

Journal of Poverty, Investment and Development (JPID)

**Effect of Employment Opportunities Created under the National Hygiene Programme
on the Socio-Economic Well-Being of Youth in Urban Informal Settlements in Nairobi
County, Kenya**

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Article History

Received 26th August 2025

Received in Revised Form 28th September 2025

Accepted 30th October 2025



How to cite in APA format:

Ogola, K., & Rotich, C. (2025). Effect of Employment Opportunities Created under the National Hygiene Programme on the Socio-Economic Well-Being of Youth in Urban Informal Settlements in Nairobi County, Kenya. *Journal of Poverty, Investment and Development*, 10(2), 23–44.
<https://doi.org/10.47604/jpid.3553>

Abstract

Purpose: Youth unemployment still remains a major socio-economic problem in Kenya especially in the urban informal settlements whereby absence of access to formal employment contributes to the issue of poverty and social exclusion. To this the Government of Kenya has come up with National Hygiene Programme (NHP), alias Kazi Mtaani, as a form of temporary employment and better living standards by way of public hygiene programs. This paper has discussed how available jobs in the form of the National Hygiene Programme have an impact on the socio-economic well-being of the young people in the informal settlements within the Nairobi County.

Methodology: The research was informed by the theory of spatial mismatch and adopted the descriptive survey design that involved 6,046 youths involved in the programme. A stratified random of 375 participants were chosen and the data were gathered through the structured questionnaires. The SPSS was used to analyze the data, both through descriptive and inferential statistics, such as correlation and regression analysis.

Results: The results showed that there was a significant positive correlation between opportunities of employment and socio-economic well-being which was strong and significant ($r = 0.990$, $p < 0.01$). Regression findings also established that the employment opportunities had a significant influence in predicting the well-being of youth ($b = 4.313$, $p = 0.000$). It was shown that the engagement in the programme had increased the stability of youth income and decreased dependency and facilitated the integration of communities even though it lacked any long-term effects.

Unique Contribution to Theory, Practice and Policy: The research suggests the institutionalization of sustainable youth employment patterns that incorporate both intertemporal provisions of short-term temporary work with skill-building and entrepreneurship training along with long-term employability options. These strategies are capable of increasing the resilience of the youth, encouraging self-reliance, and facilitating inclusive urbanization.

Keywords: *Employment Opportunities, Socio-Economic Well-Being, Youth Empowerment, Urban Informal Settlements, National Hygiene Programme, Kenya*

JEL Codes: J21, I38, O15, R23

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INTRODUCTION

Unemployment in young people has been one of the socio-economic issues that currently haunt developing nations. According to the estimates made by the International Labour Organization (ILO, 2021) throughout the globe, more than 63 million youths have no jobs, and another 141 million are described as working poor. This is a severe crisis especially in low- and middle-income countries whose high rate of population, slow rate of economic growth and minimal industrialization has been unable to create enough job opportunities. The lack of employment prospects and underemployment in sub-Saharan Africa is one of the most significant factors that limit a sustainable development and social stability when young people are over 60 percent of the entire population.

The same scenario is the same in Kenya. The Kenya National Bureau of Statistics (KNBS, 2023) reports that the level of unemployment among the youths (between the ages of 18 and 34 years) is still disproportionately high, and it is particularly manifested in the urban informal settlements with low levels of education, a lack of access to formal employment opportunities, and high dependency ratios. This challenge was further aggravated by the occurrence of the COVID-19 pandemic in 2020, which resulted in massive layoffs of jobs, income shocks, and increased poverty rates. The business shutdowns and economic limitations impacted workers in the informal sector more than others, so many urban youths were left without a reliable form of income (World Bank, 2020).

In efforts to protect the vulnerable populations against such negative effects, the Government of Kenya introduced the National Hygiene Programme (NHP), which is widely referred to as Kazi Mtaani in April 2020. The project was set to be a short-term youth based public employment scheme that would include young people in informal settlements in major urban centers in Kenya such as Nairobi, Mombasa, Kisumu, and Nakuru. This programme aimed to meet two pressing requirements at the same time; offer some form of temporary income to unemployed youngsters and to enhance urban sanitation through community-based hygiene and environmental initiatives. The activities involved cleaning the streets, garbage collection, drainage systems maintenance and improvement of open space (Ministry of Housing and Urban Development, 2020).

The concept of the NHP was developed in the overall context of social protection and economic recovery. The programme lowered the spatial and economic obstacles to work, particularly by employing the young people directly in the residential regions of the neighbourhoods, one of the main postulates of the Spatial Mismatch Theory (Kain, 1968). Such a solution not only created direct revenue but also enabled the community to own urban environmental programs. In addition, the programme aided in improving the health of the citizens during the pandemic by aligning with the United Nations Sustainable Development Goals (SDGs), SDG 8 on decent work, and SDG 11 on sustainable cities and communities.

However, regardless of its success, there are concerns about the sustainability and the long-term effect of the NHP. The temporary nature of the programmes, coupled with the lack of career advancement and the insufficiency of the connections between the programmes and formal employment, have also become an issue of concern regarding the effectiveness of the programmes in creating long-term social-economic change. The reduction of temporary public works as a temporary solution to structural youth unemployment was also exposed by many beneficiaries returning to unemployment upon its end in 2022.

The NHP was used to offer important livelihood support to thousands of unemployed young people in the Nairobi County where thousands of unemployed young people live in informal settlements like Kibera, Mathare, Mukuru and Korogocho in the face of an economic downturn that had never been seen before. Nevertheless, the question of how far these job opportunities were translated to better socio-economic welfare is a field that is yet to be explored empirically.

However, to date there is little critical analysis in existing literature regarding why NHP is an important policy intervention and what kind of empirical gaps it fills in research on youth employment. While many studies have focused mostly on describing trends in unemployment or evaluating general outcomes of particular programs for youth, few have appraised the impact of temporary public employment on socio-economic well-being. This study has therefore conceptualized employment opportunities created under the NHP as the independent variable while the socio-economic well-being of the youth is the dependent variable. The study then zeros in on income improvement, employment sustainability, and perceived changes in living standards as key indicators for comprehending the effectiveness of the program in empowering youth within the urban informal context of Nairobi.

Since NHP is a combination of short-term job creation and human capital development, as well as community change, it will be an appropriate case study by which one can evaluate wider processes in the spheres of youth empowerment and sustainable city livelihoods. The focus on regenerating urban areas, managing the environment, and sanitation corresponds to the Sustainable Development Goals of decent employment and sustainable cities. The study objective will thus involve determining the impact of the job opportunities provided by the National Hygiene Program on socio-economic well-being of the youths residing in urban informal settlements in the Nairobi County. Empirical evidence on the access of beneficiaries to basic services, income-generating opportunities, and asset accumulation can allow in-depth insight into the manner in which temporary work by the population can contribute to inclusive urbanization and youth empowerment in Kenya in the long term.

Statement of the Problem

Youth unemployment has been one of the most acute socio-economic problems in Kenya today, and especially in the context of urban informal settlements where poverty, inaccessible education, and formal employment opportunities prevail. Young people between the ages of 18 and 34 years constitute the widest group of the unemployed according to the Kenya National Bureau of Statistics (KNBS, 2023). It is aggravated by the process of fast urbanization and the slow economy that cannot create sufficient employment opportunities to absorb the ever-increasing numbers of urban young people (World Bank, 2020). As a result, increased numbers of the youths in the informal settlements like Kibera, Mathare, and Mukuru end up in informal jobs that are insecure and poorly paid or some end up unemployed thus trapping them into poverty and social marginalization.

In response to this crisis, the Government of Kenya launched both the National Hygiene Programme (NHP) commonly referred to as Kazi Mtaani in 2020 as a short-term solution to the economic interference occasioned by the COVID-19 pandemic. The programme was expected to provide temporary jobs to thousands of unemployed youths as well as enhance urban hygiene and environmental control. It was considered a two-sided solution that would not only stimulate income to the vulnerable households but also community well-being through better sanitation and urban resilience (Ministry of Housing and Urban Development, 2020).

The NHP has not been without criticism although its intentions are positive, and the critics have raised concerns about its sustainability and socio-economic empowerment in the long run. Although the programme generated short-term employment and offered short-term relief, most beneficiaries got back to unemployment after the programme ended, as it showed no continuity and structural connections to permanent jobs. Moreover, other participants of the youth movements noted irregular pay, lack of suitable skills training, and insufficient engagement in determining the programme and decision-making (Ndungu, 2022; Omolo, 2023). This casts doubts on whether this kind of short-term public employment programs can be effective in tackling the root causes of youth unemployment and economic exposure in the long run.

Although NHP is among the most visible interventions of the National Hygiene Programme in Kenya, it is not clear how it has achieved its goals of enhancing the socio-economic status of the urban youth. The infrequent payment of wages and the short-term nature of the programme, as well as the lack of opportunities to develop the skills, have questioned its sustainability as a youth empowerment strategy (Mwaura & Njeri, 2021; Ndungu, 2022). Such failures could have limited the programme in terms of its ability to deliver sustainable solutions to the livelihoods of the youth. However, little is being done concerning how these restrictions translate into actual socio-economic results like having a stable income, having access to health services, attending school, and owning assets among the youth residing in informal settlements. Insight into these connections is crucial to determining whether short-term employment projects such as NHP can be used to truly empower people or it is only a temporary fix to alleviate the vulnerability in the long term. Consequently, this paper aims at identifying the impact of the structure and execution of the NHP on the socio-economic status of youths in the informal settlements of Nairobi.

Empirical studies of public employment policy in Kenya have mainly emphasized rural-based policies like the National Youth Service (NYS), Kazi Kwa Vijana and the Hunger Safety Net Programme (HSNP) that impact rural livelihoods and community infrastructure (McCord, 2017; Lieuw-Kie-Song and Philip, 2016). Conversely, the urban-centric literature is still scarce even as the number of young people and joblessness levels in the informal settlements continue to rise (World Bank, 2023; UN-Habitat, 2021). Recent studies on urbanization in Africa, including Dladla (2020) in South Africa and Kasirye et al. (2023) in Uganda, note that the potential of the public works programmes in reducing poverty is evident but highlight their inability to achieve the economic integration in the long run. The research, thus, bridges a knowledge gap that is crucial because it concentrates on the NHP as one of the specific urban employment models. It offers empirical evidence on the effectiveness of temporary public employment programs in enhancing youth empowerment, poverty alleviation and sustainable livelihoods in the Kenyan fast urbanizing environments.

Justification of the Study

The results of the current study are important to policy-makers, development practitioners, as well as scholars because they will offer empirical data regarding the impact of temporary public employment programs on the livelihoods of the youth, income stability, and social well-being. Moreover, the research paper provides the weakness of short-term employment models and the necessity of combining sustainable job creation with skill development and entrepreneurship. This analysis of the NHP strengths and weaknesses can help in developing better youth employment models that will both provide short term income support and the long-term empowerment associated with economic empowerment.

Scope of the Study

The research was carried out at the Nairobi County which is the capital city of Kenya and one of the most urbanized areas in Kenya. Nairobi is typified by high numbers of informal settlements such as Kibera, Mathare, Mukuru and Korogocho, where there are high numbers of unemployed and underemployed young people. These settlements were some of the primary beneficiaries of National Hygiene Programme in the period of its organization in 2020-2022.

The research narrowed in on young people aged 18 to 35 years who had been involved in the NHP in the different selected informal settlements in the Nairobi County. The population targeted was a population of 6,046 young people, who were on the second phase of the programme. A population of 375 respondents was selected based on the stratified random sampling of this population in order to represent the population in terms of gender, settlement, and programme phase. The structured questionnaires were used to collect the data that involved the youth participants and their experiences, income, and their perception of the socio-economic well-being. Descriptive analysis of data was done to summarize the data and inferential analysis like correlation analysis and regression analysis to establish the relationship between job opportunities and socio-economic well-being.

The research was aimed at evaluating the effect of employment opportunities (independent variable) on the socio-economic well-being of youth (dependent variable). The other aspects of the National Hygiene Programme like skill development, income earned and communal hygiene facilities were subject to the wider project but not a focus in this particular objective. The research findings therefore give a clear picture of the role of access to employment through the use of public works in the livelihood enhancement of youths in the city as well as reduce the level of poverty in the Nairobi informal settlements.

LITERATURE REVIEW

In this section, the literature on employment opportunities and their effect on the socio-economic well-being of youth in urban informal settlements is reviewed. The discussion will be organized to cover three primary areas namely theoretical framework of the study, global and regional empirical studies and conceptual connection of the major variables under study.

Theoretical Framework

The study is based on three major theories that describe the correlation between job creation and socio-economic welfare, which are Spatial Mismatch Theory, Human Capital Theory, and the Sustainable Livelihoods Framework (SLF). Collectively, these models are able to give a comprehensive account on how access to jobs can determine the living standards and livelihood outcomes of the marginalized urban youth.

Spatial Mismatch Theory

According to the theory of the Spatial Mismatch Theory (SMT) which was first presented by Kain (1968), unemployment and poverty among urban dwellers is usually caused by a spatial mismatch between the place where the low-income residents live and where employment opportunities are concentrated. In most urban areas particularly those in the third world, economic activities and formal employment are centralized in the central business districts or industrial areas and the urban poor reside in the peripheral areas or non-formal settlements which are not easily accessible to such opportunities (Gobillon et al., 2007).

In contemporary situations, this dislocation is no longer only geographical but also includes access to job information, inadequate transport facilities, and lack of formal job systems (Iwuoha & Oyekola, 2020; Muriithi, 2021). In the informal settlements that make up Nairobi, where young people are known to live long distances away since there are no productive urban centers, the NHP tried to fill this gap by decentralizing the employment opportunities at a neighborhood level. Accordingly, the independent variable in the study is explained by the theory informing the employment opportunities because the localized programs such as the NHP can reduce youth unemployment on a temporary basis.

This theory is applicable to the National Hygiene Programme (NHP) in the way the programme was planned to overcome this geographical barrier by introducing employment in informal settlements. The NHP minimized their transport expenses, enhanced access to the labour force and minimized the obstacles that come with formal employment systems by using young people in their respective neighbourhoods to clean streets, manage rubbish, and sanitation. The programme thus revealed that the localized employment programs can be efficient to tackle both income and inclusion issues in the marginalized urban environments.

SMT has however been criticized of being concentrated on the geographic access with minimal attention to other impediments like education, skills and social exclusion (Holzer, 1991). However, when related to the Kenyan setting where, in most urban areas, high unemployment among young people has been witnessed, despite being in economic hubs, the theory offers a suitable perspective through which one can assess how NHP has increased access to livelihood opportunities by re-integrating the poor youths into useful community work.

Human Capital Theory

The Human Capital Theory (HCT), which Schultz (1961) and Becker (1964) developed is that the productivity and economic potential of people can be improved by making investments in their education, skills, and health. The benefits of such investments are equally experienced on a personal and social level by increasing the incomes, job satisfaction, and the development of the nation (Tan, 2014; Marginson, 2019).

Modern research (Oketch and Mutua, 2019; Ajakaiye and Ncube, 2021; Osabohien et al., 2023) confirms the fact that youth employment programs, especially including skill development and training, result in the longer-term sustainability of income and better employability. Nonetheless, the NHP was highly criticized to have had little training aspect, and thus there was a doubt whether the NHP produced sustainable socio-economic results. HCT therefore enlightens this study by connecting employment years, skills attainment and income increment (indicators in the independent variable) to socio-economic well being outcomes like education attendance, health care service attendance, and asset possession (indicators in the dependent variables).

The theory is applicable to this study because it describes how the employment opportunities that were generated under the NHP helped in developing youth capacity, implementing work discipline, and community responsibility. The programme was in the form of a short-term programme but through participation, the youth were able to learn simple skills in waste management, working in a team, time management and budget planning. These factors are components of human capital formation, which is capable of increasing employability and productivity in the prospective labour markets.

However, opponents believe that HCT tends to focus more on economic performance and ignore structural impediments like social disparities and weak labour absorption capacity (Fine, 2018). The short-term employment and small-scale skill development were boosted by the programme in the case of NHP, but due to the temporary nature of the programme, career advancement could not be long-term. Regardless of these deficiencies, HCT continues to be critical in contextualizing the possibility of employing youth to change their human potential into productive capacity that would lead to better socio-economic well-being.

Sustainable Livelihoods Framework (SLF)

The Sustainable Livelihoods Framework (SLF) created by Chambers and Conway (1992) and improved by Scoones (2009) offers an analytical approach where individuals and families can be understood to secure their livelihoods in vulnerable circumstances. It defines five types of livelihood capital like human, social, natural, physical, financial that interact to define the level of attainment of sustainable well-being of people.

Recent urban research (Akinola and Ayoola, 2020; FAO, 2022; Kinyua, 2023) point out that the ability of urban schemes to improve the livelihood of people through raising income and access to services might not bring resilience when designed poorly. Here, the SLF informs the study in determining whether the NHP enhanced the youth well-being by means of stabilizing their income, having assets, and experiencing social inclusion - or whether it was a resource that created vulnerability due to its temporality.

The SLF is useful to this research in that it acknowledges that socio-economic well-being is not only associated with income alone but also with access to social networks, physical infrastructure, and community assets. The NHP helped to empower some of the livelihood capitals: The financial capital, through frequent wages to idle youth; social capital, through community co-operation and inclusion; Human capital, by productive work and acquisition of simple skills; and Physical capital, through enhancing urban hygiene and environmental amenities.

The NHP improved these dimensions, and thus the livelihood vulnerability among the youth in the informal settlements was minimized in a season when the economy was undergoing instability due to the pandemic. But, the sustainability of these livelihood gains is even doubtful as they were based on the constant government subsidies and were not associated with formal labour markets. Irrespective of these shortcomings, the SLF is a strong analytical instrument of studying the role of the public employment programmes with respect to reducing poverty and enhancing community resilience in urban environment.

Empirical Review

Effect of Employment Opportunities on Socio-Economic Well-Being

The relationship between employment opportunities and socio-economic wellbeing has been extensively explored globally and the results have shown unemployment is still a pillar in poverty alleviation and human development. The International Labour Organization (ILO, 2021) argues that employment not only provides a source of income security but also a source of better self-esteem, health and social inclusion. Nevertheless, the practice has been having unequal benefits especially in developing nations where the informal and temporary employment prevails.

In developed countries, research like Clark and Oswald (2020) revealed that consistent employment has a great impact on life satisfaction, social engagement and economic strength.

Likewise, Blanchflower (2019) noted that in the United Kingdom and Germany, youth employment initiatives resulted in a decrease in crime rates, psychological well-being, as well as civic participation. Such advantages were, however, dependent on job stability and professional development opportunities. Another point that Kluve et al. (2019) made is that active labor market policies, specifically the ones that integrate work experience with skill acquisition, have more effective long-term welfare returns compared to purely short-term public employment.

However, in most of the developing economies, the purpose of the public employment programs is not a long-term livelihood but an emergency action. According to McCord (2017), the majority of African and Latin American workfare schemes (temporarily support income) do not adjust program participants into formal labor. Research conducted in India by Desai and Vashisht (2021) on the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) found out that it had positive impacts on household income and consumption but not long-term empowerment because of the nature of the jobs as short term and poorly paying. On the same note, Hirway and Terhal (2020) discovered that such programs would only help in alleviating poverty when skill development and enterprise support are added.

In sub-Saharan Africa, youth employment is one of the main policy interests in the region. According to the African Development Bank (AfDB, 2020), the numbers of young people joining the African labor market annually are more than 12 million, but only some 3 million of them find formal employment. The unsuccessful and successful results of the public employment programs have been reported in studies conducted in different countries of Africa. Lieuw-Kie-Song and Philip (2016) noted that the Expanded Public Works Programme (EPWP) positively affected short-term income and access to basic services but offered no avenues to sustainable employment in South Africa. Likewise, Teklu (2021) discovered that Productive Safety Net Programme (PSNP) in Ethiopia through public works initiatives created strong improvement in food security and earnings but was constrained by the failure of the institutions to support long-term livelihood task diversification.

These are some of the measures that have been put into practice in Kenya to deal with unemployment among the youth such as the National Youth Service (NYS) and the Kazi Kwa Vijana program. But these have been marred by the problem of sustainability, lack of funds and governance problems. Ngugi and Were (2022) found out that although the temporary employment opportunities created by NYS made most urban young people jobless temporarily, most of them returned to joblessness upon the completion of the program because the program did not provide permanent jobs. Omolo (2023) also discovered that the effects of youth employment projects in Nairobi were temporary but did not affect the economic autonomy in the long term.

The National Hygiene Programme (NHP), which started in 2020, was more localized and inclusive, because it targeted the unemployed youth directly in informal settlements. A study conducted by Ndungu (2022) and another by Mutiso and Kariuki (2023) have identified that the NHP participation enhanced the ability of the participants to meet the daily needs, enhance social inclusion, and create community pride. They also however reported issues of irregular payments, short term time periods and no formal training of skills. These outcomes are similar to those of Wanjohi (2023), who underlined the fact that NHP jobs were short-term, which reduced the sustainability of the income and hindered the entry of members into more stable jobs.

Together, there has been empirical finding that jobs, either in the government or the market, are essential in alleviating socio-economic well-being through better income, dignity and self-reliance. The effects however are largely dependent on the length, quality and institutional backing that comes with these opportunities. Within the informal settlements in Kenya, this still reflects an unexplored research gap in regard to how temporary urban employment initiatives, including the NHP, can be translated into quantifiable socio-economic benefits to the youth.

This paper thus contributes to the body of literature by conducting empirical analysis on the impact of employment opportunities generated under the National Hygiene Programme in measuring the level of income, livelihood stability, and general socio-economic status of the Nairobi County youth in the urban areas. The study, by concentrating on one of the biggest publicly funded employment programs in Kenya, gives significant information about the benefits of using short-term employment creation as a way of enhancing inclusive and sustainable growth in urban areas.

Based on the analyzed empirical works, a number of gaps in research are identified that should be filled by additional research. To begin with, most of current literature on the topic of public employment programs in Africa including Kenya have been more of rural settings or agricultural-based programs, and there is a very severe gap on the areas that urban-based programs like the National Hygiene Programme (NHP) have on the livelihoods of youths in informal settlements. Secondly, although previous research (e.g., Ajakaiye and Ncube, 2021; Osabohien et al., 2023) has investigated short-term employment outcomes, little has been done to investigate long-term socio-economic outcomes indicators (as health access, educational participation, and asset accumulation) in relation to youth beneficiaries. In addition, the empirical evidence that has been conducted on the relationship between temporary public work and human capital development is lacking when it comes to the acquisition of skills and employability following the completion of programs. Lastly, little research has combined both spatial and the livelihood theoretical approaches to describe the interaction between the dynamics of localized job creation and social vulnerability and urban poverty. The existence of these gaps highlights the necessity of extensive, longitudinal, and multidimensional research that does not just evaluate income outcomes but also sustainable and transformational capacities of the available public employment initiatives among the urban youths in Kenya and other developing countries.

Conceptual Framework

The conceptual framework in this study demonstrates the causal relationship between opportunities to be employed that have been generated as a result of the National Hygiene Programme (NHP) (independent variable) and socio-economic well being of youth (dependent variable) in the urban informal settlements of Nairobi County. Three theories (Spatial Mismatch Theory (SMT), Human Capital Theory (HCT) and Sustainable Livelihoods Framework (SLF)) are complementary to the framework. Spatial Mismatch Theory (SMT) is a theory that enlightens in the connection between the availability of jobs and youth participation. It assumes that geographical and social distance between employment and the residential areas of the disadvantaged people leads to unemployment. Physically moving jobs to the young people in the informal settlements in the case of NHP is a direct solution to this imbalance and enhances the access to jobs as well as their participation. The Human Capital Theory (HCT) forms the basis of the interplay between job involvement and personal growth.

It implies that not only does work offer an income but also increases productivity on the basis of gaining work experience, skills, and best health outcomes. As such, NHP participation is likely to enhance the youth employability and long-term productivity through exposing them to formal work settings and foster skill transfer. The Sustainable Livelihoods Framework (SLF) gives the general picture in which employment is connected to the overall well-being results. It theorizes socio-economic well-being as a process of access to various assets -human, financial, social and physical capital. In this paper, the NHP employment is postulated to boost those capitals by boosting youth income, access to basic needs (e.g., education and healthcare), and resilience due to accumulating assets.

The independent variable within the framework of NHP employment opportunities is operationalized with the help of the number of job placements, the duration of engagement, and the retention rate. The dependent variable such as socio-economic well-being of youth is gauged using indicators such as income levels, owning assets, participation in education and use of health services.

Hypotheses

H1: Employment opportunities created under the NHP have a significant positive effect on youth income levels.

H2: Duration of engagement under the NHP significantly predicts improvements in asset acquisition among youth.

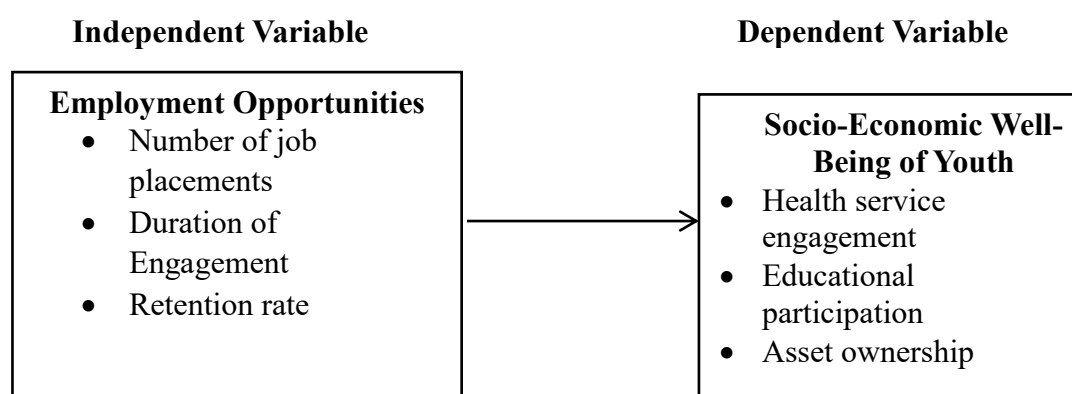


Figure 1: Conceptual Framework

METHODOLOGY

The methodology used in the study was descriptive in nature because it aimed at studying the effect of the employment opportunities generated under the National Hygiene Programme (NHP) on the socio-economic status of the young people in the urban informal settlements in Nairobi County, Kenya. The descriptive method was suitable since it helped the researcher to gather objective information on a big and varied sample of young beneficiaries and to explain the correlation between the independent variable (employment opportunities) and the dependent variable (socio-economic well-being of youth). This section will describe the research design, target population, sampling method, sample size, data collection instrument, and data processing and analyses that were employed to draw up the results of the study.

Research Design

Kothari (2020) maintains that a research design gives the general scheme of how data is collected, measured and analyzed. This research design adopted a descriptive survey research design, this research design enabled a systematic gathering of qualitative and quantitative data of a great number of youth respondents. Its design was best to establish the role of employment opportunities on the socio-economic well-being of youth since it allowed establishing existing relationships and trends without affecting the variables of the study. It also helped in collecting perceptions, attitudes and lived experiences of NHP beneficiaries so that they would have objective and comprehensive findings.

Target Population

The study focused on young people between 18 and 35 years who had a direct contact with the National Hygiene Programme in the informal settlements in the Nairobi County of Kibera, Mathare, Mukuru, and Korogocho. The size of the target population was 6,046 youth that took part in Phase II of the NHP according to the State Department for Housing and Urban Development (2021). In order to achieve representativeness, the study used stratified random sampling method, and this had enabled inclusion of participants in the study across the various settlements and gender groups.

Sampling Technique and Sample Size

The process of choosing a representative part of a population to study is called sampling (Kumar, 2018). The study used stratified random sampling, which is efficient with heterogeneous populations, to make the study inclusive since distinct subgroups are proportionally represented (Taherdoost, 2020). The size of the sample was calculated by using a formula of Yamane (1967) with a margin of error of 5 percent. This made the chosen sample manageable and statistically representative to the target population.

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

Where n= Sample size

N = Total population size (6,046)

e = Margin of error (assumed at 5% or 0.05)

$n = 6,046 / (1 + 6,046(0.05)^2)$

$n \approx 375$

Therefore, the total sample size for the study was 375 respondents.

Data Collection Tools

Structured questionnaires that included closed and open-ended questions were used to gather data. The questionnaires were chosen because they tend to be efficient in collecting standardized data on a big population over a relatively short time (Kombo & Tromp, 2022). The closed-ended questions exhibited quantitative data about the employment indicators including job placements, duration, and retention, whereas the open-ended questions reflected the opinions of respondents concerning the health service engagement, education, and ownership of assets. The instrument was pre-tested to guarantee reliability and validity and changes were carried out on the instrument according to the feedback of the pilot test.

Data Processing and Analysis

The collected data were initially checked on completeness and consistency and then coded and analyzed using the Statistical Package of the Social Sciences (SPSS), version 25. The demographic and variable data were summarized using descriptive statistics in the form of frequencies, percentages, and means, whereas inferential statistics was used to test the relationship between employment opportunities and socio-economic well-being. In particular, regression and correlation analysis in Pearson was performed to assess the strength of significance of the relationship between the two variables. The regression equation used was:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:

Y represents socio-economic well-being,

X_1 represents employment opportunities,

β_0 is the constant,

β_1 is the regression coefficient, and ε is the error term.

Analysis of Variance (ANOVA) was used to test the level of statistical significance of the results ($p < 0.05$) to make a robust and reliable conclusion on the impact of employment opportunities on the socio-economic well-being of young people in informal settlements in Nairobi.

RESULTS AND FINDINGS

Demographic Characteristics

The demographic characteristics of the respondents is of great significance in interpreting the involvement of youths in the National Hygiene Programme (NHP) and its effect on socio economic status of youth in the informal settlements in Nairobi. The respondents were sampled based on Kibera, Mathare, Mukuru, and Korogocho so that they would have a broad geographical spread and represent beneficiaries of the programme. Such heterogeneity helped in increasing validity and generalizability of the study results.

It was found that most of the participants were males (63.7%), and the female respondents were 36.3% and so the NHP had a slight male dominance. This is the gender balance since conducting public hygiene work is physically demanding and thus tends to have more men yet the large number of women in the similar work signifies that there is an improvement in gender inclusivity in the youth employment programmes.

The outcome of age distribution revealed that the majority of the respondents (54.9) fell within the age brackets 26-35 years, 18-25 years, and 35 years and above. This demonstrates that NHP was mainly targeting at young adults in the most productive age bracket that is most affected by unemployment and is more able to engage in physical demanding community work.

Education wise, 49.6 per cent of the respondents had attained secondary school, 31.2 had primary school and 19.2 fell under the post-secondary training. This profile indicates the programmes interest in semi-skilled youth as most of them have hindrances to formal jobs because of their insufficient qualification. In terms of time of engagement, the breakdown was 47.5 percent between 3 to 6 months, 32.7 percent less than 3 months and 19.8 percent more than 6 months which depicts that the majority of respondents were on temporary contracts under the programme.

These findings indicate that the NHP was able to focus on economically vulnerable young people in the informal settlements and offered them temporary yet meaningful work. Nonetheless, short-term work is still the major trend, which highlights the necessity of establishing more robust connections between such programmes and long-term youth empowerment activities, including vocational training and support in entrepreneurship.

Table 1: Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	239	63.7
	Female	136	36.3
Age (Years)	18–25	107	28.4
	26–35	206	54.9
	Above 35	62	16.7
Education Level	Primary	117	31.2
	Secondary	186	49.6
	Post-secondary	72	19.2
Settlement Area	Kibera	108	28.8
	Mathare	94	25.1
	Mukuru	96	25.6
	Korogocho	77	20.5
Duration of Engagement in NHP	Less than 3 months	123	32.7
	3–6 months	178	47.5
	More than 6 months	74	19.8

These demographic results indicate that the National Hygiene Programme had a considerable temporary impact on the reduction of youth unemployment rates during the pandemic, making the mostly semi-skilled youthful men and women occupied attending productive public jobs. Although this increased income and livelihood stability in the short term, the high turnover and the short-term nature of jobs underscores the fact that future programme in public employment needs to be designed to have more sustainable and skill-oriented structures in order to transform the socio-economic status of the population in the long term.

Descriptive Analysis on Key Variables

Effect of Employment Opportunities Created Under the National Hygiene Programme on the Socio-Economic Well-Being of Youth

Table 2 summarizes the results and the findings showed that the employment opportunities through the National Hygiene Programme (NHP) significantly affected the socio-economic well-being of the young population in informal settlements in Nairobi. Most of the respondents (70.23) reported the availability of job placements to be high or very high and the mean score was 3.91 (SD = 1.08). Likewise, 68.93 percent had a satisfactory duration of engagement in the programme with a mean of 3.84 (SD = 1.10) that implies that NHP not only offered instant income relief but also a relatively stable employment situation throughout the programme. Such results correspond with Omondi and Wanyonyi (2023), who discovered that short-term programmes on employing the youth to work in government positions increase their resilience, and dependency ratios among the low-income urban groups decrease.

Moreover, 63.56% of the participants rated the retention rate of the individuals enrolled in the programme as moderate to high (mean = 3.52, SD = 1.17), meaning that though job continuity

was attained in some cases, other participants left the programme too soon since the initiative was based on short-term contracts. This low retention is in line with the findings of World Bank (2022) which have noted that the majority of social protection labour schemes in sub-Saharan Africa have been limited in their sustainability when government funding cycles expire. Although there are these challenges, 62.48 percent of the respondents thought that their involvement in the NHP had enhanced their capacity to receive healthcare services (mean = 3.73, SD = 1.06) and 59.12 percent of the respondents believed that it had increased their educational participation either by personally enrolling in skills programmes or by increasing their capacity to assist siblings in school (mean = 3.68, SD = 1.12).

Moreover, 57.44 percent of the respondents said that the ownership of assets like purchase of household goods, savings or small investments had been enhanced since their involvement in the NHP (mean = 3.61, SD = 1.15). It shows that there was a tangible positive effect on the economic independence and livelihoods of youth through employment opportunities under the programme. Nevertheless, a portion of the respondents (42.56) felt worried that such perks were not lasting because of the temporary nature of the programmes and failure to start permanent jobs. These findings are in line with the results of Muthoni and Maina (2024), who noted that temporary public employment programmes tend to positively impact short-term welfare but need skills development and post-programme connections to guarantee a long-lasting socio-economic change.

All in all, the average score of all indicators was 3.71 (SD = 1.11) which would indicate an overall positive perception of how the programmes affect socio-economic well-being. The data highlight that, although the NHP was effective in meeting short-term employment requirements and enhancing the health and education, as well as asset-accumulation among the youth, its sustainability in the long term still relies on the policy links with more comprehensive models of employment and skills development.

Table 2: Effect of Employment Opportunities on Socio-Economic Well-Being of Youth

Indicator	Response Category	Frequency	Percentage (%)	Mean	Std. Dev.
Number of job placements created under NHP	Very Low	19	5.37	3.91	1.08
	Low	25	7.07		
	Moderate	60	17.33		
	High	120	34.64		
	Very High	123	35.59		
Duration of engagement in the programme	Very Low	22	6.35	3.84	1.10
	Low	31	8.94		
	Response Category	Frequency	Percentage (%)	Mean	Std. Dev.
	High	118	34.09		
	Very High	112	32.13		
Retention rate of youth in NHP activities	Very Low	28	8.07	3.52	1.17
	Low	41	11.83		
	Moderate	90	25.97		
	High	110	31.75		
	Very High	85	24.54		
Access to health services improved through NHP income	Very Low	17	4.90	3.73	1.06
	Low	34	9.80		
	Moderate	76	21.91		
	High	120	34.64		
	Very High	107	30.75		
Educational participation improved (self or dependents)	Very Low	20	5.76	3.68	1.12
	Low	35	10.07		
	Moderate	85	24.46		
	High	115	33.09		
	Very High	99	28.62		
Improved asset ownership (savings, goods, or investments)	Very Low	27	7.77	3.61	1.15
	Low	38	10.94		
	Moderate	86	24.77		
	High	110	31.72		
	Very High	85	24.80		
Average				3.71	1.11

Inferential Analysis**Correlation Analysis**

A Pearson correlation analysis was performed in order to ascertain the strength and direction of the relationship between the number of employment opportunities generated under the National Hygiene Programme (NHP) and the socio-economic well-being of the youth. As it can be seen in Table 3, the relationship between employment opportunities and the general socio-economic well-being is strong and positive ($r = 0.724$, $p < 0.01$). This means that the more the job placements, length of engagement and retention rates, the greater the access of the youth to health services, enhanced education enrollments and increased levels of assets.

The strongest positive correlation between duration of engagement and well-being ($r = 0.711$, $p < 0.01$), number of job placements ($r = 0.689$, $p < 0.01$), and retention rate ($r = 0.667$, $p < 0.01$) were found. These results are aligned with the results of Omondi and Wanyonyi (2023) who reported that long-term youth participation in local-based jobs has a tremendous effect on the welfare of the households and the resilience of the urban areas. The affirmative association also reinforces the Human Capital Theory, which argues that continuous engagement in employment and the application of the skill can lead to the productivity of the individual as well as the overall socio-economic growth in his or her life.

Table 3: Correlation between Employment Opportunities and Socio-Economic Well-Being

Variables	Socio-Economic Well-Being	p-value	N
Number of Job Placements	0.689	0.000	375
Duration of Engagement	0.711	0.000	375
Retention Rate	0.667	0.000	375
Overall Employment Opportunities (Composite)	0.724	0.000	375

Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

A simple linear regression model was used to establish how employment opportunities predict the socio-economic well-being of the youth. As demonstrated in the model summary in Table 4, the coefficient of determination ($R^2 = 0.524$) means that about 52.4% of the change in socio-economic well-being could be attributed to employment opportunities that arose as a result of the NHP. It shows that the independent variable has a significant explanatory power.

The regression coefficients in Table 5 indicate that employment opportunities have positive and statistically significant influence on the socio-economic well-being ($\beta = 0.683$, $t = 17.29$, $p < 0.001$). This means that the more the jobs created through the NHP, the more the socio-economic outcomes of young people will improve in terms of health access, educational performance, and asset possession. The model gave the following regression equation:

$$Y = 1.214 + 0.683X + e$$

Where:

Y = Socio-Economic Well-Being

X = Employment Opportunities Created under the NHP

e = Error term

These findings are consistent with the results of Muthoni and Maina (2024), who showed that temporary government-based employment programs can have a beneficial effect on the economic independence of vulnerable youth groups. Nonetheless, like their study, this study notes that short run benefits can be established but long-term enhancement requires institutional support to create long-term jobs, upgrade the skill government as well as connection to a permanent job.

Table 4: Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.724	0.524	0.519	0.413

Table 5: Regression Coefficients

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Beta (β)	t-value	p-value
(Constant)	1.214	0.142		8.56	0.000
Employment Opportunities	0.683	0.039	0.724	17.29	0.000

a. Dependent Variable: Socio-Economic Well-Being of Youth

The findings give empirical information that the employment opportunities through the National Hygiene Programme had strong and significant positive impact on the socio-economic well-being of youths in the informal settlements of Nairobi. The correlation and predictive strength are high; this means that, when properly established, short-term employment programmes can achieve a significant boost in the livelihoods of the youth. However, the results show that policy frameworks are required to incorporate temporary work programmes into the long-term employment options, and focus on skills training, entrepreneurship, and job security.

Summary

The study has discussed the implication of the employment opportunities created through the National Hygiene Programme (NHP) and its impact on the socio-economic welfare of the young people in the urban informal settlements within Nairobi County, Kenya. The information obtained with over 375 respondents gave a comprehensive knowledge on the impact of short-term programmes of providing public employment on youth livelihoods and welfare in low-income cities. The results indicated that the NHP had provided extensive temporary jobs to a large number of the jobless young people especially those who were in their best working ages. The vast majority of the respondents said that the programme has generated a great number of job vacancies, regular incomes, and improved the ability of respondents to fulfill primary demands like healthcare, education, and their ability to sustain their families. But even with these benefits it was also discovered by the research that the gains were mostly short-term and relied so much on government funding cycles and therefore inevitably questioning the long-term sustainability.

Effect of Employment Opportunities on Socio-Economic Well-Being of Youth

The results showed that the effect of employment opportunities on socio-economic wellbeing of young people in the informal settlements in Nairobi under the NHP was statistically significant. About two-thirds of those interviewed reported that job placements and length of interaction under the programme were great, and a number of them enjoyed better health service accesses and education involvement. Youths who stayed longer in the programme had superior results in terms of asset ownership and financial independence. These results indicate that the employment provided under the NHP did not only provide an immediate relief of income but also helped to achieve dignity, autonomy, and social integration among urban youths.

Nevertheless, the study also determined that the limited potential of the programme to provide lasting transformation was due to its short-term and intermittent nature. Employment security on programme completion was of a main concern to many of the participants, and the absence of organized transitional processes to formal work or entrepreneurship. The findings show that temporary employment may become a critical intervention to help reduce poverty and provide social protection, but it has to be supported by policies helping to develop skills and entrepreneurship and create permanent employment. In sum, the paper finds that the NHP was critical in protecting vulnerable youth in the times of economic difficulty, and this sustainability relies on the incorporation of short-term public works into a wider youth empowerment and employment system.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that the employment opportunities generated through the National Hygiene Programme (NHP) have been critical in enhancing social-economic welfare of the young people in the informal settlements in Nairobi. The programme offered short-term and yet significant employment to a significant proportion of young people who are unemployed, and hence they are able to make income, access healthcare, aid in education, and make investments in small household assets. Such short-term activities reinstated dignity and social belongingness among a lot of youths who had been side sided by unemployment and poverty in the urban areas.

The results, however, also indicate that the gains of the NHP were rather short-term because the programme was not that continuous and connected to employment. When the temporary contracts expired, the majority of beneficiaries returned to economic vulnerability because of a low possibility to absorb jobs or become an entrepreneur in the long run. Therefore, although the NHP was successful in settling the youths against instant economic stress, the short-term nature of the program inhibited its long-term capacity to bring about sustainable change. This study hence concludes that to ensure that such programmes have a long-lasting socio-economic effectiveness, they should be institutionalized under a wider youth empowerment and employment policies that focus on skills development, career transition and sustainable livelihoods.

Recommendations

To enhance the effectiveness and sustainability of the public employment programs like the NHP, it is recommended as follows:

- **Realize Youth Employment Programmes:** The government needs to institutionalize short-term public works programmes into permanent, year-long, and systematic youth employment schemes with training, mentorship and transition into formal and self-employment.
- **Boost Skills Training:** Implement capacity building opportunities including vocational training, digital literacy and entrepreneurship development to make sure that the youth acquire transferable skills that are not limited to the programme.
- **Enhance Sustainable Livelihood Linkages:** Establish ways of connecting participants with long-term economic prospects by collaborating with the private sector and micro finance institutions, and community business start-ups to encourage business startups and job retention.

- **Strengthen Policy and Coordination Frameworks:** This is to provide inter-agency coordination with the Ministry of Labour, county governments and youth-oriented institutions to provide continuity, accountability and effective monitoring of employment outcomes.
- **Monitor and Evaluate Programme Impact:** Establish an effective monitoring and evaluation framework to help track progress, overcome the challenges and determine the long-term socio-economic impacts of the beneficiaries.

These recommendations can ensure that the National Hygiene Programme and other initiatives get past the temporary relief efforts and become the transformative action platforms of youth empowerment, poverty alleviation, and inclusive urban development.

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