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Beneficiary Participation in Post-Implementation Stages in Slum Upgrading in Secondary Cities of Nakuru and Kitale, Kenya

Estone Lugairi[1*] Francis Nyongesa Wegulo[1] Hadijah Matuli Murenga[2]
1. Department of Geography, Egerton University, P. O. Box 536, Egerton, Kenya
2. Department of Peace Studies and Social Studies, Egerton University , P. O. Box 536, Egerton, Kenya
Email: estone.lugairi@egerton.ac.ke or lugairi@yahoo.com

ABSTRACT
Slum upgrading is the most highly favoured global strategy for improving living conditions with varied positive impacts across settlements. The sustainability of implemented interventions is contingent upon effective post-implementation stages and participation of targeted beneficiaries in the process. However, studies have attributed continued formation, existence and expansion of slums to inefficient post-implementation monitoring, evaluation and maintenance and lack of or inadequate beneficiary participation. This has raised questions about the perceptions of beneficiaries about their participation in the post-implementation stages in secondary cities in Kenya. Therefore, this paper assesses beneficiary participation in the post-implementation monitoring and evaluation, and maintenance of slum upgrading in secondary cities of Nakuru and Kitale, Kenya. The paper is based on an empirical survey conducted in 2019 on the Integrated Urban Housing Project in Nakuru and Building in Partnership: Participatory Urban Planning project in Kitale implemented 15 years ago. Primary and secondary data were collected using a descriptive cross-sectional research design involving a sample of 392 respondents and analyzed quantitatively and thematically. The findings indicate that the guaranteed benefits from the implemented interventions, and clarity in the roles and responsibilities through capacity building intrinsically motivated active participation of beneficiaries in the post-implementation monitoring, evaluation and maintenance of the two projects. Therefore, local authorities and external agencies should encourage interventions that directly benefit individual slum dwellers to boost their intrinsic motivation for participation in the post-implementation stages.
Keywords: Slum upgrading, post-implementation, monitoring, evaluation, maintenance, and beneficiary participation
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1.0 INTRODUCTION

The main challenge facing urban settlements globally is the ability to grow sustainably, with equitable access to basic services and infrastructure (Cities Alliance, 2019; United Nations Department of Economic and Social Affairs – UN-DESA, 2018). However, this is compromised by rapid increase in urban population coupled with escalating poverty, exclusion, inequality, and inadequate institutional capacity leading to proliferation and expansion of slum and informal settlements (Cities Alliance, 2021a; 2021b). The absolute slum population grew from 928 million in 2014 (23%) to about 1.03 billion in 2018 (24%) and further estimated to exceed 1.2 billion in 2030. The largest proportional increase will take place in Sub-Saharan Africa (SSA) where 56.5% of the urban population lived in slums and informal settlements in 2018 (UN-Habitat, 2020a; UN, 2020).

In response to the looming problem, governments the world over have adopted slum upgrading as a development strategy for gradual improvement in the living conditions of existing slum settlements to formalize and integrate them into the overall urban framework (Cities Alliance, 2021a, 2021b; UN-DESA, 2020). Studies have argued that since slum upgrading is a spatially localized action, it requires tailored solutions to specific problems within the local contexts, which depends on the collaboration and active participation of the slum dwellers as primary consumer of the interventions (Cities Alliance, 2021a, 2021b; Danso-Wiredu & Midheme, 2017). Each slum represent a unique opportunity to improve its current living conditions by developing context-sensitive solutions (Cities Alliance, 2021a).

Kenya is a typical developing country experiencing a rapid increase in slum population over time (UN-Habitat, 2020b). According to the 2019 Population and Housing Census, 31.1% of the population of the country lived in urban areas (KNBS, 2019). In 2014, at least 56.0% of its urban population lived in slum and informal settlements with an annual growth rate of 5.88% (UN-Habitat, 2016). In addition, the Kenya Integrated Housing Budget Survey shows that urban inequality increased from a Gini Coefficient of 0.416 in 2018 to 0.568 in 2019 (KNBS, 2019). In response, the country has embraced slum upgrading as a development objective, especially in line with the goals and targets of the UN-sponsored Sustainable Development Goals (SDGs) which aim at addressing various challenges affecting slum settlements. Specifically, SDG 11 seeks to "*Make cities and human settlements inclusive, safe, resilient and sustainable,*" by focusing on Target 11.1 — "*By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums*". The indicator 11.1.1 is

about the "*Proportion of urban population living in slums, informal settlements or inadequate housing.*" This is in addition to SDG 1 (End poverty in all its forms everywhere), SDG 6 (Ensure availability and sustainable management of water and sanitation for all) and SDG 10 (Reduce income inequalities within and among countries) (UN-Habitat, 2021; UN, 2020; Government of Kenya - GoK, 2016).

Several studies have demonstrated varied positive impacts of slum upgrading across settlements and countries (Okyere et al., 2016). Nevertheless, slum upgrading is more effective and guaranteed when the slum dwellers fully and actively participate in post-implementation stages pf a project (Cities Alliance, 2021a). According to Mahonge (2013) and World Bank (2010), post-implementation stages focus on the continuity and maintenance of the implemented interventions beyond the project period. This requires active involvement and participation of the targeted beneficiaries, which enhances sustainability through empowering and building capacities to assume ownership of the implemented interventions (Kwena, 2021; Seokwoo et al., 2020). However, while state and non-state actors may have significant resources and efforts to implement slum upgrading, there is considerably less attention on the post-implementation stages of the projects (Sharma et al., 2020; Doe et al., 2020; Saad et al, 2019).

The studies show that the participation of beneficiaries in the post-implementation stages contributes significantly to the success and sustainability of slum upgrading. The beneficiaries possess valuable local knowledge, skills, and expertise necessary in all the stages of slum upgrading (Cities Alliance, 2021a; Danso-Wiredu & Midheme, 2017). Their participation increase chances of ownership and acceptance, and incorporates local knowledge, ideas and aspirations in the planning and decision-making processes (Cities Alliance, 2021a). If utilized, beneficiary participation has great potential to contribute to attainment of high outcomes, better services, and responsiveness to the local needs (Mansuri & Rao, 2003; Khwaja, 2003). The beneficiaries have the highest responsibility and powers to decide whether to continue, preserve and maintain implemented interventions or not (Noori, 2017; Danso-Wiredu & Midheme, 2017). However, there is a deficiency of studies on participation of project beneficiaries in the post-implementation stages of monitoring and evaluation, and maintenance of slum upgrading in Kenya (Hart & King, 2019; Luvenga et al., 2015). In addition, most of the studies on slum upgrading have tended to focus more on primary cities compared to secondary cities where most of the urban growth is currently taking place (Githira et al., 2020; Blankespoor et al., 2016; Marais et al., 2016). Unfortunately, policymakers have not paid adequate attention to this phenomenon leading to disproportionately less policy focus on secondary cities. The situation has contributed to negligence, stagnation, and decline of living conditions in this cadre of urban settlements (Githira et al., 2020; Christiansen & Kanbur, 2016).

Thus, there is a need for an improved understanding of the attributes of the urban systems of secondary cities to create a framework for the adoption of effective strategies to addressing challenges of slum settlements (Githira et al., 2020; Turgel, 2018; Marais et al., 2016). Therefore, beneficiary participation in post-implementation stages of slum upgrading in secondary cities of developing countries such as Kenya remains a subject of research interest and speculation. This paper contributes to the debate through an assessment of beneficiary participation in post-implementation monitoring and evaluation, and maintenance of slum upgrading in secondary cities of Nakuru and Kitale, Kenya. The paper uses two case studies namely the Integrated Urban Housing Project (IUHP) in Nakuru, and the Building in Partnership: Participatory Urban Planning (BiP: PUP) project in Kitale. The objective had a null hypothesis, which states "there was no statistically significant difference in the level of community participation in the post-implementation monitoring and evaluation, and maintenance between the two projects as perceived by the project beneficiaries."

2.0 LITERATURE REVIEW

2.1 Beneficiary Participation

The concept of beneficiary participation advocates for the active involvement of the targeted local community in all decisions and activities of a development project affecting the well-being and quality of life of its members (UNDP, 2013). The concept refers to a process of active involvement of the targeted beneficiaries in influencing the decisions, direction, and execution of a development project (Barasa & Jelagat, 2013; Satterthwaite, 2012). The aim is to allow beneficiaries determine their development agenda by voicing their concerns, expressing their views and being actively involved in identifying the real needs, opportunities, priorities, and appropriate solutions of the local community (Satterthwaite, 2012). This influences ownership, empowerment, impact, and sustainability of a project (Danso-Wiredu & Midheme, 2017).

Beneficiary participation entails a shift in power over the process of development project away from external agencies to targeted beneficiaries immediately affected by the development issue (Davids, 2009). Low or lack of beneficiary participation limit understanding of community needs, weaknesses, strengths, and dynamics (Chenga et al., 2006), excludes indigenous local knowledge (Ndou, 2012), leads to inappropriate projects (Barnes et al., 2014), and is a lost opportunity for community buy-in, commitment, and ownership of projects (Ndou, 2012). Studies have argued that since slum upgrading is a spatially localized action, it requires a local response through active participation of the targeted beneficiaries to tailor interventions to real needs,

concerns and priorities of the slum dwellers (Cities Alliance, 2021a, 2021b; Danso-Wiredu & Midheme, 2017). This is because slum settlements are complex and heterogeneous settlements, which require site-specific interventions and active participation of the target beneficiaries (Cities Alliance, 2016; Louise & Cronin, 2011).

Beneficiary participation entails a redistribution of power on a continuum ranging from passive participation to active participation (Singh et al., 2012; White, 2011). The continuum has five levels of beneficiary participation namely non-participation, indirect participation, consultative participation, shared control participation, and full control participation. These levels of participation are dynamic over time and vary in different stages of slum upgrading (Perten, 2011; White, 2011) namely initiation (identification), planning, design, implementation, monitoring, evaluation, and maintenance (Hamdi & Goethert, 1997; Schenck & Louw, 1995). The combination of each stage with a particular level of participation has advantages and disadvantages, which influence the success of slum upgrading (Arcila, 2008).

2.2 Theoretical Framework

We used the Participatory Planning Theory to illustrate beneficiary participation in slum upgrading. The theory states that planning of a development project is an interactive process that requires active participation of all stakeholders through consensus building, dialogue, deliberations, and collaboration (Legacy et al., 2014; Healey, 2012). It emphasizes on undistorted participatory communication encouraging interactive, inclusive, and equal discussion scenarios, where stakeholders learn, understand, and negotiate for their competing interests (Healey, 2012; Legacy, 2010). Each stakeholder has a voice in the intended development intervention to be valued and respected. As a result, decisions made are outcomes of consensus building for the benefit of all stakeholders, which increases inclusivity, sustainability, responsibility, and ownership of the project (Healy, 2012). International donor agencies recommends application of the theory in slum upgrading to encourage active participation of the targeted slum dwellers in the implemented interventions (UN Millennium Project, 2005). The aim is to empower and include local knowledge, skills and response of slum dwellers in decision-making process (Landaeta, 2004). For our purpose, the theory demonstrates beneficiary participation in post-implementation monitoring and evaluation, and maintenance of the IUHP in Nakuru and the BiP: PUP project in Kitale.

3.0 MATERIALS AND METHODS

3.1 Study Area

This paper is based on an empirical study conducted in the secondary cities of Nakuru and Kitale, Kenya. Nakuru is the fourth largest and fastest-growing secondary city with a population of 570,674 people in 2019 having an annual growth rate of 5.6%. Poverty levels stood at 56.0% with 70.0% of the population living in slum and informal settlements (KNBS, 2019). In addition, 87.0% of the residents were tenants due to a lack of security of tenure, high cost of house construction, and low income (Olwero, 2008; Owuor, 2006) (see Figure 1). Kitale, on the other hand, is a rapidly growing secondary and agricultural city with a population of 162,174 people in 2019 with an annual growth rate of 12% and a population density of 520 persons per km^2 (KNBS, 2019). In addition, 65% of the population lacked access to basic services and lived in the sprawling slum and informal settlements (Majale, 2009) (see Figures 2).

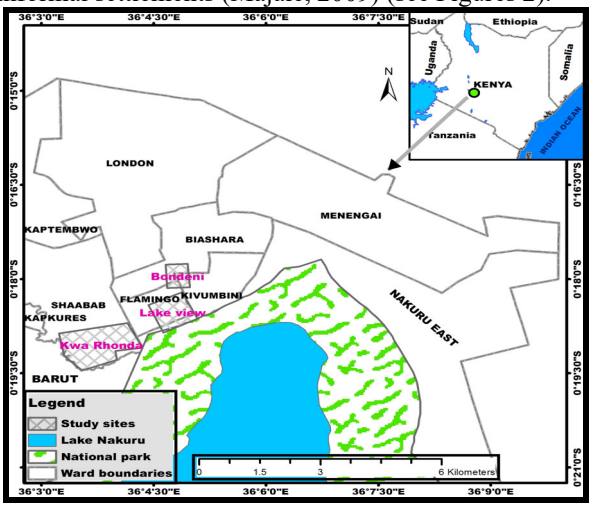

Figure 2: Study Sites in Nakuru

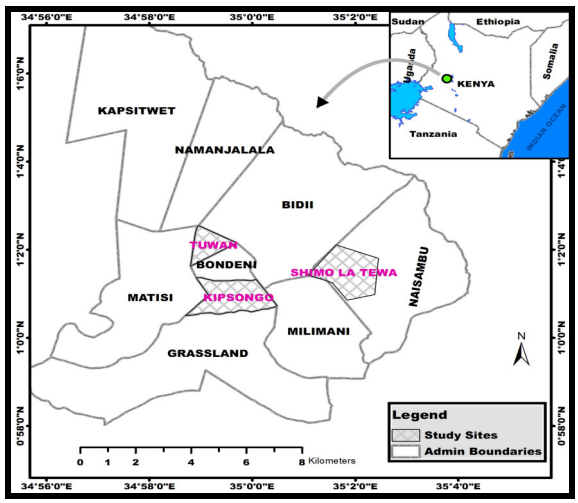

Figure 3: Study Sites in Kitale

The two secondary cities hosted slum upgrading projects in selected neighbourhoods supported by an NGO known as the Integrated Technology Development Group – East Africa (ITDG–EA). Nakuru hosted the IUHP implemented in the slum settlements of Kwa Rhonda, Lake View, and Bondeni between April 1999 and September 2003. The aim was to increase access to adequate, safe, and secure shelter by lowering the cost of

construction of housing through the use of appropriate technology and sustainable income-generating activities (IGAs) and regular savings (ITDG-EA, 2003). On the other hand, Kitale had the BiP: PUP project implemented in the slum settlements of Kipsongo, Shimo-La-Tewa, and Tuwan between April 2001 and March 2004. The aim was to integrate local knowledge in urban planning by engaging the local community in designing appropriate sustainable interventions (Majale, 2009). The end-of-project evaluations indicates that the IUHP and BiP: PUP projects benefited approximately 7261 directly in terms of improved access to basic services, income generation opportunities, low-cost housing, capacity building, and empowerment (Majale, 2009). However, evaluation studies of the two projects did not address issues of post-implementation stages and sustainability of the implemented interventions of the two projects (Luvenga et al., 2015; Barnes et al., 2014).

3.2 Methods

This paper adopted a descriptive cross-sectional research design based on two case studies namely the IUHP and BiP: PUP projects with 1,647 and 5,614 project beneficiaries, respectively.

In addition, we had the Project Manager from ITDG-EA, 193 officials of the 32 active local CBOs at the time of the study, and the County Urban Development Officer of each secondary city. From the target population, we selected a sample of 392 respondents including 365 project beneficiaries, 2 County Urban Development Officers, 1 Project manager from ITDG-EA and 24 officials of local CBOs. We collected primary data using a semi-structured questionnaire administered to project beneficiaries, key in-depth interviews (KII) with the Project Manager from the ITDG-EA and County Urban Development Officers, focus group discussion (FGD) with local CBOs, and field observation.

However, during data collection, we obtained a response rate of 98.63% (360) of the targeted project beneficiaries including 98.80% (82) for the IUHP and 98.58% (278) for BiP: PUP project. All the other targeted categories of respondents responded to their respective data collection instruments. We also collected secondary data on the broader subject of NGOs and sustainability of slum upgrading from literature review and project documents from the ITDG-EA. We designed a pilot study using the Peoples' Plans into Practice (PPP) project in Kisumu City using a sample of 40 beneficiaries. The PPP was also a participatory slum upgrading project supported by ITDG-EA in the slum settlements of Manyatta and Nyalenda of Kisumu. The pilot study established the content validity and tested the reliability of the research instruments. It yielded a Cronbach's Coefficient Alpha (α) of 0.799 for post-implementation monitoring and evaluation and $\alpha = 0.784$ for post-implementation maintenance indicating sufficient reliability (Streiner, 2003).

We used quantitative data analysis techniques to assess the level of community participation in the post-implementation monitoring and evaluation, and maintenance of the IUHP and BiP: PUP projects as perceived by the project beneficiaries. From the literature review, each of the post implementation stage was multidimensional with various indicators based on the activities involved. The post-implementation monitoring and evaluation had five indicators namely: progress and success, reporting of progress, taking corrective measures of lessons learnt, access to reports and information, and keeping the project on track, on-time and within budget (UN-Habitat, 2014; White, 2011). The post-implementation maintenance had three indicators namely: assignment of roles and responsibilities, capacity building and empowerment, and carrying out day-to-day maintenance activities (UN-Habitat, 2014; Morfaw, 2014).

We translated the selected indicators into a set of generic statements and asked the respondents to rate their perceived level of participation in each post-implementation stage on a five-point Likert scale ranging from 1 to 5. This represented a continuum from passive (minimum) participation to active (maximum) participation, where 1 indicated no participation (NP), 2 indicated low (indirect) participation (LP), 3 indicated average (consultative) participation (AP), 4 indicated high/active (shared control) participation (HP), and 5 indicated very high (full control) participation (VHP). We aggregated the individual scores of all the indicators for each stage into a single composite index score for each respondent known as the Community Participation Index (CPI) score. The higher the CPI score, the higher was the level of participation in each post-implementation stage as perceived by the project beneficiaries, and vice versa (Singh et al., 2012; Sanchez & Lopez, 2010). The score for the ex-post monitoring and evaluation ranged from a value of 5 to 25, while that of the ex-post maintenance ranged from a value of 3 to 15. We transformed the CPI score into three ordinal categories including low (indirect), average (consultative), and high (shared and full control) to facilitate differentiation between the levels of participation among the respondents.

We operationalized the objective through the first null hypothesis, which stated that: "there was no statistically significant difference in the level of community participation in the post-implementation monitoring and evaluation, and maintenance between the two projects as perceived by the project beneficiaries." The researchers used the Independent Samples t-test to establish whether there was any significant difference in the CPI scores of the two post-implementation stages between the two unrelated samples, that is, the IUHP and BiP: PUP projects. For application of the Independent Samples t-test depends on a number of key assumptions/conditions namely scale of measurement, independence of observations, normal distribution,

homogeneity of variances and no significant outliers in the data set. The scale of measurement requires the dependent (test) variable measured on a continuous (interval or ratio) scale (i.e. the CPI score in this case), while the independent (grouping) variable be on a categorical (nominal) scale consisting of two categorical and independent groups (the two projects). The observations in one group should not in any way related to observations in another group in any systematic way other than that the two groups are selected from the same population. The dependent variable has approximately normal distribution for each group of the independent variable. The distribution or comparison of distributions share the same level of variance within the particular group of data points – homogeneity (homoscedasticity) of variances**.** Lastly, there should be no significant outliers in the data set**.** After fulfilling the above assumptions, the researchers tested the Independent Samples t-test at $\alpha = 0.01$ (1%) significance level (99% confidence level). We discussed and compared the findings across the two projects.

4.0 RESULTS

We assessed the awareness, involvement and perceived beneficiary participation in post-implementation monitoring and evaluation, and maintenance of the IUHP and BiP: PUP projects as perceived by the project beneficiaries. We presented the findings in the subsequent sub-sections.

4.1 Beneficiary Participation in Ex-Post Monitoring and Evaluation

We conceptualized post-implementation monitoring and evaluation as the measurement of the impact of the IUHP and BiP: PUP projects through provision of essential and regular feedback on the progress in achieving the goals and objectives. The findings indicate that 54.4% (196) of the sample project beneficiaries, including 74.4% (61) from the IUHP and 48.6% (135) from BiP: PUP project, were aware of post-implementation monitoring and evaluation of the two projects. The respondents reported that the funding NGO actively engaged them in all stages of the two projects through regularly meetings and site visits. We established that majority of the activities of the IUHP directly targeted individual respondents, which motivated their interest in the post-implementation monitoring and evaluation of the implemented interventions. This was in contrast with the BiP: PUP project, which implemented several joint activities targeting the entire community with the benefits expected to spill over to individual beneficiaries. However, respondents observed that it took a longer period to actualize benefits to individual members leading to low awareness and motivation in the post-implementation monitoring and evaluation of the activities of the project. Those who were not aware of the post-implementation monitoring and evaluation reported lack of relevant and reliable information about the process. Others observed that they did not know about the opportunity, since no one ever asked or invited them.

We established that 80.6% (158) of the 196 respondents, including 80.3% from the IUHP and 80.7% from BiP: PUP project, who were aware of the post-implementation monitoring and evaluation were involved in the process. From the awareness and involvement, we sought to establish the perceived level of beneficiary participation in the post-implementation monitoring and evaluation. We identified five indicators of the post-implementation monitoring and evaluation from literature review namely evidence of progress and success, reporting of progress, taking corrective measures, access to reports and information, and keeping the project on track. We translated these indicators into a set of generic statements and asked the 158 respondents to rate their perceived level of participation on a five-point Likert scale ranging from 1 to 5 as described in Section 3.2. Table 1 summarizes the respondents' perceived ratings of their level of participation in the established indicators.

Table 1: Rating of Participation in Indicators of Ex-Post Monitoring and Evaluation

	Response (%)						
Participation in:	NP	LP	AP	HP	VHP	*Mean*	*Std. Dev.*
Identification, discussion and agreement on evidence of progress and success	1.3	4.4	28.5	18.4	47.5	**4.06**	**1.026**
Taking corrective measures on lessons learnt	2.5	15.2	20.3	28.5	33.5	**3.75**	**1.149**
Keeping the project on-track	1.3	13.9	16.5	55.7	12.7	**3.65**	**0.917**
Accessing monitoring and evaluation reports and information	1.9	16.5	22.8	37.3	21.5	**3.60**	**1.058**
Reporting of progress	3.2	14.6	31.0	31.0	20.3	**3.51**	**1.069**

Information in Table 1 indicate that the sample project beneficiaries rated all the five indicators above the average score of 3.00 suggesting a perceived active (high) participation in identification of evidence of progress and success, taking corrective measures on lessons learnt, keeping the project on track, accessing monitoring and evaluation reports and information, and reporting of progress. This suggests that the respondents were motivated to regularly monitor and evaluate its activities.

The researchers aggregated the individual scores of all the five indicators into a CPI score. The higher the

CPI score, the higher was the perceived level of participation in the post-implementation monitoring and evaluation of the two projects, and vice versa. The CPI score ranged from a value of 5, indicating passive participation to 25, indicating active participation. The score had a reliability coefficient of $\alpha = 0.799$ with a mean of 18.57 ± 3.896. The researchers transformed the CPI score into three ordinal categories including a score of 5-11 (low/indirect participation), 12-18 (average/consultative participation), and 19-25 (high/active participation - shared control and full control). Table 2 summarizes the respondents' overall perceived level of participation in the post-implementation monitoring and evaluation of the two projects.

Table 2: Level of Perceived Participation in the Ex-Post Monitoring and Evaluation

		Project		
		IUHP	BiP: PUP	Total
Perceived level of participation	Low	0 (0.0%)	8 (7.3%)	8 (5.1%)
	Average	8 (16.3%)	47 (43.1%)	55 (34.8%)
	High/active	41 (83.7%)	54 (49.5%)	95 (60.1%)
Total		49	109	158

Information in Table 2 indicates that 83.7% (41) and 49.5% (54) of the respondents from the IUHP and BiP: PUP projects, respectively, perceived a high (active) participation in post-implementation monitoring and evaluation. The study established that the direct and individual benefits from the activities of IUHP motivated beneficiaries to develop a positive perception of their participation in the post-implementation monitoring and evaluation compared to the BiP: PUP project, which prioritized communal benefits. A combined 60.1% (95) of the respondents recorded active participation in the post-implementation monitoring and evaluation with shared and full control over the content, process, results, and corrective measures of the two projects.

4.2 Beneficiary Participation in the Ex-Post Maintenance

The researchers conceptualized post-implementation maintenance as the ongoing repairs, protection, servicing, training, renovations, and other processes needed to preserve and maintain the IUHP and BiP: PUP projects. The findings indicates that 62.8% (226) of the sample project beneficiaries, including 64.4% (179) from the BiP: PUP project and 57.3% (47) from IUHP, were aware of post-implementation maintenance of the two projects. The researchers established that the communal approach used by the BiP: PUP project had devised a set of common rules and regulations that guided collective use and compulsory maintenance of joint activities such as rehabilitated natural springs. The collective use of common activities motivated high maintenance in the post-project period. This ensured regular maintenance of the activities in the post-project period. This was in contrast with the IUHP where the maintenance of the activities targeting individuals varied depending on the interest and ability of the concerned beneficiary with no compulsion.

We observed that 84.5% (191) of the 226 respondents, including 91.5% (43) from the IUHP and 82.7% (148) from BiP: PUP project, who were aware of the post-implementation maintenance of the two projects were involved in the process. From the awareness and involvement, we sought to establish the perceived level of beneficiary participation in the post-implementation maintenance. We identified three indicators of the post-implementation maintenance from literature review namely assignment of roles and responsibilities, capacity building and empowerment, and carrying out day-to-day maintenance activities. We translated these indicators into a set of generic statements and asked the 191 respondents who were aware and involved in the post-implementation maintenance to rate their perceived level of participation on a five-point Likert scale ranging from 1 to 5 as described in Section 3.2. Table 3 summarizes the respondents' perceived ratings of their level of participation in the established indicators.

Table 3: Rating of Perceived Participation in the Indicators of Ex-Post Maintenance

	Response (%)						
Participation in:	NP	LP	AP	HP	VHP	*Mean*	*Std. Dev.*
Assignment of roles and responsibilities	3.7	15.7	24.1	14.1	42.4	**3.76**	**1.254**
Capacity building and empowerment	8.4	12.6	18.8	23.6	36.6	**3.68**	**1.310**
Carrying out day to day maintenance activities	12.0	16.2	15.2	35.6	20.9	**3.37**	**1.307**

Information in Table 3 indicate that the respondents rated the three indicators above the average score of 3.00 suggesting a perceived active (high) participation in the ex-post maintenance of the two projects with specific roles and responsibilities. The researchers attributed to this to the fact that being the primary users and consumers of the completed activities, the respondents had a high intrinsic motivation to maintain them. The respondents reported that the two projects clarified specific roles and responsibilities for the beneficiaries and other stakeholders in the post-implementation maintenance of the two projects.

The researchers aggregated the individual scores of all the three indicators into a CPI score. The higher the

CPI score, the higher was the perceived level of participation in the post-implementation maintenance of the two projects, and vice versa. The CPI score ranged from a value of 3, indicating passive participation to 15, indicating active participation. The score had a reliability coefficient of $\alpha = 0.783$ with a mean of10.81±3.23. The researchers transformed the CPI score into three ordinal categories including a score of 3-6 (low/indirect participation), 7-11 (average/consultative participation), and 12-15 (high/active participation - shared control and full control). Table 4 summarizes the respondents' overall perceived level of participation in the post-implementation maintenance of the two projects.

Table 4: Level of Perceived Participation in the Post-Implementation Maintenance

		Project		
		IUHP	BiP: PUP	Total
Level of participation	Low	3 (7.0%)	26 (17.6%)	29 (15.2%)
	Average	9 (20.9%)	52 (35.1%)	61 (31.9%)
	High/active	31 (72.1%)	70 (47.3%)	101 (52.9%)
Total		43	148	191

Information in Table 4 indicates that 72.1% (31) and 47.3% (70) of the respondents from the IUHP and BiP: PUP projects, respectively, perceived a high (active) participation in post-implementation maintenance of the two projects. The researchers attributed the high level of participation in IUHP to guaranteed individualized benefits, which motivated the need for maintenance of the implemented activities. A combined 52.9% (101) of the respondents recorded high (active) participation in the post-implementation maintenance with shared and full control over the preservation and maintenance of the two projects. This helped the beneficiaries to continue receiving the same benefits from the two projects over time.

4.3 Difference in Participation in the Post-Implementation across Projects

Results from sub-sections 4.1 and 4.2 summarize the awareness, involvement and perceived levels of participation of the beneficiaries in the post-implementation monitoring and evaluation, and maintenance. From these findings, the study further established whether there was a significant difference in the perceived levels of participation in the post-implementation across the projects. Thus, study operationalized objective one using the first null hypothesis, which stated that "there was no statistically significant difference in the level of community participation in the post-implementation monitoring and evaluation, and maintenance between the two projects as perceived by the project beneficiaries." The study used the Independent Samples t-test to determine whether there was a significant difference in the CPI mean scores of the two post-implementation stages between the two independent samples (IUHP and BiP: PUP project).

The researchers tested the various underlying assumptions of t-test. The dependent (test) variable was a continuous (interval) variable measured in the actual scores (CPI scores for the two pots-implementation stages), while the independent (grouping) variable was a nominal variable (the two projects – IUHP and BiP: PUP project). The study drew observations from beneficiaries of two independent projects. The study tested for normality of the dependent variable (CPI scores) using the Q-Q Plot, which revealed a normal distribution of the mean scores for both groups (the two projects) for community participation in the two post-implementation stages. The Levene's Test for Equality of Variances given by $F = 17.496$, $p = 0.106$ for ex-post monitoring and evaluation and $F = 1.037$, $p = 0.302$ for ex-post maintenance indicate homoscedasticity of variance. Since p values are all greater than 0.05 significance level, group variances were treated as equal. Therefore, the study established non-violation of any of the assumptions, which made the Independent Samples t-test suitable to determine significant difference in the CPI means scores between the two projects at 0.01 significance level. Table 5 summarizes the output of the Independent Samples t-test.

Table 5: Comparing the CPI Score of Post-Implementation across Projects

Stage	Project	N	Mean	Std. Dev.	T	df	Sign. (2-tailed)
Ex-post monitoring and evaluation	IUHP	49	20.88	2.713	5.426	156	0.000
	BiP: PUP	109	17.53	3.910			
Ex-post maintenance	IUHP	43	12.33	2.990	3.610	189	0.000
	BiP: PUP	148	10.36	3.175			

Table 5 indicates that the IUHP recorded a higher CPI mean score of 20.88±2.713 for the post-implementation monitoring and evaluation compared to BiP: PUP, which had a mean score of 17.53±3.910. The difference in the mean score suggests that the delivery models (approaches) used by the two projects to implement their activities varied in their motivation of the beneficiaries to participate in the post-implementation monitoring and evaluation. The direct benefits to individual beneficiaries from the IUHP motivated them to tack progress, assess impact, make decision and take corrective actions in the post-project period. This was in contrast

with BiP: PUP project, which prioritized joint activities whose benefits the respondents reported took a long time to trickle down to individual beneficiaries.

Table 5 also indicates that the IUHP recorded a higher CPI mean score of 12.33±2.990 for post-implementation maintenance compared to BiP: PUP, which had a mean score of 10.36±3.175. The difference in the mean score also suggests that as primary users and consumers of the implemented activities, beneficiaries were intrinsically motivated to maintain activities with guaranteed individualized benefits of the IUHP compared to joint activities with indirect benefits to individual beneficiaries from BiP: PUP project. The study supported these differences using the t-values, namely t (156) = 5.426, p (0.000) < 0.01 significance level for post-implementation monitoring and evaluation and t (189) = 3.610, p (0.000) < 0.01 significance level for post-implementation maintenance in the two projects. Since p (0.000) < 0.01 significance level, the first null hypothesis is rejected suggesting that there was a statistically significant difference in the level of community participation in the post-implementation monitoring and evaluation, and maintenance between the two projects as perceived by the project beneficiaries.

5.0 DISCUSSION

In this paper, we have presented an assessment of the beneficiary participation in the post-implementation stages of monitoring and evaluation and maintenance of slum upgrading in the secondary cities in Nakuru and Kitale, Kenya. The assessment focused on the awareness, involvement and perceived beneficiary participation in the two post-implementation stages of the two slum upgrading projects under review.

The results indicates that close to a half (54.4%) of the sample project beneficiaries were aware of the post-implementation monitoring and evaluation, with majority (80.6%) of them involved in the process. As primary consumers, the beneficiaries actively participated in monitoring and evaluating the progress and impact of the implemented interventions. The beneficiaries tracked the progress, assessed real impact, made decisions, and took corrective measures from the lessons learnt. This encouraged them to assume ownership and responsibility of the projects and ensured long-term benefits even after the exit of the external agencies. The beneficiaries had shared and full control over the content, process, and results and take corrective actions and measures in the post-implementation monitoring and evaluation. These findings were in consonant with observations by Meri (2016) that active participation in the post-implementation monitoring and evaluation empowers beneficiaries and fosters ownership, accountability, transparency, outcomes, and sustainability of a project. However, Imparato and Ruster (2003) while studying slum upgrading and participation from Latin America, argued that the success of any intervention depends of the availability of a reliable monitoring and evaluation system to provide an audit trail or record of decisions and actions taken, gauge the real impact, and sound an alarm of when things are going wrong. As a result, Ndou (2012) while studying reasons for failure of community-based projects in Limpopo observes that lack of or low participation presents a lost opportunity for beneficiary buy-in, commitment, and ownership of projects, which in turn compromises the sustainability of projects.

Similarly, our findings established that more than a half (62.8%) of the sample project beneficiaries were aware of the post-implementation maintenance with majority (84.5%) of them involved in the process. The beneficiaries actively participated in the post-implementation maintenance of the two projects to maintain their guaranteed benefits from the implemented interventions 15 years after completion. We attributed this to clarity in the roles and responsibilities of the beneficiaries through capacity building and empowerment. The beneficiaries were aware of who does what, when, where, and how in the maintenance of the two projects. These results support observations by Arcila (2008) and Perten (2011) in their analysis of the successes and shortcomings of participatory slum upgrading in the City of Medellin-Colombia and Villa 31 in Buenos Aires, respectively. The two studies opined that the success of beneficiary participation in maintenance depended on the choice of technology, resources, and level of skills among the beneficiaries. However, Moitra and Samajdar (1987), in a study about the evaluation of the Slum Improvement Program of Calcutta Bustees, found out that lack of adequate awareness and preparedness of the beneficiaries about their roles and responsibilities compromise their involvement in the maintenance. As a result, Chenga et al. (2006) argued that interventionists should provide ongoing support and training after project implementation or completion to ensure that the project is successful and sustainable in the long-term.

We established that the two projects adopted different delivery models in implementing majority of their interventions. The IUHP used an individual approach by directly targeting and benefiting individual beneficiaries. This intrinsically motivated and encouraged higher beneficiary participation to safeguard the guaranteed individual benefits. The respondents demonstrated ownership, responsibility and commitment, which contributed to the perceived high participation in post-implementation monitoring and evaluation, and maintenance. This was in contrast with the BiP: PUP project, which used a communal approach that prioritized activities targeting the larger community with benefits expected to trickle down to individual members over time. This resulted in variations in the intrinsic motivation to participate in the post-implementation stages between the two projects. As a result, the IUHP recorded a higher community participation index mean score of 20.88±2.713

for the post-implementation monitoring and evaluation compared to BiP: PUP, which had a mean score of 17.53±3.910. This variation was supported using the Independent Samples t-values, which indicates that there was a statistically significant difference in the level of community participation in the post-implementation monitoring and evaluation, and maintenance between the two projects as perceived by the project beneficiaries. These findings support observations by Cities Alliance (2016) that the unique social, historical, economic, and political contexts makes slums complex and heterogeneous settlements. Thus, the implemented slum upgrading interventions vary based on the local situation and adaptation. As a result, Hristova et al. (2015), and Hosagrahar (2013) argue that the success of development interventions depends on their compatibility the local culture. Thus, the external agencies including NGOs should acknowledge diversity in cultural heritages and values for sustainability of projects.

6.0 CONCLUSIONS

This paper has assessed the beneficiary participation in the post-implementation stages of monitoring and evaluation and maintenance of slum upgrading in the secondary cities in Nakuru and Kitale, Kenya. The findings show that the beneficiaries were aware and actively involved in the post-implementation of the implemented interventions. This contributed to their positive perception and active participation in the post-implementation monitoring, evaluation, and maintenance of the two projects under review. As primary users of slum upgrading, the beneficiaries were encouraged to actively participate in the post-implementation stages of the two projects to ensure continuity and maintenance of the guaranteed benefits from upgraded interventions beyond the project period. The study indicates that slum upgrading interventions with direct and individualized benefits to the project beneficiaries intrinsically motivated higher participation in the post-implementation monitoring, evaluation and maintenance compared to those taking a communal approach. Therefore, local authorities and external agencies should encourage slum upgrading interventions that directly benefit individual slum dwellers to boost their intrinsic motivation for participation in the post-implementation stages.

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