

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 2; February 2025; Page No. 241-245

Received: 17-11-2024
Accepted: 26-12-2024

Indexed Journal
Peer Reviewed Journal

Facilitating accessibility to agricultural schemes in selected areas of Gujarat

Smita Maniar, Komal Thakkar and Priyanka Maity

Research and Development Department, Deepak Foundation Vadodara

DOI: <https://doi.org/10.33545/26180723.2025.v8.i2d.1637>

Corresponding Author: Smita Maniar

Abstract

Agriculture is vital to India's economy, yet it faces challenges like fragmented land holdings, limited technology access, and market volatility. The Indian government has introduced several agricultural schemes to enhance productivity and farmer livelihoods, including direct financial support and crop insurance. The present study conducted in selected villages of Chotaudepur District, Vadodara District, Bharuch District and Morbi District, of Gujarat —through Sangaath project, implemented by Deepak Foundation, a renowned NGO working for addressing the needs of vulnerable population. Sangaath project helps in facilitating the linkages of agricultural schemes among the people who are unable to access and gain benefit of the schemes for which they are entitled. Findings reveal that there is lack of awareness and inability of the community to understand the processes involved in applying for the schemes. The results indicates that through facilitation at grassroots level using local resources and collaboration between government department, NGOs, and the private sector, the accessibility can be increased leading to impactful change in the farming community. This ultimately fosters a more inclusive and sustainable agricultural economy in Gujarat.

Keywords: Agriculture, schemes, NGOs, CSR

Introduction

Agriculture is the cornerstone of the Indian economy, providing livelihoods for nearly half of the country's population and playing a critical role in ensuring food security (GOI, 2023) ^[2]. However, the sector faces numerous challenges, including fragmented land holdings, limited access to modern technology, poor irrigation infrastructure, and fluctuating market prices (NABARD, 2022) ^[7]. In response, both the central and state governments have introduced various agricultural schemes aimed at improving productivity, enhancing rural incomes, and promoting sustainable farming practices. These schemes focus on a range of areas such as crop insurance, irrigation, mechanization, and the adoption of modern agricultural techniques.

Despite the availability of these schemes, their successful implementation depends heavily on farmers' awareness and utilization (Sharma, 2022) ^[13]. The introduction of digital platforms like the i-Khedut portal in Gujarat has revolutionized the way farmers access government subsidies and support. However, disparities in digital literacy, resource availability, and local agricultural practices often hinder the effective utilization of such platforms (Patel & Mehta, 2023) ^[8]. This research paper aims to assess the awareness and utilization of government agricultural schemes in selected areas of Gujarat, examining both the barriers that limit access and the factors that promote scheme adoption.

Indian Scenario of Agricultural Schemes

Agriculture remains the backbone of the Indian economy,

contributing approximately 17-18% to the country's GDP and employing nearly 50% of the workforce. However, the sector faces persistent challenges such as low productivity, soil degradation, and water scarcity, which is further worsened by fragmented landholdings and limited access to modern farming technologies. The Indian government has introduced a series of national agricultural schemes aimed at improving farm productivity and farmers' socio-economic conditions. Key schemes like the Pradhan Matri Kisan Samman Nidhi (PM-KISAN) which provide direct benefit transfer of Rs 6000 to all farmers, Pradhan Mantri Fasal Bima Yojana (PMFBY), which provides crop insurance, and the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), focusing on improving irrigation efficiency, have been instrumental in addressing these challenges (Press Information Bureau, 2023) ^[12].

Additionally, initiatives like the Soil Health Card Scheme and National Mission on Sustainable Agriculture (NMSA) have been pivotal in promoting sustainable farming practices, while schemes like the Kisan Credit Card (KCC) have improved access to credit facilities (Kumar & Sharma, 2022) ^[4]. However, the effectiveness of these programs varies significantly across states and regions (Singh, 2023) ^[14]. Many farmers in remote or less-developed areas remain unaware of these schemes, leading to suboptimal utilization (Patel & Mehta, 2023) ^[8]. Therefore, enhancing awareness and creating a robust support system are critical to ensuring that these schemes reach their full potential (Rao, 2023) ^[15].

Gujarat Scenario of Agricultural Schemes

Gujarat, with its diverse agro-climatic zones ranging from

the fertile plains of central Gujarat to the arid regions of Kutch, presents a unique agricultural landscape that requires region-specific policies and schemes (Government of Gujarat, 2023). The state has made significant strides in promoting modern agricultural practices, with a proactive introduction various schemes to support farmers. One of the flagship initiatives is the i-Khedut portal, a digital platform designed to streamline farmers' access to government schemes related to crop insurance, farm mechanization, irrigation, and more. Launched by the Gujarat government, the portal aims to increase transparency and reduce hurdles farmers often face in accessing subsidies and support services (Sharma & Patel, 2023) ^[16].

Despite the availability of such platforms, factors such as digital literacy, internet connectivity, and local support and guidance significantly impact the adoption of these schemes (Patel & Desai, 2023) ^[9]. In areas with limited access to digital resources or inadequate infrastructure, farmers struggle to benefit from these government initiatives (Trivedi, 2023) ^[18]. On the other hand, regions where NGOs and local authorities actively engage with farmers to raise awareness and provide technical support have seen higher participation rates (Mehta & Shah, 2023) ^[6].

Deepak Foundation is a registered non-government organisation working over four decades to promote holistic development of rural and tribal vulnerable communities. The Foundation initiated a project entitled Sangaath in 2019 to support the communities to assess and avail benefits of Central and State Government schemes in several areas of Gujarat.

Rationale

The linkage between agricultural schemes and their implementation in specific areas has been a subject of research, particularly in agrarian regions like Gujarat. Studies in the field explore how government policies and schemes align with the socio-economic and environmental needs of local farmers, ensuring improved agricultural practices, sustainability, and rural development.

Research by Kumar *et al.* (2018) ^[5] highlights that national programs like the Pradhan Mantri Fasal Bima Yojana (PMFBY) and the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) are essential in mitigating risks associated with farming, such as crop failure and water scarcity.

According to a study by Patel (2016) ^[11], districts like Vadodara and Bharuch have benefited significantly from targeted government schemes that focus on irrigation efficiency and soil health improvement. The study observed that the linkage of these schemes to local agricultural practices has led to better crop productivity and enhanced income for farmers. Research in Chhotaudepur, a tribal-dominated region, has shown that tribal farmers have gained access to modern agricultural tools and financial assistance through programs like the Kisan Credit Card (KCC) scheme. Meanwhile, Morbi, being a drought-prone district, relies heavily on irrigation schemes, and the implementation of PMKSY has contributed to increased water-use efficiency.

Agricultural extension services are integral to the success of government schemes, as noted by Sharma and Singh (2017) ^[17]. Their research suggests that strong extension linkages

between agricultural schemes and local farming communities are key to improving knowledge dissemination and technology adoption. In regions like Bharuch and Morbi, the presence of extension workers has helped bridge the gap between the government's intent and farmers' understanding of how to implement these schemes effectively.

Despite these benefits, studies such as that of Desai and Mehta (2019) ^[1] have highlighted challenges in the linkage of agricultural schemes, particularly in underdeveloped areas like Chhotaudepur. Issues like lack of awareness, bureaucratic hurdles, and inadequate infrastructure often hinder the full realization of these schemes' potential. For instance, access to crop insurance through PMFBY in Vadodara and Morbi remains limited due to delayed claim settlements and complicated application processes.

Research by Joshi (2020) ^[3] suggests that stronger policy interventions and tailored strategies are necessary to improve the linkage between agricultural schemes and regional needs. In particular, the study advocates for localized adaptation of national schemes, ensuring that they address the unique agro-ecological and socio-economic conditions of districts like Vadodara, Bharuch, and Chhotaudepur. It recommends improving infrastructure for irrigation, financial inclusion, and better integration of digital platforms like the i-Khedut app, which provides scheme-related information to farmers in Gujarat.

While national schemes have provided substantial support, district-specific strategies and strong extension services are crucial in maximizing the impact of these programs in regions like Vadodara, Chhotaudepur, Morbi, and Bharuch.

The present study highlights the awareness and utilization of agricultural schemes in selected areas of Gujarat, including regions like Naswadi, Nandesari, Savli, Dahej, and Morbi, which are characterized by diverse agricultural practices and socio-economic conditions. Deepak Foundation facilitated the access to schemes through corporate support from Deepak Group of Companies. By analysing the level of engagement with platforms like the i-Khedut portal and the factors influencing scheme utilization, this study aims to provide insights into how these schemes can be made more accessible and effective for all farmers across Gujarat. Corporate Social Responsibility (CSR) has become an increasingly important tool in driving rural development and enhancing the agricultural sector in India. These efforts are particularly significant in regions where government reach may be limited due to infrastructure challenges or lack of awareness among farmers.

Objectives

1. To facilitate access and utilization of government schemes promoting agriculture through initiatives at grassroots level
2. To assess the factors which are enabling the utilization of the schemes

Study Details

Sangaath is a technology-driven project implemented by Deepak Foundation, supported by Deepak Group of Companies, aimed at enhancing the reach of Government schemes and programs to eligible beneficiaries.

Study Area

The study focuses on blocks across different districts of Gujarat: Bharuch and Vagra Block (Bharuch district), Wankaner, Halvad, Tankara and Madiya block (Morbi district), Naswadi (Chhotaudepur district), Savli (Vadodara district), and Nandesari area, Rural Vadodara Block (Vadodara district). These regions were selected based on their agricultural significance, diversity in socio-economic conditions, and participation in government schemes. A total of 105 villages were covered in this study, with data collected from 36,185 unique households and 1,03,313 unique beneficiaries to assess the accessibility and implementation of agricultural schemes.

Vagra and Bharuch block of Bharuch district is a key agricultural hub with a diverse cropping pattern that includes cotton, wheat, and horticultural crops. The region has a well-established agricultural base, with farmers actively engaging in various government initiatives aimed at enhancing productivity and financial stability.

Morbi, while known for its industrial significance, has a substantial agricultural population engaged in farming. The study area includes villages where agricultural practices are integrated with government-supported schemes to improve rural livelihoods.

Naswadi Block in Chhotaudepur district is a tribal-dominated region where agriculture plays a crucial role in livelihood sustenance. The study examines agricultural practices, infrastructure support, and accessibility to schemes in rural communities, focusing on improving farmer engagement.

Vadodara district is a significant agricultural and industrial region in Gujarat, with varied socio-economic and agro-climatic conditions. The study focuses on Savli Block and Nandesari, covering rural and semi-industrial areas to assess the accessibility and impact of agricultural schemes.

This study aims to analyze scheme accessibility, digital outreach, and administrative mechanisms with respect to Agricultural schemes in the different selected regions.

Sr.no	Location	Block	Villages	Households	Beneficiaries	Agri. Schemes Beneficiaries
1	Bharuch	Vagra & Bharuch	33	10,049	30,750	1,635
2	Chotaudepur	Naswadi	24	4,066	12,238	1,598
3	Morbi	Wankaner, Halvad, Madiya, Tankara	22	4,561	14,269	1,473
4	Vadodara	Savli	14	4,468	15,233	1,034
5	Vadodara	Nandesari	12	13,041	30,823	953
Total		9	105	36,185	1,03,313	6,693

The above table shows the details of the study area and total number of households and beneficiaries covered in the selected areas of 4 districts. Further this paper majorly discusses about the agricultural schemes in the selected areas.

Study Methodology

Project Sangaath focuses on strengthening government service utilization and empowering communities. The Project has developed a model called Jan Suvidha Kendra, and introduced Adhikar for beneficiaries' which will enable access and tracking of government schemes and services at the village level, ensuring benefits are reached to eligible beneficiaries. Deepak Foundation through Project Sangaath aims to optimize the utilization of government schemes and services for sustainable development.

The Sangaath project is implemented at field level which is being mentored and monitored centrally for optimum output.

The key activities of the project are listed below.

1. Baseline survey for household profiling and

identification of eligible beneficiaries for various schemes and Pre-Requisite documents.

2. Identification of local resource for rapport building in the village, awareness on schemes among the community and making application through home-to-home visits.
3. Setting up and operationalization of Jan Suvidha Kendra a hub for knowledge on schemes and facilitation centres within the village panchayat.
4. Awareness programs in identified villages with various government stakeholders along with village level stakeholders.

Results and Discussion

This section highlights the results of the study especially with related to agricultural schemes facilitated by the Foundation vis-a-viz schemes from the Pradhan Mantri Kisan Samman Nidhi Yojana, i-Khedut Portal such as Tractor Sahay Yojana, Automatic Seed cum Driller, Tadpatri Sahay Yojana, and Rotavator.

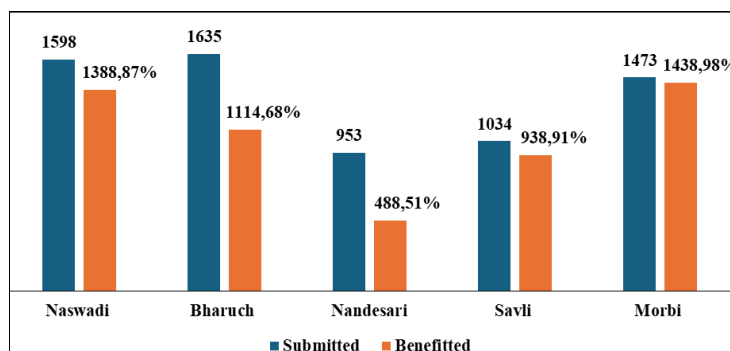


Fig 1: Applications submitted and approved of agricultural schemes

In fig 1.1 shows the number of applications related to agriculture submitted and benefitted among the selected sites. It can be seen from the graph that Bharuch has the highest number of applications submitted, which is 1635 out of which 1114 (68%) of the submitted applications were approved followed by Naswadi, and Morbi. Naswadi shows 1,598 applications submitted, with 1,388 applications, achieving 87% approved applications, indicating strong participation of farmers having agricultural land. Morbi records 1,473 applications submitted, with 1,438 approvals, yielding a 98% success rate, the highest among all regions majorly because of the facilitation of scheme named Krushi Sahay Yojana (Krishi Rahat Package). Nandesari has 953 applications submitted, with 488 approved applications, leading to a 51% success rate. Savli demonstrates high efficiency, with 1,034 applications and 938 approvals, achieving a 91% success rate, reflecting a well-functioning system. Morbi records 1,473 applications submitted, with 1,438 approvals, yielding a 98% success rate, the highest among all regions majorly because of the facilitation of scheme named Krushi Sahay Yojana (Krishi Rahat Package). From the above description it can be said that Morbi and Naswadi has the scope for more agricultural schemes compared to Bharuch, Nandesari and Savli. Among all the agricultural schemes, the major scheme covered for the linkages was Pradhan Mantri Kisan Samman Nidhin Yojana. This explains that farmer beneficiaries look forward to schemes which do not require any pre investment. Therefore, such schemes are appreciated and more taken up.

Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)

Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) is a central government program fully funded by the Government of India and implemented by the Ministry of Agriculture and Farmers' Welfare. Under the PM-KISAN scheme, farmers receive annual financial support of ₹6,000, which is transferred directly into their bank accounts in three installments of ₹2,000 each. Initially, the scheme targeted small and marginal farmers with up to two hectares of land but was later expanded to include all farmers across the country, regardless of the size of their landholding.

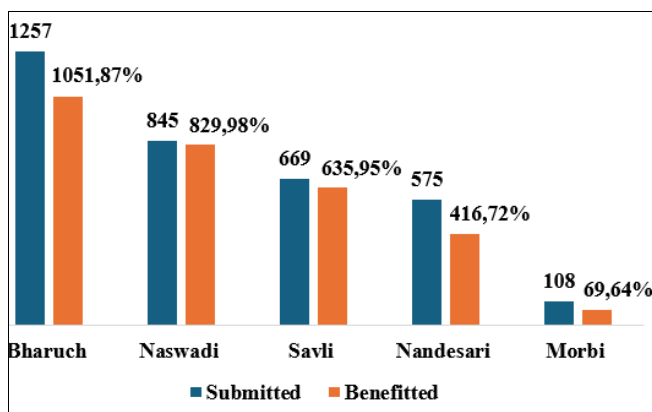


Fig 2: Applications of PM-KISAN submitted and approved

Fig 1.2 shows the applications of PM-KISAN in the selected regions. When comparing the five sites—Morbi, Savli, Nandesari, Naswadi, and Bharuch—in terms of the PM-

KISAN scheme's application submissions and benefits received, several key differences emerge. These differences can be analyzed based on participation levels (number of applications submitted) and the effectiveness of benefit distribution (success rates).

Bharuch leads with the highest number of applications submitted (1,257), reflecting strong awareness and high participation in the PM-KISAN scheme, largely due to its extensive geographical area and population. Naswadi follows with 845 applications, indicating significant engagement, though lower than Bharuch, suggesting that while a considerable portion of farmers are benefiting, there remains scope for further outreach. Savli demonstrates moderate participation with 669 applications, highlighting a reasonable level of awareness and interest, while Nandesari, with 575 applications, reflects moderate participation, influenced by its industrial dominance. Morbi records the lowest participation at 108 applications, suggesting limited awareness, logistical barriers, or challenges in accessing the scheme.

Conclusion

This study highlights the importance of district-specific strategies, digital accessibility, and strong extension services in maximizing the impact of national agricultural schemes in Gujarat. While programs like PM-KISAN, PMFBY, and the i-Khedut portal have significantly contributed to improving farmers' socio-economic conditions, regional disparities in application success rates, digital literacy gaps, and administrative challenges indicate the need for more targeted interventions.

CSR initiatives have proven to be instrumental in complementing government efforts by raising awareness, providing technical assistance, and supporting infrastructure development. Their role in bridging gaps, particularly in areas with limited reach, underscores the potential of public-private partnerships in strengthening agricultural development. Districts such as Naswadi and Savli serve as successful models where high participation and benefit rates demonstrate the effectiveness of well-implemented schemes. In contrast, Bharuch and Morbi highlight areas where administrative streamlining and enhanced outreach can further improve access and efficiency.

To ensure equitable access and maximize the impact of these schemes, efforts must focus on strengthening digital infrastructure, simplifying application processes, and improving awareness among farmers. Continued collaboration between the government, CSR initiatives, and NGOs will be crucial in addressing regional challenges and ensuring that all farmers, especially those in underserved areas, can fully benefit from agricultural schemes. By refining policies and expanding outreach, Gujarat can further enhance its agricultural potential, fostering a more inclusive and sustainable rural economy.

Policy implications

Investing in digital infrastructure and training farmers will enhance their ability to access and utilize platforms like the i-Khedut portal, ensuring wider reach and effective use of technology. Simplifying application processes and expanding single-window systems will help reduce delays and errors, making it easier for farmers to benefit from

various schemes. Conducting region-specific awareness campaigns with the involvement of NGOs and CSR initiatives will ensure that underserved areas receive necessary information and support. Improving administrative efficiency by deploying adequate personnel and resources, especially in high-application regions, will streamline implementation and prevent bottlenecks. Strengthening agricultural extension services will provide on-ground technical support tailored to local needs, ensuring farmers receive relevant guidance. Customizing national schemes to address unique agro-climatic and socio-economic conditions will enhance their effectiveness and applicability. Leveraging data from digital platforms will help identify underserved areas and introduce targeted interventions, optimizing resource allocation. Establishing regular evaluation mechanisms will allow for continuous assessment of scheme effectiveness and adaptation of policies based on feedback, ensuring sustained impact and better outcomes for beneficiaries.

References

1. Desai M, Mehta V. Challenges in agricultural scheme implementation in underdeveloped regions of Gujarat. *Dev Stud Q.* 2019;18(1):89-101.
2. Government of India. Agriculture Statistics at a Glance. Ministry of Agriculture and Farmers' Welfare; 2023.
3. Joshi K. Policy interventions for regional adaptation of agricultural schemes: insights from Gujarat. *Policy Dev Perspect.* 2020;10(4):456-471.
4. Kumar A, Sharma P. Sustainable farming practices and credit access in India. *J Rural Dev.* 2022;41(4):15-30.
5. Kumar R, Sharma A, Verma P. Impact of national agricultural schemes on regional challenges: a case study of India. *J Agric Policy Pract.* 2018;15(3):205-217.
6. Mehta R, Shah P. The role of NGOs in enhancing farmer participation in government schemes. *Agri Dev J.* 2023;15(2):78-92.
7. NABARD. Challenges in Indian agriculture. NABARD Annual Report; 2022.
8. Patel R, Mehta A. Digital platforms in agriculture: the case of i-Khedut portal. *Int J Agric Econ.* 2023;38(2):15-29.
9. Patel S, Desai K. Digital literacy and its impact on agricultural scheme adoption. *J Rural Technol.* 2023;10(4):112-130.
10. Patel J, Desai H. Barriers to technology adoption in rural Gujarat. *J Agric Ext.* 2023;50(2):18-29.
11. Patel S. Irrigation efficiency and soil health in Gujarat: benefits of targeted government schemes. *Gujarat Agric Res J.* 2016;12(2):145-153.
12. Press Information Bureau. Impact of PM-KISAN, PMFBY, and PMKSY on agriculture. Ministry of Agriculture; 2023.
13. Sharma P. Impact of awareness on agricultural scheme adoption. *J Rural Dev.* 2022;41(4):32-45.
14. Singh R. Regional disparities in agricultural scheme utilization. *Indian J Agric Econ.* 2023;78(2):45-62.
15. Rao S. Strategies for enhancing awareness of government schemes. *J Agric Policy.* 2023;37(3):65-78.
16. Sharma R, Patel M. Digital transformation in agriculture: a case study of the i-Khedut portal. *J Digit Policy Gov.* 2023;12(4):35-48.
17. Sharma P, Singh R. Extension services as a bridge: linking agricultural policies and farmers. *Indian J Rural Dev.* 2017;26(4):367-382.
18. Trivedi A. Challenges in digital resource accessibility for farmers. *Int J Agric Policy.* 2023;8(1):45-60.