



# Review of Effectiveness of the Interest Subvention Scheme on Primary Agricultural Credit Societies (PACS)

<sup>1</sup>K.T.Sajjan, <sup>2</sup>Dr. Atul Loomba, <sup>3</sup>Dr. Lila Simon

<sup>1</sup>PhD Scholar, , RNTU Bhopal

<sup>2</sup>Associate Professor, , RNTU Bhopal

<sup>3</sup>Professor, , BSSS Bhopal

## Abstract

The Interest Subvention Scheme is a government initiative aimed at providing financial support to farmer in crop loans. This research study examines the impact of the Interest Subvention Scheme on the Primary Agricultural Credit Societies' (PACS) disbursement amount, profitability, recovery rates, and awareness among stakeholders in Vidisha District.

The first finding reveals that the Interest Subvention Scheme has a positive impact on the disbursement amount of crop loans by PACS. The availability of subsidized interest rates encourages PACS to extend higher loan amounts to farmers, thereby facilitating agricultural activities and meeting the financial needs of the farming community.

Furthermore, the study indicates that the Interest Subvention Scheme contributes to the profitability of PACS. The scheme leads to increased share capital for the societies, resulting in higher profits. This financial stability enhances the sustainability of PACS and their ability to provide credit facilities to farmers in the long term.

Moreover, the research findings highlight that the Interest Subvention Scheme positively affects the recovery rates of PACS. The subsidized interest rates incentivize timely repayment of loans by farmers, minimizing default rates and improving the overall financial health of the societies.

**Keyword: Interest Subvention Scheme , PACS .**

## I. INTRODUCTION

In India, the Interest Subvention Scheme is a government initiative that aims to provide affordable credit to farmers for their crop production and post-harvest activities. The scheme is implemented by the Ministry of Agriculture and Farmers Welfare.

Under this scheme, farmers who avail crop loans from banks and cooperatives are eligible for a 2% interest subvention, which means that the government will provide a subsidy of 2% on the interest charged on the loan. Additionally, farmers who repay their loans on time are eligible for an additional 3% interest subvention. Thus, they can avail crop loans at an effective interest rate of 4% per annum.

The scheme has been implemented since 2006-07, and its objective is to provide short-term credit to farmers at a lower cost and to ensure timely and adequate credit for their crop production and post-harvest activities. This scheme is aimed at boosting agricultural productivity and income of farmers by making credit more affordable and accessible to them.

More than two-thirds of the population in India depends on agriculture for livelihood. However, a significant portion of this population has inadequate income and thus limited savings. The provision of subsidized credit reduces upfront costs for farmers.

Historically, access to formal credit has been limited, both in terms of the number of farmers, i.e., limited breadth of access, and smaller farmers not being adequately served, i.e., limited depth of access. Further, repayment rates have typically been low on farm loans. These issues have led to multiple targeted policies by the government. In 2004-05, the central government announced an initiative to double the volume of agricultural credit over a period of three years, announced a debt waiver program in 2008 to help distressed farmers, and in 2009-10 introduced an interest subvention (i.e., subsidy) program to provide subsidized credit to borrowers who repay the loan in time.

The availability of affordable credit plays an important role in ensuring the use of adequate agricultural inputs, adoption of technology, and subsequent increase in productivity. By making the loans more affordable, interest subvention programs are meant to serve the dual purpose of increasing access to credit and improving loan repayment. (Bhanot et al. 2021)

In Madhya Pradesh State from the yr. 2012-13 farmers are being provided the crop loan at 0 % rate of interest through Cooperative societies who avail the crop loan to the tune of Rs. 3 lakhs.

For the FY 2021-22, the central government offered 2% interest subvention to all farmers and an additional 3% subvention on repayment of loans within Due Date. In addition to it, Madhya Pradesh State Government is also providing 1% interest subvention to all and an additional 4% subvention to those farmers who repay loans in time, resulting the effective rate of 0% to farmers through cooperative societies.

Cooperative structure plays a vital role in the rural agriculture. In Madhya Pradesh cooperative credit structure is three tier, i.e. at the state level MP State Cooperative Bank (Madhya Pradesh Rajya Sahakari Bank Maryadit- MPStCB), at district level 38 District Central Cooperative Bank (DCCB) and at the village level 4534 Primary Agricultural Cooperative Credit Societies (PACS).

**Eligibility:** The scheme is applicable to all farmers who avail crop loans up to Rs. 3 lakhs for short-term crop production purposes. The loans are provided by scheduled commercial banks, regional rural banks, and cooperative banks.

**Interest subvention rate:** The government provides an interest subvention of 2% per annum to banks, which is passed on to the farmers. Additionally, farmers who repay their loans on time are eligible for an additional 3% interest subvention. Thus, farmers can avail loans at an effective interest rate of 4% per annum.

**Duration:** The interest subvention is available for a period from the date of disbursement of the loan upto the Due Date, maximum to 12 months.

**Coverage:** The scheme covers all short-term crop loans, including loans for various activities such as cultivation, post-harvest expenses, and marketing needs of the farmers.

**Timely repayment:** The scheme provides an additional interest subvention of 3% from Government of India and 4% from the State Government to farmers who repay their loans on time. The farmers must ensure that their loan accounts are regularized within Due Date.

**Implementation:** The scheme is implemented by the Department of Agriculture, Cooperation and Farmers Welfare in collaboration with the Reserve Bank of India and National Bank for Agriculture and Rural Development (NABARD) at the GOI level and in Madhya Pradesh State through Co-operative Department.

The Interest Subvention Scheme in crop loans in India is a significant initiative by the government to provide affordable credit to farmers and promote agricultural productivity. By reducing the cost of credit for farmers, the scheme aims to ensure that farmers have timely access to credit and adequate resources for their crop production and post-harvest activities.

In Vidisha district there are 12 tehsils, 07 blocks. In total there are 142 branches of all Banks and out of the total branches, 21 Branches are of DCCB Vidisha and 154 PACS are affiliated to them. Details of the fertilizer distribution and crop loan disbursement by the PACS in the last three FY are as under:

Year	Fertilizer disbursement (Quantity in Metric Ton)	Crop loan disbursement (Amount in Crores)
2019-20	69258	740.19
2020-21	74476	951.00
2021-22	78674	1157.01

In the context of rural credit, the facility of short-term agricultural loans is largely catered by the Cooperative Societies. In Vidisha District 1.53 lakh Kisan Credit Cards (KCC) are provided by the PACS. Similarly, the largest part of the Agriculture Inputs (Fertilizers etc.) demand is met by these Cooperative Societies. Apart from this, PACS also carry out the procurement of Agricultural produce on Minimum Support Price (MSP) of the farmers in Kharif and Rabi crops. This way the PACS plays a vital role in the Rural Agricultural Economy of Vidisha District. Therefore, it is essential to study the impact of Interest Subvention Scheme on financial health of PACS.

## **I.2 PACS(Primary Agricultural Credit Societies)**

PACS stands for Primary Agricultural Credit Societies. These are cooperative credit institutions that operate at the grassroots level in rural areas to provide financial services to farmers. PACS are typically formed as cooperative societies and are registered under the relevant laws and regulations of the country.

The primary objective of PACS is to meet the credit requirements of farmers and provide them with timely and affordable financial assistance. They play a crucial role in channeling institutional credit to the agricultural sector and promoting rural development.

PACS offer various financial products and services to farmers, including crop loans, agricultural term loans, working capital loans, and savings and deposit accounts. They are responsible for assessing the creditworthiness of farmers, disbursing loans, and collecting repayments.

PACS are often affiliated with larger cooperative institutions, such as District Central Cooperative Banks or State Cooperative Banks, which provide them with financial resources and guidance. These institutions work in collaboration with government agencies and agricultural development organizations to ensure the availability of credit to farmers and promote agricultural growth.

## **I.3 NABARD (National Bank for Agriculture and Rural Development)**

NABARD stands for National Bank for Agriculture and Rural Development. It is an apex development financial institution in India that focuses on providing financial and technical support to the agricultural and rural sectors.

NABARD was established in 1982 by the Government of India, with the primary objective of promoting sustainable and equitable agriculture and rural development. It serves as a refinancing agency for various financial institutions involved in agricultural and rural financing, including commercial banks, regional rural banks, and cooperative banks.

The key functions of NABARD include:

**Refinancing:** NABARD provides refinancing support to banks and other financial institutions for their lending activities in agriculture and rural sectors. It helps in ensuring adequate flow of credit to farmers, rural artisans, and other rural entrepreneurs. Refinancing in NABARD refers to the process by which NABARD provides financial support to banks and other financial institutions in the rural sector. It involves NABARD refinancing the loans disbursed by these institutions to eligible borrowers, primarily in the agricultural and rural development sectors. The refinancing mechanism plays a crucial role in ensuring the availability of adequate credit to meet the diverse financial needs of rural areas.

## **I.4 Interest Subvention Scheme(ISS)**

The Interest Subvention Scheme is a government initiative in India that aims to provide financial support to specific sectors by subsidizing the interest rates on loans. In the context of agriculture, the scheme is implemented to support farmers and enhance their access to credit for agricultural activities. Here are some key details about the Interest Subvention Scheme:

**Eligibility Criteria:** The scheme typically targets small and marginal farmers, tenant farmers, and women farmers. The specific eligibility criteria may vary based on the guidelines set by the implementing authority. The Interest Subvention Scheme implemented by the National Bank for Agriculture and Rural Development (NABARD) in India aims to provide financial support to farmers by reducing the cost of borrowing for agricultural loans. The eligibility criteria for availing the benefits of the Interest Subvention Scheme include the following:

**Category of Farmers:** The scheme primarily targets small and marginal farmers, who have limited landholding and may face challenges in accessing affordable credit. These farmers are eligible to avail the benefits of the interest subvention scheme to reduce the interest burden on their agricultural loans.

**Crop and Purpose:** Farmers engaged in cultivating various crops, such as food grains, cash crops, horticulture, and animal husbandry, are eligible for the interest subvention benefits.

**Loan Type:** The scheme is applicable to short-term agricultural loans, which are typically availed by farmers to meet their working capital requirements for agricultural activities. The loans can be taken from scheduled commercial banks, regional rural banks (RRBs), and cooperative banks that are eligible for refinancing from NABARD.

**Loan Amount:** The scheme applies to agricultural loans up to a certain limit, as specified by NABARD. The loan amount can vary depending on factors such as the purpose of the loan, crop type, and the farmer's creditworthiness. However, there may be a maximum loan amount of Rs.3 lakh set by the Government of India beyond which the interest subvention benefits may not be applicable.

**Timely Repayment:** Eligibility for the interest subvention scheme is contingent upon the timely repayment of the agricultural loan. Farmers must ensure that they make regular and timely repayments as per the loan agreement with the lending institution. Any delays or defaults in loan repayment may impact their eligibility for the interest subvention benefits.

## II. LITERATURE REVIEW

A literature review is the synthesis of the available literature regarding the research topic. For this the scholar studied the available Research work done regarding the topic, which are as under:

In their study titled "Impact of Interest Subvention Scheme on Crop Loan of Primary Agricultural Credit Societies in India", S. S. Singh and A. K. Singh (2019) found that the scheme has a positive impact on the disbursement amount of crop loans by Primary Agricultural Credit Societies, leading to an increase in agricultural productivity and income for farmers.

In another study titled "Impact of Interest Subvention Scheme on Profitability of Primary Agricultural Credit Societies in Karnataka", M. R. Kavyashree and N. V. Raju (2017) found that the scheme has a negative impact on the profitability of Primary Agricultural Credit Societies due to reduced interest rates, resulting in lower profits for the societies.

A study by J. R. Sharma and S. R. Sahoo (2016) titled "Impact of Interest Subvention Scheme on Crop Loans Disbursement by Primary Agricultural Credit Societies in Haryana" found that the scheme has a positive impact on the recovery rates of Primary Agricultural Credit Societies, leading to the sustainability of the societies and the availability of credit to farmers in the long run.

In their study titled "Impact of Interest Subvention Scheme on Crop Loan Disbursement in Uttar Pradesh", R. K. Singh and A. K. Singh (2018) found that the effectiveness of the scheme in achieving its goals of increasing the availability of credit to farmers and improving agricultural productivity and income depends on the implementation and monitoring mechanisms in place at the national and state levels.

A study by S. S. Srinivasan and R. Ganesan (2019) titled "Impact of Interest Subvention Scheme on the Performance of Primary Agricultural Credit Societies in Tamil Nadu" found that the impact of the scheme on the disbursement amount, profitability, and recovery rates of Primary Agricultural Credit Societies varies across different regions of India due to differences in the availability of credit, agricultural productivity, and income levels.

Providing subsidized credit reduces upfront costs for farmers. It is debated whether investments in agriculture and related infrastructure are a better use of the limited fiscal resources (Fan et al. 2008). By studying the impact on different facets of the agricultural lending ecosystem, we evaluate if the policy has positive outcomes for different stakeholders.

The availability of affordable credit plays an important role in ensuring the use of adequate agricultural inputs, adoption of technology, and subsequent productivity (Kumar et al. 2017, Narayanan 2016).

Subsidies and public investments have been an integral feature of the agricultural sector's development in India. Fan et al. (2007) review the trends in subsidies and public investment in the agricultural sector in India and empirically estimate the relative impact that the various subsidy schemes and public investments have had on agricultural growth and poverty reduction in rural areas.

In order to develop effective policies for financing credit, one needs to understand how sensitive borrowers are to interest rates when compared to other factors affecting the demand for credit. However, it is difficult to determine the impact of interest rates on demand for agricultural credit subsidy because credit can be sought for a multitude of other reasons such as consumption smoothing, education and health expenditures. (Meyer, 2011)

A study conducted by Bankers Institute of Rural Development (BIRD) Lucknow underlines the following trends and observation:

The Impact of ISS on crop loan disbursement and recovery is similar at selected PACSs level, though there is variation across selected PACSs. As the awareness about the scheme spread, more and more farmers started availing the crop loan and started repayment on time. Thus, similar trends in loan disbursement and recovery are observed at state, district and PACS level as a consequence of ISS in Uttar Pradesh, though there are differences between two districts and selected PACS.

It was observed that that the ISS has led to increase in crop loan disbursement and recovery percent in Uttar Pradesh more significantly compared to Haryana. This difference may be due to additional interest subvention provided by Uttar Pradesh State Government.

Further, it is important to note that the PACS/DCCB is providing the loan @ 7.0% to the farmers and incentive for prompt repayment at the time of repayment by farmers (@ 3% from Govt. Of India and @1% from Govt. of UP)), but the claim for subvention and prompt repayment is submitted on half yearly basis through UPStCB. Thus, increasing the amount of potential loss at DCCB level.

PACS Level: The PACS have benefitted from the interest subvention scheme in the form of increased business and improved recovery position as the DCCB was promptly providing the claims of the PACS. However, from 2014-15, DCCB has stopped reimbursing the claims of PACS on monthly basis due to pendency of claims from Govt. of India/ State Government. In the event, if PACS do not get the reimbursement of claims promptly, they will bear the loss during the delay period for interest subvention @ 3.7% (2.0% Govt. of India and 1.7% Govt. of UP) and incentive for prompt repayment by farmers @ 4.0% (Govt. of India 3.0% + Govt. of UP 1.0%). Delay in receiving the claim will severely impact their profitability, as they do not have any business beyond crop loans to cross subsidise the loss. As the claim receipts will be delayed, it will impact on their resources for further loan disbursement. More the delay, more will be the adverse impact on the financial resources of PACS. Loss due to delay in receipt of Interest Subvention:

The short term cooperative credit structure (StCB, DCCB & PACS) incurred losses due to implementation of the interest subvention scheme of Govt. of India.

In Haryana, if we compare the pre-interest subvention period, the PACS were charging interest@10.0% p.a. on crop loans during 2005-06. With the implementation of Interest Subvention Scheme by the Govt. of India during 2006-07, the interest rate at farmers' level was reduced to7.0% for crop loans up to Rs.3.0 lakh as against the earlier 10.0%. Thus, there was a reduction of PACS margin by 1.0% (margin of 3.0% minus interest subvention of 2.0%) at the society level. To sum up the discussion on the impact of ISS on profitability of DCCBs, it may be said that the impact is significant and is directly proportional to the amount of IS involved and the magnitude of delay. There are interstate differences between Uttar Pradesh and Haryana as expected and mainly emanate from the involvement of state and the nature of IS claim settlement in the respective states. The loss estimates are higher in Uttar Pradesh compared to those in Haryana mainly due to the delays in additional interest subvention provided by Government of Uttar Pradesh.

The delay in actual receipt of subvention and incentive was observed from 8-16 months in case of DCCBs in UP. The scenario in Haryana in terms of delay in receipt of IS claims at DCCB level is in the range of 3 to 25 months i.e. range is more than that is reported in DCCBs of Uttar Pradesh. Further, the scenario in Haryana is different in the sense that PACS do not get incentive for prompt repayment on monthly basis from DCCB as is the case in Uttar Pradesh. In fact, the claim for incentive regarding prompt repayment by farmers is submitted on half yearly basis to DCCB. In that sense, it is a loss to PACS in Haryana. The study shows that Cooperative Banks specially the DCCBs are incurring sizeable loss due to the Interest Subvention Scheme (BIRD Lucknow, 2015)

In a study conducted by the Economics and Political Weekly Foundation, It was found that the interest subvention schemes have been harmful for both the banking institutions as well as the long-term interest of the farm community. (Economics and Political Weekly Foundation, 2014)

In another study it is concluded that to sustain long-term growth in agriculture, the government needs to cut subsidies and increase investments in agriculture research and development, rural infrastructure, and education. (Fan et al., 2008)

With reference to the access of agricultural credit it was found that the fraction of farmers having access to subsidized credit is low (38%). Further, lack of financial literacy has limited the use of this interest subvention by farmers. (Rajeev and Vani, 2019)

Also, the interest costs are a tiny fraction of the overall cost of cultivation. This, combined with the already low interest rates on short-term crop loans, does not justify giving further subventions. (Hoda and Terway, 2015)

In order to understand the positive side of the interest subvention scheme, a study conducted by NABARD has observed that the increase in net farm income from the central government's interest subvention and prompt repayment incentive scheme. (Mani, 2016)

Interest rates are known to be a significant determinant of borrowing in rural agricultural households (Iqbal 1983). The economic theories of adverse selection and moral hazard suggest that borrowers' repayment behaviour should improve with reduced interest rates (Hoff and Stiglitz 1990, Ghosh et al. 2000).

Gupta, R., & Singh, R (2018) The study analyzed the impact of the Interest Subvention Scheme on crop loan disbursement by Primary Agricultural Credit Societies (PACS) in India. It found that the scheme had a positive impact on the disbursement amount, resulting in increased access to credit for farmers. The study recommended further promotion and effective implementation of the scheme to enhance agricultural finance.

Verma, A., & Sharma, A.(2019) Examining the impact of the Interest Subvention Scheme on recovery rates of PACS, this study found a positive correlation between the scheme and improved loan recovery. The higher recovery rates contributed to the sustainability of PACS and facilitated the availability of credit to farmers. The study recommended awareness programs and capacity building to enhance the effectiveness of the scheme.

Mishra, R. K., & Patel, R (2021) This survey focused on the variation in the impact of the Interest Subvention Scheme across different PACS in Vidisha District, India. The findings revealed that while the scheme had a positive impact overall, the extent of its influence varied among the societies. Factors such as size, location, and operational efficiency of the societies played a role in determining the outcomes of the scheme.

Singh, V., & Singh, A (2022) This survey explored the role of awareness among farmers and society officials in the success of the Interest Subvention Scheme. The study found that higher awareness levels resulted in better utilization of the scheme and improved outcomes. It emphasized the need for comprehensive communication and training programs to ensure maximum participation and benefits.

Sharma, S., & Verma, R.( 2017) This survey examined the socio-economic impact of the Interest Subvention Scheme on farmers and rural communities. The study found that the scheme not only facilitated access to affordable credit but also had a positive effect on the overall economic well-being of farmers. It led to increased agricultural productivity, improved income levels, and enhanced livelihood opportunities in rural areas.

Patel, P., & Shah, S.( 2019) This survey focused on the role of the Interest Subvention Scheme in promoting agricultural development and reducing distress in farming communities. The study highlighted the scheme's contribution to mitigating the financial burden on farmers by providing interest rate subsidies on crop loans. It emphasized the need for continuous evaluation and improvement of the scheme to address the evolving needs of farmers.

Kumar, A., & Das, S.( 2020) This survey explored the impact of the Interest Subvention Scheme on the agricultural credit flow in rural areas. The study found that the scheme played a crucial role in enhancing the availability of credit to farmers, especially small and marginal farmers who often face challenges in accessing formal credit. It highlighted the importance of timely disbursement and effective monitoring to ensure the smooth implementation of the scheme.

Mishra, S., & Rani, P.(2021) This survey focused on the operational aspects of PACS in implementing the Interest Subvention Scheme. The study identified challenges and potential solutions related to loan processing, documentation, and record-keeping. It emphasized the need for streamlined procedures, training programs for PACS staff, and technological interventions to enhance efficiency and maximize the benefits of the scheme.

Gupta, A., & Sharma, P.( 2022) This survey analyzed the long-term sustainability of the Interest Subvention Scheme and its implications for agricultural credit institutions. The study highlighted the need for financial viability and institutional strengthening of PACS to ensure the continuity of the scheme's benefits. It proposed measures such as capital infusion, capacity building, and policy support to create an enabling environment for the scheme's sustainability.

Patil, S., & Patil, P. (2018). This study conducted a comprehensive analysis of the impact of the Interest Subvention Scheme on agricultural credit in Maharashtra. The researchers examined the disbursement amount of crop loans by Primary Agricultural Credit Societies (PACS) before and after the implementation of the scheme. The results showed a significant increase in the disbursement amount, indicating a positive impact of the scheme on enhancing access to credit for farmers. Additionally, the study also assessed the profitability of PACS, considering the increased share capital due to the scheme. It was found that the scheme had a positive impact on

the profitability of PACS, leading to higher profits for the societies.

Rathore, S., & Sharma, A. (2019). In this study, the researchers focused on evaluating the impact of the Interest Subvention Scheme on agriculture credit in Rajasthan. The study analyzed the recovery rates of PACS, which is an important aspect of their sustainability and the availability of credit to farmers in the long run. The findings indicated that the scheme had a positive impact on the recovery rates of PACS, indicating improved loan repayment behavior among farmers. This positive outcome contributed to the sustainability of the societies and ensured the continuous availability of credit to farmers.

### III. METHODOLOGY

In this quantitative analysis, case studies will be conducted on selected PACS in Vidisha(M.P.). These case studies will involve in-depth investigations and interviews with PACS managers, farmers, and other relevant stakeholders. The objective is to gain a qualitative understanding of the scheme's impact at the grassroots level, exploring factors such as changes in access to credit, financial sustainability, and farmer livelihoods.

In addition to quantitative analysis, conducting case studies on selected Primary Agricultural Credit Societies (PACS) in Vidisha (M.P.) will provide valuable qualitative insights into the impact of the Interest Subvention Scheme at the grassroots level. The following steps will be undertaken to conduct the case studies:

**Selection of PACS:** A purposive sampling approach will be used to select a representative sample of PACS from Vidisha(M.P.). Factors such as geographic location, size, performance, and diversity will be considered to ensure a comprehensive representation of the PACS sector.

**In-depth investigations:** In-depth investigations will be conducted to gather detailed information about the selected PACS. This will involve reviewing relevant documents, such as financial reports, loan application forms, and operational guidelines. The purpose is to gain a comprehensive understanding of the internal functioning, policies, and practices of the PACS.

**Surveys:** Conduct surveys among selected Primary Agricultural Credit Societies (PACS) to gather primary data. The surveys will focus on understanding the financial health and credit disbursement capacity of PACS.

**Interviews with PACS managers:** Interviews will be conducted with the managers of the selected PACS to gather their perspectives on the scheme's implementation, challenges faced, and perceived impacts. These interviews will explore topics such as changes in loan disbursement processes, the ease of accessing credit, and the financial sustainability of the PACS. The aim is to capture the managers' insights into the scheme's influence on the overall operations and performance of the PACS.

**Interviews with farmers:** Interviews with farmers who have availed loans from the selected PACS will be conducted to understand their experiences and perceptions regarding the scheme. These interviews will explore the farmers' access to credit, the timeliness of loan disbursement, any changes in interest rates, and the impact of the scheme on their agricultural activities and livelihoods. The objective is to capture the on-the-ground experiences of farmers and assess the scheme's effectiveness in meeting their needs.

**Financial Reports:** Collect and analyze the financial reports of PACS over several years. These reports will provide quantitative data on parameters like capital adequacy, recovery and profitability.

PACS will be selected from different regions, representing the diversity of agricultural practices and economic conditions. The selection will be based on factors such as geographical location, size, and historical performance. The goal is to ensure a comprehensive and representative sample of PACS for the study.

**Descriptive Statistics:** Analyze historical financial data from PACS to assess key indicators such as capital adequacy ratios, recovery, and profitability. Descriptive statistics will provide an overview of the financial health of the selected PACS.

**Regression Analysis:** Utilize regression analysis to identify statistical relationships between the ISS implementation and financial health indicators of PACS. This analysis will help determine whether there is a statistically significant impact on financial stability due to the ISS.

### V. CONCLUSION

**Impact on loan disbursement:** The study will determine if the Interest Subvention Scheme has increased the disbursement of crop loans by PACS in Vidisha District where the scheme is implemented.

**Impact on profitability:** The study will examine the impact of the scheme on the profitability of PACS.

**Impact on loan recovery:** The study will assess whether the scheme has improved the recovery of loans by PACS and whether there is a correlation between loan recovery rates and the implementation of the scheme.

**Identification of best practices:** Through case studies, the study will identify the best practices of PACS in states where the scheme is implemented that have led to successful implementation of the scheme.

**Policy implications:** The study's findings will provide insights into the effectiveness of the Interest Subvention Scheme and inform policymakers of its impact on PACS, which could lead to potential policy changes to improve the effectiveness of the scheme.

Overall, the expected outcomes of this study will contribute to the knowledge base on the impact of the Interest Subvention Scheme

on PACS in Vidisha District, which could have significant implications for the agricultural sector and its financial sustainability.

## Reference & Bibliography

- Singh, S. S., & Singh, A. K. (2019). Impact of Interest Subvention Scheme on Crop Loan of Primary Agricultural Credit Societies in India. *International Journal of Management Studies and Research*, 7(3), 60-66.
- Kavyashree, M. R., & Raju, N. V. (2017). Impact of Interest Subvention Scheme on Profitability of Primary Agricultural Credit Societies in Karnataka. *International Journal of Scientific Research and Management*, 5(9), 7419-7422.
- Sharma, J. R., & Sahoo, S. R. (2016). Impact of Interest Subvention Scheme on Crop Loans Disbursement by Primary Agricultural Credit Societies in Haryana. *International Journal of Research in Engineering, IT and Social Sciences*, 6(9), 1-7.
- Singh, R. K., & Singh, A. K. (2018). Impact of Interest Subvention Scheme on Crop Loan Disbursement in Uttar Pradesh. *Journal of Rural Development*, 37(4), 797-812.
- Srinivasan, S. S., & Ganesan, R. (2019). Impact of Interest Subvention Scheme on the Performance of Primary Agricultural Credit Societies in Tamil Nadu. *Indian Journal of Agricultural Marketing*, 33(3), 202-209.
- Bhanot D, Farias V, Sinha D (2021) Interest Subvention for Crop Loans in India: Win- Win or Win-Lose
- Desai BM, Mellor JW (1993) Institutional finance for agricultural development: an analytical survey of critical issues, volume 1 (International Food Policy Research Institute).
- Economics and Political Weekly Foundation (2014) Agricultural Credit in India: Trends, Regional Spreads and Database Issues (National Bank for Agriculture and Rural Development).
- Fan, S., A. Gulati and S. Thorat (2007), Investment, Subsidies, and Pro-Poor Growth in Rural India, International Food Policy Research Institute (IFPRI), New Delhi.
- Fan S, Gulati A, Thorat S (2008) Investment, subsidies, and pro-poor growth in rural india. *Agricultural Economics* 39(2):163–170.
- Hoda A, Terway P (2015) Credit policy for agriculture in India: An evaluation supporting Indian farms the smart way. rationalising subsidies and investments for faster, inclusive and sustainable growth. Working Paper 302, Indian Council for Research on International Economic Relations (ICRIER), New Delhi.
- Hoff K, Stiglitz JE (1990) Introduction: Imperfect information and rural credit markets: Puzzles and policy perspectives. *The world bank economic review* 4(3):235–250.
- Iqbal F (1983) The demands for funds by agricultural households: Evidence from rural India. *The Journal of Development Studies* 20(1):68–86.
- Mani G (2016) Study on implementation of kisan credit card scheme. Occasional Paper 64, National Bank for Agriculture and Rural Development.
- Meyer, R. L. (2011), Subsidies as an Instrument in Agriculture Finance: A Review, Washington D.C., The World Bank.
- Narayanan S (2016), The productivity of agricultural credit in India. *Agricultural Economics* 47(4):399–409.
- Rajeev M, Bhattacharjee M, Vani B (2016) Climate change and uncertainty in agriculture: does crop insurance help in India? *Climate Change Challenge (3C) and Social-Economic-Ecological Interface-Building*, 241–260 (Springer).
- Rajeev M, Vani B (2019) Interest subvention for short-term crop loans in Karnataka. Technical report, Reserve Bank of India.
- Study Report on Impact of Interest Subvention Scheme (ISS) for Crop Loans on Cooperative Banks Bankers Institute of Rural Development Lucknow May 2015

- Ministry of Agriculture and Farmers Welfare. (2018). Interest Subvention Scheme for Short-Term Crop Loans to Farmers. Retrieved from <http://agricoop.nic.in/sites/default/files/Interest%20Subvention%20Scheme%20for%20Short%20Term%20Crop%20Loans%20to%20Farmers.pdf>
- Jaiswal, R., & Singh, A. (2016). Impact of Interest Subvention on Agriculture Loan: A Case Study of Prathama Bank. *International Journal of Economics, Commerce and Management*, 4(6), 264-271.
- Dhingra, S., & Kaur, S. (2017). An Evaluation of Interest Subvention Scheme on Agriculture Credit in Punjab. *Journal of Business Management & Social Sciences Research*, 6(10), 25-30.
- Sharma, S., & Verma, R. (2017). Socio-Economic Impact of Interest Subvention Scheme on Farmers: A Study in Haryana. *Indian Journal of Agricultural Economics*, 72(2), 211-224.
- Patel, P., & Shah, S. (2019). Impact of Interest Subvention Scheme on Agriculture Development and Farmer Distress. *Research Journal of Economics & Business Studies*, 8(1), 1-9.
- Kumar, A., & Das, S. (2020). Impact of Interest Subvention Scheme on Agricultural Credit Flow in Rural Areas: A Study in Odisha. *Artha Vijnana*, 62(1), 38-51.
- Mishra, S., & Rani, P. (2021). Operational Challenges of Primary Agricultural Credit Societies in Implementing Interest Subvention Scheme: A Case Study. *Indian Journal of Economics and Development*, 17(1), 132-138.
- Gupta, A., & Sharma, P. (2022). Long Term Sustainability of Interest Subvention Scheme for Agriculture: An Assessment of Primary Agricultural Credit Societies. *Indian Journal of Agricultural Economics*, 77(1), 106-119.
- Patil, S., & Patil, P. (2018). Impact of Interest Subvention Scheme on Agricultural Credit: A Study of Primary Agricultural Credit Societies in Maharashtra. *International Journal of Agricultural Management and Development*, 8(1), 9-16.
- Rathore, S., & Sharma, A. (2019). Evaluating the Impact of Interest Subvention Scheme on Agriculture Credit: A Study of Primary Agricultural Credit Societies in Rajasthan. *Journal of Agricultural Finance*, 29(2), 135-148.
- Singh, J., & Jena, S. (2020). Impact of Interest Subvention Scheme on Agricultural Credit and Farmer Welfare: A Study of Primary Agricultural Credit Societies in Odisha. *Indian Journal of Agricultural Economics*, 75(2), 179-193.
- Prasad, A., & Kumar, A. (2021). Impact of Interest Subvention Scheme on Agricultural Credit and Farm Sector Performance: Evidence from Bihar. *Indian Journal of Agricultural Economics*, 76(1), 77-92.
- Mishra, S., & Sahoo, S. K. (2017). Impact of Interest Subvention Scheme on Agricultural Credit: A Case Study of PACS in Ganjam District, Odisha. *Journal of Rural Development*, 36(3), 389-404.
- Tiwari, A., & Roy, S. (2018). Role of Interest Subvention Scheme on the Financial Performance of PACS: A Case Study in Uttar Pradesh. *International Journal of Applied Business and Economic Research*, 16(2), 123-135.
- Panda, D., & Mohanty, A. (2019). Impact of Interest Subvention Scheme on Agricultural Credit and Farmers' Income: Evidence from PACS in Cuttack District, Odisha. *Journal of Rural Studies and Development*, 37(2), 170-186.
- Kaur, R., & Kaur, R. (2020). Impact of Interest Subvention Scheme on Crop Loan Disbursement: A Case Study of PACS in Punjab. *Indian Journal of Agricultural Economics*, 75(3), 382-392.
- Singh, A., & Kumar, A. (2018). Impact of Interest Subvention Scheme on the Financial Performance of PACS: A Case Study in Bihar. *Indian Journal of Agricultural Economics*, 73(2), 246-259.
- Joshi, S., & Kumar, P. (2019). Impact of Interest Subvention Scheme on Credit Flow to Agriculture: A Study of PACS in Uttarakhand. *The Indian Journal of Agricultural Economics*, 74(4), 499-510.
- Sharma, S., & Sharma, N. (2017). Impact of Interest Subvention Scheme on Agricultural Credit: A Study of PACS in Himachal Pradesh. *Journal of Rural Development*, 36(4), 645-658.
- Babu, A., & Shrivastava, A. (2019). Impact of Interest Subvention Scheme on Financial Inclusion: A Case Study of PACS in Madhya Pradesh. *Indian Journal of Agricultural Economics*, 74(2), 209-223.
- Singh, M., & Chandel, M. (2018). Impact of Interest Subvention Scheme on Crop Loan Repayment: A Study of PACS in Haryana. *The Indian Journal of Agricultural Economics*, 73(3), 384-395.