



SOCIO-ECOLOGICAL DIMENSIONS OF RURAL TRANSFORMATION IN A POST-TSUNAMI RESETTLEMENT VILLAGE IN EASTERN SRI LANKA.

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ABSTRACT

Rural development is traditionally conceptualized as a multi-sectoral process aimed at enhancing quality of life through infrastructure and socio-economic progress. However, from the perspective of Social Change Theory, rural transformation is non-linear and hinges on the functional integration of social systems with ecological and economic realities. Planned interventions, such as the post-2004 tsunami resettlement in Valathappetty Ismayilpuram, can trigger "backward transformation" when new structures misalign with local contexts, underscoring a research gap in the long-term socio-ecological sustainability of Sri Lanka's resettlement villages. This qualitative study examined 193 households in the resettlement scheme using purposive sampling of 20 information-rich cases (representing approximately 10% of the population, including 15 long-term residents and 5 livestock farmers). Data from semi-structured interviews, field observations, and key informant interviews with village officials and agricultural officers were analyzed via Thematic Analysis. Findings delineate three phases: initial arid grazing structure, post-tsunami development via planned housing, and current regression marked by significant out-migration (decreasing from 193 to 125 households). With 65% of the community relying on agriculture, the primary drivers of decline include employment deficits, grazing land depletion, multicultural adaptation challenges, and inadequate access to education and healthcare. Sustainable transformation necessitates prioritizing livelihood security, ecological preservation, and social integration over mere infrastructure. Social work interventions should promote local employment, resource adaptation, and community cohesion to avert further systemic decline.

Keywords: Ismayilpuram, Planned Resettlement, Rural Livelihood, Social Change Theory, Socio-Ecological Dimensions, Transformation.

Introduction

A rural area is generally defined as a small settlement located in the periphery of a nation. These areas are primarily characterized by agricultural activities, small-scale industries, and local trade. The rural population often maintains strong social bonds, with lifestyles rooted in natural heritage and traditions. Residents are typically capable of undertaking economic activities that are self-sustaining within their environment, utilizing local resources to produce goods and market them in local commercial centers.

Furthermore, modern urbanization, technological advancements, and educational progress have opened new opportunities within the rural economy. Digital trade and the use of online platforms have created new avenues for marketing agricultural produce and selling rural goods (Food and Agriculture Organization of the United Nations, 2022).

Despite these developments, challenges such as the lack of digital literacy and disparities in internet access persist in rural communities (Essa, Mohamed & Yusuf, 2023). Additionally, inadequate infrastructure, limited marketing facilities, and climate change pose significant threats to rural societies. Rural areas heavily dependent on agriculture and natural resources are particularly vulnerable to unpredictable weather events, such as floods and droughts, as well as the displacement of youth (United Nations, 2023). Consequently, adopting climate-resilient practices and sustainable agricultural methods, alongside the development of local employment, marketing facilities, and rural infrastructure, is essential for transitioning toward an urban-integrated rural model (Agarwal, 2022).

Global natural disasters have underscored the importance of rural infrastructure. The use of remote services and digital technologies demonstrates potential for improving services in rural areas (World Health Organization, 2021). At the same time, the economic consequences of natural disasters have affected the livelihood of rural populations (Banerjee, Bouy & Ghosh, 2020). Moreover, the migration of rural people remains a persistent challenge in rural societies. Addressing the causes of migration through informed action can help stabilize and improve the rural economy (Ja, Li & Wang, 2021).

Background of the Study

In Sri Lanka, rural areas play a pivotal role in the nation's social and economic structure; however, these communities continue to face various challenges. The impact of the COVID-19 pandemic since 2020 has deeply affected many aspects of rural life, while the rapid pace of technological advancement and the immediate consequences of climate change are significantly shaping the future of these communities. Contemporary research highlights the ongoing backwardness of rural areas and the need to enhance the digital literacy of these populations (Woods, 2021).

The village of Ismailpuram serves as a critical case study. Following the 2004 tsunami, which severely impacted many villages in the Eastern Province—destroying livelihoods and disrupting social structures—the Sri Lankan government initiated a resettlement housing project. Under the Ampara District Secretariat, the Tsunami Housing Project resulted in the establishment of Ismailpuram village, where approximately 193 houses were constructed and allocated by the Ministry of Housing on November 8, 2008.

Despite being created for post-tsunami resettlement, Ismailpuram has faced numerous challenges for many years. The lack of proper maintenance for essential facilities, such as the government-allocated market complex, schools, and children's parks, has led to their gradual deterioration. Furthermore, the failure of the government's resettlement plan to fully materialize has resulted in unsuccessful efforts to secure livelihoods, leading to persistent economic crises. Specifically, traditional occupations such as agriculture and livestock farming have declined, contributing to increased poverty due to lower incomes. Inadequate transportation facilities have also hindered the ability of rural villagers to market their products or access essential goods.

Therefore, it is essential to study the status of Ismailpuram village to understand the social, economic, and environmental factors contributing to its underdevelopment. This study was undertaken with the primary objective of identifying the causes behind the backwardness of Ismailpuram village and proposing appropriate social welfare recommendations for rural development. The research aims to analyze the current situation of Ismailpuram, identify barriers to rural development, examine the challenges faced by rural people, and provide recommendations for the advancement of the village.

Theoretical Framework

Social Change Theory

Social change is an inherent and continuous process. It is derived from the premise that society possesses complex dynamics that are not always predictable. Shifts in cultural patterns, technological revolutions, policy reforms, and population changes can create both opportunities and challenges that redefine the social structure (Rachmad, 2022). However, planned resettlement projects—such as those initiated after natural disasters like the 2004 tsunami—can disrupt and reconfigure this social structure. The study conducted in Ismailpuram village indicates that despite the creation of formal housing plans, the government's failure to establish an environment conducive to the people's livelihoods and professional needs ultimately paved the way for the village's regression.

Social Change Theory provides a structured framework for understanding such social forces and identifying the critical determinants of transformation. It facilitates collective actions to foster development, social cohesion, and empowerment. Nevertheless, in such planned resettlement contexts, people often find it difficult to adapt to new cultural and social environments, leading to a tendency to return to their original habitats. According to Social Change Theory, this reflects the ruptures that occur in the cultural values and social relationship patterns of a community.

Specifically, impacts such as urbanization and globalization can fracture social bonds, relationships, and community support mechanisms. This can cause deep damage to the social relationships between individuals and groups, potentially leading to the loss of local cultural values and traditions (Junaedil, Dikrurhman & Abdullah, 2023). When analyzing these social changes, a significant trend toward large and complex groups emerges, where trade, schools, services, and society all converge today. Increased regional agriculture, rural industrialization, and improved transportation and information dissemination are driving rural areas toward integrated urban development.

Consequently, the "business-suit farmer" has emerged as a replacement for the traditional rural farmer. Rural and urban patterns are blending to create a new "rural-urban" society. Such changes are interconnected, affecting not only farmers but also their urban and rural relatives (Rogers, 1960). Furthermore, due to urbanization and globalization, rural social structure is increasingly becoming individualistic and exposed to external influences, while traditional social

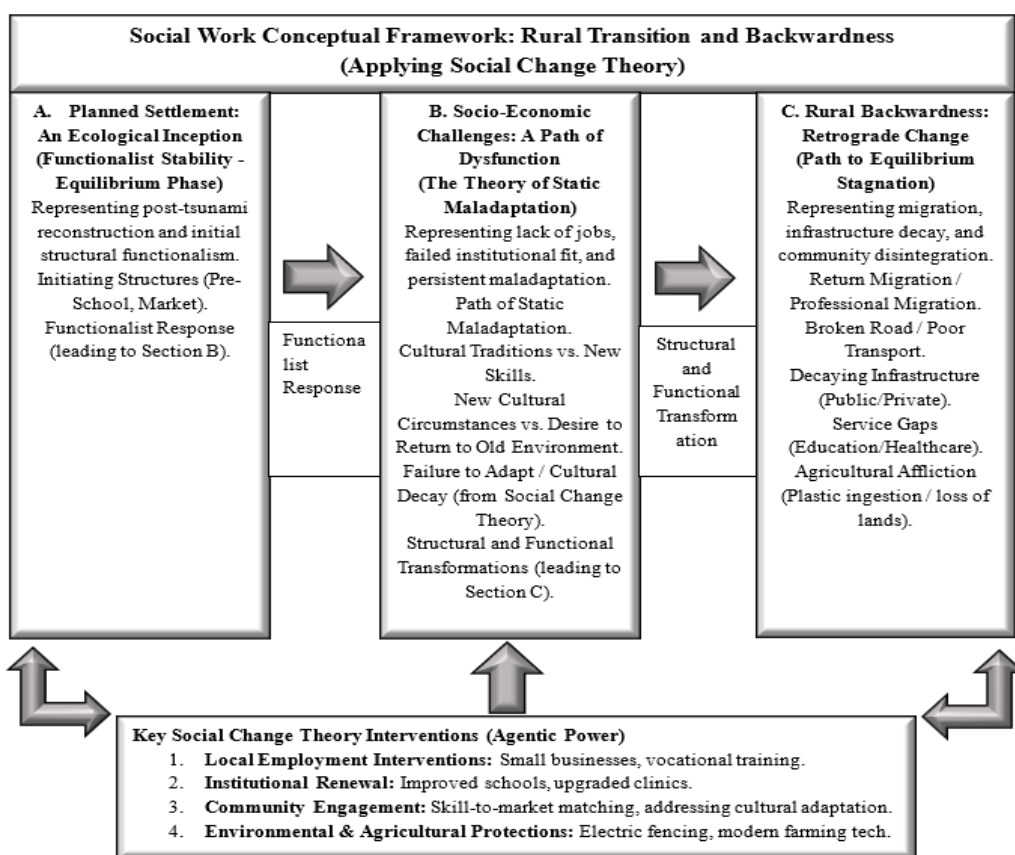
relationship patterns are undergoing transformation. During planned resettlements, the lack of proper education, health, and infrastructure facilities encourages migration among the people. Ultimately, this creates social rupture and economic backwardness instead of rural progress. Therefore, based on Social Change Theory, if a planned resettlement is to be successful, it must be a comprehensive approach that includes not only providing houses but also local employment opportunities, cultural protection, and proper social integration.

Functionalist Theory

Functionalist theory explains the interconnection between various parts of a society (Mahees, 2021). Each segment contributes to the stability and order of society, while also describing various dimensions and activities—such as employment opportunities, migration, education, technology, and infrastructure—that drive rural change. This perspective clarifies how each component of a village, through the execution of specific functions, contributes to its overall functional transformation.

For example, in Ismailpuram village, fulfilling the basic needs of various sectors, such as family, education, and employment, can facilitate shifts in economic and income-generating activities. Changes occurring within the village affect its diverse parts and their respective functions. As employment opportunities and infrastructure facilities evolve and new job prospects are created within the village, the economic status of the people shifts. This, in turn, can induce changes in family structures and educational systems. When infrastructure facilities are improved in the village, the standard of living of the people rises, which may lead to shifts in social hierarchies and lifestyle habits.

Conceptual Frame



(Source: Author)

This framework explains how a planned settlement faces regression over time through three critical stages.

Planned Settlement

The first stage concerns "planned settlement." Following the 2004 tsunami, the government established this village to resettle 193 families. This stage demonstrates the provision of basic infrastructure facilities, such as housing, market complexes, and schools.

Socio-Economic Challenges

The second stage describes "socio-economic challenges." Although housing was provided, the employment opportunities necessary for the people's livelihoods were not created there. Specifically, those who were previously engaged in

coastal activities, such as fishing and handicrafts, suffered from "cultural maladaptation" as they were unable to adapt to this new environment. Since they were forced to travel up to 15 kilometers to find work, the residents faced severe economic distress.

Rural Backwardness

The third stage reflects "rural backwardness." Due to the lack of proper employment and basic facilities, 68 families left the village and migrated elsewhere. Meanwhile, government buildings, public spaces, and roads that remained unmaintained deteriorated, causing the village to lose its essence. Although agricultural lands were converted into residential areas, the lack of proper waste management also led to the decline of traditional agriculture. Thus, this framework concisely explains how a planned model village has transformed into a backward village today due to the absence of proper livelihood planning.

Methodology

In this study, qualitative data were collected using both primary and secondary sources. Primary data were gathered through interviews with 20 long-term resident households, as well as focused interviews with five livestock and cattle farmers. Furthermore, key informant interviews were conducted with village officials, religious leaders, and agricultural officers to obtain in-depth information. Secondary data were sourced from the statistical reports of the Divisional Secretariat, and all collected data were subjected to thematic analysis.

Delimitation of the Study

The research was strictly limited to families involved in the tsunami resettlement project within the administrative boundary of Ismailpuram village. Only those permanently residing in these settlements were included in the study. Temporary residents, leaseholders, and short-term occupants were excluded from the research scope.

Data Analysis

Demographic Profile

The study covered the 193 households within the selected village, comprising a total registered population of 763 individuals, of which 406 are female and 357 are male. The village consists of 193 families resettled by the government following the tsunami. Additionally, the village includes 21 households engaged in long-term vegetable cultivation and livestock farming, alongside 30 households that migrated from various parts of the country, purchased land in the village, and have since settled there permanently.

Livelihoods and Employment

The selected village consists primarily of arid land; however, the surrounding environment is conducive to paddy and sugarcane cultivation. Consequently, the majority of the residents are engaged in agricultural activities, such as livestock and cattle farming, and poultry rearing. A small portion of the population works in a nearby iron factory, while an even smaller number is involved in fishing and local trade.

Data collected from the participants indicate that 65% of the residents rely on agriculture for their livelihoods. Furthermore, 20% work as laborers in the iron factory, 10% are engaged in self-employment, such as trade and fishing, and the remaining 5% work as casual daily-wage laborers during periods outside of planting and harvest seasons.

The difficulties associated with resettlement are highlighted by the reflections of participants. A 65-year-old resident (R1) stated:

"I came here right after the tsunami. I do not know how to do any work other than what I have known all my life. They brought me here after taking my fishing gear, and I have been asked to farm this land, but all I know is fishing and raising cattle".

This illustrates the challenge faced by individuals who, despite having years of experience and expertise in a specific trade, are forced to adapt to an entirely different social and cultural environment. The research highlights the difficulties people face when attempting to adjust to new circumstances while trying to integrate with an established social order.

Similarly, two farmers, aged 45 and 52 (F3 and F4), remarked:

"We have been here for over two years. Our fathers and forefathers were farmers here, and this is the right place for us. But when the government brought this housing project here after the tsunami, the people who moved in have no work, and we do not know how to do any other kind of labor".

When the government undertakes resettlement, moving people accustomed to a specific environment and culture into an entirely different setting can cause significant harm. The evidence suggests that both the resettled individuals and the host community face direct negative impacts when trying to reconcile their existing professional activities with the new environment.

Furthermore, during a primary data interview, a 50-year-old key informant (K1) noted the lack of employment opportunities:

"The government built this market complex, but there is no work to be done there. It is only suitable for those who sell small items or keep cattle. This is not the right land for us. Since there is no fishing work here, people keep the small shops closed. The iron factory provides work for some, but many people go out for casual labor during the off-season".

In summary, the study confirms that residents resettled by the government are facing severe difficulties in sustaining their livelihoods, with some individuals resorting to casual labor during periods of unemployment.

Land Use and Resource Management

The shift in land use within the village highlights a significant departure from original patterns. Rural land use encompasses economic, social, and environmental dimensions (Zhang, Jiang & Kong, 2024). Initially, much of the land was utilized for livestock grazing; however, this has been replaced by residential plots, forcing farmers to travel long distances to find suitable grazing grounds. Furthermore, traditional farmers who were once engaged in long-term vegetable cultivation have been severely impacted by land fragmentation and government-led resettlement projects. As land was reallocated for housing, children's parks, and commercial zones—much of which now remains unused or poorly maintained—the traditional agricultural practices, including cyclical farming and natural soil fertilization, have been lost.

Moreover, the improper disposal of daily household waste (plastic, glass, and metals) in the center of the village has created hazardous conditions for livestock, leading to diseases and premature death, which further threatens the livelihood of the farmers. A 59-year-old farmer (F1) remarked:

"This land was originally suitable for cattle grazing, but now houses have been built everywhere. We have to travel far to find fodder for our cattle, which is a significant burden for our livestock farming".

This indicates that when the government designs resettlement projects, there is insufficient attention paid to the historical and existing land use. The prioritization of housing construction over livelihood planning leaves residents struggling to sustain their incomes. Another farmer (R5) noted:

"We have been farming vegetables for generations. The government took our land for resettlement. There is not enough space here to practice our traditional cyclical farming, and our traditional agricultural system is dying".

The study confirms that the government's seizure of agricultural land for housing has undermined the livelihoods of the rural population. Furthermore, the neglect of infrastructure, such as market complexes and playgrounds, which now sit empty, highlights the failure of the resettlement authorities to incorporate the basic needs of the community into their planning. When the environment is not conducive to their trades, the provided facilities become obsolete, and residents are forced to migrate in search of other opportunities.

The accumulation of household waste in public areas also causes environmental degradation. A resident (R20) pointed out:

"People dump their household waste in the middle of the village, and the cattle eat it".

Effective waste management is as critical as livelihood and infrastructure planning in resettlement schemes. Without proper waste disposal, the contamination of land and groundwater jeopardizes agricultural output and animal health, directly impacting the economic stability of the farmers. As supported by Liu et al. (2024), understanding the profound impact of human displacement on land use and environmental structures is essential for the success of any resettlement initiative.

Population Changes and Migration

Although the government initially resettled 193 families in the village, the findings indicate that only 125 of these families currently reside in the village permanently, while others have returned to their places of origin. The study reveals that the initial housing infrastructure provided during resettlement failed to align with the professional requirements and social backgrounds of the beneficiaries, thereby precipitating socio-economic crises that forced residents to migrate.

A 56-year-old long-term resident (R2) explained:

"There were more than 190 families here at the beginning, but most of them moved back to their own lands or to other areas due to the social and economic conditions of this village".

Reflections from long-term residents (R10 and R13) further clarify the drivers of this migration:

"We had a good life in our original places, but everyone moved back to their areas after the tsunami because there is no work here. I also thought of leaving, but I am still here because I have a small business that keeps me going".

These accounts indicate that the resettled population primarily migrated in search of employment opportunities. While some individuals managed to adapt to the rural environment and improve their livelihoods, the majority relocated in pursuit of better economic prospects.

A key informant (K2) highlighted the underlying cultural factors:

"Initially, people were happy to live here to reduce their trauma after the tsunami, but they soon felt a strong desire to return to their original lands. They did not like the multicultural environment here and were more interested in following their traditional cultural practices. Consequently, many sold their houses to others, even if it meant leaving them, and moved out. The houses they vacated have since deteriorated and are no longer suitable for living, and are now occupied by people who came from various parts of the country".

In conclusion, the demographic shifts in the village are a direct result of migration. As noted by Lin et al. (2024), rapid rural-urban transformation has significant impacts on these communities, often leading to the swift regression of certain areas. The primary drivers for this migration include the lack of

employment opportunities, social challenges, the inability to practice traditional customs, the lack of desire to live in multicultural settings, and a strong preference to return to their ancestral homes.

Findings and Discussion

Rural Transformation Trends

As discussed by Lin et al. (2024), population dynamics and land use patterns in traditional rural areas are highly sensitive to spatial and temporal shifts. This reflects the rapid growth and transformation of these regions, which can be categorized into four types: (A) potential for emerging urban or peri-urban centers; (B) abandonment and integration with neighboring villages; (C) areas requiring intervention to attract population and manage construction land development; and (D) regions evolving into specialized urban hubs that require integration into the broader rural-urban network. By comparing the village's initial structure with its current state, three distinct stages of rural evolution are evident.

Initially, the area comprised arid lands with natural vegetation, suited primarily for cultivation and livestock farming. Following the 2004 tsunami, the government's resettlement project aimed to create a planned village, setting it on a development trajectory. However, the subsequent migration of families has left the village in a state of regression.

Reflecting on this, a 70-year-old religious leader (K3) remarked:

"Initially, this village showed promising development within its first 15 years. However, the social shifts over the last decade due to migration mean that very few people remain. Their religious and cultural practices are also in a state of decline".

Consequently, while the area briefly flourished as a cohesive rural community shortly after its inception, the last decade of migration has left it in a state of regression. With only a small population remaining, this represents not just a decline in numbers, but a broader erosion of the community's spiritual values, cultural traditions, and social identity.

Long-term residents (R3 and R6) noted the rapid turnover of residents:

"Most of the families resettled here migrated within five years. Only those who have permanently settled in the last decade remain. This is why the village appears backward today. However, we have observed that since 2015, the rural development project has helped improve some basic infrastructure like roads".

The residents emphasize that because the resettlement lacked essential services or livelihood opportunities, families began to migrate within five years of arrival. The few long-term residents who remain without alternatives are stuck in a community lacking the vitality of new development or social change, resulting in a state of stagnation.

A key informant (K3) further attributed the decline to the beneficiaries' own actions:

"Rural development is fundamentally dependent on the people. As community engagement increases, the government attempts to provide facilities and resources; otherwise, it prioritizes cost-cutting. In the case of this village, the people's lack of contribution has been more significant than the government's contribution".

The findings conclude that the village's regression is largely due to the residents' failure to properly utilize the resources and services provided by the government, along with their lack of initiative to pursue professional opportunities locally. As highlighted by Verma et al. (2024), creating local employment is essential for rural development, protecting heritage, and fostering sustainable regional growth. The limited government effort to facilitate these changes, coupled with the residents' own passivity, has contributed to the village's current state of decline.

Determinants of Rural Transition

The study identifies key drivers of demographic shifts and institutional barriers to rural development, concluding that the primary cause for the village's stagnation is that most residents migrated in pursuit of employment. Although the government facilitated a planned resettlement project, the failure to create a viable environment for livelihoods ultimately contributed to the village's regression. Furthermore, many residents—particularly those rooted in traditional customs—found it difficult to adapt to the new, multicultural social environment of the settlement, leading to a strong desire to return to their ancestral homes.

Long-term residents (R4, R8, and R9) highlighted significant infrastructure and service deficits:

"There is no school here for our children to attend; we have to travel 15 kilometers to urban schools. Because of the lack of proper facilities, most people have already moved away. My children are there too, and I only stay here because I am getting older and prefer the quiet".

The absence of essential medical facilities and the necessity for children to travel long distances for higher education have driven the younger generation to relocate to urban centers. This indicates that when basic needs cannot be met, community cohesion breaks down, leaving the village populated primarily by those who are elderly or seeking solitude. As noted by Chen, Wang, and Lin (2024), a settlement must not be viewed merely as a place of residence; it must also encompass vital life necessities such as quality education and healthcare to be sustainable.

A key informant (K3) further explained the cycle of underdevelopment:

"If the initial settlers had started their livelihoods here, the village would have seen significant growth. However, because they had to seek national or international schools for their children and travel to urban areas for fishing, farming, or business to sustain their trades, migration became inevitable. With the remaining population being small and lacking essential facilities, the village has failed to develop".

The findings confirm that the migration of residents is driven by factors such as children's education, healthcare needs, a failure to preserve traditional cultural identity, an inability to adapt to multicultural settings, and a lack of local employment opportunities. These factors have collectively incentivized the population to leave the village, thereby undermining its long-term development prospects.

Comparative Analysis of Rural Transformation

When comparing the study village with other rural areas, it becomes evident that while the village achieved short-term growth, it has remained underdeveloped over the long term due to the attitudes and actions of its residents. In other rural communities, residents effectively utilize local resources to sustain their livelihoods and optimize their production activities. For instance, in Sri Lanka, the residents of the Kegalle District, who are traditionally involved in the textile industry, leverage local resources to advance their professional efforts. Similarly, in the Northern Province, rural residents utilize local paddy yields to produce goods and manage their marketing effectively.

Furthermore, the Northern region provides a favorable environment for cattle farming and the milk industry, demonstrating how communities can achieve progress by capitalizing on indigenous resources. In contrast, residents of the study village appear to depend on resources external to the village or located in urban areas.

Consequently, the residents often travel to locations where resources are available to meet their needs, remaining largely unaware of the potential of the resources available within their own village. The study further concludes that those who did utilize local resources maintained long-term stability and successfully managed their livelihood activities, whereas the lack of such initiative among the study participants contributed to the village's continued backwardness.

Conclusion and Recommendations

Conclusion

Rural-to-urban migration is a significant social change driven by complex social, economic, and environmental factors. The lack of employment opportunities, insufficient educational and medical facilities, natural disasters, and technological advancements all contribute to the migration of rural populations to urban areas. This has resulted in an imbalance, characterized by rising urban populations and rural stagnation. This study has successfully identified the primary drivers and impacts of migration within rural communities. Based on these findings, it is essential to prioritize the improvement of rural areas through the creation of local employment opportunities and the upgrading of basic infrastructure. Such measures are vital to reducing migration and fostering sustainable rural development.

Recommendations

- Create employment opportunities and foster entrepreneurship in rural areas to stabilize local livelihoods.
- Encourage local production and enhance the rural economy through agricultural and handicraft-based cooperatives.
- Improve the quality of rural schools and establish vocational training centers and higher education institutes.
- Upgrade rural healthcare facilities to include routine check-ups and specialized medical services.

- Improve infrastructure between rural and urban areas to facilitate the effective marketing of local goods.
- Introduce modern agricultural technology and increase the efficiency of crop production.
- Streamline government-provided financial aid and assistance schemes to make them more accessible.
- Provide specialized vocational training and financial support for women and youth.
- Ensure safety from wildlife by installing electric fencing and other protective measures.

Implementing these recommendations can effectively reduce the number of people migrating from the village, improve the livelihoods of long-term residents, and steer the village toward sustainable growth. By fostering a sense of community cohesion and integrating local cultural values into development strategies, we can strengthen the community's identity. Promoting integrated rural development will empower the population, enhance the quality of rural life, and ensure the long-term, sustainable development of the village. This approach is essential for reducing rural-to-urban migration and establishing a robust foundation for the future of rural communities.

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