



An analytical Study on the Status and Problems of Sugarcane Marketing in Uttar Pradesh (With special reference to Pilibhit District)

Sachin Yadav^{1*}

¹*Department of Economics (S.R.T. Campus, Tehri), HNB Garhwal University, Uttarakhand*

*Corresponding Author: sachinyadav111993@gmail.com

Received: 8.9.2024 Revised: 30.10.2024 Accepted: 2.12.2024

©Society for Himalayan Action Research and Development

Abstract: India is emerging to become leading country in sugarcane production in world. In 2021-22, it overtook Brazil in terms of sugar production. However, it is currently in second place in sugarcane production. Uttar Pradesh is the leading state in sugarcane production in country and is also leader in total grain production. (In year 2021-22, Maharashtra came first in sugar production.) Sugarcane has an important place in economy of state, from which goods like sugar, jaggery, alcohol, animal feed, chemicals, and others are obtained. Sugarcane production in state is increasing every year, where a large part of sugarcane production is now being converted into ethanol. Demand for its by-products is increasing day by day. There are 157 sugar mills in state, out of which 118 are functional, while Maharashtra has highest number of 246 sugar mills established in country. Sugarcane is cultivated on more than 23 lakh hectares of land in state, of which 2348 lakh metric tons of sugarcane were produced in years 2023–24. Sugarcane is produced in large quantity in 28 leading districts of the state. In which study area Pilibhit district holds the leading position in sugarcane production. 47.7 percent of the farmers grow sugarcane along with other crops. Sugarcane crop is not produced equally in all the blocks of the district; the areas that have more sales centers or mills have more sugarcane production. There are 5 mills in the district; purchase centers have also been established at the local level by these mills. Through these purchase centers, the distant produce is weighed and transported to the mills, after which the farmers are paid, but the farmers in the district are facing many types of problems in sugarcane marketing weighing and payment of sugarcane not being done on time, manipulation in weighing, late receipt of slips, and other problems.

Keywords: Sugarcane production • Fair and remunerative price • Agriculture status of sugarcane marketing • Problems in sugarcane marketing

Introduction

India is an agricultural country. Most of the rural population here is engaged in the agricultural sector, and country produces almost all crops— food grain , non-food grain, oilseeds, pulses, sugarcane, commercial, cash crops, etc (Upreti and Singh 2017). India is emerging in sugar production in the world, leaving behind Brazil in year 2021–22 (Economic Survey 2021–22). Due to which the supply of sugar in country is increasing and exports can also be increased (Economic Survey 2022-23). Similarly, Uttar Pradesh is leading state of sugar production as well as largest ethanol-producing state A large

part of sugarcane production in UP is converted into ethanol production, now almost all states have started getting highest blend of ethanol in proportion to petrol (Agriculture Annual Report, 2022–23). By year 2025, Government of India has set a target of 20 percent blending of fuel ethanol with petrol, which is also increasing sugarcane production (Jyoti and Singh 2020). Other reasons, such as policies to encourage production, including a Fair and remunerative price and State advisory price, guarantee of sale of sugarcane, and public distribution of sugar, have helped in increasing sugarcane production (Srivastava 2022). However, factors such as lack



of rainfall, declining groundwater levels, environmental change, global warming, delay in payments to sugarcane farmers, lower net income compared to other crops, labor shortages, and rising labor costs, followed by, have contributed to the overall decline in the sugar sector (Ahmed 2022). Sugarcane is not produced equally in all the districts of the state. More Quantity sugarcane is produced in western the Uttar Pradesh, as well as some eastern districts - Pilibhit, Lakhimpur, Hardoi, Bahraich, Gonda, Lakhimpur etc. state 28 districts have more sugarcane production (<https://upcsr.org/pdf/Annual%20REport%202022.pdf>). There are 732 sugar mills in country and 157 mills in the state, but only 118 mills are functional (<https://www.indiansugar.com/>). This includes all government, cooperative, and private mills. There are five mills in Pilibhit, of which two are governments, two are cooperative, and one is a private mill, out of which 1 is not functional (<https://www.anekantprakashan.com/sugar-factories-in-pilibhit/district>). In the district,

sugarcane is produced after paddy and wheat as per the area. But farmers in the district have to face many problems in selling sugarcane; due to this, income of the farmers is decreasing(<https://www.amarujala.com/uttar-pradesh/pilibhit/10-thousand-farmers-left-sugarcane-cultivation-pilibhit-news-c-121-1-pbt1008-119975-2024-07-26>).

Research Methodology

Data from primary and secondary sources have been used to collect data for research in the study. Primary data has been collected through field surveys in all the blocks of district Pilibhit. This research work was done on the basis of schedule. Pilibhit District of Uttar Pradesh was selected for study area. Like the country and the state, district Pilibhit is also an agricultural district; about 90% of its population is dependent on agriculture, which is called mini Punjab. Because paddy, wheat, and sugarcane crops are mainly produced in the district. (<https://en.wikipedia.org/wiki/Pilibhit/date/05/08/2023/time/6:02>).

Data collection

Table-1. Details of selected blocks and villages and farmers in the Pilibhit district

S.N.	Selected block	Number of inhabited villages (block wise)	Number of farmers (block wise)	Serial number	Name of the selected village	Number of Selected farmers
1.	Bilsanda	447	21927	1.	Ruria	10
				2.	Bra Gaon	10
				3.	Nand	10
				4.	Orajhar	10
				5.	Mahua	10
					Total	50
2.	Barkhera	124	24011	1.	Pareva Anoop	10
				2.	Bhopat Pur	10
				3.	Sondaha	10
				4.	Amdar	10
				5.	Pipra	10
					Total	50
3.	Bisalpur	168	19727	1.	Sehrha	10
				2.	Sisaiya Jalalpur	10
				3.	Ahir Pura	10
				4.	Milak Gautia	10



				5.	Rampura	10
					Total	50
4.	Puranpur	134	57259	1.	Sandai	10
				2.	Abhaypur Jamunia	10
				3.	Mathna Japati	10
				4.	Dhakia Kesarpur	10
				5.	Navdia	10
					Total	50
5.	Marouri	98	26600	1.	Bhitaure	10
				2.	Amkhera	10
				3.	Abhaypur	10
				4.	Atcona	10
				5.	Gajraula	10
					Total	50
6.	Amaria	139	24575	1.	Modhonpur Patti	10
				2.	Nagariya Colony	10
				3.	Dhundhri	10
				4.	Pinjra	10
				5.	Bikhari Pur	10
					Total	50
7.	Lalauri Khera	185	15814	1.	Khajuraho Gautia	10
				2.	Madhudandi	10
				3.	Rooppur Kamalu	10
				4.	Jironia	10
				5.	Barha	10
					Total	50
Total	7	1295	195677		35	350

Source: <https://pilibhit.nic.in/>

There are total seven blocks in Pilibhit district: Amaria, Bisalpur, Lalourikheda, Barkheda, Marouri, Bilsanda, and Puranpur (<https://pilibhit.nic.in/about-district/date/05/08/2023/time/5:23>). Villages of all each block of Pilibhit district were selected on the basis of a random sampling method. 5-5 villages were selected from each block. And 10–10 farmers were selected from each village through a random sampling method. Thus, data was collected from a total of 350 farmers through schedule (Yadav 2024). Table-1 .It can be seen. Secondary data has been used through government and non-government sources,

Research papers, CUCP Report, News papers, magazines, Central Government Budget, Agriculture Department Report, Uttar Pradesh Budget, Economic Survey, Uttar Pradesh Economic Survey, PIB News, etc. After this, the data was classified, tabulated, histogrammed, and analyzed and simplified with the help of SPSS and MS Excel.

Objectives

- To study the status of sugarcane marketing in study area Pilibhit district.
- To study the payment system in sugarcane marketing in study area Pilibhit district.



- To study the problems faced by farmers in sugarcane marketing in study area Pilibhit district.

Development of Sugarcane Pricing in India:

The work of sugarcane pricing in India was started only after country became independent. Price of sugarcane in country is determined according to federal ideology, in which central government determines price of sugarcane uniformly for whole country, which has three categories, including early maturing varieties, normal varieties, and unsuitable varieties. In which price of early maturing varieties is kept highest while unsuitable varieties are kept lowest. This is called Fair and Remunerative Price, which is minimum support price of the sugarcane crop that is given to farmers in exchange for purchase of sugarcane, which helps in pricing of sugarcane and sugar under Essential Commodities Act 1955 (Govt. of India (2013-14)). Price of both sugarcane and sugar is determined by this Act. For year 2024–25, fair and remunerative price of sugarcane has been increased from Rs 315 per quintal to Rs 340 per quintal (Government of India 2024).

Similarly, some state governments also fix the minimum price of farmers of the state, which is called state advisory price, which is generally higher than minimum price of the central government. At present, Uttar Pradesh, Uttarakhand, Haryana, Punjab, and Karnataka are the major sugarcane producing states where state advisory price is fixed higher than fair and remunerative price (Govt. of India. (2016)). Uttarakhand government has declared state advisory price of Rs 375 per quintal for the sugarcane crushing season 2023-24 (Government of Uttarakhand 2024), And Punjab government has declared state advisory price of Rs 391 per quintal for sugarcane crushing season 2023-24, which is higher than other states. For sugarcane crushing season 2023-24, Uttar Pradesh government has

increased state advisory price by Rs 20, from Rs 350 to Rs 370 for early maturing varieties, from Rs 340 to Rs 360 for normal varieties, and from Rs 330 to Rs 355 for unsuitable varieties (Business standard 2024).

Sale of sugarcane produces by the farmers in the study area Pilibhit district

District Pilibhit holds a prominent place in sugarcane production; 47.7 percent of farmers produce sugarcane along with other crops. Sugarcane crops are not produced uniformly in all the blocks in the district; in areas where there are more sales centers or mills, sugarcane crop production is higher in those areas. There are 5 mills in the district, which include Kisan Sahakari Sugar Factory Limited-Majhola, Bajaj Hindustan Sugar Limited-Barkheda, Kisan Sahakari Sugar Mills Limited-Puranpur, Kisan Sahakari Sugar Mills Limited-Bisalpur, and L.H. Sugar Factories Limited-Pilibhit. Kisan Sahakari Sugar Factory Limited and Majhola Kisan Sahakari Sugar Mills Limited, Bisalpur At present, these mills have also established purchase centers at the local level (<https://www.anekantprakashan.com/sugar-factories-in-pilibhit/district>).

Distant produce is weighed and delivered to the mills through these purchase centers. Local farmers or farmers near the mills can sell sugarcane directly to the mills for crushing. The weighing of sugarcane is done through slips at the purchase centers of mills; these slips are received in the name of the landowner farmer. A few months after the sugarcane crop is planted, the sugarcane survey is done in May-June. According to the sugarcane survey, slips are applied to the landowner according to the area; these slips are also applied for two types of sugarcane: ratoon sugarcane and plant sugarcane. The slips of ratoon sugarcane are crushed before the sugarcane is crushed, so that the field becomes empty. The next crop is sown. The leaves of the plant come later. L.H. Sugar



Factories Limited, Pilibhit, and Bajaj Hindustan Sugar Limited, Barkhera, are big mills. 70–80 percent of the district's sugarcane is crushed by these two mills; in this plant, sugarcane is crushed later (Prefeasibility Report 2018).

Sugarcane slips are planted on the basis of area. Those who are in dire need, such as farmers, sell the produce produced on the sugarcane crusher. Sugarcane is bought at a lower price from the Cooperative Purchase Center at Kolhu.

Table 2. Farmers' response's on where they sell the sugarcane crop produced by the farmers in study area Pilibhit district

Response	Frequency	Percent	Vail Percent
Mills at the doorstep	62	17.7	37.1
At the center of mills	105	30.0	62.9
Total	167	47.7	100.0
Don't do sugarcane crop	183	52.3	
Total	350	100.0	

Source: Field Survey 2023.

Table-2. It can be seen that out of a total of 350 farmers, 167 (47.7 percent) grow sugarcane crops along with other crops, out of which 62 (17.7 percent, or 37.1 valid percent) farmers sell sugarcane crops directly at the doorstep of sugar mills. 105 (30 percent, 62.9 valid percent)

farmers sell at local purchase centers of sugar mills. The farm of these farmers is far away from the purchase centers, so these centers are arranged in the local area. 183 (52.3 percent) farmers do not produce sugarcane crops.

Table 3. There is a problem in selling sugarcane crop in the study area Pilibhit district. Farmers' responses on this

Response	Frequency	Percent	Vail Percent
Yes	162	46.3	97.0
No	5	1.4	3.0
Total	167	47.7	100.0
Do not sell	183	52.3	
Total	350	100.0	

Source: Field Survey 2023.

Table -3. It can be seen that out of a total of 350 farmers, 167 (47.7 percent) grow sugarcane crops along with other crops, out of which 162 (46.3 percent, 97 valid percent) farmers are

involved in selling sugarcane crops in one way or another. Problem occurs. 5 (1.4 percent, 3 valid percent) farmers have no problem selling any type of sugarcane crop.

Table 4. Farmers' responses to the problem of measuring and weighing while selling sugarcane crop in the study area Pilibhit district

Response	Frequency	Percent	Vail Percent
Yes	54	15.4	33.3
No	108	30.9	66.7
Total	162	46.3	100.0
Do not respond	188	53.7	
Total	350	100.0	

Source: Field Survey 2023.



Table-4. It can be seen that out of total 350 farmers, 167 (47.7 per cent) farmers grow sugarcane crop along with other crops, out of which 162 (46.3 per cent, 97 valid per cent) farmers have some kind of involvement in selling sugarcane crop. There is a problem. Out of this, 54 (15.4 per cent, 33.3 valid per cent)

farmers have measurement and weighing problems. Farmers face many problems due to lack of weight, taking more time in weighing. 108 (30 percent, 66.7 valid percent) farmers do not have the problem of weighing and measuring.

Table 5. Farmers' responses to the problem of taking more time to sell sugarcane crop in the study area Pilibhit district

Response	Frequency	Percent	Vail Percent
Yes	54	15.4	33.3
No	108	30.9	66.7
Total	162	46.3	100.0
Do not respond	188	53.7	
Total	350	100.0	

Source: Field Survey 2023.

Table -5. can be clear that out of total 350 farmers, 167 (47.7 per cent) farmers grow sugarcane crop along with other crops, out of which 162 (46.3 per cent, 97 valid per cent) farmers have some kind of involvement in selling sugarcane crop there is a problem. Out of this 54 (15.4 per cent, 33.3 valid per cent) farmers find more time at the purchase centre. 108 (30 percent, 66.7 valid percent) farmers did

not report the problem of time consuming. During the field survey, farmers have told through conversation that sugarcane cannot be weighed at the purchase centers in a day, it takes 2 to 3 days, the trolley has to be dropped at the purchase centers and the trolley has to be collected on the second or third day, crowd. - It takes a week in hell days.

Table 6. Farmers' responses on selling sugarcane crop in the study area Pilibhit district due to the distance of purchase center

Response	Frequency	Percent	Vail Percent
Yes	24	6.9	14.8
No	138	39.4	85.2
Total	162	46.3	100.0
Do not respond	188	53.7	
Total	350	100.0	

Source: Field Survey 2023.

Table -6. It can be seen that out of total 350 farmers, 167 (47.7 per cent) farmers grow sugarcane crop along with other crops, out of which 162 (46.3 per cent, 97 valid per cent) farmers have some kind of involvement in selling sugarcane crop. There is a problem. Out

of these, 24 (6.9 percent, 14.8 valid percent) farmers have told that the purchase center is far away from the farm, these are the farmers who sell sugarcane directly to the sugar mill. 138 (39.4 per cent, 85.2 valid percent) farmers did not report that the purchase center was far away.

Table -7. Farmers' responses to the problem of shortage on selling sugarcane crop in the study area Pilibhit district



Response	Frequency	Percent	Vail Percent
Yes	66	18.9	40.7
No	96	27.4	59.3
Total	162	46.3	100.0
Do not respond	188	53.7	
Total	350	100.0	

Source: Field Survey 2023.

Table -7. It can be seen that out of total 350 farmers, 167 (47.7 per cent) farmers grow sugarcane crop along with other crops, out of which 162 (46.3 per cent, 97 valid per cent) farmers have some kind of involvement in selling sugarcane crop. There is a problem. Out of this, 66 (18.9 per cent, 40.7 valid per cent) farmers have reported the problem of shortage. 96 (27.9 per cent, 59.3 valid per cent) farmers

did not report the problem of shortfall. In conversation with the farmers, it has been told that the problem of reduction in sugarcane crop is a common thing, 5 to 10 percent reduction is done. The problem of drawdown at the sugarcane purchase centers of the mills is more than at the gate of the mills while the problem of drawdown is less at the gate of the mills.

Table 8. Farmers' responses regarding payment for selling sugarcane crop in the study area Pilibhit district

Response	frequency	Percent	Vail Percent
1 to 15 days	00	00	00
16 days to 1 month	73	20.9	45.1
1 month to 3 months	58	16.6	35.8
More than 3 months	31	8.9	19.1
Total	162	46.3	100.0
Do not sell	188	53.7	
Total	350	100.0	

Source: Field Survey 2023.

Table -8. It can be seen that out of total 350 farmers, 167 (47.7 per cent) farmers grow sugarcane crop along with other crops, out of which 162 (46.3 per cent, 97 valid per cent) farmers have some kind of involvement in selling sugarcane crop. There is a problem. Out of this, 73 (20.9 percent, 45.1 valid percent) farmers get paid in 16 days to 1 month. 58 (16.6 percent, 35.8 valid percent) farmers are paid in 1 month to 3 months. 31 (8.9 percent, 19.1 valid percent) farmers take more than 3 months to pay. In a conversation with the farmers, it was told that Pilibhit sugarcane mill pays the earliest while Barkhera sugarcane mill is the last, sometimes it takes 6 months to 1 year to pay and

more than. Even though the law stipulates that payments must be made within 14 days of the purchase. In order dated December 23, 2021, a single-judge Allahabad High Court bench led by Justice Rajan Roy ordered five BHSL sugar mills located in districts of Pilibhit, Shahjahanpur, and Lakhimpur Kheri to pay interest on overdue cane price payments. (Amar ujala July, 2024). UP government, however, did not make sure that this order was followed. According to the Sugarcane Act of 1934, mills must promptly reimburse farmers for their produce. Mills are responsible for paying interest at the rate of 12 percent annually if they



do not clear payments within 15 days (News Laundry 2020).

Table 9. Farmers' responses to less arrival or late receipt of slips for selling sugarcane crop in the study area Pilibhit district

Response	Frequency	Percent
No	162	46.3
Did not respond	188	53.7
Total	350	100.0

Source: Field Survey 2023.

Table -9. It can be seen that out of total 350 farmers, 167 (47.7 per cent) farmers grow sugarcane crop along with other crops, out of which 162 (46.3 per cent, 97 valid percent) farmers have some kind of involvement in selling sugarcane crop. There is a problem. Out of this, all the farmers told that slips come late and less, this is the biggest problem for us, the whole season is spent in correcting the calendar of slips.

Conclusion

Central Government does not increase the fair and remunerative price uniformly every year. In the year 2023-24, there was an increase of only Rs 10/quintal; in the year 2024-25, there has been an increase of Rs 25/quintal. Due to the lack of a uniform price increase, the fear of uncertainty remains. The state advisory price is increased by state governments only on the basis of minimum support price. The farmers of the states that declare the state advisory price also become victims of uncertainty. State advisory price is not increased every year in Uttar Pradesh. It was Rs 340 in the year 2021-22; it was not increased in the year 2022-23. In the year 2023-24, only Rs 20/quintal was increased, which is a very small amount. In the study area district Pilibhit, a total of 47.7 percent farmers produce sugarcane crop (partially or fully), in which 17.7 percent farmers sell sugarcane directly at the door of the mills, while 30 percent farmers sell it at the purchase centers of the mills. Out of 47.3 percent farmers producing sugarcane crops, 46.3 percent have reported

some kind of problem in selling sugarcane, while 1.4 percent farmers have not reported any problem in selling sugarcane. 15.4 percent of farmers have reported the problem of more time taken in selling sugarcane. 6.4 percent of farmers have reported the problem of distance from the purchase center. 18.9 percent of farmers face the problem of short weighing while selling sugarcane. In this, farmers face more problems of short weighing at the purchase centers of the mills than at the door of the mills. 46.3 percent of farmers have reported the problem of getting slips late or in less quantity. If we talk about the payment process of farmers, 20.9 percent of farmers get paid within 16 days to 1 month. 16.6 percent of farmers get paid between 1 month and 3 months, while 8.9 percent of farmers get paid in more than 3 months. In this also, the payment time of different mills is different. Barkheda Mill takes the longest time to make payment.

Suggestions

1. In the states that declare state advisory prices, state advisory price increases should be declared every year like a fair and remunerative price so that farmers can be saved from uncertainty.
2. Like the minimum support price of Government of India, Government of Uttar Pradesh should also increase the State Advisory Price every year, keeping in mind the condition of sugarcane farmers, so that condition of sugarcane farmers in Uttar Pradesh can be strengthened.



3. States where State Advisory Price has not been declared and there are major producer manufacturers should also start declaring State Advisory Price.
4. Pilibhit District, some farmers are not paid within 15 days of weighing. Barkhera sugar mill has the worst performance in making payments. The government should impose penalties on these mills for late payment, although there is a policy of late payment with 12 percent interest, but this does not have much impact on the mills.
5. A law or act should be made at the national level for timely payment to sugarcane farmers so that the mills can pay the farmers on time.
6. All sugarcane-producing farmers of Pilibhit district have reported the problem of getting slips late or in less quantity. The district administration should investigate the irregularities so that farmers can get slips in sufficient quantity and on time.
7. Pilibhit district, 15.4 percent of sugarcane farmers have reported irregularities in measurement and have also reported collusion with the administration. The state government should form an investigation committee on the officers/employees involved at the local level; strict action should be taken against the employees if found guilty.
8. In the study area, district Pilibhit, 6.9 percent of sugarcane farmers have said that the mill is far away from their farm. For this, the local administration should inspect and make arrangements to establish more sugarcane purchase centers.
9. In the study area, the survey is done by the sugarcane surveyor, due to which there is a high possibility of partiality and human and non-human errors. Satellite images, drones and other modern technology should be used for this work.

10. In Uttar Pradesh, ganna satta or slips are available only in the name of landholder farmers. His non-landholders, sharecroppers, and contractors should also be included in it.

References

- Agriculture Annual Report (2021–22). Department of Agriculture, Cooperation, and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Government of India, Krishi Bhawan, New Delhi, pp. 124-32.
- Agriculture Insurance Company of India Ltd. (2021). Evolution of Crop Insurance. Available online: <https://www.aicofindia.com> (accessed on 24 October, 2024).
- Agriculture Annual Report (2023–24). Department of Agriculture, Cooperation, and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Government of India, Krishi Bhawan, New Delhi, pp. 138-140.
- Chandra Bhushan and Vineet Kumar (2017). A Report of the “Pradhan Mantri Fasal Bima Yojana: An Assessment”, Published by Centre for Science and Environment, New Delhi, pp. 22–23.
- Dandekar, Vinayak Mahadeo. (1985). Crop insurance in India: A review, 1976–1977 to 1984–1985. *Economic and Political Weekly*. pp. A46–A59.
- Dandekar, Vinayak Mahadeo. (1985). Crop insurance in India: A review, 1976–1977 to 1984–1985. *Economic and Political Weekly*; 1985; pp. A46-A59.
- Department of Financial Services (2024). Restructured Weather Based Crop Insurance Scheme Available online: <https://financialservices.gov.in/insurance-divisions/Government-Sponsored-Socially-Oriented>



- Insurance-Schemes/Restructured-Weather-Based-Crop-Insurance-Scheme-(RWBCIS)
Dey K and Maitra D (2017). Agriculture Insurance in India: Promise, Pitfalls, and the Way Forward. *Economic and Political Weekly*, 52(52), 88–96.
- Ghosh R K (2018) Performance Evaluation of Pradhan Mantri Fasal Bima Yojana (PMFBY): Part I: “Governance Analysis”. Ahmadabad: Indian Institute of Management Ahmedabad. pp.4-13.
- Ghosh S (2019). An Analysis of Pradhan Mantri Fasal Bima Yojana (PMFBY): Expectations and Reality. *International Journal of Advanced Science and Technology*, 28(20), 788 - 794.
- Government of India. (2020). Pradhan Mantri Fasal Bima Yojana: Revamped Operational Guidelines; New Delhi: Department of Agriculture, Cooperation and Farmers’ Welfare, Ministry of Agriculture and Farmers Welfare, Government of India.
- Gulati, Ashok, Perna Terway, and Siraj Hussain. (2018). Crop Insurance in India: Key Issues and Way Forward. Available online: <https://www.think-asia.org/handle/11540/8052>
- Gulati A, Terway P. Hussain S. (2018). *Crop insurance in India: Key issues and way forward* (Working Paper, No. 352). Indian Council for Research on International Economic Relations (ICRIER). Available online: https://icrier.org/pdf/Working_Paper_352.pdf
- Ghosh R. (2018). *Performance evaluation of Pradhan Mantri Fasal Bima Yojana (PMFBY) Part I—Governance analysis*. Indian Institute of Management, Ahmedabad. Available online: [https://www.iima.ac.in/c/document_library/get_file?uuid=ae2019ae-6e67-4ad8-964b-93c464f2223b&groupId=62390&filename=PMFBY%20\(Part-I\)%202018%20-%20Final%20Report%20-%20sent%20to%20MoA](https://www.iima.ac.in/c/document_library/get_file?uuid=ae2019ae-6e67-4ad8-964b-93c464f2223b&groupId=62390&filename=PMFBY%20(Part-I)%202018%20-%20Final%20Report%20-%20sent%20to%20MoA)
- Government of India (2016). Guidelines of PMFBY, Ministry of Agriculture and Farmer Welfare, Delhi, pp.34–35. <https://www.indiastatdistricts.com/uttarpradesh/pilibhit-district/time/7:53>. (Accessed on 23 may, 2024)
- <https://pilibhit.nic.in/about-district/> time/5:23 (accessed on 22 October, 2024).
- <https://en.wikipedia.org/wiki/Pilibhit/time/6:02> (accessed on 22 October, 2024).
- India Brand Equity Foundation (IBEF) (2021). Agriculture in India: Information about Indian Agriculture and Its Importance. Available online: <https://www.ibef.org/industry/agriculture-india.aspx> (accessed on 5 May 2024).
- Jain R C A (2004). Challenges in Implementing Agriculture Insurance and Re-Insurance in Developing Countries. *The Journal* 2004:14–23.
- National Institute of Agricultural Extension Management, (2023). A Study on Evaluation of Mega Awareness Campaign of Pradhan Mantri Fasal Bima Yojana (PMFBY), Available online https://pmfby.gov.in/compendium/General/Report_on_Evaluation_of_PMFBY.pdf
- Nair R. (2010). Weather-based Crop Insurance in India: Towards a Sustainable Crop Insurance Regime? *Economic and Political Weekly*, 45(34), 73–81. Available online: <http://www.jstor.org/stable/25742001>



- Mahajan, Shrikrishna, and Amol Bobad. (2012). Growth of NAIS: A study of crop insurance in India. *Bauddhik* 3: 1–15.
- Mishra, Pramod K. (1994). Crop insurance and crop credit: Impact of the comprehensive crop insurance scheme on co-operative credit in Gujarat. *Journal of International Development* 6: 529–567.
- Mukherjee, Subhankar, and Parthapratim Pal. (2017). Impediments to the spread of crop insurance in India. *Economic and Political Weekly* 52. Available online: <https://www.epw.in/journal/2017/35> (accessed on 26 February 2024)..
- Press Information of India (2024). Finance Minister Smt. Nirmala Sitharaman reviews Pradhan Mantri Fasal Bima Yojana. Ministry of Finance; Available online: <https://pib.gov.in/newsite/PrintRelease.aspx?relid=210067> (Accessed on 23 October, 2024)
- Parthiban, J. J., & Anjugam, M. (2023). A Comparative Study on the Performance of Various Agricultural Crop Insurance Schemes of India with Special Reference to Pradhan Mantri Fasal Bima Yojana (PMFBY). *Asian Journal of Agricultural Extension, Economics & Sociology*, 41(3), 145–153.
- Rao P. (2019, August 27). Insurance for the farmer. *The Statesman*. Available online: <https://www.thestatesman.com/opinion/insurance-for-the-farmer-1502792655.html>
- Raju SS and Ramesh Chand. (2008). Agricultural Insurance in India: Problems and Prospects; NCAP Working Paper 8. National Center for Agriculture Economics and Policy . Available online: https://www.farm-d.org/app/uploads/2012/09/oth_15.pdf
- Rajeev M., Nagendran P. (2019). Where do we stand? Crop insurance in India. *Review of Rural Affairs*, 54, 26–27.
- Subash SP, Pavithra S Suresh P. (2017). ‘Pradhan Mantri Fasal Bima Yojana (PMFBY): Challenges and way forward. New Delhi: ICAR-National Centre for Agricultural Economics and Policy Research; pp.45- 48. Available online: <https://krishi.icar.gov.in/jspui/bitstream/123456789/8152/1/2017-18.pdf>
- Paulraj A and Easwaran N (2020). Evaluation of 'Revamped' Crop Insurance Pradhan Mantri Fasal Bima Yojana (PMFBY) among Paddy Farmers in Tamil Nadu, India. *Current Journal of Applied Science and Technology*. VL-39.pp.66-77.
- Taylor M (2016), "Risky Ventures: Financial Inclusion, Risk Management and the Uncertain Rise of Index-Based Insurance", *Risking Capitalism (Research in Political Economy, Vol. 31)*, Emerald Group Publishing Limited, Leeds, pp. 237-266.
- Tiwari R, Chand K and Anjum, B. (2020). Crop Insurance in India: A Review of Pradhan Mantri Fasal Bima Yojana (PMFBY). *FIIB Business Review*, 9(4), 249-255.
- Uttar Pradesh Economic Survey (2022-23). Economics and Statistics Department, State Planning Institute Uttar Pradesh, p. 45.



https://updes.up.nic.in/updes/data/arthik_samiksha/arthik%20samiksha_2022_23.pdf

Uttar Pradesh Statistical Diary (2022-23).
Economic & Statistics Division. State
Planning Institute
Planning Department, Uttar Pradesh pp. 26-
44.

https://updes.up.nic.in/updes/data/sdiaryenglish/files/diary%20eng%202023_merged.pdf

Yadav S (2024). Analytical Study on Non-
Institutional Agricultural Loans in District
Pilibhit . *Journal
of Mountain Research* 19(1): 107-116

https://www.researchgate.net/publication/382384040_An_Analytical_Study_on_Non-Institutional_Agricultural_Loans_in_District_Pilibhit