

Impact of Management Practices on the Sustainability of (IDP) Model Villages in Rwanda: Case of Rweru Sector Bugesera District

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Abstract

The objective of this background paper is to review the Impact of Management Practices on the Sustainability of the Integrated Development Programme (IDP) model villages in Rwanda that cover the last 21 years from 2006 to 2021. The paper looks at the difficulties that the approach encountered and lessons learnt to sustain the integrated development model villages in Rwanda. The paper looks at the different approaches that have evolved since 2006 to support Rwandans both in rural and urban areas towards the implementation of the IDP model and how the model villages have been incorporated in the design and implementation of the resettlement plans in Rwanda. However, the findings were; there has been a rapid increase in household biomass energy consumption which has been occurring recently in the study area. This involved critical shortage or total lack in some cases of other energy alternatives. Biomass (firewood & charcoal) remains practically the only source for cooking for many years to come as electricity will remain too expensive in the medium future. It has been observed that sewages are poorly disposed of and the impacts of untreated sewage and wastewater cause risks to humans by causing water-borne disease. Also, the level of the private sector in upgrading unplanned settlements and resettling people living in high-risk zones with poor environmental conditions are not reflected and thus the sustainability of the model villages is will not be achieved. This paper finally answered that management practices are partially applied to the IDP model villages in Rwanda and a need to sustainably manage them is needed by either, raising the level of private-sector resource mobilization for urbanization and the rural settlement calls for devising innovative ways for partnership with the private sector by ensuring that capacities and mechanisms to tap into urban finances from the private sector or designing programs and projects to support their functionality as a means of putting much emphasis to cater for them by transforming Rwanda into an urbanized country as per the National Strategy for Transformation NST1 (2018-2024).

Keywords

Management Practices, Sustainability, IDP Model Villages

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1. Introduction

Rural development programs have been around since the early 1950s but the concept was brought to the forefront of development in the 1970s by Robert McNamara, then the President of the World Bank in a speech to the Bank's Board of Governors in 1973 in Nairobi, he emphasized the alarming

the situation of the absolute poor in the developing world and proposed a rigorous approach to fighting this poverty. The strategy he outlined for this poverty reduction or elimination was to be centered on an integrated approach to rural development. The World Bank therefore vigorously championed the cause of rural development in the 1970s defining rural development as "a strategy designed to improve

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the economic and social life of a specific group of people - the rural poor". It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural areas [6].

The Integrated Rural Development Programmes have always been on the agenda of development for any country. In India, the country has contributed much towards poverty reduction strategies following the visit made by prime minister Narendra Modi in Rwanda in 2017, the Prime minister decided to dedicate an enormous share of the country's annual budget towards rural development. There was a time when social reformers planned of developing Model Villages. Globally several development organizations have developed quantifiable indicators to measure the effectiveness of Integrated development interventions and Model Villages that align with this global inventory of development indicators. The paper highlights some of the notable Model Village efforts of India and what have been their development indicators in the backdrop of the global inventory of Rural Development Indicators.

Muthuraman and Takeda reported a Model Village called Ankapur which is a small, self-sufficient, progressive village located in Nizamabad district of Telangana state. The IDP model has been known for its overall development in general and agricultural development in particular, many agencies including International Rice Research Institute, Manila, Philippines recognized this village as a replicable model in other places.

Local municipalities in South Africa have to use "integrated development planning" as a method to plan future development in their areas. Apartheid planning left us with cities and towns that have racially divided business and residential areas, are badly planned to cater for the poor - with long travelling distances to work and poor access to business and other services, have great differences in level of services between rich and poor areas and have sprawling informal settlements and spread out residential areas that make cheap service delivery difficult. Development Plan (IDP) have been adopted to enhance the local municipality's delivery of such services. In practice, though, it has become evident that rendering services such as clean water, proper sanitation, electricity and health facilities has remained a major challenge for local municipalities across South Africa [5].

The Integrated development programme (IDP), sometimes referred to as area development) the approach became the prototype for development assistance to rural communities and was adopted by many in the development assistance community especially in their activities in Africa in the early 1970s and in Nigerian cities are witnessing high rate of environmental deterioration and are rated among urban areas

with the lowest livability index in the world, therefore if Integrated development programme are not managed well, environmental degradation will occur at a higher rate [1].

The Government of Rwanda by its Economic Development and Poverty Reduction Strategy translated into National Strategy for Transformation (NST1) as well as Social Protection policy is ambitious to pull citizens out of poverty by developing Rwandans into a capable and skilled people with quality standards of living, stable, secure society and also to accelerate inclusive economic growth. Rural development has assumed global attention especially among the developing nations. A country like India where majority of the population around 65% of the people live in rural areas has great significance. The present strategy of rural development in India mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programmes of wage and self-employment. The article overviews the role and function of the Government and its' programmes for rural development in India [2].

The Population in Rwanda living in isolation and in high-risk zones experience inadequate and unreliable infrastructure whereby households in these areas often do not have access to safe drinking water, electricity, reliable transportation or modern communication services, all-season roads, access to health facilities, schools, and markets among other amenities. This affects economic development in these areas henceforth the government of Rwanda took the initiative of relocating people from all islands of Rwanda including those of Mazane and Sharita in Bugesera district so as to secure the lives of the people. This paper attempts to provide the impact of management practices as opposed to the sustainability of Integrated Development Program (IDP model villages) in Rwanda. For the purpose of this paper, the authors defined management practices as to the working methods and innovations that governments use to improve the effectiveness of work systems and as the best to meet the new/present challenges and make use of the opportunities for the growth of future generations not to encounter weak sustainability that adds nothing to conventional economic optimality [8].

Having defined Sustainability as means of creating an economic system that provides for quality of life while renewing the environment and its resources, we wanted to address questions like, how can we sustain the Integrated Development Program settlement in Rwanda? Are settled families happy with the newly established houses in Rwanda?

Again, since Rwanda is a natural resource-based economy and its development is and will depend on the sustainable use of natural resources, combating climate change effects at the same time protecting and conserving biodiversity.

As such, through the support of the Ministry of Finance and Economic Planning (MINECOFIN) in close collaboration with Rwanda Environment Management Authority (REMA), there is a need to harmonize economic growth with the sustainable use of natural capital and main streaming environment, weather and climate information, as well as climate change considerations into the behaviour of industries and consumers, would change consumption and production patterns.

Additionally, there are still many people living in unplanned settlements and high-risk zones with poor environmental conditions in both rural and urban areas despite government development interventions proposed by MININFRA in different consultations for relocation of dwellers concluded that there has been a central issue of poor settlement and the setup of infrastructures (houses) for the established families are poorly managed and thus lack a core component of sustainability across Rwanda.

The National informal urban settlement upgrading strategy, the current situation of human settlement in Rwanda is as a result of a great deal of effort made by the Government of Rwanda to devise improved mechanisms for the creation of useful approaches for the development of human settlement at

all levels hence developing and facilitating decent settlement of Rwandans including relocation of those living in high-risk zones and scattered settlements [3].

Rwanda’s urban areas are growing rapidly, and the NST1 target is to accelerate sustainability and urbanization from 17.3% (2013/14) to 35% by 2024 [3]. As a result, the Rweru IDP model village was set up in 2006 and later the initiative of integrated development settlement was scaled up in other parts of the country, emphasizing communities that are living in islands, scattered settlements and high-risk zones [4].

Lastly, Rwanda has an enabling environment in the form of its visionary national leadership, its results-based reporting on the achieved indicator, culture performance called (Imihigo), decentralization, and improved public awareness on the role of development intervention done by the government of Rwanda i.e., urbanization and human settlement which presents an opportunity for effective monitoring of Integrated development programme (IDP) across the country. The investigations intend to bring on board the planning and budgeting of the IDP Model Village project to always consider the national planning and budgeting calendar right from the Budget Calls Circular (BCC) for short and Mid-term Expenditure Framework (MTEF) [4].



Figure 1. The map of Bugesera district.

2. Materials and Methods

This study was carried out in Bugesera in the Eastern province of Rwanda with its capital Nyamata and Bugesera district is one of seven districts of Eastern Province in Rwanda. The district covers a total surface area of 1337 Km². A sampling procedure called random sampling was used such that each possible combination of sampling units out of the population has the same chance of being selected is referred to as random sampling.

2.1. Description of the Study Area

Rweru IDP model is located in the Bugesera district of the Eastern province of Rwanda with its capital Nyamata, Bugesera district is one of seven districts of Eastern Province in Rwanda. The district has a total surface area of 1337 Km². As a pilot integrated environmentally sustainable development intervention, the Rweru project was expected to provide an integrated development model that, the Vision Umurenge Programme (VUP) and other similar national programs could adopt and later be replicated countrywide.

2.2. Data Collection

Data for the research were obtained from the primary source by using the designed questionnaires as the instrument for data collection, following the specifications of the research questions. The data gathering approach was based on a questionnaire with primarily structured, closed-end questions and respondents give out their thoughts while secondary data was obtained from, Rwanda Housing Authority and Bugesera district. The techniques used to collect data were Focus group discussion, Field examination, Interview and Questionnaire. 53 out of 300 respondents were sampled from the IDP model village of Rweru in Bugesera District.

3. Results

This study used 3 (three) objectives namely; To analyse the management practices applied in the Integrated Development Programme (IDP) model village of Rweru in Bugesera district, to analyse the sustainability of IDP model village in Rwanda, to assess the impact of management practices on the sustainability of IDP model villages in Rwanda. This paper reviewed research in which the primary focus was directed toward the impact of management practices on the sustainability of (IDP) model villages in Rwanda.

After assessing the impact of management practices on the sustainability of IDP model villages in Rwanda, it has been observed that districts are constrained by a lack of resources and therefore, the research findings have concluded that there is a need for each district to own to develop IDP Model Village

and mobilize the fund for the regular maintenance of those infrastructures in partnership with different stakeholders in Rwanda.

The findings from the field after assessing the impact of management practices, the role of management towards sustainability is reflected in the strong land administration and management that ensures optimal allocation and use of land for proper settlement. This has included rationalization and harmonization of land use master plans at both national and districts level, and this has been supported by fully functioning land administration information. In this framework of assessing the management practices applied in the IDP model village of Rweru in Bugesera district, an empirical analysis revealed that the null hypothesis has been rejected subsequently, the results of the study become insignificant and an alternative hypothesis was accepted and thus one can infer that the IDP model villages in Rwanda aren't sustainably managed.

According to the assessment made on the impact of management practices on the sustainability of IDP model villages in Rwanda, challenges including where IDPs beneficiaries of Girinka program the beneficiaries don't drink morning milk due to undisclosed information.

The beneficiaries/households don't have land for forage and land for cultivation of elephant grasses and most of the villages biogases are not working or not installed despite mechanisms to strengthen their management and ensure their sustainable exploitation working with the private sector to make them operational other than the government investing in every aspect of IDP model villages since the involvement of private operators is still low.

After assessing the impact of management practices on the sustainability of IDP model villages in Rwanda, it has been observed that districts are constrained by a lack of resources and therefore, the research findings have concluded that there is a need for each district to own to develop IDP Model Village and mobilize the fund for the regular maintenance of those infrastructures in partnership with different stakeholders in Rwanda.

3.1. Data Presentation

After data collection and data analysis, the presentation was done to be able to come up with findings that will generate policy actions and help in the scale-up process of other Integrated development villages across the country.

Table 1 indicated that out of the surveyed 53 people, 30.2% were male and 69.8% were female, 60.4% married, 1.9% single and 34% were widows, 22.6% of respondents has no education level, 56.6% attended primary school which is highly represented, and 7.5% attended secondary school,

respondents are in these categories of age 15.1% were in the range of 25 to 34, 20.8% were in the range of 35 to 44, 13.2% were in the range of 45 to 54, 30.2% were in the range of 55 to 64, and 18.9% were beyond 64 years of age. Some members settled in the IDP model village agreed that they did not

believe that better settlement with improved basic needs can improve their wellbeing, but now they do well off and hence management practices have been achieved, and the researcher inferred that management practices have been applied to the IDP model village of Rweru in Bugesera district.

Table 1. Demographic information.

Gender	%	Marital status	%	Education	%	Age	%
Male	30.2	Married	60.4	no education	22.6	25-34	15.1
Female	69.8	Single	1.9	Primary	56.6	35-44	20.8
		Widowed	34	Secondary	7.5	45-54	13.2
						55-64	30.2
						beyond 64	18.9

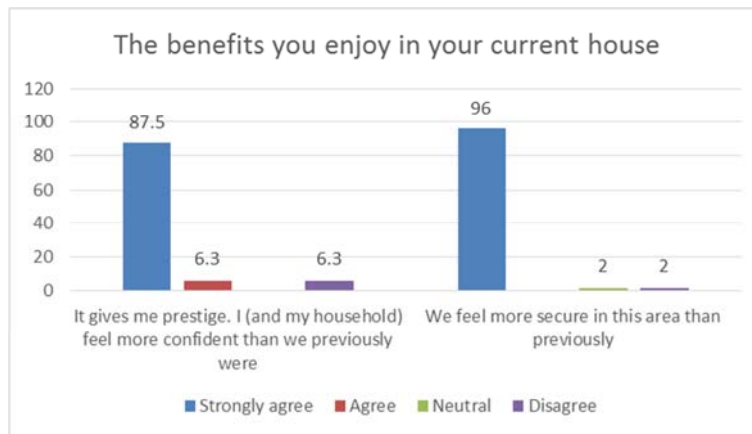


Figure 2. The benefits you enjoy in your current house.

3.2. Controlling

As indicated in figure 2 above, benefits in their current house compared to where you lived previously according to respondents, 87.5% strongly and 6.3% agree that the current house gives them are prestige 92% strongly agree and 2% agree that the current house is more ventilated and there is no smoke like in previous house, 91.8% strongly agree and 2% agree that the current house has a higher value and can be used as collateral security unlike our previous one. The discussions

with the beneficiaries showed that one of the most important benefits of the project is the provision of decent houses. Therefore, without the introduction of Rweru, living conditions were bad, the houses of the beneficiary were smaller and of lower quality and couldn't fetch water from their houses. They indicated that the houses make them feel more secure and strengthen the stability of their living conditions. It is therefore important to stress out that management practices have been applied to Rweru village the houses are the project's most important outcome for the beneficiaries.

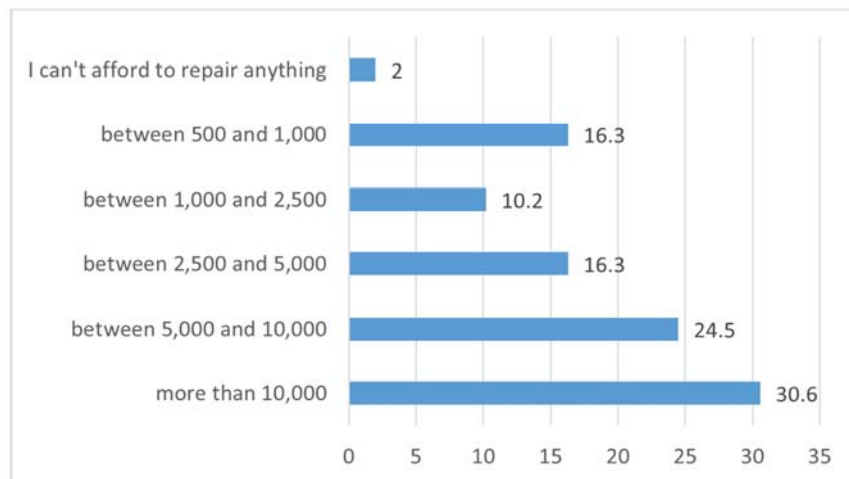


Figure 3. Costs related to maintenance of houses.

As stated above, Respondents spend money on maintenance and repair of their current house where 30.6% spent more than 10,000, 24.5% spent in the range of 5,000 and 10,000, and 16.3% spent between 2,500 and 5,000, 10.2% spent between 1,000 and 2,500, 16.3% spent between 500 and 1,000 while 2% reported that they can't afford to repair their houses. Maintenance is costly, and the government role is needed to determine their sustainability on a regular basis of houses.

It is therefore important to stress that management practices have been applied to Rweru village, the houses are the project's most important outcome for the beneficiaries.

3.3. Staffing

In the process of upgrading the unplanned settlements and resettling people living in high-risk zones with poor environmental conditions. People were employed through the distribution of cows. Interviewing the households, the researcher discovered that none of them had a cow before the project and none of them considers that possessing a cow would have happened without the project. In other words, the without-the-project situation would be the total absence of cows in the village.

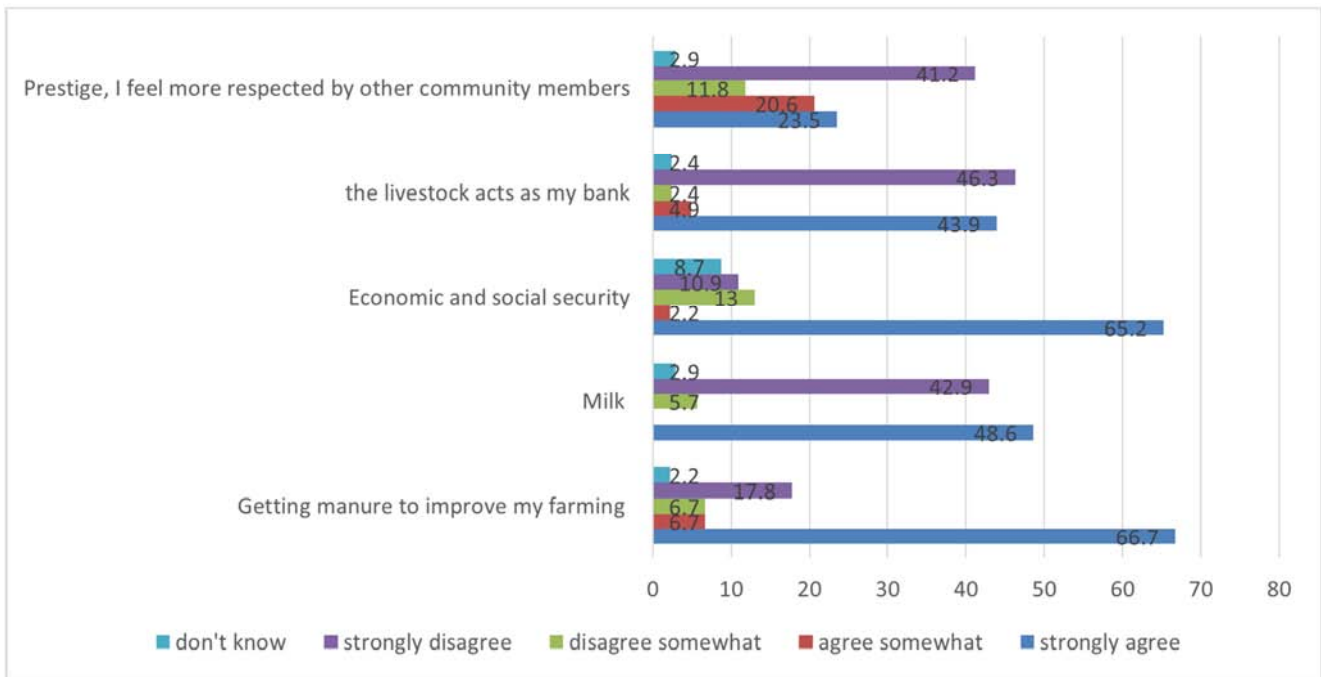


Figure 4. Benefits from livestock.

Figure 4 above indicates that the number of benefits expects to get from the livestock, 66.7% strongly agree and 6.7% agree that the benefit expects getting manure to improve my farming while only 6.7% disagree and 17.8% strongly disagree but higher 2.2% age of 73% agreed. 48.6% strongly agree, 5.7% disagree, and 42.9% strongly disagree that they expect to get milk from livestock.

Therefore, we could infer that the high number of people get manure from livestock to improve my farm, a medium number of people get milk from livestock, and the high number of people get Economic and social security from livestock, medium number of people the livestock acts as a bank, medium number of people the benefit they get from livestock is prestige, they feel more respected by other community members and thus one is able to conclude that management

practices have been applied in Rweru IDP model village. The distribution of cows allows producing milk, calves and meat, which reduced malnutrition aspect.

3.4. Organization

The NST1 upholds the environmental protection principles of Vision 2020, which emphasized enacting policies that promote access to clean water. The overarching goal of combating climate change was illuminated in Vision 2020, with the objective of developing eco-friendly policies in all sectors of the economy to promote the concept of a green economy. Water harvesting and use constitute one of the main areas of innovation of the Rweru IDP model village. It also appears to be the most life-changing component of the project, alongside the house.

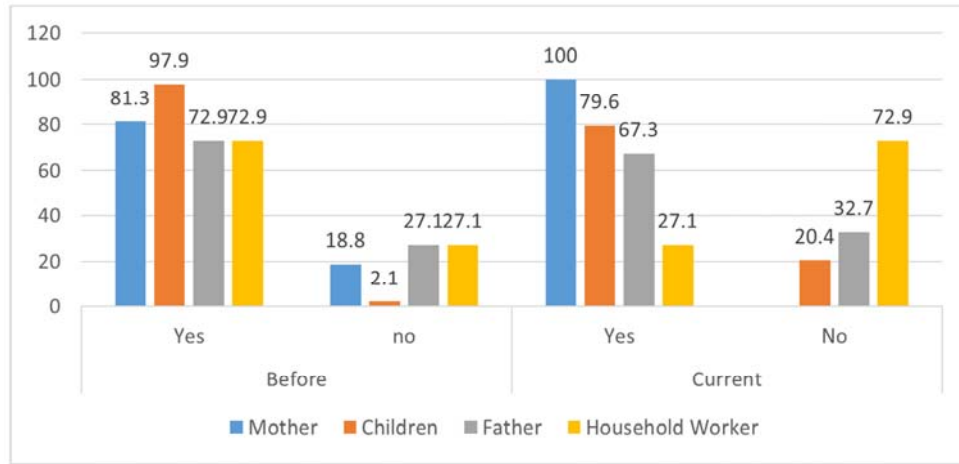


Figure 5. Water collection methods.

According to figure 5, 81.3% of mothers fetched water before and all of them at IDP model villages do it while 97.9% of children fetched water before and were decreased to 79.6% as IDP model village, 72.9% of the father fetched water before and were decreased to 67.3% as IDP model village, 72.9% of household worker fetched water before and have decreased to 27.1% as IDP model village.

One can confer that, the number of children and number of fathers and household workers who fetches water reduced drastically, indicating that management practices are applied to IDP model villages.

3.5. Environmental Sustainability

According to the African Union Agenda 2063 that aspires to create environmentally sustainable and climate-resilient African economies and communities as stated in its 10-year implementation plan. Among the priority areas include sustainable natural resource management, water security, renewable energy, climate resilience and natural disaster preparedness and prevention. Specific targets include preservation of at least 17% of the terrestrial and inland water resources and capacitating 30% of farmers, fishermen and pastoralists to use climate-resilient systems of production.

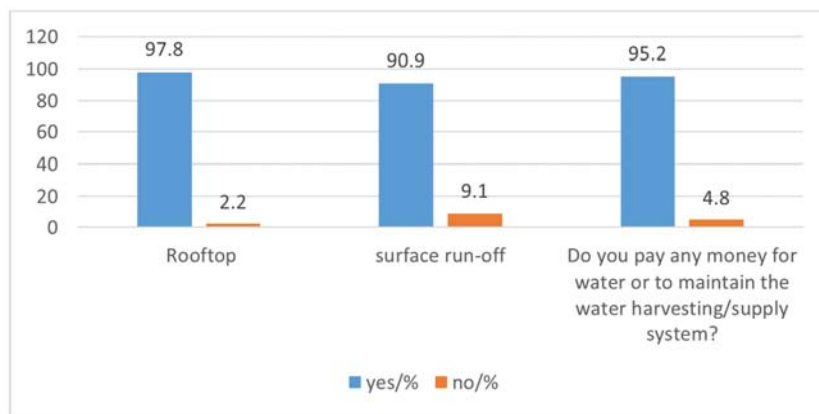


Figure 6. Harvesting rainwater.

As indicated in figure 6 above, 97.8% of respondents harvest rainwater from rooftop and 90.9% harvest rainwater from surface run-off and 95.2% of them pay any money to maintain the water harvesting or supply system. The role of management on the sustainability of IDP the model village has been reflected in that one can conclude that sustainability is reflected in the provision of water collection tanks than it was previously before 2016.

According to figure 7, 16.7% spent less than Frw 300, 10.4% spent in the range of Frw 300 and 500, 20.8% spent Frw 500

and 750, 50% spent between Frw 750 and 1000, and 2.1% spent more than Frw 1,000 on maintenance of water system per month thus this results indicated that there are no mechanisms for analysing sustainability of IDP model village components.

In addition, one could infer that according to the number higher in percentages considers that amount as moderate and affordable compared to the service we receive. Therefore, one can conclude that the government will again spend more money on maintenance since citizens find it expensive to

maintain the facilities provided.

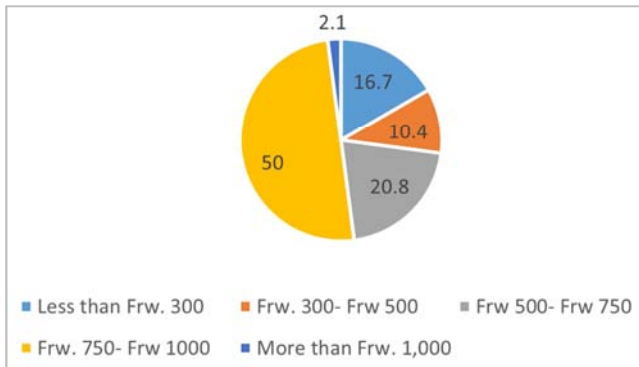


Figure 7. Water system maintenance.

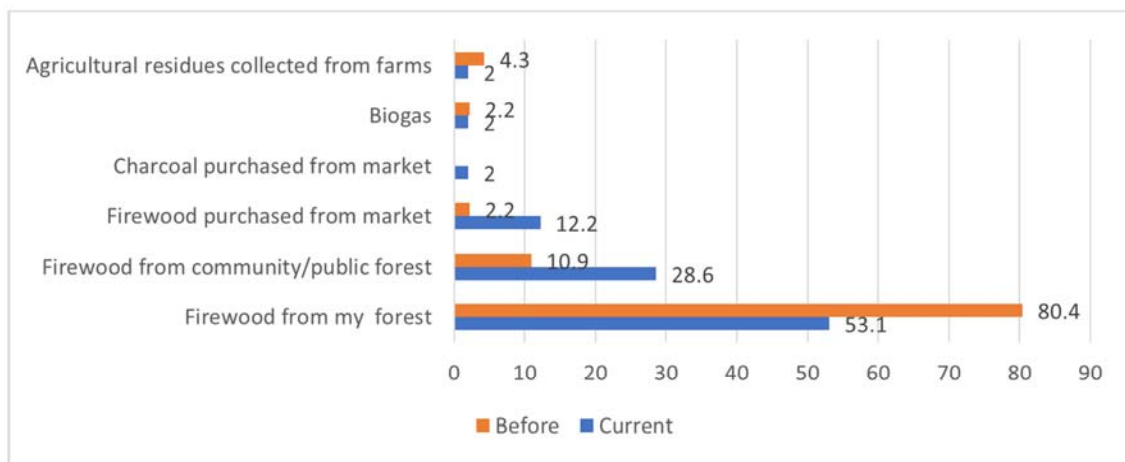


Figure 8. Main source(s) of energy for cooking.

As indicated in figure 8 above, in terms of energy for cooking/heating before July 2008 and the current situation, 80.4% used firewood from the forest in their forest before and at IDP model villages decreased to 53.1%, 10.9% used firewood from public or community before and at IDP model villages increased to 28.6%, 2.2% used firewood purchased from the market before and at IDP model villages increased to 12.2%, charcoal purchased from the market was not used before but at IDP model village were used by 2%.

Therefore, the number of households depending on firewood as a source of energy for cooking is high and this will affect future generations both intergenerational and intra-generational equity which doesn't respond to government intervention of reducing firewood consumption from 83.3% (2014) to 42% by 2024.

In conclusion, over 79% of the national population still rely on biomass as the traditional and inefficient cooking technology while 80.4% of households of Rweru IDP model villages use firewood, the study findings will inform the policymakers on the efficiency of the biogas program and areas for further improvements.

3.6. Intergenerational Equity

Intergenerational equity for the human species could undermine prospects for other species, whose future is arguably no less important but planning through the protection of the future of the natural in all of its complexity may thus take priority over trying to secure a future for the human race that is premised on justice between present and future generations.

Intergenerational equity represents a widely recognized principle of international environmental law providing for the preservation of natural resources and the environment for the benefit of future generations. Meeting the needs of the present without compromising the ability of future generations to meet their needs.

3.7. Intra-generational Equity

According to EICV5, the report indicated that 79.9% of households are still using biomass as cooking energy. The intra-generational equity will not be achieved due to resource depletion since the Ministry of Infrastructure and Environment doesn't ably point out vivacious strategies to reduce households using firewood as a source of energy for cooking despite the strategies adopted for improved cooking stoves. This has been observed in different programs where underperformance of biogas program has failed and the majority of Rwandans (beneficiaries) lack the capacity to maintain the plants and can't feed them with the required inputs [7]

According to EICV5, 79.9% of households are still using biomass as a source of cooking energy, only 30% of households use Improved Cook Stoves and 0.5% use LPG/Gas or Biogas.

Below is the current status after completion of the study in the Rweru IDP model in Bugesera district on Biomass.

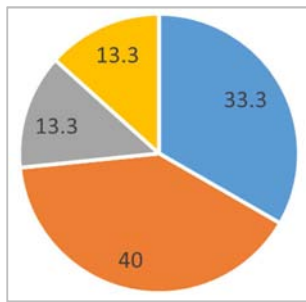


Figure 9. Cost related to biogas system.

On biogas, 33.3% spent less than Frw 500, 40% spent Frw 500-1,000, 13.3% spent Frw 1,000-2,000, and 13.3% spent Frw 2,000-5,000 on biogas system per month.

Biogas prevalence rate assessed on all households, most of them are not operational due to technical problems; due to lack of cow dung but also due to lack of coordinated feeding management especially in a case where there is a shared digester.

In the process to implement human settlements development policies that ensure equal access to and maintenance of basic services, including those related to the provision of food security; education; employment and livelihood; basic health care services; safe drinking water and sanitation; adequate shelter; and access to open and green spaces, giving priority to the needs and rights of women and children, who often bear the greatest burden of poverty have revealed that biogas should be a public service and in the planning and the design a need for planning for biogas management is needed as it is costly to the beneficiaries.

This will be achieved by focusing on promoting the use of alternative fuels such as cooking gas and biogas and promoting the use of cooking gas in urban areas.

Energy is still a constraint, given the high level of dependency on biomass fuels, yet biomass resources are scarce due to a combination of land shortage and thus dealing with the equality among the same generations in the utilization of resources will not be attained.

3.8. Security

The major aspiration of the government of Rwanda is to establish and maintain security, peace and stability nationally and regionally for development and investment. Rwanda's security and stability is a major asset in the global economy. Rwanda's security and stability offers a competitive advantage in the region and the people settled in Rweru IDP model village are secure and safer than where they were in the islands of Mazane and Sharita.

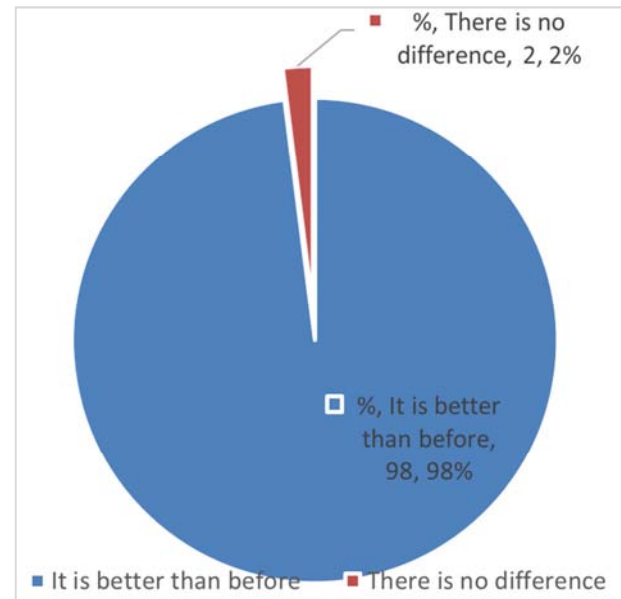


Figure 10. Security.

Figure 10 indicates that 98% of respondents reported that their security in their current community and household is better than before while 2% which means that current security is maximum due to community policing working with citizens and other security organs and respondents thanked the management for ensuring security in their vicinity.

The ability of the country to respond appropriately and effectively to climate change depends on the ability to understand and assess impacts and vulnerability. Policymakers, researchers, and the public and private sectors can then use that knowledge to make informed decisions on appropriate steps for adaptation and mitigation in all sectors of the economy.

Following the respondent's responses, they revealed that the houses make them feel more secure and strengthen the stability of their living conditions.

Figure 10 indicates that 98% of respondents reported that their security in their current community and household is better than before while 2%, which means that current security is maximum due to community policing working with citizens and other security organs and respondents thanked the management for ensuring security in their vicinity.

There are activities people participate in to maintain the community facilities, respondents replied that, 92.5% participated in Umuganda and other community activities regularly, 86.8% contributed money, and thus one is able to infer that the role of management has been applied in IDP model villages in terms of social facilities by ensuring the sustainability of the model village.

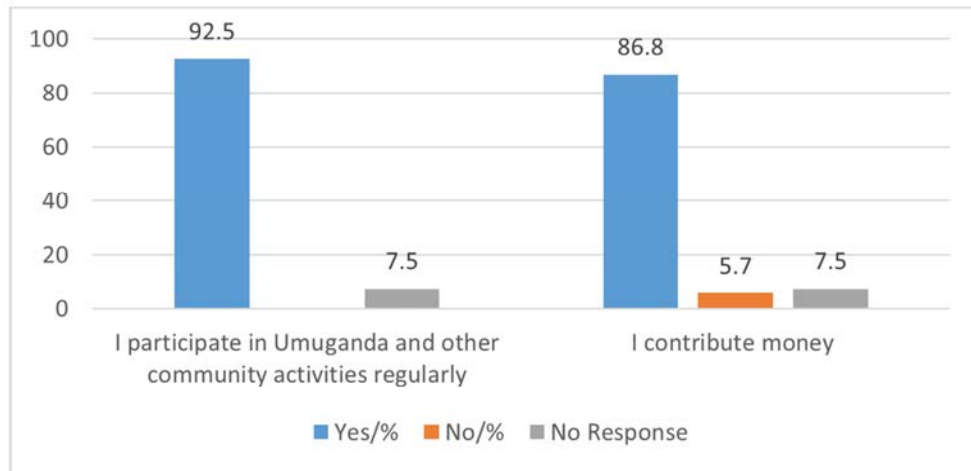


Figure 11. Maintain community facilities.

4. Conclusion and Recommendations

4.1. Conclusion

The study found out that lack of ownership and maintenance are big challenges as stated by most respondents. The existing literature does not adequately mention on how to handle the long-term view of our actions affect future generations and making sure that resources are not depleted and have caused pollution at rates faster than the earth is able to renew them are not reflected well hence the researcher can infer that, the management practices are not applied in the IDP model village of Rweru in Bugesera district.

Since the study used qualitative methods, it has been observed that, there has been a rapid increase in household biomass energy consumption which has been occurring recently in the study area. This involved critical shortage or total lack in some cases of other energy alternatives. Biomass (firewood & charcoal) remains practically the only source for cooking for many years to come as electricity will remain too expensive in the medium future.

It has been observed that sewages are poorly disposed and the impacts of untreated sewage and wastewater cause the risks to humans by causing water-borne disease since beneficiaries' activities are compromising with the environment.

Following the discussions and interviews that were conducted during the field visit study, it was recognized that some of the beneficiaries were not brought along the process of establishing the IDP model village. This hinders the ownership aspect that is crucial to such kind of initiatives.

Again respondents revealed that, Capacity building initiatives are also still lacking especially in helping beneficiaries to know how to use the infrastructures in place. Some of the

beneficiaries claimed that they have not been trained on how to repair bio digesters in case of fault.

Lastly, it has been observed that the government is investing in the construction of IDP model villages in Rwanda and there is no involvement of private sector and furthermore, no plans from the Government to include private sector just because the project is not viable enough to attract private sector investment.

4.2. Recommendations

The government of Rwanda acknowledges that environmental degradation and climate change poses a major challenge to economic growth and sustainable development. Indeed, Rwanda took the initiative of relocating people from all islands, including those of Mazane and Sharita in Bugesera district so as to secure the lives of the people, rehabilitate and reinstate the ecosystem.

Conclusively, the results of the study pointed out that beneficiaries were not brought along the process of establishing the IDP model village without their concern and thus the process of settlement hindered the ownership of government development intervention which will put at risk the ability of future generations.

The paper provided a number of recommendations related to sustainability of IDP Model villages as follows;

To the Ministry of Local Government (MINALOC), there is a need to convene a National consultative meeting bringing together developmental stakeholders (Central Government, Local leadership, Local NGOs, Faith-based Organizations, Development partners) to shape the way forward for future livelihoods intervention to IDP Model Villages to ensure their sustainability.

There is a need for each district to own the develop IDP Model Village and mobilize the fund for the regular maintenance of

those infrastructures in partnership with the beneficiaries.

To beneficiaries/ citizens in the project areas of intervention, a need to raise up sense of ownership of the already set up integrated development model villages across the country is needed.

To the Ministry of Infrastructure via Rwanda Housing Authority, there is a need to develop and provide the missing infrastructure components /pillar in the existing IDP Model Villages and newly set up IDP model villages.

To the Ministry of Finance and Economic Planning, the Ministry should set up a fully functional special task force in charge of sustainability of IDP Model Villages and make overall coordination and monitoring to make sure that Cost-benefit and cost-effectiveness analysis are made by justifying the outcomes and impacts and measure inputs in monetary terms thus Informing decisions about the most efficient allocation of resources.

Raising the level of private sector resource mobilization for urbanization and rural settlement calls for devising innovative ways for partnership with private sector. This should entail developing capacities and a robust mechanism to tap into urban finances including from the private sector and foreign direct investments for success.

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data on generated benefits related to an increase in agricultural and livestock production, indicated that beneficiaries were not brought along the process of establishing the IDP model village.

References

- [1] Aluko, O. (2010). Rule of law, planning and sustainable development in Nigeria. *Journal of sustainable development in Africa*, 12 (7), 88-95.
- [2] Gangopadhyay, D., Mukhopadhyay, A. K. and Singh, P., 2008. *Rural development: A strategy for poverty alleviation in India*. India Science and Technology (Online).
- [3] GoR (2017): *National Informal Urban Settlement Upgrading Strategy*.
- [4] GoR, 7 Years Government Programme: *National Strategy for Transformation (NST 1, 2018 – 2024)*.
- [5] Madzivhandila, T. S. and Asha, A. A., 2012. Integrated development planning process and service delivery challenges for South Africa's local municipalities. *Journal of Public Administration*, 47 (si-1), pp. 369-378.
- [6] McNamara, R. S., 1975. Urban poverty in developing countries: A World Bank analysis. *Population and Development Review*, 1 (2), pp. 339-346.
- [7] Muremyi, R., Dominique, H., Niragire, F., Ignace, K. and Abayisenga, S., 2021. Analysis of the effect of health insurance on health care utilization in Rwanda: a secondary data analysis of Rwanda integrated living condition survey 2016-2017 (EICV 5). *PAMJ-One Health*, 4 (10).
- [8] Pearce, D., & Atkinson, G. (1998). The concept of sustainable development: An evaluation of its usefulness ten years after Brundtland. *Revue Suisse d'Economie Politique et de Statistique*, 134, 251-270.
- [9] Pradhan, S. and Ranjan, A., 2011. Corporate social responsibility in rural development sector: Evidences from India. *School of Doctoral Studies (European Union) Journal*, 2, pp. 139-147.