major contribution of the agricultural sector in rural India is to provide employment, food grain production, and raw materials for the industrial sector. Maharashtra is an economically important state in India, and its agricultural system has developed based on various geographical, climatic, and economic factors. Sugarcane, cotton, soybean, pulses, vegetables, and horticultural crops are produced on a large scale in the state. The major features of the agricultural sector in the state are rain-fed agriculture, limited irrigation facilities, seasonality of crops, and price fluctuations. Due to the uncertainty of the monsoon, there is no stability in production, which directly affects the income of farmers. Due to both instability in income and risk of production, farmers have to turn to banking and financial institutions to meet their capital requirements. A large amount of credit is required for seasonal expenses, seeds, fertilizers, medicines, labor, machinery, and water management.

The role of credit supply is very important for the rural economy. But in the last few years, due to difficulties in loan repayment, the proportion of non-performing assets (NPAs) has been increasing. Non-repayment of agricultural loans on time, crop damage, fall in production prices, decrease in market demand, or natural disasters all affect the financial condition of farmers. As a result, agricultural loan arrears increase, and the financial condition of banking institutions weakens. There is a strain on the rural credit system.

On the other hand, various agricultural policies are implemented by the government to support farmers. These policies include direct cash assistance schemes, subsidies, irrigation schemes, insurance schemes, guaranteed price schemes, as well as loan waiver schemes. For example, the PM-Kisan scheme launched by the Government of India provides direct financial assistance to farmers. The purpose of loan waiver schemes implemented by the state government at various times is to provide financial relief to farmers. But it is important to examine how these policies impact NPA levels. While loan waivers provide immediate relief, they can sometimes lead to apathy among farmers towards repayment. Limited irrigation facilities and dependence on monsoons have been a constant challenge for farmers in Maharashtra. In addition, factors such as crop insurance, marketing difficulties, and climate change make farmers financially vulnerable. In such a context, it is important to understand the effectiveness of agricultural policies not only in terms of subsidies but also in how they affect the economic behavior of farmers and the health of financial institutions.

Farmers need loans to meet production costs, and if these loans are not repaid on time, the NPA level increases. Rising NPA levels can pose a serious threat to the banking system and rural development. Rising NPAs increase the risk of financial

institutions, reduce the supply of new credit, and ultimately slow down the flow of the rural economy.

The NPA level in the state of Maharashtra has increased in the last few years, and there are various reasons behind it. Natural disasters, decline in crop prices, market uncertainty, delays in policy implementation, and limited infrastructure are contributing factors. Along with this, policies like loan waivers have some negative impact on the repayment culture.

While designing agricultural policies, it is necessary to strike a balance between directly benefiting farmers and not increasing the financial burden on financial institutions. Therefore, it is very important to study the interrelationship between these two factors, agricultural policies and NPA rate. This will enable policymakers to design more effective fiscal and agricultural policies.

This study will enable a comprehensive study of the effectiveness of agricultural policies in Maharashtra, the economic reasons behind the increase in NPA, and the financial behavior of farmers. The main objective of the research is to understand how agricultural policies have affected rural fiscal discipline and the NPA rate. This study will allow policymakers to suggest long-term solutions.

Some important questions arise in this regard:

- What is the impact of agricultural policies on the repayment capacity of farmers?
- Did loan waivers and subsidy schemes reduce or increase the NPA rate?
- Is the implementation of policies effective?
- How do NPAs affect credit supply by financial institutions?

## 2. OBJECTIVES OF THE STUDY

- 1) To provide a brief overview of agricultural policies in Maharashtra.
- 2) To understand the chronological flow of agricultural credit and NPA in the state.
- 3) To analyse the impact of agricultural policies on NPA levels.
- 4) To make policy suggestions.

### 3.1. Study Period

The period for the study has been set as 2015–2024. The implementation of agricultural policies in Maharashtra has been extensive during this decade. Also, changes in farmers' borrowing, repayment, and NPA rates have been observed during this period. Using data during this period, it is possible to understand long-term trends, the impact of policy changes, and changes in the economic situation in the state.

### 3.2. Data Sources

The following reliable and authoritative sources have been used for the study:

## 1. Reserve Bank of India – State-wise NPA Data

- RBI publishes state-wise NPA data every year.
- It includes the distribution of loans in the banking sector, the NPA amount, and the percentage changes in NPA.
- Using this data, farmers' loan repayment difficulties and NPA flow in the state can be studied.

## 2. Ministry of Agriculture & Farmers Welfare (MOA & FW)

- Annual reports of the Ministry of Agriculture, Government of India, detailing policies, subsidy schemes, loan waivers, and the PM-Kisan scheme.
- This data provides details on crop credit distribution, interest subsidy, insurance schemes, and scheme implementation.

## 3. Government of Maharashtra – Agriculture Department Report

- Provides data on district-wise agricultural production, irrigation facilities, crop income, implementation of policies, and the financial condition of farmers in the state.
- This allows for analysis of financial transactions and credit distribution in the state.

## 4. Economic Survey of Maharashtra

- Provides a review of the state's economic situation, farm income, irrigation facilities, crop prices, and other economic factors.
- This data sheds light on the impact of policies and the economic reasons behind the increase in NPAs.

## 5. NABARD Reports

- Reports published by NABARD provide information on the rural financial system, credit distribution, arrears trends, and NPAs.
- It provides details on the credit arrangements of banking institutions and the impact of policies.

### 3.3. Analytical Methods

#### Descriptive Analysis has been used for this study. Descriptive Analysis:

- Changes in NPA rate, trends in loan disbursement, and the impact of policies are reviewed.
- Comparative analysis can be done by preparing tables, charts, and graphs of the changes over the years.
- This analysis provides a comprehensive overview of the repayment capacity of farmers, the impact of loan waiver policies, and the impact on financial institutions.

#### 3.3.1. Tables and Charts

- Line Charts: To show the changes in NPA rate over the years.
- Bar Charts: To compare the district-wise or crop-wise loan disbursement and NPA rate.
- Tables: To present the results of policies in concise statistics.

#### 3.3.2. Comparative Analysis

- To see whether there has been a change in the NPA rate after the implementation of policies.
- To study the differences in NPA rate across different districts or crops.
- To understand how the policy plan has impacted the economic condition of farmers.

### 3.4. Data Reliability and Limitations

#### Reliability:

- All data has been collected from official sources (RBI, NABARD, Economic Survey, Agriculture Department).
- The data can be trusted as these sources are reputable.

#### Limitations:

- Since it is secondary data, the experience of farmers is not included.
- Some figures may be slightly outdated as the data has not been updated in some districts.
- The impact of the policies has been analyzed only from an economic perspective; social, cultural, or psychological factors are not included.

## 4. Review of Agricultural Policies in Maharashtra

The agricultural policies implemented by the state and central governments in Maharashtra aim to increase farmers' production, secure income, improve irrigation and water management, and reduce financial stress. These policies are intended to have a positive impact on the rural economy. Below is a detailed review of the major policies in Maharashtra:

### 4.1. Crop Loans and Interest Subsidy

- The state government provides interest subsidies to farmers to provide loans at low interest rates. This subsidy directly reduces the financial burden on farmers.
- Interest subsidy makes it easier for farmers to get loans for crop expenses, seeds, fertilizers, pesticides, machinery, and labor.
- The introduction of the online application process has made loan disbursement more transparent, faster, and more convenient.
- Farmers working on large areas can also get the required capital due to an increase in the loan limit.

### Result

- Low interest rate helps to sustain the income of farmers.
- The possibility of timely loan repayment increases, which reduces the NPA rate to some extent.

### 4.2. Loan Waiver Schemes

- Chhatrapati Shivaji Maharaj Shetkari Sanman Yojana (2017)
- Under this scheme, loans of farmers up to a certain amount were waived off. The objective was to provide relief to farmers who were financially distressed due to natural calamities or market downturns.

- Mahatma Jyotirao Phule Karj Mukti Yojana (2019)
- The main objective of this scheme was to provide financial stability to low-income farmers by providing debt relief.

#### Impact

- These schemes provide immediate relief to farmers, but in the long term, there is a possibility of creating a depression in loan repayment.
- There is a slight reduction in NPA levels after the implementation of the scheme, but the impact on sustainable financial discipline may be reduced.

#### 4.3. Irrigation and Water Conservation

- The state government has focused on developing the irrigation sector through schemes like Jal Yukt Shivar Abhiyan.
- Long-term water conservation and increasing rainwater harvesting are coordinated with farmers.
- Water management schemes are implemented to reduce farmers' dependence on rainfall, which leads to stability in production.

#### Results

- Improved irrigation increases crop production, reduces risk, and stabilizes income.
- Increased income improves loan repayment capacity, which directly impacts the NPA rate.

#### 4.4. Market Management and Insurance Schemes

##### 1. Pradhan Mantri Fasal Bima Yojana (PMFBY)

This scheme ensures farmers' crops, which provide compensation in case of natural calamities or market downturn.

- **Minimum Support Price (MSP) policies and agricultural produce marketing reforms**

Year	Total Agricultural Loan (₹ crore)	NPA Amount (₹ crore)	NPA Ratio (%)
2015–16	78,450	6,872	8.76
2016–17	85,320	7,940	9.30
2017–18	91,120	9,385	10.30
2018–19	97,560	10,410	10.67
2019–20	1,02,300	11,980	11.71
2020–21	1,09,870	13,220	12.03
2021–22	1,18,420	13,590	11.47
2022–23	1,25,800	14,230	11.31
2023–24	1,33,500	14,870	11.14

#### 5.1. Observations

##### 1. 2015–2020:

- NPA ratio has increased steadily during this period.
- While the NPA ratio was 8.76% in 2015–16, it reached 11.71% in 2019–20.
- Main reasons behind the increase: Uncertain crop production, dependence on monsoon, fall in market prices, and financial transaction errors.

##### 2. After 2020–21:

- The MSP policy provides a minimum selling price to farmers.
- Improved market management stabilizes income and reduces debt burden on farmers.

#### Impact:

- Insurance and MSP schemes have a positive impact on the financial stability of farmers.
- Income protection increases the likelihood of loan repayment, which has a direct impact on the NPA rate.

#### 4.5. Overall impact of policies

- These policies aim to stabilize the income source of farmers, reduce production risk, and reduce financial stress.
- Crop loans, loan waivers, irrigation schemes, insurance schemes, and market management all together have a positive impact on the financial situation of farmers.
- These measures improve the ability of farmers to repay loans and keep the NPA rate under control.

#### Key observations:

- The impact of policies can be seen from a straightforward economic perspective, but their effective implementation, district-wide variations, crop-wise variations, and the social conditions of farmers also need to be considered.

#### 5. Trends in Agricultural NPA Ratio in Maharashtra (2015–2024)

The data on agricultural loans and related NPA ratios in Maharashtra allow for an in-depth analysis of changes over the years. The table below shows the NPA ratio (in percentage) based on crop loans and term loans from 2015–16 to 2023–24.

- NPA ratio shows stability, slightly decreasing from 12% to 11.14% (2023–24).
- Loan waiver schemes of the Central and State Governments (Chhatrapati Shivaji Maharaj Shetkari Sanman Yojana, Mahatma Jyotirao Phule Karj Mukti Yojana) were implemented during this period.
- However, the expected reduction in the ratio has not been observed, which indicates that loan waiver alone is not a sufficient measure.

### 3. Impact of loan waivers and policies:

- There has been no long-term reduction in the NPA ratio even after the loan waiver schemes.
- Reasons for this: apathy towards loan repayment among some farmers, uncertainty of income due to production risk, as well as fundamental problems in the banking system.

### 4. Production stability and financial stress:

- Policies such as irrigation, insurance, and MSP have tried to bring stability to production.
- The expected reduction in NPA levels is still not visible; this suggests that effective implementation of policies, farmers' financial transactions, and marketing arrangements needs to be considered holistically.

### 5.2. Analytical Perspective

- The trend in NPA levels shows that farmers' loan repayment capacity was decreasing during 2015–2020.
- Some stabilization is seen after 2020, but NPA levels are still high in the long term (around 11–12%).
- Policy measures (loan waiver, interest subsidy, insurance, irrigation schemes) have some positive impact on NPAs, but emphasis on financial training, marketing reforms, and farmers' financial awareness is needed to ensure long-term stability.
- A district-wise or crop-wise comparative analysis of NPAs can provide more in-depth conclusions, which will lead to more effective policy decisions.

### 5.3. Summary

The agricultural NPA ratio in Maharashtra has increased steadily between 2015–2020, clearly indicating the difficulties faced by farmers in repaying their loans. Although there has been some stabilization in the NPA ratio during 2020–24, the expected reduction has not yet been seen. This indicates that loan waiver alone is not enough; a holistic approach to achieving sustainable improvement is required, including production stability, farmers' financial literacy, market reforms, and policy implementation. It will be important to take further policy decisions based on these data and observations.

### 6. Causes of Rising NPAs

There are several economic, environmental, and managerial reasons behind the increase in NPAs on agricultural loans in Maharashtra. A detailed review of the main reasons is given below:

#### 6.1. Dependence on Monsoon

- Most of the agriculture in Maharashtra is dependent on the monsoon, especially in Vidarbha, Marathwada, and some districts of Konkan.
- Uncertainty in rainfall, late onset, or sudden crop failure due to heavy rains directly affects the income of farmers.
- Due to dependence on rainfall, farmers face difficulties in repaying loans in some years, which results in rising NPAs.

#### 6.2. Fluctuations in Market Prices

- Despite the Minimum Support Price (MSP), the problem is that farmers actually get a price lower than the MSP in the market.
- Uncertainty in market prices, broken supply chains, and supply-demand imbalance led to large fluctuations in income.
- If income decreases, farmers are unable to repay loans on time, which increases NPA.

#### 6.3. Loan Waiver Mentality

- Frequent loan waiver schemes have created a perception among some farmers that they will get waivers again in the future.
- This can make non-repayment of loans on time normal.
- This hurts long-term fiscal discipline, and NPA levels remain high.

#### 6.4. Management Inefficiencies

- The recovery mechanism of cooperative societies and banks is weak in some districts.
- Loan disbursement, monitoring of repayment, and a late warning mechanism are not effective.
- Such management inefficiencies do not allow timely recovery of loans and increase NPA levels.

#### 6.5. Incomplete Insurance Coverage

- Insurance schemes like Pradhan Mantri Fasal Bima Yojana provide some compensation, but there is a problem of delayed or inadequate compensation.
- If insurance coverage is incomplete, farmers' income is not secured, and they face difficulties in repaying loans.
- The direct impact of the insurance scheme is limited to reducing NPA.

#### 6.6. Other Economic and Social Factors

- While the cost of agricultural production is increasing, income growth is not as expected.
- Loan repayment is delayed due to farmers' borrowing habits, financial stress in the family, and limited employment options.
- Immaturity in financial transactions and lack of financial literacy also contribute to the increase in NPA.

### 7. Impact of Agricultural Policies on NPA Levels

The impact of agricultural policies in Maharashtra on NPA levels is mixed. Some improvement in the financial condition of farmers is seen due to loan waivers, interest subsidies, irrigation, insurance, and market reform schemes implemented by the state and central governments, but long-term stability is not yet fully achieved.



## 7.1. Positive Impacts

### 1. Short-term Financial Relief

- The loan waiver scheme reduces the temporary financial burden on farmers.
- The number of defaulters temporarily decreases, and the pressure on banking institutions is reduced.

### 2. Loan Accessibility and Interest Subsidy

- Farmers get the necessary capital to grow their crops due to the availability of loans at low interest rates.
- It helps in purchasing necessary tools, fertilizers, seeds, and machinery to increase production.

### 3. Irrigation and Water Conservation

- Jalyukt Shivar Abhiyan and other water conservation schemes have stabilized production in some districts.
- Stability in production improves the ability of farmers to repay loans, which directly affects the reduction of NPAs.

## 7.2. Negative Impacts

### 1. Decline in Repayment Discipline

- Due to frequent loan waiver schemes, some farmers assume that they will get waivers again in the future.
- As a result, regular loan repayments are avoided, and the NPA ratio remains high.

### 2. Uneven Policy Impact

- Irrigation and water conservation schemes have not reached all districts.
- While production has stabilised in some districts, other areas are more dependent on rainfall and production.

### 3. Production and Market Risks

- Despite MSP and insurance schemes, income remains volatile due to market price fluctuations and incomplete insurance coverage.
- Income uncertainty affects loan repayment, which does not reduce NPA.

## 7.3. Mixed Outcome

- Short-term fiscal relief and production stability come with positive outcomes, but the impact of long-term fiscal discipline and policies is not uniform across the board, leading to high NPA ratios.
- The impact of policy measures appears to be positive in certain districts and crops, but further improvements are needed to achieve state-wide stability.

## 7.4 Conclusion

- Loan waivers, interest subsidies, and irrigation schemes have provided temporary relief to farmers, but effective implementation of policies, production stability, financial

literacy, and market reforms are required to achieve long-term sustainability.

- Monetary measures alone are not enough to reduce NPA levels; improving managerial capacity, strategic planning, and financial discipline of farmers is also required.

## 8. Policy Recommendations

The following policy measures are suggested to reduce NPA on agricultural loans in Maharashtra and to monitor the financial stability of farmers:

### 8.1. Incentives for Timely Repayment

- Additional subsidy, interest subvention, or other financial benefits should be given to farmers who repay their loans regularly.
- This will develop a mentality of timely repayment among farmers.
- The number of defaulters will be reduced, and the NPA ratio will be controlled.

### 8.2. Risk Management over Loan Waivers

- Strong insurance schemes should be implemented instead of frequent loan waivers.
- A Minimum Price Guarantee system should be developed to reduce production risk.
- Income protection should be ensured by implementing crop insurance, microinsurance, or sector-wise risk management policies.
  - This can maintain long-term fiscal discipline and reduce the NPA ratio.

### 8.3. Expansion of Irrigation Facilities

- Irrigation facilities should be expanded in dry and low rainfall areas.
- Water conservation and water management will bring stability in production, which will improve loan repayment capacity.
- Schemes like Jalyukt Shivar Abhiyan need to be implemented more comprehensively and district-wise.

### 8.4. Financial Literacy and Awareness

- Farmers should be trained on banking transactions, loan management, the importance of interest rates, and insurance schemes.
- Increasing financial literacy will ensure loan discipline among farmers and increase the tendency to repay on time.
- Improvement in the decision-making capacity of farmers will lead to long-term NPA control.

### 8.5. Improvement in Data Management

- Digital platforms and e-financing systems should be used for NPA tracking.
- Banks and cooperatives should update data on time, and also keep a constant watch on loan disbursement, repayment, and arrears.

- Policy decisions can be made more effective through data analysis.

#### 8.6. Market and Price Stabilisation

- Farmers should get fair prices in the market through the effective implementation of MSP policies.
- Rural market reforms, agricultural cooperatives, and direct sales systems should be developed for product marketing.
- Market stability will reduce income uncertainty and help reduce NPA.

#### 8.7. Holistic Approach

- Financial measures alone are not enough to reduce NPA; a holistic approach is required to consider production stability, financial literacy, water conservation, market management, and managerial capacity.
- If policies are implemented together, the financial condition of farmers will improve, and the NPA rate will be controlled in the long term.

### CONCLUSION

Although the agriculture sector in Maharashtra has achieved significant growth in production and crop diversity in the last decade, the expected improvement in the financial discipline of farmers has not been achieved. The agricultural policies of the state and central governments have helped farmers to some extent and have provided short-term financial relief, but the NPA rate is still at an alarming level.

The main reasons behind this are volatility in crop yields, a wrong mindset based on frequent loan waivers, uncertainty in market prices, incomplete insurance coverage, as well as ineffective implementation of some policy measures. All these factors affect the regular loan repayment capacity of farmers and keep the NPA level high.

As a long-term solution, it is essential to ensure stability of production, encourage regular loan repayments, increase financial literacy, expand irrigation and water conservation schemes, improve market management, and implement policies coherently and comprehensively. Such measures will strengthen fiscal discipline in the state, improve the financial condition of farmers, and keep the NPA rate under control in the long term.

This study clearly shows that holistic coordination of agricultural policies and financial management is necessary for sustainable economic stability, and further policy decisions based on it can be more effective.

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