

Promoting Organic Agriculture through Paramparagat Krishi Vikas Yojana: An Empirical Study

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Abstract

This paper looks at the Paramparagat Krishi Vikas Yojana (PKVY), a program started in 2015 to boost organic farming in India. Organic farming uses natural methods, which became more popular after problems with chemical farming. PKVY helps farmers by providing money, training, and support. The study analyzed data for the period from 2022 to 2023 to see how funds were distributed and used. It found big differences in how much money different states got. Uttar Pradesh and Uttarakhand received the most funds, while some states like Andhra Pradesh and Gujarat got very little. Problems like poor infrastructure, unsuitable climates, and low farmer participation have made the program less effective. To improve, the study suggests fixing infrastructure issues, engaging more farmers, and aligning state policies with the goals of organic farming to make PKVY more successful and sustainable.

Keywords: Organic farming, Paramparagat Krishi Vikas Yojana, Fund allocation, Fund release, State expenditure, Local climate, Farmers involvement.

Introduction

In India, organic farming has traditionally relied on sustainable methods like composting, crop rotation, and the use of organic manure to maintain soil health and manage pests. However, the Green Revolution of the 1960s shifted agriculture towards the use of chemical fertilizers and pesticides to enhance yields, leading to environmental degradation and soil health problems. This shift has spurred renewed interest in organic farming as a more sustainable alternative.

In response to these challenges, the Indian government introduced several supportive policies. The National Programme for Organic Production (NPOP) was launched in 2000, followed by the Paramparagat Krishi Vikas Yojana (PKVY) in 2015 as part of the National Mission on Sustainable Agriculture (NMSA). PKVY promotes eco-friendly, low-cost farming

practices and has significantly expanded organic farming. The initiative now covers 11.85 lakh hectares and benefits over 16 lakh farmers across 32,384 clusters.

PKVY aims to produce agricultural products free from chemical or pesticide residues by employing low-cost, environmentally friendly technologies. The scheme provides financial support to farmers, offering Rs 50,000 per hectare over three years. This includes Rs 31,000 per hectare per year, distributed directly to farmers via Direct Benefit Transfer (DBT) for both on-farm and off-farm organic inputs. Additionally, the scheme offers need-based assistance for various infrastructure components, such as integrated processing units, collection and grading units, integrated pack houses, refrigerated vehicles, pre-cooling, cold stores, ripening chambers, and transportation.

Review of Literature

Chandrashekar (2010) studied the “Changing Scenario of Organic Farming in India: An Overview”. He found that in developed countries, organic food is expensive because labour costs are high. In India, labour is cheaper, so organic farming could be more affordable. Right now, Indian farmers face higher costs while learning organic methods, but these costs are likely to decrease as they get more experienced. This could help India become a leading producer of organic food. As demand for organic products grows, it could also improve farmers' incomes and support more sustainable farming.

Panneerselvam, Halberg, Vaarst, and Hermansen (2011) studied “Indian farmers' experiences with and views on organic farming”. Farmers' choice to switch to organic farming was more about worries over lower yields and lack of knowledge than their age or education. How they experience organic farming depends on their region's practices, climate, and support. Although organic farming can save costs and increase yields over time, many farmers struggle at first with lower yields and more labour. To help farmers switch successfully, they need ongoing support, training, and better market access, with solutions tailored to their local needs.

Reddy A Amarender (2017) conducted the study “Impact Study of Paramparagat Krishi Vikas Yojana (Organic Agriculture) Scheme of India”. He found that India's agriculture is struggling with high costs and low prices, but organic farming could help. The Indian government supports this shift through the Paramparagath Krishi Vikas Yojana (PKVY), a program that promotes organic farming. India leads globally with about 80% of certified organic farms. With growing consumer demand for chemical-free products and climate

challenges, organic farming is becoming more important. The PKVY helps by using a cluster approach and the Participatory Guarantee System (PGS) to meet environmental and market needs.

Krishna, N., Bhute, A., Sahai, S., Dwivedi, T. and Ghosh, M., (2023) conducted a study on “Socio- Economic Impact of Organic Farming – In References to Chhattisgarh, India”. Organic agriculture, according to the FAO, supports ecological health, biodiversity, and community knowledge. The study found that family structure affects knowledge of organic farming: people from nuclear families usually know less than those from joint families. It also showed that annual family income matters; lower-income families often have less knowledge about farming, while higher-income families generally have more. This suggests that financial resources help access better education and farming techniques.

Disha Ghildiyal, L.C. Mallaiah (2024) “An Assessment of Paramparagat Krishi Vikas Yojana in India”. Organic farming is becoming more popular in India with strong government support. The Paramparagat Krishi Vikas Yojana (PKVY), started in 2015-16, helps by using a cluster approach and certification to promote organic farming. By 2021-22, PKVY had spent Rs 1661.46 crores, covering over 32,000 clusters and 6.53 lakh hectares, benefiting 16.19 lakh farmers. The amount of organic farmland grew by 27.92% annually. This report looks at how PKVY is set up, its performance, benefits, and the challenges it faces.

Research gap

Existing research on organic farming in India mostly looks at its economic impact and how well government schemes like the Paramparagat Krishi Vikas Yojana (PKVY) work. However, there is little focus on how funds are allocated and released to different states, or why some states do not get funding at all. Our research will examine these gaps, looking at how funds are distributed and exploring how states manage to support organic farming when government funds are not available.

Objectives

- To detect the allocation and utilization of funds under Paramparagat Krishi Vikas Yojana.
- To identify the reasons for delays in the disbursement of funds in PKVY.

Methodology

The study was conducted using secondary data covering the period from 2022 to 2023. The data were visualized through tables and pie charts. We used percentages to evaluate state-wise fund allocations, fund releases, and government expenditures. The data was collected from [indiastat.com](https://www.indiastat.com). The table shows the allocation of funds to various Indian states and union territories, including the amount allocated and the percentage of the total funds.

Table 1: Show state wise allocation of funds by Paramparagat Krishi Vikas Yojana 2022-2023

STATES/UNION TERRITORIES	ALLOCATION	%
Andhra Pradesh	826.35	1.84
Bihar	2830.65	6.29
Chhattisgarh	3504.93	7.78
Goa	1025.1	2.28
Gujarat	20.5	0.05
Haryana	10.25	0.02
Himachal Pradesh	1121.36	2.49
Jharkhand	1397.27	3.10
Karnataka	1045.61	2.32
Kerala	1971.12	4.38
Madhya Pradesh	5925.51	13.16
Maharashtra	745.9	1.66
Odisha	741.44	1.65
Punjab	222.46	0.49
Rajasthan	2452.64	5.45
Tamil Nadu	704.87	1.57
Telangana	30.75	0.07
Uttar Pradesh	12972.55	28.81
Uttarakhand	6030.68	13.39
West Bengal	555.39	1.23
NE (Aspirational & Committed liabilities)	0	0.00
All Union Territories (UTs)	893.02	1.98
India	45028.35	100

SOURCE: <https://www.indiastat.com/table/paramparagat-krishi-vikas-yojana-pkvy/selected-state-wise-funds-allocation-released-expe/1445666>

Table:1 shows among the 28 states and 8 union territories, Uttar Pradesh received the highest allocation of ₹12,972.55 crore, which is 28.81% of the total funds. In contrast, Haryana and Gujarat received the lowest allocations, with ₹10.25 crore, representing 0.02% of the total, and ₹20.5 crore, which accounts for 0.05%, respectively. States with moderate allocations include Tamil Nadu with ₹704.87 crore, amounting to 1.57% of the total; Maharashtra with ₹745.9 crore, which is 1.66%; Odisha with ₹741.44 crore, representing 1.65%; and West Bengal with ₹555.39 crore, or 1.23%. Other states with moderate allocations are Andhra Pradesh with ₹826.35 crore, equating to 1.84%; Himachal Pradesh with ₹1,121.36 crore, which is 2.49%; Karnataka with ₹1,045.61 crore, representing 2.32%; Kerala with ₹1,971.12 crore, amounting to 4.38%; Rajasthan with ₹2,452.64 crore, or 5.45%; Chhattisgarh with ₹3,504.93 crore, equating to 7.78%; Madhya Pradesh with ₹5,925.51 crore, representing 13.16%; and Uttarakhand with ₹6,030.68 crore, which accounts for 13.39%. The Union Territories combined received ₹893.02 crore, making up 1.98% of the total, while the North Eastern region, including Aspirational & Committed Liabilities, received no funds.

The pie chart shows how ₹45,028.35 million is divided among Indian states and union territories, with each slice representing a different area and showing both the amount of funds they got and percentage of the total amount.

PARAMPARAGAT KRISHI VIKAS YOJANA 2022-2023

ALLOCATION OF FUNDS

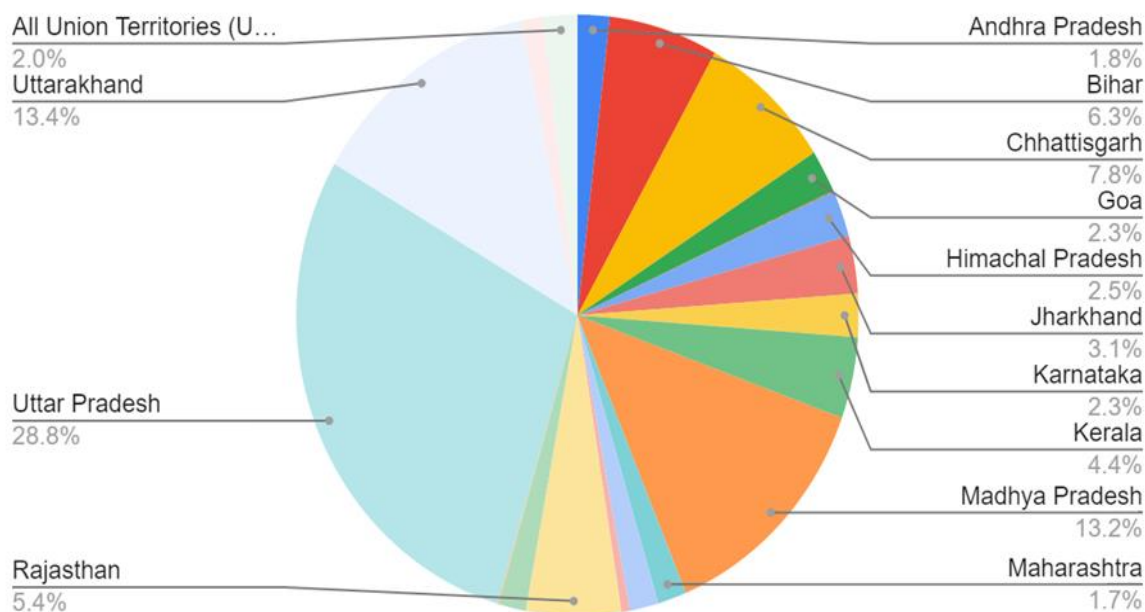


TABLE:2**State wise release of funds by Paramparagat Krishi Vikas Yojana 2022-2023**

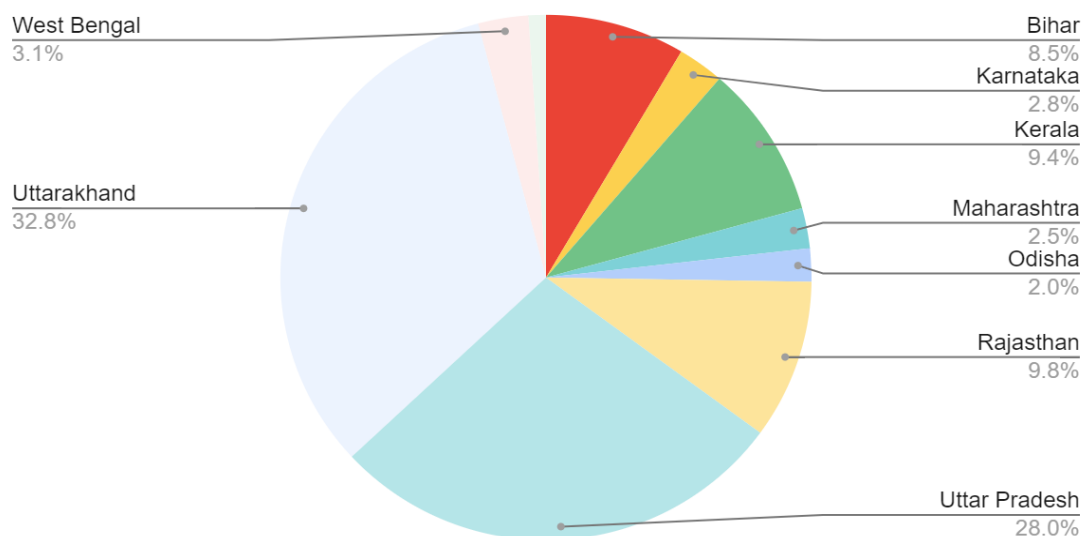
STATES/UNION TERRITORIES	RELEASE	PERCENTAGES
Andhra Pradesh	0	0.0
Bihar	1547.68	8.5
Chhattisgarh	0	0.0
Goa	0	0.0
Gujarat	0	0.0
Haryana	0	0.0
Himachal Pradesh	0	0.0
Jharkhand	0	0.0
Karnataka	512.55	2.8
Kerala	1712.07	9.4
Madhya Pradesh	0	0.0
Maharashtra	449.67	2.5
Odisha	370.72	2.0
Punjab	0	0.0
Rajasthan	1783.26	9.8
Tamil Nadu	0	0.0
Telangana	0	0.0
Uttar Pradesh	5089.32	28.0
Uttarakhand	5969	32.8
West Bengal	555.39	3.1
NE (Aspirational & Committed liabilities)	0	0.0
All Union Territories (UTs)	193.55	1.1
India	18183.2	100

SOURCE: <https://www.indiastat.com/table/paramparagat-krishi-vikas-yojana-pkvy/selected-state-wise-funds-allocation-released-expe/1445666>

Table:2 shows the release of funds to various Indian states and union territories, including the amount release and the percentage of the total funds. In the fund distribution across Indian states and Union Territories, Uttarakhand received the highest allocation of ₹5969 crore, accounting for 32.8% of the total funds, while Uttar Pradesh received a significant share of ₹5089.32 crore, representing 28.0%. Moderate allocations were made to Bihar with ₹1547.68 crore, which is 8.5% of the total, Kerala with ₹1712.07 crore, making up 9.4%, and Rajasthan with ₹1783.26 crore, representing 9.8%. West Bengal received a moderate amount of ₹555.39 crore, which is 3.1%. Conversely, all Union Territories combined received the lowest allocation of ₹193.55 crore, or 1.1%. Several states, including Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Punjab, Tamil Nadu, Telangana, and NE (Aspirational & Committed liabilities), received no funds at all.

PARAMPARAGAT KRISHI VIKAS YOJANA 2022-2023

RELEASE OF FUNDS



The pie chart displays the allocation of ₹18,183.2 million in funds to various Indian states and union territories. Each slice represents the share of funds allocated to a specific state or union territory, with the size of the slice indicating the amount and percentage of the total funds received.

Table 3: State wise expenditure of the government for Paramparagat Krishi Vikas Yojana 2022-2023

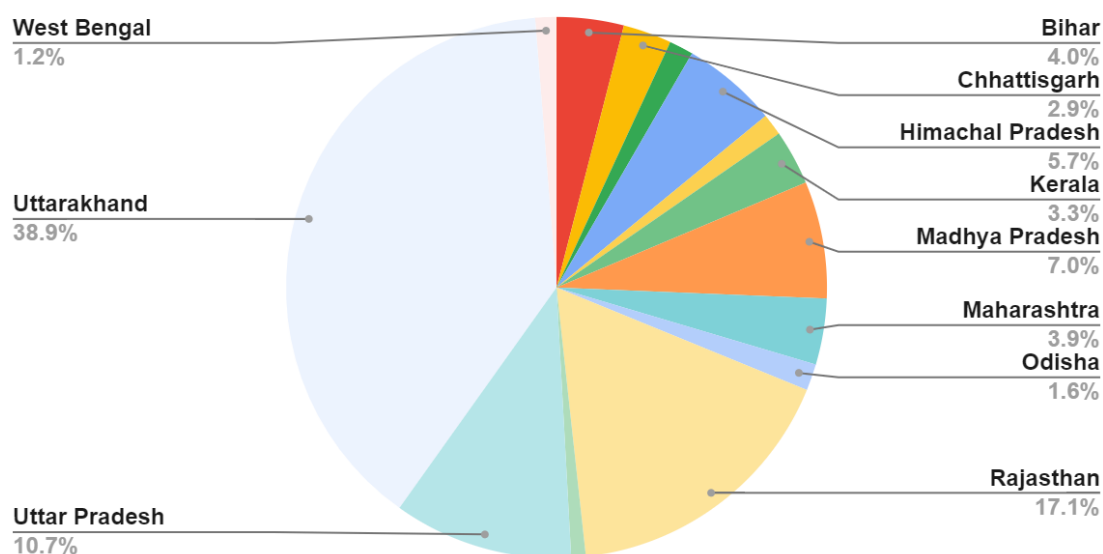
STATES/UNION TERRITORIES	EXPENDITURE	PERCENTAGES
Andhra Pradesh	0	0
Bihar	789.75	4
Chhattisgarh	571.03	2.9
Goa	283.05	1.4
Gujarat	0	0
Haryana	0	0
Himachal Pradesh	1124.32	5.7
Jharkhand	0	0
Karnataka	256.35	1.3
Kerala	647.52	3.3
Madhya Pradesh	1375.93	7
Maharashtra	776.74	3.9
Odisha	311.97	1.6
Punjab	0	0
Rajasthan	3363.94	17.1
Tamil Nadu	170.56	0.9
Telangana	0	0
Uttar Pradesh	2111.16	10.7
Uttarakhand	7652.94	38.9
West Bengal	240.41	1.2
NE (Aspirational & Committed liabilities)	7.58	0
All Union Territories (UTs)	0	0
India	19683.25	100

SOURCE: <https://www.indiastat.com/table/paramparagat-krishi-vikas-yojana-pkvy/selected-state-wise-funds-allocation-released-expe/1445666>

Table:3 shows the expenditure incurred by Indian states and Union Territories, Uttarakhand had the highest expenditure of ₹7652.94 crore, accounting for 38.9% of the total expenditure. Uttar Pradesh followed with an expenditure of ₹2111.16 crore, representing 10.7% of the total. Moderate expenditures were observed in states such as Rajasthan with ₹3363.94 crore, which is 17.1% of the total, Himachal Pradesh with ₹1124.32 crore, making up 5.7%, and Madhya Pradesh with ₹1375.93 crore, representing 7%. Maharashtra also had a moderate expenditure of ₹776.74 crore, with 3.9% of the total. The lowest expenditures were in Tamil Nadu with ₹170.56 crore, which is 0.9% of the total, West Bengal with ₹240.41 crore, or 1.2%, and Odisha with ₹311.97 crore, accounting for 1.6%. Other states such as Bihar and Kerala had expenditures of ₹789.75 crore, with 4% of the total, and ₹647.52 crore, which is 3.3% of the total, respectively. Several states, including Andhra Pradesh, Gujarat, Haryana, Jharkhand, Punjab, and Telangana, along with all Union Territories, had no recorded expenditure.

PARAMPARAGAT KRISHI VIKAS YOJANA 2022-2023

EXPENDITURE



The pie chart displays the expenditure of various Indian states. Each slice represents the expenditure to a specific state, with the size of the slice indicating the amount and their percentage.

Findings

- The states with the highest allocations under the Paramparagat Krishi Vikas Yojana (PKVY) Bihar, Karnataka, Kerala, Maharashtra, Odisha, Rajasthan, Uttarakhand, Uttar Pradesh, and West Bengal.
- The states with the lowest allocations under the Paramparagat Krishi Vikas Yojana (PKVY) are Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Jharkhand, Punjab, and Telangana.
- These discrepancies happens due to several reasons, it depends on state focus on manufacturing industries, service sectors rather than agriculture which reduces the disbursement of funds from the central government.
- Low participation of the farmers, they hesitate to shift from conventional farming to organic farming which tends to diminishes the potential production.
- State's climate and geographical position also plays a vital role in availing funds from the central through the scheme due to soil types, soil degradation, water scarcity needs high priority areas to do organic farming.
- If a state did not do well with previous funding like not meeting goals might give it less money next time or make it follow stricter rules.
- If a state has had problems with delays and poor management in past projects, it might get less money in the future. Funders are more likely to give money to states that have a history of completing projects on time and successfully.

Suggestions

- PKVY should give extra funding or rewards to states that achieve their goals. This will encourage states to use their resources wisely and meet the program's objectives.
- PKVY should create a strong system to regularly check and evaluate the progress of projects. This will help find what is working well and what needs improvement, making sure the funds are used wisely.
- PKVY should provide training for state officials and agencies to improve their skills in managing organic farming projects. This will help with better planning, reduce delays, and lead to more successful results.

- PKVY should give states clear instructions, deadlines, and goals for organic farming projects. This will help states plan better and avoid mistakes or delays.

Conclusion

To address the challenges faced by the Paramparagat Krishi Vikas Yojana (PKVY) and enhance its impact on organic farming in India, it is essential to focus on key areas of improvement. By doing so, PKVY can become more effective. These measures will not only help states utilize funds more efficiently but also contribute to the overall growth and sustainability of organic farming in India. Implementing these steps will enable PKVY to better support farmers and promote sustainable agricultural practices across the country.

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