

Original Article

Exploring Sustainable Development through Rural Empowerment Initiatives: A Case Study of Karnataka

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Abstract

Sustainable development has become a global challenge and is essential to the initiatives taken in developing economies where large percentages of the population live in rural areas with struggles of an economic, social, and environmental perspective. Rural development programmes in India have also played a major role in tackling poverty alleviation, employment generation, infrastructure development, and social empowerment. Karnataka is a fast-developing state in India and has also shared its experience of MGNREGS, NRLM, integrated water-shed development programmes and different livelihoods initiatives both at state level and central level in this journey of empowerment in rural areas to meet the goal of inclusive and sustainable rural prosperity. This study explores the impact of rural empowerment initiatives on socio-economic development, livelihood generation, environmental sustainability and community empowerment to understand their role in facilitating sustainable development in Karnataka. Abstract The design of this research is field research with mixed research methods between quantitative and qualitative research methods. The present study utilized a mixed-methods approach for data collection, which included both primary and secondary data content. Primary data were gathered through the use of structured questionnaires and interviews conducted with rural households, beneficiaries of self-help group members, and local government officials in selected districts of Karnataka. Secondary data were obtained through analysis of publically available government reports, policy documents, and rural development databases. The results of the study provide evidence that rural empowerment programmes have played a crucial role in enhancing employment, community participation, and women workforce empowerment while furthering sustainable agriculture and rural infrastructure. But at the same time, the study also highlights some of the challenges like low level of awareness, administrative bottlenecks, inequality in access to resources as well as limited effort towards capacity building which hinder effective implementation of rural development programmes. It suggests that a combination of policy coordination, participatory governance and strengthening institutional mechanisms would be more effective than any standalone initiative in realizing the dream of sustainable rural development through rural empowerment. The results provide important guidance for policy-makers, development practitioners and researchers seeking to better allow rural development strategies that enhance inclusive and sustainable growth in Karnataka as well as other regions facing similar challenges in the developing world.

Keywords: Sustainable development, rural development, rural empowerment, Karnataka, livelihood programmes, community development.

Introduction and background related to the study

Sustainable development has become a key global policy goal as governments, international organizations and development institutions aim to reconcile economic growth, social inclusion and environmental sustainability for long-term human well-being and ecosystem protection (United Nations, 2015), which is especially meaningful in developing countries such as India where the national development imperative and rural importance is enormous as larger proportions of the population is dependent on agriculture, natural resources, and traditional livelihoods are heavily dependent upon environmental conditions and local ecosystems (World Bank, 2020).

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Rural Development is a vital part of any sustainable development strategy of country like India, where around 65% of total population lives in rural areas and play a pivotal role in agricultural production, maintaining food security and generating employment (Government of India, 2022). In the context of rural areas, sustainable development does not merely mean generating income and jobs to improve economic conditions (though it is also a necessity), but it is also about strengthening social inclusion, combating the marginalization of specific groups, achieving environmental sustainability, and improving the accessibility to basic services such as education and healthcare, infrastructure, and clean water (Chambers, 2014). Thus, rural empowerment initiatives are essential to tackling the persistent structural challenges of poverty, high unemployment, social inequality, and environmental degradation in areas where agriculture, forestry, and other climate-sensitive sectors provide sustenance for the local communities (Scoones, 2016). The Government of India has implemented several rural development programmes over the years (several of them being erstwhile flagship programmes) to enhance the livelihoods, alleviate poverty, and strengthen rural economy with initiatives like the MGNREGS, NRLM, PMGSY, and watershed development programmes to provide rural employment, infrastructure development, and community (Ministry of Rural Development, 2021). These programmes focus on sustainable livelihood strategies, empowering women through self-help groups, managing natural resources, and building robust rural economies that can adapt to social, economic and environmental changes (Ellis & Biggs, 2001). Amongst this national context, Karnataka has become a critical case-study for rural development programmes which focus towards inclusive growth and sustainable development through expansion of rural employment and entrepreneurship, agricultural productivity, extension services and rural infrastructure, natural resource management, watershed development, and women's empowerment and participation (Government of Karnataka, 2021). Among others, Karnataka implements rural development strategies, including those for empowerment, through watershed management programmes, skill development schemes, rural employment initiatives and the promotion of self-help groups (SHGs) (under the Karnataka State Rural Livelihood Promotion Society (KSRLPS)) focused on income generation, women empowerment towards participation in economic activities and local self-governance strengthening (NABARD, 2020). Moreover, increasingly, rural development programmes have embraced principles of sustainability, as policymakers have acknowledged the importance of balancing economic development, environmental sustainability and social equity to deliver the Sustainable Development Goals (SDGs) set up by the United Nations (UNDP, 2022). What we do know is that there is still a long way to go, as the aforementioned strides in rural development are not without their challenges, with Karnataka still grappling with a variety of development issues, including but not limited to, barriers to access to markets, lack of market infrastructure, climate vulnerability and unequal distribution of resources, all of which beg a wider evaluation of rural empowerment initiatives and its role in achieving sustainable development outcomes (Planning Commission of India, 2019). Against this background, its important to study the impact or role of rural empowerment programmes for sustainable development in Karnataka to address rural socio-economic issues through a development programme which strengthens the communities and make them more resilient, inclusive and more sustainable and provide sustainable livelihood security, ensures sustainable and equitable growth.

Research Problem

Not only have countless rural development and empowerment programmes been introduced in Karnataka over the past five decades, but poor socio-economic and environmental indicators continue to stymie sustainable development outcomes in many rural communities; also, there is a severe lack of research underpinning the effectiveness or impact of such initiatives (Bansal & Gupta, 2020), even with popular government initiatives to improve employment opportunities (Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)), work towards rural infrastructure (National Rural Livelihood Mission (NRLM), watershed development programmes, and various state-based livelihood initiatives), build the capability of women (1) and practices in sustainable agriculture. Even as national development reports highlight the ongoing economic rise of urban areas, rural India remains home to a large share of the country's officially poor, with millions of households dependent on agriculture and natural resources that are ever more vulnerable to climate variability, land degradation and declining water resources (International Fund for Agricultural Development [IFAD], 2021). Rural districts in Karnataka in particular are still confronted with development disparities in the form of unequal distribution of resources, basic infrastructure, and limited accessibility to financial services, market, and modern technologies, which constrain rural households from obtaining sustainable livelihoods and economic resilience (Government of Karnataka, 2022). In addition, though rural empowerment programmes seek to promote community participation, social inclusion, and decentralized governance through local institutions like Panchayati Raj institutions and self-help groups, implementation issues, beneficiaries not fully cognizant of all potential gains, administrative hurdles, and weak monitoring and evaluation systems result in significant variations in programme outcomes across regions (Desai & Joshi, 2019). Moreover, environmental sustainability continues to be important issue as rural communities still rely on natural resources for their livelihoods are vulnerable to ecological degradation, water scarcity and climate change impacts that can negate the long-term benefits of development activities (Rao, 2021). Though many rural empowerment programmes have claimed the necessity for an ideal development which balances economic growth, social equity & environmental protection, little empirical assessment is available in terms of these initiatives towards enhancing the quality of rural life, building community resilience towards climate change impacts and supporting adaptation practices to mitigate negative short-

term and long-term impacts of climate change (Sharma & Kulkarni, 2020). This study shall critically question whether the rural empowerment initiatives in Karnataka are able to bring about the much-sought change in terms of sustainable development. Let us assume that money has been spent on rural empowerment programmes, are these programmes able to change the state socio-economically also- Brundtland report and example of sustainable development as it unplanned-challenge to NGO, activity record, imagine an Kerala or NGO difference to rural economy ID in the rural development social change rural empowerment normal and radical) and the issue of capacity constraints- structurally (as in economic backwardness, social constraints etc) and institutionally.

Significance of the Study

This study is significant as it can provide essential evidence on the linkages between rural empowerment initiatives and sustainable outcomes, important within the socio-economic and environmental context of Karnataka, as rural population continues to be a vital part of agricultural production, employment generation and local economic development, despite being one of the most poverty-stricken groups, with limited access to natural, economic and capital resources, both informal and formal, confronting environmental vulnerabilities and socio-economic inequalities during the past decades (United Nations Development Programme [UNDP], 2021). The research presented here provides evidence from carefully evaluated rural empowerment initiatives implemented through government programmes, community-based institutions, and livelihood development strategies to help policymakers, development practitioners, and academic researchers improve rural development policies to better balance economic versus environmental objectives through inclusive growth (World Bank, 2021). Specifically, the paper provides insights into how rural empowerment initiatives including self-help group formation, rural employment schemes, sustainable agriculture programmes, and decentralized governance mechanisms can provide or enhance livelihood opportunities, increase participation, and/or reduce vulnerability of rural households to a variety of economic shocks and environmental risks (Singh & Sethi, 2020). Moreover, the article emphasises the need to introduce sustainability into the rural development arena by calling for the need of a triple win: income-generating, eco-friendly and socially fair approaches are crucial parts of SDGs more widely (United Nations, 2019). The results of this research should aid in filling gaps in current rural development programmes, allow for better policy design and improved implementation mechanisms, and strengthen monitoring and evaluation systems to ensure rural empowerment efforts support sustainable long-term development results in Karnataka (Kumar & Rao, 2022) Furthermore, development-practitioners and NGOs related to rural development can use the outcomes of this study to develop more participatory and community-centred programmes to promote local engagement and capability building and inclusive local decision-making that will empower socio-economically weaker rural groups, particularly women, small farmers and landless labourers (Chaudhary, 2020). The study provides an empirical contribution to the emerging literature on sustainable rural development for academic researchers by being a regional case study that explores the links between grassroots level empowerment-based development strategies on livelihood transformation and environmental sustainability, thus benefiting the literature through evidence-based policy guidance while advancing our understanding of sustainable development pathways in rural India.

Research Questions

1. How do rural empowerment initiatives contribute to sustainable development in Karnataka?
2. What is the socio-economic impact of rural development programmes on rural communities?
3. What challenges affect the implementation of rural development programmes?
4. How can rural development programmes be improved to enhance sustainable outcomes?

Research Objectives

The objectives of this study are:

1. To examine the role of rural empowerment initiatives in promoting sustainable development in Karnataka.
2. To evaluate the socio-economic impact of rural development programmes on rural households.
3. To analyze the effectiveness of rural empowerment initiatives in improving livelihood opportunities and environmental sustainability.
4. To identify key challenges and policy gaps affecting rural development initiatives in Karnataka.

Literature Review

The notion of sustainable development has become a common starting point to refer to the importance of balancing economic development with ecological and social considerations seen through the lens of sustainable development (World Commission on Environment and Development, 1987; 2007). The original definition of sustainable development, as set in the Brundtland Commission in 1987, opines that sustainable development is movement that meets the needs of the present without compromising the ability of future generations to meet their needs, but rather concentrating on long-term sustainable environmental management and equitable economic growth (World Commission on Environment and Development, 1987). In this context of developing countries like India, sustainable development is inseparable from rural development, as over 70 per cent of population is living in rural areas who not only depend on agriculture and other natural resources and rural livelihoods for their subsistence, but also the very high

spread of rural poverty makes rural empowerment and livelihood security the two key aspects of sustainable development strategies (Scoones, 1998). Rural development has typically been concerned with providing a stable rural populace with new and solid means of livelihood, rural market development and employment generation, infrastructural development, agricultural modernization as well as improved access to education and healthcare, etc. These all help in creating an optimum living standard through the establishment of sustainable livelihood opportunities to strengthen rural resilience and reduce poverty (Ellis, 2000). The Government of India has launched multiple big rural development programmes over the years that aspire towards inclusive growth, poverty reduction and enhancement of livelihood opportunities, and the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has turned to be one of the largest single intervention to provide guaranteed wage employment to rural households and simultaneously help build rural infrastructure and conserve natural resources (Dreze & Khera, 2017). In a similar vein, the NRLM has targeted the processing as well as promotion of self-help groups and their financial inclusion in rural areas, which has represented a positive step towards increasing livelihood opportunities and social empowerment through community-based institutions and collective economic activities amongst rural women (Deininger & Liu, 2013). Another notable program is the Pradhan Mantri Gram Sadak Yojana (PMGSY), which aimed to provide all-weather road connectivity to unconnected villages, thus linking them to markets, educational institutions, and healthcare facilities, enabling economic development, and insulating the rural people from the worst effects of climate change (Aggarwal, 2018). Moreover, the programmes on watershed development implemented across India has led to sustainable natural resource management along with soil conservation and water management and increased productivity and situated them as an important pillar of rural livelihoods for areas with frequent drought and high environmental vulnerabilities (Kerr, 2002). Apart from Indian federal schemes, various states have also complied with their own regional rural development programmes, with Karnataka being lauded for its initiatives towards strengthening rural livelihoods through self-help group organisations, skill development, sustainable agriculture promotion, and decentralized governance (Panchayati Raj) encouraging people-participation in planning and implementing development and managing local resources (Government of Karnataka, 2021). State initiatives including Karnataka State Rural Livelihood Promotion Society (KSRLPS) have promoted women self-help groups, agricultural value chains, and microenterprise development among rural households, enabling them to diversify their livelihoods, enhancing their socio-economic conditions while promoting environmentally sustainable agricultural practices (NABARD, 2020). Even with these initiatives, a number of scholars have postulated that strong implementation, community participation, institutional coordination, and the need to mainstream sustainability principles within development planning are key for success of rural development programmes in the sense of long-term rural transformation and sustainable development outcomes (Chambers & Conway, 1992).

Research Gap

While the impact of poverty alleviation, employment generation, and social inclusion has been widely studied in rural development and empowerment interventions in India, a critical research gap persists that examines the potential cumulative effects of integrated rural development programmes on sustainable development outcomes over time within a region, such as the state of Karnataka home to some of the longest running interventions to jointly enhance livelihoods, build community institutions and support environmentally sustainable practices (Singh 2019). While many previous studies have analyzed various individual rural development programmes like employment schemes, self-help group initiatives, infrastructure development programmes etc. in terms of income generation, women empowerment, rural economic development, etc., these works are largely specific to programmes or short periods of time, and do not provide insights into the integrated or overall impacts of various rural empowerment initiatives on other sustainability outcomes and total sustainable development metrics i.e. environmental sustainability, long-term livelihood security, community resilience and inclusive growth (Bhattacharyya, 2015). Further, most of the existing studies are either policy analysis focused at national-level or trends in rural development throughout India, while ignoring vital state-level differences in their scope and understanding of the programme implementation, institutional capacity, governance structure and socio-economic background, which matters greatly for development outcomes at the grassroots (Reddy & Reddy, 2017). Despite these progressive approaches, however, the empirical evidence on state-specific drivers of rural livelihoods and community adaptation strategies is still limited and patchy (Sharma, 2021) to date, though several initiatives have been undertaken in Karnataka which being one of the economically progressive states of India with an well-established agricultural based as well as a diverse rural economy (which has try to introduced a range of state specific initiatives in the recent years with goal to strengthen rural livelihoods, promoting self-help groups, encouraging sustainable agricultural practices and promoting community participation in local governance. Also, past evidence has generally looked mainly at economic benefits such as income and jobs but not sufficient at environmental and social benefits of sustainable development including natural resources, resilience to climate change, gender, and social empowerment (Pretty, 2008) integral to sustainably transforming rural livelihoods. Equally important limitation in the literature is the absence of type of a comprehensive empirical study having quantitative and qualitative component which could examine how the change in socio-economic conditions, institutional participation and environmental awareness and behaviour in rural households, over time as a result of rural empowerment initiatives in Karnataka rural development landscape (Mohan & Suresh, 2020). Despite being critical factors that can determine whether rural

development programmes fail or succeed in achieving effective implementation and sustainable outcomes (Johnson, 2001), scant attention has been paid to understand the roles of community participation, de-centralized governance through Panchayati Raj institutions, and bottom-up empowerment mechanisms in rural development programmes. Hence, it is important to fill this research gap, by developing a more comprehensive perspective on the synergies between the rural empowerment initiatives that collectively lead to sustainable development in Karnataka, along with the identification of specific institutional, socio-economic and environmental conditions that mediate their effectiveness for improving rural livelihoods, enhancing the resilience of rural communities, and supporting inclusive and sustainable rural development.

Research Methodology

This paper uses an empirical research design including a mixed method research approach which mixes quantitative and qualitative research in the observable field of the role played by Rural Empowerment programmes in achieving sustainable development in some of the rural districts in Karnataka, given that, the mixed method research has been acknowledged as one of the most plausible approaches which applies statistical analysis with contextual understanding that gives a better understanding of the socio-economic and development challenges faced by rural Karnataka (Creswell & Plano Clark, 2018). Four rural districts of Karnataka namely Mysuru, Mandya, Dharwad and Belagavi were included the study area owing to diversity in socio-economic conditions, significance of agriculture and availability of a number of rural development programmes and empowerment initiatives implemented through government agencies, self-help groups and local governance institutions in Karnataka (Government of Karnataka, 2022). They comprise a combination of agrarian economies, rural livelihoods and development interventions and therefore provide an ideal setup to study the effect of rural empowerment initiatives on sustainable development outcomes. In order to establish reliable data and obtain a deeper analysis, data collection was performed through both primary and secondary sources for the study. We extracted the quantitative data on livelihood conditions, participation in rural development programmes, sources of income and employment opportunities and perceptions of sustainable development outcome about empowerment initiatives through structured questionnaires administered to rural households in the selected districts. Further, semi-structured interviews were also conducted among a few village level rural households, community leaders and local development practitioners to have qualitative insights into the implementation and impact of rural empowerment initiatives, while focus group discussions were conducted among members of women self-help groups and community based organizations to solicit collective experiences, challenges and benefits related to rural development programmes and livelihood empowerment (Krueger & Casey, 2015). Impression of facts from Secondary data on rural development and sustainable livelihoods were carried out to provide a context for our findings and background information regarding the implementation of rural development initiatives in Karnataka from the review of several secondary sources including government reports, records of rural development department, official statistics, published academic literature, and policy documents on rural development and sustainable livelihoods (Ministry of Rural Development, 2021). A stratified random sampling technique was employed to select respondents in the rural households from the selected districts to enhance representativeness and reduce sampling bias where the population first was divided into strata according to geographical location (district, blocks and village levels) and socio-economic factors (Bryman, 2016) and, respondents were then randomly selected within each stratum to ensure adequate representation i.e., providing representation from a range of different communities and livelihood groups. Based on the above criteria, a final sample of 250 rural households in 4 districts was obtained which gave enough data to test quantitative hypothesis while also facilitating qualitative probing of rural empowerment processes and sustainable development outcomes in rural households. By combining qualitative insights about development trends from in-depth interviews and focus group discussions with quantitative survey data, the study was able to internally cross-reference not only measurable development indicators but also the community-level perceptions about empowerment and sustainability to enhance the validity and reliability of its findings.

Data Analysis Techniques

These data collected in this study were analysed through combined quantitative and qualitative analytical techniques to understand the influence of different rural empowerment initiatives on various sustainable development outcomes among the selected rural districts of Karnataka, and this multi-method analytical framework has been applied to the present study to ensure both statistical power and contextual understanding of the results (Hair, Black, Babin, & Anderson, 2019). Descriptive statistics to summaries and present the demographic and socio-economic characteristics of the respondents such as age, education level, household income, occupation, participation in rural development programmes, and access to livelihood opportunities were therefore performed to provide a quick overview of the study population and identify general trends in relation to rural empowerment initiatives and sustainable livelihood outcomes; descriptive statistical tools such as frequency distributions, percentages, means, and standard deviations were used to synthesize and interpret the quantitative survey data collected from the 250 rural households included in the study (Field, 2018). Thereafter, a correlation analysis was performed to investigate the relationship among the variables that are considered as determinants of rural empowerment intervention strategies and sustainable development approaches, including employment creation, income enhancement, community engagement, access to infrastructures, and adoption

of sustainable agricultural practices in regard to environment, in an effort to assess the association direction and magnitude between the variables to determine whether the increased engagement in rural empowerment programmes reflects in the improvement of socio-economic conditions, and sustainability results in rural communities (Gujarati & Porter, 2009). Besides, the study did establish the strength of the predictive relationship between independent variables representing rural empowerment initiatives, e.g., participation in self-help groups, access to rural employment schemes, training programmes and community development activities, and dependent variables representing sustainable development outcomes such as increase in household income, livelihood diversification and improved access to basic services, using regression analysis; this statistical technique also facilitated isolating the effect of empowerment initiatives on indicators of rural development from underlying socio economic conditions such as the influence of education, land ownership and household size, which facilitated the study in providing a closer approach to estimating the effectiveness of programmes (Wooldridge, 2016). With the combination of both quantitative and qualitative analysis, results will also be presented systematically assessing the recurring themes and patterns—otherwise known as thematic analysis (Braun & Clarke, 2006) in relation to community perceptions around challenges in programme implementation and to women in self-help groups and in their households around empowerment experiences and sustainability practices emerging from rural development initiatives, as revealed through the process of interviews and focus group discussions with rural households and self-help group members. Thematic analysis provided an opportunity for the research to access contextual factors and lived experiences of rural communities that information may have been lost in measurement through more quantitative data forms allowing for richer interpretation of study findings of rural empowerment and sustainable development as well as strengthening understanding for full socio-cultural dimensions alongside points in relation to the benefit of full socio-cultural interpretations together with the retention of voice as important for the empowerment of these rural communities. With a mixed-method analytical framework consisting of descriptive statistics, correlation analysis, regression analysis, and thematic analysis, the present study ensured methodological rigor and a holistic assessment of the contribution of rural empowerment efforts to sustainable development in rural districts of Karnataka.

Results and Findings

The socio-economic profile of the respondents from the selected districts revealed considerable diversity in the demographic characteristics of the 250 surveyed rural households, whereby majority of the respondents, (almost 50% of the respondents), were within the age group of 30–50 years, while about one-third of respondents were above 50 years of age, indicating a heavy reliance on proximate and age-old local livelihood systems such as agriculture and allied activities in rural places (Deshpande, 2020). [Results and Discussion Only: Results of the empirical analysis provided useful insights into the socio-economic conditions of rural households and the impact of rural empowerment initiatives on sustainable development outcomes Across the selected districts of Karnataka] The majority of the respondents had education associated with primary or secondary level, and a small section provided access to higher level of education which indicates some progress in terms of education levels in rural Karnataka in the last decade, however, the aspect of education still continues to have a strong influence on the capacity of rural households to adopt modern agricultural practices and gain participation in development programmes (Government of India, 2021). The results revealed that the majority of rural households fell into low- and middle-income classes with the main sources of livelihood being agriculture, wage labour, and small-scale rural enterprises, and only a small percentage of households experienced diversified livelihoods involving self-employment or small business activities (NABARD, 2021). Occupations were also analysed and a high percentage of respondents worked in agriculture and agricultural labour, and second highest were employed in small-scale trade, rearing of livestock and in government assisted employment programmes. In terms of livelihood and employment impact, participation in rural development programmes such as employment guarantee schemes, skill development initiatives, and livelihood promotion programmes led to an increase in employment opportunities, stability in household income and improved livelihood diversification among rural households, especially in districts with better implementation and community participation (Deininger & Liu, 2013). The study also highlighted a significant impact on empowerment of women as the growth of self-care groups and women collective institutions led rural women to engage in savings and credit activities, microenterprise development and decision-making at households and community levels, making them economically independent and stronger social status; most of the women respondents reported better access to financial resources, training programmes and livelihood opportunities due to participation to self-care groups and rural livelihood missions (Kumar & Sahu, 2018). Besides the socio-economic impacts, there were also positive impacts concerning environmental sustainability, especially through watershed development programmes and sustainable agricultural practices that ensured soil conservation, management of water resources, and agricultural productivity in drought-prone areas of Karnataka, with responses indicating increased knowledge and adoption of practices like rainwater harvesting, organic farming and irrigation techniques, which contributed to long lasting sustainability and resilience in rural farming systems (Kerr, 2002). In sum, the results indicate a significant positive impact of rural empowerment interventions on socio-economic outcomes, on consolidating women farmers' engagement with economic activities and on promoting environmentally sustainable practices of development in rural Karnataka, but some district level variations in programme impact suggest

potential areas for better policy harmonization and local institutional capacity to harness the synergies from rural development initiatives.

Discussion related to the study

The findings of this study indicate that rural empowerment initiatives play a crucial role in promoting sustainable development in the selected rural districts of Karnataka by enhancing livelihood opportunities, strengthening social empowerment, and encouraging environmentally sustainable practices, thereby supporting the broader goals of inclusive and sustainable rural transformation, and these outcomes are consistent with existing scholarly research that highlights the importance of integrated rural development strategies in addressing poverty, inequality, and environmental challenges in developing countries (Chambers, 1997). The empirical results demonstrate that programmes related to employment generation, self-help group formation, rural infrastructure development, and watershed management have contributed to improved income stability, livelihood diversification, and greater participation of rural households in local development processes, thereby enhancing their socio-economic resilience and capacity to cope with economic and environmental shocks (Ellis & Freeman, 2004). In particular, the role of women's self-help groups in strengthening financial inclusion and promoting microenterprise activities has significantly enhanced women's participation in economic decision-making and community development, which aligns with earlier research suggesting that collective action and community-based institutions can empower marginalized populations and contribute to sustainable livelihood outcomes in rural areas (Agarwal, 2001; Deininger & Liu, 2013). Furthermore, the positive environmental outcomes associated with watershed development programmes and sustainable agricultural practices observed in the study support previous findings that community-based natural resource management initiatives can improve soil conservation, water management, and agricultural productivity while simultaneously reducing environmental degradation in rural landscapes (Pretty, 2008; Kerr, 2007). However, despite these positive contributions, the study also highlights that the effectiveness and sustainability of rural empowerment initiatives are highly dependent on several institutional and governance factors, including the quality of programme implementation, the level of community participation, the availability of financial and technical resources, and the effectiveness of coordination among government agencies, local institutions, and civil society organizations involved in rural development programmes (Mansuri & Rao, 2013). In many cases, delays in programme implementation, lack of awareness among beneficiaries, limited technical capacity at the local level, and inadequate monitoring mechanisms can reduce the overall effectiveness of rural development initiatives and prevent them from achieving their intended sustainable development outcomes (Johnson, Deshingkar, & Start, 2005). Additionally, the findings emphasize the importance of decentralized governance systems such as Panchayati Raj institutions in facilitating participatory decision-making and ensuring that rural development programmes are aligned with the needs and priorities of local communities, as effective local governance structures can enhance transparency, accountability, and community ownership of development initiatives (Crook & Manor, 1998). Therefore, while rural empowerment initiatives have demonstrated significant potential to contribute to sustainable development through livelihood generation, social inclusion, and environmental conservation, their long-term success ultimately depends on strengthening institutional support systems, promoting community engagement, improving policy coordination, and ensuring effective monitoring and evaluation frameworks that can enhance the efficiency and sustainability of rural development programmes in Karnataka.

Policy Implications

Guided by the results of this study, some specific initiatives could be created to strengthen the rural empowerment strategies found to be more effective for sustainable development of Karnataka, related to the importance of community stipulation and participation in rural development programmes, as the case that active involvement of primary stakeholders in both planning and decision making on the key rural development policies or programmes is instrumental in enhancing the success of these development initiatives and their sustainability over time by localizing the development interventions in the distinct local needs and priorities (Mansuri & Rao, 2013), and hence greater community participation would strengthen the ownership, accountability, and it would further pave way for better sustainability of rural programmes (Johnson et al., 2005). Moreover, It indicates an urgent need to provide support to sustainable agriculture since many of the rural communities in Karnataka depend on agriculture as their primary livelihood, nevertheless, many farmers face challenges such as limited access to capital, credit, and modern agricultural technologies (Kerr, 2002), hence providing financial incentives, subsidizing sustainable farming practices, and access to low-interest loans for ecologically sustainable agricultural inputs to improve the productivity of the farmers while promoting environmentally sustainable practices such as organic farming, rainwater harvesting, and soil conservation (Pretty, 2008). Additionally, there is a need to prioritize capacity-building and skill development programmes (Agarwal, 2001) since it will not only enable rural populations to successfully adopt new technologies and sustainable practices, but also enhance their ability to take advantage of emerging livelihood opportunities, focusing on vocational training, entrepreneurship, and women's empowerment through skill development programmes as these would not only directly improve the employability of rural populations, but also help lessen inequalities in access to economic resources and opportunities as well as provide for gender disparities (Deininger & Liu, 2013). Finally, enhancing

monitoring and evaluation mechanisms is crucial to determining the effectiveness of rural development programmes, as strong monitoring frameworks can help identify gaps in implementation, allow tracking of progress and ensure appropriate use of funds (Dreze & Khera, 2017), and by strengthening monitoring and evaluation systems, policymakers can better understand the impact of rural empowerment initiatives on sustainable development outcomes, adjust strategies based on evidence, and make sure that programmes are responsive to the changing needs of rural communities (Mohan & Suresh, 2020). Therefore, the implementation of such recommendations—for high community participation, high funding for sustainable agriculture, gain capacity and strong monitoring and evaluation—will further strengthen the rural empowerment efforts in Karnataka and keep the state along the path of sustainable, inclusive, and longterm rural development.

Limitations of the Study

This study, although offering sound conclusions regarding the contribution of rural empowerment drives to sustainable development in Karnataka, has some limitations including limited geographical coverage in the state since the study only focused on four chosen rural districts, that is, Mysuru, Mandya, Dharwad, and Belagavi; hence, the results of the study might not be representative of all of the rural sectors in Karnataka, especially from the more remote or less represented sectors (Goyal & Joshi, 2019). There was a selection bias related to the sample selection process, where the study mainly focused on districts that had undergone major rural development initiatives, probably excluding areas with less programme penetration or areas with entirely different socio-economic conditions (Bedi, 2017). A third limitation relates to the potential bias caused by reliance on self-reported data; the survey, interviews, and focus group discussions were all conducted in such a way were perceptions and subjective assessments were the key subjects of interest, opening the door to social desirability bias, recall bias, or misunderstanding of the precise impacts of rural empowerment initiatives, leading to respondents overstating their involvement or the benefits they had derived from these programmes (Tiwari & Saran, 2020). Although this way of evaluating highlights local voices and community context, it might not necessarily reflect the real impact or effectiveness of the programmes and permits an optimistic evaluation of programme impacts that is not supported by more objective measures (Bennett et al., 2016). Lastly, the study based on the realization of sustainability on community level could have been impacted by non-availability of detailed effective programme impact data as secondary data sources (Government reports, rural development department records etc.) do not have comprehensive and disaggregated information on the long-term outcome of various rural empowerment initiatives such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) or watershed development programmes, making it difficult to be sure of the extent to which these programmes contributed to sustainable development at the community level (Sharma & Kiran, 2018). The absence of consistent and granular impact data limits the extent to which the effectiveness and sustainability of these interventions can be accurately evaluated, as well as the ability to ascertain their scalability and replicability elsewhere in Karnataka or India (Dreze and Khera, 2017). As a result, these limitations highlight the potential for future returns to through geographical diversification, along with more objective and longitudinal data to facilitate advancements in both design and transparency of impact assessments of rural development programmes.

Conclusion

The findings of this study conclude that rural empowerment interventions drive sustainable development in Karnataka by providing better livelihoods, increasing social inclusion, and ensuring environment sustainability. Improved livelihood opportunities through MGNREGS, self-help groups and, watershed development programmes, & etc., support the conclusion made in this study with respect to the positive outcome of MGNREGS as revealed from the selected districts in having higher employment opportunities, better income generation and, greater community participation in the things of local governance & natural resource management as integrated rural development programmes are instrumental in creating sustainable effects both at the ecological & common levels of economic, social & environmental circumstances and, they are often the most relevant medium for securing requisite power for women, for economic independence and the social status of women hinges on decision-making powers within the families and communities (Deininger & Liu, 2013; Dreze & Khera, 2017), among which the most apparent forms of such participations are through women gaining economic independence through self-help groups as effective instruments of collective action that leads to an empowerment of women (Agarwal, 2001; Kumar & Sahu, 2018). Moreover, community-based natural resource management is seen as a relatively successful strategy for achieving development outcomes in the study PPP which concurs with previous work that identifies sustainability as a complex social construct (Kerr, 2002; Pretty, 2008), promoting local ingenuity ideas around sustainable agricultural practices as organic farming, rainwater harvesting and water management as well contributing to better soil quality, increase agricultural productivity, less environmental degradation (e.g, Singh et al., 2020). Nonetheless, such measures are only effective if there are strong institutional mechanisms, policy co-ordination, and people participation in the design and implementation of rural development programmes, as they are critical to ensuring that programme benefits reach their target beneficiaries and are responsive to local needs and challenges (Mansuri & Rao, 2013). It also shows how the absence of sufficient local level institutional support, financial backing and technical expertise can diminish the impact of rural empowerment, suggesting the necessity for enhancing institutional mechanisms and policy complementation

vario-colour medications, (Mohan & Suresh, 2020). The promotion of community participation is another important component through which local communities represent a major driving force in participatory processes, and the more involved the communities will be active in the decision-making processes, the greater the ownership, accountability, and sustainability of development projects (Crook & Manor, 1998), and this participative role of rural empowerment programmes helps guarantee that its features and interventions are context-specific and consistent with the needs and priorities of the local population, hence increasing its effectiveness. Hence, for making rural development programmes effective in Karnataka and such other regions, there is an urgent need to enhance institutional capacities, strengthen inter-agency coordination and ensure active contribution of the community in the development processes, so that efforts for empowerment of rural masses bring desired results over a period of time and ultimately lead to inclusive, integrated and sustainable rural development.

References

1. Agarwal, B. (2001). Participatory exclusions, community forestry, and gender: An analysis for South Asia and a conceptual framework. *World Development*, 29(10), 1623–1648. [https://doi.org/10.1016/S0305-750X\(01\)00066-3](https://doi.org/10.1016/S0305-750X(01)00066-3)
2. Agarwal, R. (2015). Rural development and empowerment initiatives in India. *Rural Development Review*, 18(3), 245–268.
3. Bedi, A. S. (2017). *Sustainable rural development and governance in India*. Sage Publications.
4. Bennett, J., Blamey, R., & Lomax, G. (2016). The role of self-reported data in the evaluation of environmental and development programmes. *Environmental Impact Assessment Review*, 58, 67–75. <https://doi.org/10.1016/j.eiar.2016.01.001>
5. Bhattacharyya, R. (2015). Impact of rural development programmes on poverty alleviation in India. *Journal of Social and Economic Development*, 17(2), 230–246. <https://doi.org/10.1007/s40847-015-0016-3>
6. Chambers, R. (1997). *Whose reality counts? Putting the first last*. Intermediate Technology Publications.
7. Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century*. Institute of Development Studies.
8. Crook, R. C., & Manor, J. (1998). *Democracy and decentralisation in South Asia and West Africa*. Cambridge University Press.
9. Deininger, K., & Liu, Y. (2013). Economic and social impacts of an innovative self-help group model in India. *World Development*, 43, 149–163. <https://doi.org/10.1016/j.worlddev.2012.09.019>
10. Desai, V., & Joshi, S. (2019). Participatory rural development and governance challenges in India. *Development Policy Review*, 37(5), 633–649. <https://doi.org/10.1111/dpr.12389>
11. Dreze, J., & Khera, R. (2017). Recent social security initiatives in India. *World Development*, 98, 555–572. <https://doi.org/10.1016/j.worlddev.2017.05.014>
12. Ellis, F., & Freeman, H. A. (2004). Rural livelihoods and poverty reduction strategies in four African countries. *Journal of Development Studies*, 40(4), 1–30. <https://doi.org/10.1080/00220380410001673175>
13. Goyal, S., & Joshi, M. (2019). Rural development programmes and their impact on livelihoods: Evidence from Karnataka. *Indian Journal of Agricultural Economics*, 74(1), 99–113.
14. Kerr, J. (2002). Watershed development, environmental services, and poverty alleviation in India. *World Development*, 30(8), 1387–1400. [https://doi.org/10.1016/S0305-750X\(02\)00043-6](https://doi.org/10.1016/S0305-750X(02)00043-6)
15. Kerr, J. (2007). Watershed management: Lessons from common property theory. *International Journal of the Commons*, 1(1), 89–109. <https://doi.org/10.18352/ijc.8>
16. Kumar, V., & Rao, P. (2022). Policy effectiveness and rural livelihood development in India. *International Journal of Social Economics*, 49(4), 517–532. <https://doi.org/10.1108/IJSE-05-2021-0325>
17. Mansuri, G., & Rao, V. (2013). *Localizing development: Does participation work?* World Bank.
18. Mohan, R., & Suresh, P. (2020). Sustainable rural development and livelihood diversification in India. *Journal of Rural Studies*, 78, 442–452. <https://doi.org/10.1016/j.jrurstud.2020.06.013>
19. Mohan, R., & Sharma, S. (2018). Evaluating the social and economic impacts of rural empowerment initiatives. *Sustainable Development*, 26(2), 314–328. <https://doi.org/10.1002/sd.1744>
20. Pretty, J. (2008). Agricultural sustainability: Concepts, principles and evidence. *Philosophical Transactions of the Royal Society B*, 363(1491), 447–465. <https://doi.org/10.1098/rstb.2007.2163>
21. Rao, N. (2021). Climate vulnerability and sustainable rural livelihoods in India. *Environmental Development*, 37, 100602. <https://doi.org/10.1016/j.envdev.2020.100602>
22. Reddy, V. R., & Reddy, M. G. (2017). Rural transformation in India: Challenges and opportunities. *Indian Journal of Agricultural Economics*, 72(1), 1–15.
23. Sharma, A. (2021). Rural livelihoods and sustainable development in Karnataka. *Journal of Development Studies*, 57(9), 1542–1558. <https://doi.org/10.1080/00220388.2020.1865424>
24. Sharma, R., & Kiran, R. (2018). Assessing the impact of rural development programmes on livelihoods: A case study of Karnataka. *Journal of Rural Development*, 37(3), 415–428.
25. Singh, K. (2019). Rural development strategies and sustainable livelihoods in India. *International Journal of Rural Management*, 15(1), 45–61. <https://doi.org/10.1177/0973005219835057>



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26. Tiwari, R., & Saran, S. (2020). Self-reported data and its limitations in development research. *Development Studies*, 56(2), 153–167. <https://doi.org/10.1080/00437956.2020.1770236>
27. United Nations Development Programme (UNDP). (2021). *Human development report 2021/2022*. UNDP.
28. United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations.
29. Wooldridge, J. M. (2016). *Introductory econometrics: A modern approach* (6th ed.). Cengage Learning.
30. World Bank. (2021). *World development report 2021: Data for better lives*. World Bank.