

EVOLVING
PRODUCTION SYSTEMS:
**Gram Vikas's Role in
Enabling Systemic Shifts**

In 2022-23, Gram Vikas initiated the “Learning from the Past, Reading the Present, Planning for Future” (LPRPPF) initiative to reflect on its legacy and chart a roadmap for the future. This four-phase exercise began with workshops to frame hypotheses about how change happens, followed by in-depth reviews and community interactions. We commissioned three independent studies that evaluated the intergenerational outcomes of Gram Vikas’s education programme, the resilience of self-managed water and sanitation systems, and advancements in production systems in rural Odisha. The study findings document Gram Vikas’s programmes, highlighting evidence and narratives that illustrate its role in fostering long-term social change in Odisha.

Summary Report

Evolving Production Systems: Gram Vikas’s Role in Enabling Systemic Shifts

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Gram Vikas commissioned this study as part of its “Learning from the Past, Reading the Present, and Planning for the Future” (LP-RP-PF) exercise. This report, one of three in the Learning from the Past series, examines how Gram Vikas’s early efforts contributed to long-term systemic changes in cashew, masonry, and agriculture production systems in rural Odisha, improving livelihoods and local economies.

Gram Vikas is a rural development organisation partnering with Odisha’s marginalised communities since 1979, driving sustainable change and impacting the lives of over five million people in more than 8,000 villages.

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FOREWORD



Through its work spanning the first four decades, Gram Vikas helped communities take early steps that eventually led to changes in their production systems. In each case, while the immediate rationale for Gram Vikas's intervention may have been different, these efforts contributed to building reliability, skills, and the possibility of alternative uses of household resources, including labour. This, in turn, led to shifts in the socio-economic realities of the community.

Instances of this were seen in paddy production, where Gram Vikas encouraged villages to shift from the higher reaches to the valley, moving away from the slash-and-burn cultivation that was prevalent at the time. The motivation for Gram Vikas may have been to arrest deforestation as well as to increase access, but this also created the opportunity for paddy production in these areas. Cashew plantation was an environmental intervention but led to possibilities for the deployment of household labour. Masonry skills were often developed in response to a programme need, but they may have led to wider developments.

We wished to trace the evolution of these production systems and what may have been the possible role that Gram Vikas played in them. Prachi Agarwal and Zeeshan Ali took this broad desire and developed it into a methodology which leads us to some insights on looking at the long arc of change in production systems. It was a broad mandate, with limited sources of secondary data, and the team has managed to reconstruct from oral histories over this length of time. The research team interacted with 117 respondents across 25 villages in three study locations. They conducted 16 focus group discussions and took 42 key informant interviews, including those of Gram Vikas staff.

One of the production systems was that of cashew in Gajapati. The popularity of cashew can be seen, as 80% of the sampled villages are involved in cashew cultivation.



The low maintenance, climatic conditions, steady good returns, and access to markets have been factors that have fuelled this, along with encouraging support from the government on horticulture. The cashew processing industry in the neighbourhood in Andhra Pradesh meant that there was market access. This was brought to the doorstep by entrepreneurs like Mohan Naik, who has been buying locally for the last 15 years and supplying to traders at Palasa.

Gram Vikas's role in the early years involved helping establish nurseries in Tumbo and Subhadrapur. It also socialised the idea by taking farmers to successful plantations in Ganjam. This required collaboration with community representatives like Maanti Sabar, who was also working with Gram Vikas as a village animator at that time, and who, after visiting a successful plantation, set up a nursery in his village in the 1990s. Farmers like Gorang Sabar got their first plant 30 years ago and have gradually expanded to 400 trees planted on three acres of upland. This 'established' system received a shock in 2018 through Cyclone Titli, which destroyed 80–85% of the cashew plantations. Gram Vikas stepped up then to support new plantations, which helped in restoring the production system.

The process of bringing 'deergsthayi vikas' - development that lasts over a period of time - requires Gram Vikas to be around. Policy changes, such as the recent changes that impact processing in Andhra Pradesh, will create an environment which Gram Vikas can continue to support farmers to benefit from.

Masonry is another such production system. Between 1982 and 1993, 6,000 men and women from rural communities were trained as technicians to support the building of biogas plants for nearly 54,000 households in 6,000 villages in 25 of the 30 districts of Odisha. In 1993, when Gram Vikas exited from the programme, it helped most of these trained people to become self-employed mechanics, providing technical services for building and maintaining biogas plants.

The study focussed on the region surrounding the Kerandimal foothills, a tribal-dominated area that spans four Gram Panchayats – Mohuda, Banthapalli, Sihala, and Kankia – situated just 10 kilometres away from Berhampur City. Approximately 75–80% of the masons who received training have continued to work in the same profession. These figures reflect diverse preferences: women masons like Sarada Mallik, who preferred to be involved in the work locally offered by Gram Vikas for about 20 years; Baliya Mallik from Kankia, who has become a master trainer; Tarini Mallik, who trained in 2001 and has worked on daily wages in Berhampur; and others like Shankar Mallik, who used this to diversify his income while continuing with agriculture.

Additionally, many have trained others to become masons and construction workers in different districts, such as Ganjam, Gajapati, Kalahandi, Malkangiri, and Khordha. The many 'case studies' in the study remind us that change is not unidirectional or predictable.

The story of changes in paddy and vegetable cultivation is more complex, as it maps the changed relationship with agriculture over the years in the region. How may one understand Gram Vikas's role? Making something that seems only a possibility real, through continued relating with the community, seems to be one way to understand it.

In the early 2000s, water from the Indravati Dam reached the Kalampur block, and the farmers there started cultivating two different paddy crops each year. Around 2008, farmers in Thuamul Rampur learned about the double crop technique from the farmers in Kalampur and started practising it themselves. However, most farmers typically stored the rice they grew for themselves and sold it only in cases of financial distress. In this, Gram Vikas mobilised demonstration and interest in transplanting over broadcasting in paddy cultivation and catalysed a longer journey towards change in the agriculture production system.

This study shows that in our concern for attribution, we may lose sight of some of the system-wide changes that development action also brings. And it is a reminder that there are many layers and diversities in this development process.

Sustainable change is a layered process which is context-specific. The legacy to be strategic and catalytic, not creating dependence but responding while keeping both the bird's-eye and worm's-eye view, seems relevant as Gram Vikas moves ahead in the very changed context of the current decade and beyond.



EXECUTIVE SUMMARY



In 2019, when Gram Vikas turned 40, it recognised the need to re-orientate its work in light of changing contexts and the achievements, experiences, and lessons from the previous four decades. In July 2022, Gram Vikas launched an organisation-wide learning exercise titled Learning from the Past, Reading the Present, and Preparing for the Future (LP–RP–PF). The goals of this exercise were to understand and document Gram Vikas’s contribution to community development over the last 43 years, and to validate the Gram Vikas Decade V Strategic Approach and develop a strategic plan for its implementation.

As part of this process, Gram Vikas commissioned several studies to explore and document changes at the community level over the past four decades.

This study investigated transformations in the production systems of cashew, masonry, and paddy with vegetables in Koinpur (Gajapati district), Kerandimal (Ganjam district), and Thuamul Rampur (Kalahandi district), respectively. The study had three key objectives:



To document changes in these production systems in the selected locations;



To analyse the stages and realities of these changes over the last 43 years; and



To assess the role of Gram Vikas in shaping these changes.

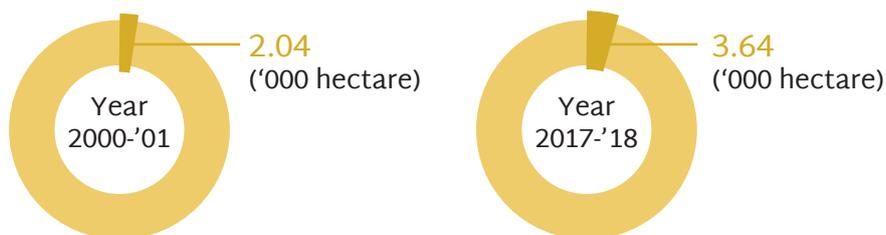
1. Development of the Cashew Production System in Koinpur, Gajapati



Rayagada block, located in Odisha's Gajapati district, has a large tribal population. This study focused on the Gram Panchayats of Koinpur, Kerandi, and Lakshmipur in Rayagada block, referred to as the Koinpur area throughout the report. Decades ago, the tribal population depended on shifting cultivation, but this practice has become less viable due to population growth, deforestation, and ecological imbalances. It has largely been replaced by terraced paddy fields.

Local communities now cultivate fruit trees, kitchen gardens, and orchards, but continue to seek more reliable options within horticulture. Over the last two to three decades, the Government of Odisha has actively promoted horticultural interventions. Cashew cultivation has emerged as a particularly successful option—popular for its low maintenance and high profitability. Around 80% of households in the sampled villages are now engaged in cashew farming.

Growth in cashew plantation area in Gajapati district



Source: Agriculture and Farmers Empowerment Department, Government of Odisha.



INTRODUCTION OF CASHEW CULTIVATION AND EARLY INTERVENTIONS

During the 1980s and earlier, shifting cultivation (slash and burn) was a way of life in the area. The people, mostly Adivasis, lived on a subsistence economy rooted in land and forest. Traditionally, communities in the Koinpur area were hunters, food gatherers, and shifting cultivators. For generations, they lived on hill slopes and mountainous terrain, drawing nourishment from the surrounding hills and forests in multiple ways—meeting small needs and making a bare minimum living.

In 1987, Gram Vikas and the Directorate of Horticulture, Government of Odisha, introduced cashew grafts to local communities to promote cashew cultivation. In 1992, Gram Vikas partnered with the National Wasteland Development Board (NWDB) and conducted numerous counselling meetings and extension activities to encourage adoption. By the late 1990s, farmers had begun to adopt cashew farming, which led to the expansion of plantations. Buyers from Palasa and Gopili, in the state of Andhra Pradesh, offered ₹20 per kilogram for cashews, and doorstep selling began in the early 1990s.



EXPANSION, DISRUPTION, AND CURRENT STATUS OF CASHEW PRODUCTION

The area witnessed steady growth in cashew plantations between 2000 and 2020, supported by horticulture department training on cultivation techniques and pest control. Cashew farming proved profitable, gradually replacing shifting cultivation. Growers began earning between ₹50,000 and ₹300,000 per season. However, in 2018, Cyclone Titli devastated 80–85% of the cashew plantations in the Koinpur region, significantly reducing farmers' incomes. Local farmers persevered, replanting the trees, and by 2021, the crops began to yield again. Despite the damage caused by Cyclone Titli, farmers have recovered and are confident of reaching pre-Titli levels of production by 2025.

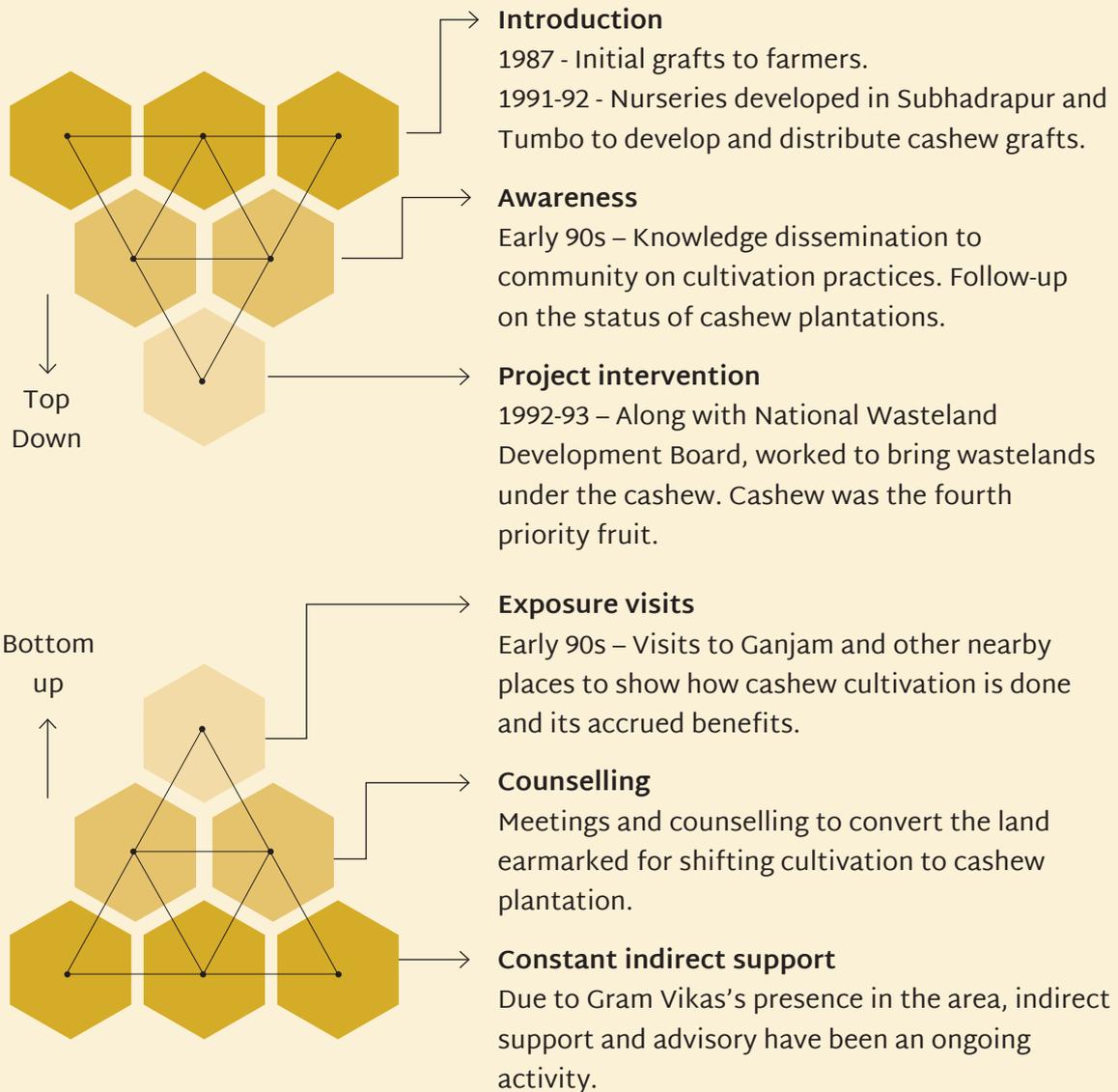
In recent years, cashew cultivation has become increasingly popular in the Koinpur area, with 75–80% of households in every sampled village engaged in it. As cashew units in Palasa became saturated and regulatory enforcement increased, factory owners began establishing processing units in nearby areas of Odisha. Researchers observed such units in Oya, Elasar Colony, and Jakra in the Kerandi Gram Panchayat. Local villagers are employed as daily wage labourers in these processing units.

The cashew industry has continued to thrive due to doorstep selling opportunities, the availability of land on hill slopes, and favourable climatic conditions. These selling opportunities began with buyers from Palasa and Gopili and now include a few local traders. Farmers are encouraged to cultivate more cashews, as the assurance of a steady



cash income has improved their lifestyles and food habits, while also reducing their dependence on shifting cultivation.

Gram Vikas played a catalytic role in initiating the cashew production system in Koinpur.



2. Masonry Production System in the Kerandimal Area, Ganjam



The study focused on the region surrounding the Kerandimal foothills, an Adivasi-dominated area spanning four Gram Panchayats—Mohuda, Banthapalli, Sihala, and Kankia—located 10 kilometres from Berhampur city in Ganjam district.

Traditionally, the people of the Kerandimal area were hunters and shifting cultivators, living in small villages along the hill slopes. Shifting cultivation is now uncommon, with only 10–15% of households in villages near the foothills continuing to practise it on hill slopes.

Over the last two to three decades, however, many have moved down the hills and now reside in pucca houses built with support from Gram Vikas and the Government of Odisha.



GRAM VIKAS'S MASONRY TRAINING PROGRAMME

In 1987, Gram Vikas launched a masonry training programme in the area. The programme ran for around 20 years at regular intervals and produced over 600 trained masons. The first group of trainees went to Ranchi for their training, but later, the sessions were held at Gram Vikas's Mohuda campus in Ganjam district, Odisha. Initially, each batch included 30–40 men and women from the Kerandimal area, and the training lasted three months. After completing the course, most trainees were hired by Gram Vikas to work on construction projects in various locations, including Kankia, Koinpur, Kalahandi, and other project areas.

Approximately 75–80% of the trained masons have continued to work in the same profession. Many have gone on to train others as masons and construction workers in different districts, such as Ganjam, Gajapati, Kalahandi, Malkangiri, and Khordha. They have contributed to the construction of individual houses in villages through ongoing housing projects across these districts. Some have chosen to work independently with construction contractors in Berhampur. In the 1990s, when Gram Vikas built a residential school in Kankia, many of these masons were involved in its construction.



CREATING LIVELIHOOD ALTERNATIVES THROUGH MASONRY TRAINING

Before the masonry training was introduced, landlords were a common presence in the area. Farmers often had to mortgage their land to access financial assistance, which led to widespread issues such as liquor dependency. Landlords also compelled farmers to work on their farms. The masonry training provided an alternative and stable source of income, breaking this cycle. People realised they could earn a secure living through professions outside agriculture.

The masonry production system expanded significantly due to the appeal of immediate earnings. Unlike agriculture, which requires an entire season and carries various risks, masonry offers daily wages. Masons can choose how much and when they want to work. Many skilled masons aspire to become local contractors but lack the capital to purchase equipment and meet working capital needs. Masons estimate that ₹2,00,000 would be sufficient to start out as a contractor. Since formal masonry training ceased 15 years ago, local youth have been gaining skills through informal, practice-based learning from experienced workers.



LOCATION ADVANTAGE

The proximity to Berhampur (10–15 kilometres), one of Odisha's major and rapidly growing cities, has been a key factor in the development of the masonry profession in the Kerandimal area. With numerous housing societies, factories, and construction projects underway, there is a high demand for skilled labour, particularly masons, who can earn a wage of around ₹600 per day. In the Kerandimal villages, masons typically receive ₹500 and meals, although payments for local work are often delayed. Living near Berhampur ensures more regular income, and masons are able to return home and spend time with their families in the evenings.



EARNINGS AND EMERGING INTEREST AMONG YOUTH

The income levels of masons have been increasing steadily, ranging on average from ₹12,000 to ₹40,000 per month. While agriculture is often viewed as a challenging and high-risk profession requiring significant investment, masonry is a skilled occupation that enables individuals to earn at their own pace without seasonal constraints. Although younger generations often aspire to office jobs, many would consider becoming masons if they were more aware of the opportunities available in this field. In fact, many young boys and girls in the area have requested that Gram Vikas resume its masonry training programme.

Per day masonry rates at Berhampur since 2000 (₹)*



Source: Interviews with masons



Construction training provided by other organisations, such as Larsen & Toubro, also appeals to young people. They are often referred by the Gram Vikas team and, after completing their training, return to work in their local areas, recognising the strong demand for masonry skills in nearby villages and Berhampur city.

Gram Vikas provided a masonry training programme for over two decades to support individuals who lacked work opportunities. The programme proved highly successful, with more than 630 men and women trained in the Kerandimal area.

Role of Gram Vikas in the development of masonry production system in Kerandimal area

Training

Gram Vikas trained more than 630 men and women under the masonry training programme. Most of the trained masons work as independent masons supporting their families.

Initial Job Placements

Gram Vikas absorbed most of the trainees in its ongoing housing, school, and other infrastructure projects, supporting the trainees early in their careers.

Continuous Support

Many trained masons worked on Gram Vikas's projects for years. Gram Vikas provided ancillary services like cycle loans and savings facilities to help masons thrive.

Reference Programme

Gram Vikas has been working in the Kerandimal area for the last 40 years. Masonry training has stopped for the last 10-15 years. However, GV encourages youngsters to participate in masonry programmes at L&T and others.



70-75% of the trained masons under the Gram Vikas Masonry training programme continue to work as independent masons. Over the last 40 years, they have worked as masons supporting their families and reducing their dependence on shifting cultivation.

3. Paddy and Vegetable Production System in Thuamul Rampur, Kalahandi



Gram Vikas has been working to improve the lives of communities in Thuamul Rampur since 1984. Kalahandi district in Odisha has undergone a significant transformation, having once been infamous for its high number of starvation deaths. Today, it ranks among India's top 25 rice-producing districts, with rice production increasing five-fold since 1999. From being known as the "land of hunger," Kalahandi has emerged as Odisha's rice bowl, currently holding the second position in the state for rice production.

This study focused on villages and Gram Panchayats that are part of the Kumudabahal and Adri Farmer Coordination Organisations (FCOs) supported by Gram Vikas. In the early years of its work—during the 1980s and early 1990s—Gram Vikas encouraged villages to move from higher ridges to the valleys. This shift marked a move away from slash-and-burn (shifting cultivation) practices, which were then common in the community. While Gram Vikas's motivation may have been to reduce deforestation and improve access, the shift also created opportunities for paddy cultivation in these areas.



ADOPTION OF TECHNIQUES AND EVOLVING PRACTICES

In Thuamul Rampur, farmers have adopted new techniques to increase yields from the same piece of land, including planting two paddy crops in both the Kharif and Rabi seasons and using mountain streams and other irrigation sources to support production.

Many farmers now sell their yields in nearby markets. However, overall knowledge of agronomy and market dynamics remains low, and the lack of adequate market support and storage facilities often leads to crop losses and lower prices.

In the early 2000s, water from the Indravati Dam reached the Kalampur block, enabling farmers there to begin cultivating two paddy crops each year. Farmers in Thuamul Rampur did not directly benefit from the dam, but around 2008, they learned about the double-cropping technique from their counterparts in Kalampur and began to adopt it. In the Adri area, some farmers had already started cultivating two paddy crops in the late 1990s, leading to higher paddy production and increased rice sales. However, the technique was not universally adopted, as many farmers continued to store their rice for personal consumption, selling only in times of financial distress. During this period, Gram Vikas actively promoted the benefits of transplanting paddy instead of using the traditional broadcasting method.



IRRIGATION, CROPPING PATTERNS, AND MARKET CONSTRAINTS

In recent decades, mountain stream irrigation sources have come under increased pressure due to population growth, the expansion of cropping, and rising temperatures. These factors have led to water shortages for agriculture, particularly during the summer months. In response, villagers, both individually and collectively, have constructed canals from streams and springs, directing water to their fields using soil bunds and contouring methods. Some farmers have also replaced traditional pumps with electric and solar pumps.

Currently, around 50–60% of households grow two paddy crops annually, while 20–30% cultivate vegetables. Some farmers use solar pumps to irrigate their fields. However, despite increasing demand, local merchants exploit vegetable growers, pushing prices down. In the absence of storage facilities, farmers are forced to sell quickly at lower prices due to the perishability of their produce.

There is considerable potential to expand vegetable production in the region. However, many farmers face persistent challenges, including limited access to quality inputs, insufficient marketing support, lack of storage infrastructure, and weak bargaining power. Pests are another concern, reducing potential yields by nearly half. In the early stages of cultivation, stray cattle cause significant damage to crops, particularly in the absence of protective wooden boundaries. Farmers need marketing support, training on crop protection, and fairer pricing mechanisms to fully realise the benefits of vegetable cultivation.



PRODUCTIVITY GAINS AND THE ROLE OF GRAM VIKAS

Over the last 25 years, farmers have increased paddy yields by 50% from the same parcels of land by adopting double cropping and transplanting techniques. In 1995, paddy output from a three-acre plot was around 30 quintals; today, it has risen to nearly 45 quintals.

For 43 years, Gram Vikas has consistently supported communities in the region by providing agricultural knowledge, motivation, irrigation solutions, and other essential resources. It continues to play a critical role in enhancing paddy cultivation and strengthening vegetable production in the Kumudabahal and Adri FCO villages of Thuamul Rampur block.



Conclusion

Gram Vikas has played a catalytic role in driving the growth of three production systems across Koinpur, Thuamul Rampur, and Kerandimal. The community holds Gram Vikas in high esteem for its continued support and guidance. Today, communities are more self-reliant, confident, and optimistic, supported by increased incomes, improved connectivity, and better education levels.

To move forward, Gram Vikas must reflect on the following key questions:



Production system: Cashew Production System, Koinpur

Key question: What areas can Gram Vikas leverage its strengths and goodwill of the last 40 years to support the community in achieving better outcomes from cashew production?



Production system: Masonry Production System, Kerandimal

Key question: What steps can Gram Vikas take to elevate the existing masons and fulfil the younger generation's aspirations in the Kerandimal area?



Production system: Vegetable and Paddy Production System, Thuamul Rampur

Key question: How can Gram Vikas improve its alignment with the government's horticulture and agriculture departments to enhance thematic interventions, secure relevant projects, and strengthen community-level engagement? What potential interventions, such as forward or backward linkages, could help farmers secure better rates and returns?

Gram Vikas must remain responsive to emerging challenges and continue to adapt to changing contexts. This includes strengthening operational systems, exploring new opportunities for growth, and building on existing relationships with communities. As a trusted institution, Gram Vikas's future efforts should focus on both expanding its reach and deepening its engagement at the grassroots.

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This report aims to offer insights that will support and inform stakeholders working to strengthen the three production systems examined in this study.





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