

Contribution Of Integrated Development Program (IDP) Model Village On Socio-Economic Welfare Of Beneficiaries In Rwanda: A Case Of Idp-Model Of Nyarugenge District (2016-2021)

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Abstract

The purpose of this study was to assess the contribution of the integrated development program (IDP) model village on the socio-economic welfare of beneficiaries in Rwanda: A case of IDP of Nyarugenge District from 2016 up to 2021) The study aims to understand how this model contributes to an increase of household income, job creation and business development within the District. Research methodology: The study used a mixed methods approach, combining qualitative and quantitative research techniques. The study's sample size is 88 beneficiaries of the IDP village model in Nyarugenge District. A questionnaire and documentary review were used to collect data and finally, the study used descriptive statistics and inferential statistics as methods of data analysis. Results: The findings indicate that the construction of quality house has a significant positive influence on the socio-economic development of beneficiaries of the IDP village model, with a regression coefficient of $\beta_1=0.059$ and p-value of 0.0070 (indicating significance at the 0.05 level). This suggests that a one-unit increase in the construction of quality houses results in an increase of 0.059 units in socio-economic development. Additionally, the provision of public services also has a substantial positive impact, as evidenced by $\beta_2=0.602$ and a p-value of 0.0000. This implies that a one-unit increase in the provision of public services leads to an increase of 0.602 units in socio-economic development. Furthermore, access to job opportunities significantly contributes to socio-economic development, with $\beta_3=0.022$ and a p-value of 0.0030. This reflects that the increased number of food, staff jobs in upgraded houses has generated additional employment opportunities in supply and related businesses. Limitations: The researcher anticipated challenges during data collection due to the Murburg pandemic and beneficiaries' busy schedules, planning to hold online meetings for availability and targeting days off while collaborating with project supervisors to address reluctance in submitting questionnaires. Contribution: This study contributes to the existing body of knowledge by providing empirical evidence on the positive impacts of the Integrated Development Program (IDP) model on the socio-economic welfare of beneficiaries in Rwanda, particularly in the Nyarugenge District.

Keywords: Integrated Development Program, Model Village, Socio-economic & Development

INTRODUCTION

Housing, food and clothing are fundamental to an adequate standard of living; however, over a billion people worldwide, particularly in developing regions, reside in urban slums lacking access to adequate housing [1]. Rapid urbanization is contributing to this issue, with the global urban population expected to reach nearly five billion by 2030, largely concentrated in Asia and Africa, where a significant proportion of urban dwellers live under poverty line [2], [3]. Despite major slum redevelopment initiatives by the World Bank and national governments since the 1980s, these efforts have primarily addressed existing slums without curbing the rural-to-urban migration driving slum proliferation [4]. Global slum upgrading and integrated development village model projects in countries like Brazil, India, and Salvador, supported by organizations such as Cities Alliance and the World Bank, have made

progress but fall short of meeting the Millennium Development Goals (MDG) 7 targets for adequate housing and sustainable infrastructure [5], [6]. Effective infrastructure development is essential for economic growth and poverty reduction, but a substantial deficit remains in areas like housing quality, road access, electricity, and water supply. In Brazil, improving housing security is crucial, as tenure regularization could enhance living conditions and reduce unlawful evictions [6]. In Caribbean countries like Venezuela, Chile, and Cuba, promoting rental housing is critical, as many urban residents are low-income tenants without adequate access to affordable housing options, which calls for policy support for tenant rights and community-based solutions [7].

African Countries like Egypt, South Africa, Tunisia, and Morocco stand out in their efforts towards slum upgrading and redevelopment [8]. The slum growth rates have fallen markedly in the mentioned countries, though the fact that the growth rate of informal settlements is still positive speaks to the fact that slums are not going away or even shrinking [9]. The report went on to say that to stem (or at least slow) the growth of slums in African cities, countries were going to have to make some hard choices and major financial commitments (with the help of the World Bank, a major player in the worldwide effort to promote slum upgrading and redevelopment) to accomplish the Millennium Development Goal towards lifting significant amounts of slum dwellers out of poverty [10]. In Eastern African countries like Kenya, people living in the slums have minimal access to clean water, an inadequate number of good schools, limited access to social amenities, poor sanitation, and widespread social-cultural conflicts [11]. In addition, these individuals are exposed to the threats of forceful evictions from the illegal structures they have made home [11]. Kenya, like other countries, has witnessed an unprecedented increase in urban population over the past fifty years [12]. This has posed a great challenge to urban economies which have been unable to cope with the increasing demand for essential services such as housing, health and education.

For the government, the umudugudu settlement represented a solution to population pressure, poor land management, and the impoverishment of the masses. Furthermore, the government believed that, in the long run, the umudugudu settlement would become the primary mode of use and development of the national territory and would subsequently evolve into urban centers. However, imidugudu settlements still face difficulties in achieving the expected outcome, hence the ongoing initiatives of improving the imidugudu strategy, creating frameworks and designs that will help the government and its people attain the imidugudu objectives [13]. Kigali's holistic and sustainable development village model aims to improve residents' quality of life through integrated upgrades in housing, infrastructure, land tenure security, and employment opportunities [14]. The initiative focuses on securing land rights, promoting alternative livelihoods, and building local capacity for long-term redevelopment. However, challenges include potential economic impacts on local water sellers as free water access could disrupt their established investments, and infrastructure improvements may drive rent speculation, affecting vulnerable residents. Additionally, empowerment efforts for slum dwellers are crucial, as many rely heavily on external aid due to historical socio-economic dependencies [15].

In Rwanda, land is scarce, with an average landholding of less than 0.5ha per household. The high population growth rate of 2.6%, inheritance practices and the rapid economic development stimulate a high demand for land [16]. This has led to intensive land use, with marginal land also being brought under intensive cultivation, while the continuous subdivision of land results in increasingly smaller holdings. To provide an interim solution to the land and housing issue, the government introduced a land-sharing programme and a grouped settlement programme commonly known as umudugudu (villagisation) and an integrated development program (IDP) village model as a way of resolving the issue of land scarcity [17]. Despite efforts under Rwanda's IDP program, Kigali's slum conditions persist due to rapid urban growth and inadequate improvements in living standards. Strategies including enhanced services, housing, and land tenure security have not significantly curbed informal settlement expansion [18].

Although the village model upgrading and redevelopment approaches show potential in raising minimum living standards, no public evaluations exist to assess the socio-economic impacts on slum residents. This gap highlights the need for research into the IDP model village's contribution to residents' welfare, particularly in Nyarugenge District, to better understand its community-level effects. Hence, the study aimed to assess the contribution of integrated development program (IDP) model village on the socio-economic welfare of beneficiaries in Rwanda with reference of IDP in Nyarugenge District. Specifically, the study intended to assess the level of implementation of the Integrated Development Program (IDP) model village in Nyarugenge District; to examine the socio-economic welfare of beneficiaries in the IDP model village of Nyarugenge District and to analyze the effect of the IDP model village on the socio-economic welfare of beneficiaries in Nyarugenge District.

Significance of the Study

The study on the Contribution of the Integrated Development Program (IDP) Model Village on Socio-Economic Welfare of Beneficiaries in Rwanda, focusing on the Nyarugenge District (2016–2021), holds critical significance in the context of capacity building for inclusive sustainable development in business, management, and entrepreneurship. This significance outlined across several dimensions as follow:

Policy and Developmental Relevance

This study offers evidence-based insights into how IDP model villages contribute to improving socio-economic outcomes, such as access to basic services, employment opportunities, housing, and overall quality of life.

Understanding these contributions provides policymakers and planners with a clearer picture of how integrated rural and urban development strategies can be optimized for sustainable impact.

Capacity Building for Inclusive Growth

Analyzing how the IDP model supports skill development, business training, and access to entrepreneurship opportunities, the study contributes to the discourse on human capital development and inclusive economic growth. It highlights the extent to which IDP villages equip beneficiaries with the knowledge, tools, and infrastructure needed to become self-reliant and actively engaged in the economy.

Contribution to Business and Entrepreneurship Development

The study explores how the IDP approach creates enabling environments for micro, small, and medium enterprises (MSMEs) through access to markets, financial literacy programs, and communal infrastructure. This is vital for developing entrepreneurial ecosystems in underserved or marginalized communities, aligning with Rwanda's Vision 2050 and the SDGs.

Practical Implications for Management and Program Implementation

The findings can inform managers of development projects, local government officials, and NGOs on effective strategies for implementing and scaling integrated development programs. By identifying best practices and existing gaps, the study aids in improving resource allocation, monitoring mechanisms, and stakeholder engagement in socio-economic development.

Academic and Theoretical Contribution

The study enriches the body of literature on sustainable development models by offering a localized analysis of the IDP initiative in Rwanda. It contributes to the theoretical understanding of how integrated socio-economic models affect communities in developing countries, especially within the frameworks of sustainable development, social entrepreneurship, and inclusive business models.

Empowerment of Marginalized Populations

Lastly, this research underscores the role of the IDP model in addressing inequality by promoting access to services and economic opportunities for vulnerable populations. By doing so, it demonstrates how capacity building at the grassroots level can catalyze transformation in the lives of disadvantaged groups, fostering equity and resilience.

THEORETICAL FRAMEWORK

This study is supported by participatory planning theory, dependency theory and smart urbanism theory to ground the research problem. Sherry Arnstein's Participatory Planning Theory (1969) advocates for the involvement of stakeholders, particularly marginalized groups, in decision-making processes that impact their lives. Central to the theory is Arnstein's "Ladder of Citizen Participation," which categorizes participation into eight levels, from non-participation to full citizen power, reflecting varying degrees of influence communities have in planning [19]. This framework underscores the value of empowering communities to actively shape projects, ensuring development is more inclusive and responsive to local needs. Applying this theory to Rwanda's Integrated Development Program (IDP) model village initiative, particularly in the Nyarugenge District, highlights the potential for improving socio-economic welfare through community involvement. By engaging residents in planning and implementation, the IDP model promotes local ownership and ensures that interventions are relevant to community priorities.

This participatory approach not only aligns resources with community needs but also fosters skill-building and economic empowerment, contributing to sustainable improvements in housing, employment, and infrastructure, ultimately enhancing beneficiaries' quality of life and economic resilience [20]. Based on the strengths presented in the arguments above, the study adopted the participatory planning theory as the basis of its conceptual framework since slum upgrading and redevelopment programmes require a positive change in public perceptions for them to have any meaningful impact on the community or society. The above can only be achieved when all stakeholders in the process are involved in coming up with a participatory slum up-grading redevelopment framework that caters for all their interests.

This study also draws on Dependency Theory, initially advanced by Raúl Prebisch, Andre Gunder Frank, and Fernando Henrique Cardoso in the late 1960s. The theory contends that underdeveloped nations remain economically dependent due to structural inequalities within the global economic system [21]. It argues that wealthy "core" countries systematically exploit "peripheral" nations, compelling them to export raw materials while importing manufactured goods thus reinforcing an unequal and dependent relationship [22]. Unlike modernization theory, Dependency Theory asserts that underdevelopment is not a transitional stage but a condition deliberately maintained to benefit the global core [23]. Consequently, this dependency cycle entrenches poverty and constrains the socioeconomic progress of peripheral nations [24]. Applying Dependency Theory to Rwanda's Integrated

Development Program (IDP) model village initiative, such as in the IDP of Nyarugenge District, highlights the importance of self-reliant development strategies to enhance socio-economic welfare. By focusing on locally driven development and building internal capacity, the IDP model attempts to reduce dependency on external aid and influence. It empowers beneficiaries by enhancing local employment, building infrastructure, and improving services, aligning with Dependency Theory's call for fostering internal resources. The model's emphasis on self-sustaining improvements such as local housing, education, and income-generating activities supports socio-economic stability for Rwandan communities. Dependency Theory implies that to achieve long-term development, programs like the IDP must prioritize reducing external economic reliance and fostering internal development that supports the local economy, ensuring more equitable growth and resilience [25].

The Integrated Development Program (IDP) model village initiative significantly contributes to the socio-economic welfare of beneficiaries by promoting holistic development that addresses multiple dimensions of community needs [26]. Focusing on essential areas such as housing, infrastructure, health services, and education, the IDP model fosters a supportive environment where residents can improve their quality of life. Through participatory planning, beneficiaries are actively involved in identifying their specific needs and priorities, ensuring that interventions are relevant and effective [27]. This community-centered approach not only enhances service delivery but also empowers residents, promoting ownership and accountability in local development initiatives, which is critical for sustainability. The IDP model's contributions to socio-economic welfare can be linked to both Participatory Planning Theory and Dependency Theory [28], [29], [30]. The participatory approach aligns with the core principles of Participatory Planning Theory, emphasizing the importance of stakeholder involvement in decision-making processes, thereby ensuring that development initiatives are tailored to the unique challenges and aspirations of the community [31]. Simultaneously, by focusing on self-reliance and reducing dependency on external aid, the IDP model embodies the tenets of Dependency Theory [32], [33]. It seeks to build local capacities and enhance economic independence, which can ultimately lead to a more sustainable and equitable socio-economic landscape for beneficiaries in Rwanda. Through these theories, the IDP model not only addresses immediate needs but also lays the groundwork for long-term development and resilience within the community [34] studied the impact of a condominium housing program on the welfare of 335 beneficiary households in Mekelle city, using the Propensity Score Matching (PSM) method to address selection bias [35]. The results indicated a

significant positive effect on household wealth, as measured by a wealth index, which increased by 0.23 to 0.25, and on annual education expenses per attending child, which rose from Birr 502 to Birr 641 [35]. However, the program did not show significant effects on other welfare indicators, such as monthly food expenditure or children's educational attainment. Sensitivity analyses confirmed the robustness of the findings regarding the program's impact on wealth and education expenses.

A study by [36] on the impact of Chile's housing program using Propensity Score Matching, found that the program had significant positive effects on materiality conditions (access to water, sewerage, and electricity), but it hurt overcrowding (number of people per room). However, their study shows that the program has no significant effects on welfare indicators. In other words, their result shows an unambiguous improvement in the quality of the housing solutions. However, the impact on other outcomes is doubtful. According to them, this could be due to high residential segregation that resulted from attempting to maximize the number of housing solutions on the cheap. A study by [37] investigated the impact of housing improvement projects on poverty reduction among registered women's groups in Shinyalu Constituency, Kakamega County, Kenya. The study aimed to examine how factors such as housing locality, housing cost, housing tenure, and housing quality influenced poverty reduction, utilizing a descriptive survey design with a sample of 284 representatives [37]. Data were collected through structured questionnaires and analyzed using SPSS 23, employing both descriptive and inferential statistics. The findings revealed that all four factors significantly contributed to poverty reduction, with housing quality having the strongest impact, followed by housing locality, housing cost, and housing tenure. The study concluded by recommending the adoption of housing improvement projects by women's groups to enhance their economic well-being [37].

A study by [38] examined the effects of slum upgrading on the livelihoods and welfare of residents in Kibera slums, Kenya, to address the proliferation of informal settlements. The study aimed to provide understandings into the livelihood strategies adopted by Kibera residents following slum upgrading programs and to evaluate how these strategies influence the socio-economic development of beneficiaries of the Integrated Development Program (IDP) model village [38]. It considered four key variables: job opportunities, enterprise development, public service provision, and self-help project funding. The findings revealed that many residents remained in informal jobs or were unemployed, but the introduction of pricing schemes for water led to reduced costs in upgraded housing (M

= 3.97, SD = 0.907) and increased access to education financing in the upgraded areas compared to the slums (M = 4.01, SD = 1.098), highlighting the potential benefits of slum upgrading initiatives for improving residents' welfare.

The framework below is an illustration of possible underlying projects influences on people's social

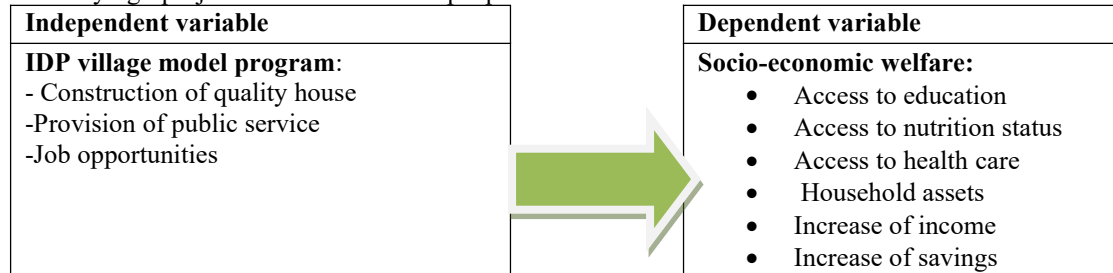


Figure 2: Conceptual Framework

Source: Researcher, 2021

From the foregoing review of relevant literature, it is evident that research in the area of the IDP village model program has been done but not with a comprehensive approach. All the literature reviewed indicates that previous researchers only concentrated on a few variables of IDP mode; while this study covers additional important variables that were omitted by previous studies, construction of quality houses, provision of public service and job opportunities. This makes the study more comprehensive. From a survey of relevant literature, it has been found that there are few studies specific to Rwanda on the link of activities of the IDP village model program and the socio-economic welfare of its beneficiaries of the IDP village model program. This study therefore intends to fill these pertinent gaps in literature by studying the contribution of the IDP village model program on the socio-economic welfare of people in Rwanda concerning IDP village model Nyarugenge District.

METHODS AND MATERIALS

The study used descriptive research design and explanatory research design. A descriptive study is concerned with describing the variable under the study [39], such as project financing and project success by using a quantitative approach while the choice of correlation research design is to find out the influence of IDP village model program such as the construction of quality house, provision of public service, job opportunities and market access on socio-economic welfare such as access to education, access to nutrition status, access to health care, household assets and increase of income and increase of savings. Based on the nature of this study, the target population was 112 beneficiaries of Karama IDP village model located in Kigali sector, Nyarugenge District.

economic welfare. The independent variables are grouped on the left side but not in any order of importance. The dependent variable is placed on the right hand and connected with an arrow as a sign of a direct relationship.

The study used Slovin's Formula to determine the sample size that was used in data collection because 112 beneficiaries of IDP village model was large which is great than 100, therefore the sample size is calculated as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size=112 and is the level of precision.

$$n = \frac{112}{1 + 112 (0.05)^2} = \frac{112}{1.28} = 87.5 \approx 88$$

The study employed simple random sampling to ensure that each household had an equal chance of selection, reducing bias and enhancing the representativeness of the data. This method ensures that the findings can be generalized to the broader population served by the Integrated Development Model in Nyarugenge District. This study utilized a combination of primary and secondary data collection methods. Primary data was gathered through questionnaires and in-depth interviews with participants to assess the impact of the Integrated Development Model in Nyarugenge District, while secondary data was sourced from reports, journals, and related literature. Data collection instruments included a Likert-type questionnaire administered to 88 households, semi-structured interviews with key informants like the Sector Executive Secretary, and a review of existing documents such as reports, publications, and statistical summaries. These methods ensured comprehensive data for analyzing job creation and challenges in implementing the Integrated Development Model. The research tools underwent thorough validation and reliability testing to ensure data accuracy and quality.

Therefore, the study collected data from 88 beneficiaries of the IDP village model located in

Nyarugenge District. The researcher used a simple random sampling technique where each member of the population has an exactly equal chance of being selected. Therefore, 88 beneficiaries of IDP village model were selected by using a simple random sampling technique because each beneficiary has an equal chance of being selected in this study to provide information regarding the contribution of the integrated development program (IDP) model village to socio-economic welfare of beneficiaries in Rwanda with reference of IDP in Nyarugenge District. The study used questionnaires in the process of collecting primary data where questionnaires were disseminated through emails to the respondents to give them ample time to verify the accuracy and reliability of the data collected. This was considered to be a cheaper and convenient approach for data collection in areas that were not easily accessible by the researcher. Questionnaires with a 5-point Likert Scale were administered to collect data since it was easy for the respondents to use and understand. The questionnaire tool was used to collect information from 88 beneficiaries of the IDP village model.

Validity was established through collaboration with senior researchers, ensuring alignment with study objectives. The tools underwent face and content validity evaluations, with pre-testing conducted among 10 participants from Gikomero Village model in the Gasabo District. This led to refining ambiguous questions and achieving a high Content Validity Index (CVI) of 0.862, exceeding the acceptable threshold of 0.7. the research instrument was refined with expert guidance and careful assessment of questionnaire clarity, confirming that questions effectively addressed the research objectives. Reliability was verified using a test-retest method, yielding a Spearman correlation coefficient of 0.830, above the 0.7 threshold deemed acceptable for social sciences [40].

Reliability was tested through a pilot study of 10 beneficiaries from the Gikomero Village model in the Gasabo District, followed by Cronbach's alpha analysis using SPSS. The results showed a Cronbach's Alpha of 0.830 for 23 items, confirming strong internal consistency and reliability, well above the 0.7 benchmark. The data analysis in this study applied descriptive and inferential statistics such as multiple regression analysis, to examine the impact of Integrated Development Program (IDP) activities on socio-economic welfare in Nyarugenge District where descriptive statistics such as mean and standard deviation were used to evaluate variables like construction of quality house; provision of public

service; job opportunities and socio-economic welfare of beneficiaries of IDP model while multiple regression evaluated the contribution of activities of IDP model such as skills development, access to finance, infrastructure improvements, social infrastructure and community engagement to job creation in Nyarugenge District.

The regression model can be expressed as

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \varepsilon$$

Where: Y is job creation Y= socio-economic welfare of beneficiaries of IDP model

X₁= Construction of quality house

X₂= Provision of public service

X₃= Job opportunities

B₀= regression constant ε = error term, $\beta_1, \beta_2 \dots \beta_n$ = Coefficients of variation

RESULTS AND DISCUSSIONS

This chapter presents the findings of the study, the analysis and the interpretation of the results. The findings were analyzed about the objectives of the study and the interpretations are provided after each table, always taking into consideration the initial research questions. This chapter thus examines the empirical evidence and establishes the groundwork on the research questions that were answered before concluding. The primary focus of this study was to determine the influence of quality housing on the socio-economic development of beneficiaries of the IDP village model; to examine the influence of the provision of public service on the socio-economic development of beneficiaries of the IDP village model and to find out the effects of job opportunities on socio-economic development of beneficiaries of IDP village model. Questionnaires were sent to 88 beneficiaries of the IDP village model. The data collection process took about two weeks, with numerous reminders sent to each of the participants.

The results from Table 1 highlight the favourable perceptions of beneficiaries regarding the Karama Integrated Development Program (IDP) model in Nyarugenge District, particularly regarding housing quality and location. The high mean score of 4.69 for well-constructed and adequately furnished model buildings aligns with findings from [35] which reported similar beneficiary satisfaction due to the quality of housing in urban development projects. In Mehari's study, the positive impact of housing on household wealth underscored the importance of construction quality, suggesting that effective design and execution can significantly enhance beneficiaries' living conditions.

Table 1 : Activities of Karama IDP Model in Nyarugenge District

Variables	Mean	St. Dev
The Model Building is well-constructed and adequately furnished	4.69	.63
Proximity to the town has effects on the quality of a Shelter since many people would like to be near towns	4.45	1.04
The house has been constructed well for all beneficiaries of the IDP village model	4.43	.97
The constructed house has been supervised by local leaders before being handed to its beneficiaries	4.53	.99
Construction of quality housing	4.52	0.90
The Centre has adequate sanitary facilities	4.43	.97
There is an improved formalized cost of access to water in the IDP village model	4.12	1.15
Due to the IDP village model, electricity connection is now affordable	4.85	.52
Infrastructure such as roads built in a model village has boosted the economic relations of its residents.	4.67	.78
Provision of public service	4.51	0.85
People living in the upgraded housing had more access to business attendant jobs as compared to those living in slum	4.15	1.37
More small business ventures have been created to improve on income of the locals	4.68	.88
Job in the scale business in the IDP village model has increased as compared to the slum	4.52	.99
The IDP village model has created a ready market for household specialized enterprises	4.80	.48
Many service provision enterprises have emerged in the IDP village model as compared to the slums	4.74	.78
Job opportunities	4.57	0.90

Source: Researcher, 2022

Additionally, the mean score of 4.45 for proximity to urban areas echoes previous research by [1] which indicated that improved housing in urban settings often leads to better access to essential services and employment opportunities, thereby contributing to overall welfare.

Furthermore, the results emphasize the crucial role of local leadership in ensuring project success, reflected in the mean score of 4.53 regarding supervision of the construction process. This finding resonates with [6] study, which demonstrated that effective governance and oversight in slum upgrading initiatives directly influenced residents' satisfaction and project outcomes. The confidence expressed by beneficiaries in the supervision of their homes likely enhances their trust in the program, similar to how effective local leadership was linked to improved welfare in the Kibera slums. Additionally, the provision of adequate sanitary facilities (mean = 4.43) and affordable electricity connections (mean = 4.85) further illustrates the IDP's comprehensive approach to improving living standards. This approach aligns with previous studies emphasizing the importance of infrastructure improvements in fostering community development and social interaction, highlighting the IDP's commitment to holistic enhancements in residents' quality of life.

The economic implications of the IDP model are particularly noteworthy, as demonstrated by the mean scores related to job creation and business opportunities. The average score of 4.52 for access to small-scale business jobs and 4.68 for new business ventures

indicates a significant impact on local economic development. This observation supports the findings of Atsenga, & Amuhaya (2021), who noted that housing improvement projects fostered economic growth and job creation among women in Kakamega region. The creation of a ready market for household enterprises (mean = 4.80) and the rise of service provision enterprises (mean = 4.74) highlight the thriving local economy resulting from infrastructural improvements facilitated by the IDP model. The overall mean score of 4.57 for job opportunities reinforces the conclusion that the IDP has successfully created a conducive environment for economic activities, thus enhancing the socio-economic welfare of residents. This finding is consistent with the broader literature that emphasizes the positive correlation between improved housing conditions and economic development within communities.

The results presented in Table 2 illustrate the positive impact of the Integrated Development Program (IDP) on the socio-economic welfare of beneficiaries in Nyarugenge District. Respondents reported a significant increase in household income, with a high mean score of 4.99, indicating that the program has effectively enhanced financial well-being over the past three years. Additionally, the mean score of 4.55 for increased household savings further emphasizes this financial growth. The IDP's influence on entrepreneurship is evident, as indicated by the mean score of 4.35 for those who started businesses, reflecting a shift towards self-sustaining economic activities.

Table 2: Level of Socio-economic Welfare of Beneficiaries of IDP in Nyarugenge District

	Mean	St. Dev
My household savings has been increased in the last three years	4.55	1.00
My household income as also increased in the last three years	4.99	.11
I started business over the last three years	4.35	1.27
I have added more capital for investment over the last three years	4.16	1.48
I bought plot to build house	4.26	1.26
I bought domestic animals	3.85	1.56
I'm able to improve household diet	3.52	1.72
I'm able to pay health insurance of my family and my relatives	4.47	1.07
I was able to pay school fees for my children	3.90	1.45
I able to afford nutrition my family at least three meals per day	3.94	1.51
Overall views	4.19	1.24

Source: Primary data, 2022

However, while there are notable improvements in areas such as health insurance (mean = 4.47) and access to basic necessities like three meals per day (mean = 3.94), scores for household diet improvement (mean = 3.52) and purchasing domestic animals (mean = 3.85) reveal some challenges in achieving optimal socio-economic development. Overall, the IDP has contributed positively to beneficiaries' welfare, with an overall mean score of 4.19 reflecting their favorable views on the program's impact. These findings suggest a pathway for further investment and support in enhancing livelihoods and addressing remaining challenges within the community.

The positive outcomes of the IDP align with past empirical studies that highlight the efficacy of similar development initiatives in enhancing socio-economic conditions. For example, a study by [29] showed that integrated development programs led to significant improvements in beneficiaries' income levels and savings, which directly correlate with the findings in Nyarugenge District. Furthermore, the influence of entrepreneurial ventures on income generation as reflected by the mean score of 4.35 in the current study.

Despite these positive developments, the challenges in household diet improvement and livestock acquisition noted in the current findings resonate with [41], who pointed out that financial growth alone does not guarantee overall well-being. Their research highlighted the importance of complementary interventions that address nutritional education and resource accessibility to maximize the benefits of financial improvements. Therefore, while the IDP has successfully fostered economic growth, it is crucial for future initiatives to incorporate strategies that enhance nutrition and livestock ownership, ensuring a comprehensive approach to socio-economic development in Nyarugenge District.

Table 3: Model Summary on the Contribution between Karama IDP Model and Socio-economic Development of its Beneficiaries

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.772 ^a	.595	.581	.16549

a. Predictors: (Constant), Job opportunities, Construction of quality house, Provision of public service.

The results presented in Table 3 provide a comprehensive model summary regarding the relationship between the Karama Integrated Development Program (IDP) model and the socio-economic development of its beneficiaries. The R value of 0.772 indicates a strong positive correlation between the identified predictors job opportunities, quality house construction, and provision of public services and the socio-economic development of beneficiaries. This suggests that as these factors improve, so does the socio-economic status of the individuals involved in the program. The R Square value of 0.595 reveals that approximately 59.5% of the variance in socio-economic development can be explained by the predictors included in the model. This substantial proportion indicates that the Karama IDP model is effective in addressing key elements that contribute to improving the socio-economic conditions of its beneficiaries.

The Adjusted R Square value of 0.581 further supports this finding, accounting for the number of predictors in the model and still demonstrating a significant explanatory power. This indicates that the model remains robust despite potential overfitting. These results are consistent with previous empirical research, such as that conducted by [26], which indicated that integrated development strategies that address multiple socio-economic factors tend to produce more significant outcomes. Their study emphasized the importance of creating job opportunities and providing quality services as foundational elements in promoting

sustainable development within communities. Furthermore, a review by [37], found that housing quality directly influences residents' economic stability, reinforcing the findings from the Karama IDP model. This underscores the necessity of holistic development initiatives that prioritize interconnected aspects of welfare to achieve meaningful socio-economic progress for beneficiaries.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.386	3	1.129	41.211	.000 ^b
	Residual	2.301	84	.027		
	Total	5.687	87			

a. Dependent Variable: Socio-economic welfare

b. Predictors: (Constant), Job opportunities, Construction of quality house, Provision of public service.

The F-statistic of 41.211 corresponding to p-value of 0.000 which is less than 0.05 thus the model is statistically significance in predicting how access to job opportunities, construction of quality house and provision of public service affect socio-economic development of beneficiaries of IDP village model. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 41.211), this shows that the overall model was significant. The significance level (Sig.) of .000 reinforces this conclusion, indicating that the probability of observing such an F-statistic due to random chance is extremely low. This statistically significant result suggests that at least one of the predictors such as job opportunities, construction of quality houses, or provision of public services has a meaningful impact on the socio-economic welfare of the beneficiaries of the Karama IDP model.

These findings align with previous research, such as that conducted by [36], which highlighted the critical role of employment opportunities and quality housing in enhancing the well-being of community members. The study emphasized that well-structured programs that focus on these areas are more likely to yield significant improvements in socio-economic conditions.

Additionally, the results support the assertions made by [34], who found that effective public service provision is essential in promoting social welfare, further validating the predictors' importance in the context of the Karama IDP model. Overall, the ANOVA results underscore the efficacy of the Karama IDP program in enhancing socio-economic welfare through targeted interventions.

Table 5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.331	.347		3.839	.000
Construction of quality house	.059	.026	.065	2.269	.007
Provision of public service	.602	.060	.742	9.979	.000
Job opportunities	.022	.009	.034	2.444	.003

a. Dependent Variable: Socio-economic welfare

$$Y = 1.331 + 0.059 X_1 + 0.602 X_2 + 0.022 X_3 + 0.347$$

According to the regression equation established, taking all factors into account (access to job opportunities, construction of quality house and provision of public service) constant at zero Socio-economic development of beneficiaries of IDP village model was 1.331.

The regression results revealed that construction of quality house have significance positive influence on zero socio-economic development of beneficiaries of IDP village model as indicated by $\beta_1 = 0.059$, p-value = $0.007 < 0.05$, $t = 2.269$. This shows that taking all other independent variables at zero, a unit increase in construction of quality house will lead to increase in Socio-economic development of beneficiaries of IDP village model by 0.059 units.

The regression results revealed that the provision of public service has a significant positive influence on zero socio-economic development of beneficiaries of the IDP village model as indicated by $\beta_2 = 0.602$, p-value = $0.000 < 0.05$, $t = 9.979$. This shows that taking all other independent variables at zero, a unit increase in the provision of public service will lead to an increase in the Socioeconomic development of beneficiaries of the IDP village model by 0.602 units.

The regression results revealed that access to job opportunities has a significant positive influence on zero socio-economic development of beneficiaries of the IDP village model as indicated by $\beta_3 = 0.022$, p-value = $0.003 < 0.05$, $t = 2.444$. This shows that taking all other independent variables at zero, a unit increase in access to job opportunities will lead to an increase in Socio-economic development of beneficiaries of the IDP village model by 0.022 units. [38] argues that slum dwellers live in poor conditions because they need jobs and income to survive and they have made rational decisions that they can find jobs in the cities than in their villages. There are thousands of informal grassroots enterprises that thrive in slums and need workers even if they pay miserable wages, and to him, this is better than earning nothing allowing one to

survive and keeping open the chance that life will improve. The fact that jobs and income are the main tools of inducement for people to live in slums seems to have made little impact on the actions of most of the organizations devoted to improving the lives of the dwellers [38]. Furthermore, [6] observe that apart from house improvement, slum upgrading should also prioritize the socioeconomic improvement of the poor by offering job opportunities, business opportunities provision of government services and self-help project funding.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that 58.1% of the variation in the socio-economic development of beneficiaries of IDP village model in Nyarugenge District can be predicted by joint interaction of job opportunities, construction of quality house, and provision of public service. The study concluded that interventions of IDP village model such as job opportunities, construction of quality house, and provision of public service has positive influence on socio-economic development of beneficiaries of IDP village model in Nyarugenge District. This implies that these variables are very significant therefore need to be considered in any effort to boost welfare of the residents. The study therefore identifies variables as critical determinants of socio-economic development of beneficiaries of IDP village model. The findings also indicated the increased use of transport in the upgraded project than in the slums and that there are more opportunities to provide sanitation services in the upgraded houses as compared to the slums and that many service provision enterprises have emerged in the upgraded houses as compared to the slums and that there is also increased access to education financing in the upgraded project than in the slums through increased government funding as compared to the slums. The following recommendations are forwarded to improve the success and quality of the integrated development program in Nyarugenge District.

Basic social infrastructures must be built accordingly. After it's passed to the households about the welfare impact it has brought and based on our result in this study we can make the following recommendations:

- ❖ The study recommends that job creation initiatives to be implemented for the rising populations. This can be achieved through provision of good infrastructure in the slums to attract domestic and foreign investment, which is necessary for largescale job creation.
- ❖ The policy should advocate that IDP Village model in Nyarugenge District should enhance the community's lives. It should create avenues for community participation in the projects in order to address their needs. Through upgrading initiatives, communities should be able to access improved

housing and it should be accompanied by related amenities.

- ❖ There is no doubt that the IDP Village model have brought a positive impact on the urban population. This is true due to the fact that it has created enormous employment opportunities starting from its construction.
- ❖ To continue periodic reviewing of the progress of the program and to act quickly on problems identified. This will assure the smooth implementation of the program and assure transparency.
- ❖ To respect the conformity of site selection with the city land use plan to avoid any mismatch with the city plan.

ACKNOWLEDGMENTS

First and foremost, I would like to express my deepest gratitude to the Almighty God for granting me the strength, health, and perseverance throughout the journey of this research.

I extend my sincere appreciation to my academic supervisors, **Dr. Semana Javan** and **Dr. Johnson Ocan**, whose invaluable guidance, constructive feedback, and unwavering support were instrumental in shaping and completing this research. Your mentorship not only enhanced the academic quality of this work but also inspired me to pursue excellence at every stage. My heartfelt thanks go to the **Adventist University of Central Africa/ Rwanda**, whose resources and institutional support created an enabling environment for the acceptance of academic publication. I am also indebted to the local authorities and staff of Nyarugenge District, as well as the beneficiaries of the IDP Model Village, for their cooperation, availability, and willingness to share critical insights and data that formed the backbone of this research.

To my family and friends, your constant encouragement, moral support, and patience were my anchor throughout this demanding process. Special thanks to those who assisted with logistics, data collection, and editing their contributions were deeply appreciated. Finally, I acknowledge all those, named or unnamed, whose input however small helped bring this research to completion. May your kindness and support be rewarded.

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