

**REVERSING RURAL-URBAN MIGRATION IN ODO-OTIN LOCAL
GOVERNMENT AREA, OSUN STATE: A SOFT INFRASTRUCTURAL APPROACH**

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Abstract

Rural-urban migration among the productive age group remains a significant global concern. Hence, this study contends that addressing this challenge calls for a shift in focus from hard infrastructural facilities to soft infrastructures. By utilising available hard infrastructure and raising awareness among rural population, this approach can unlock redundant resources and create sustainable development. The study employed a structured questionnaire administered to 399 respondents, determined using the Taro Yamane formula. Data were analyzed using descriptive statistics (tables, means, standard deviation) and inferential methods including linear regression and ANOVA, the study examined the effects of rural-urban migration in Odo-Otin local government area. Although theoretically, socio-economic, political and technological factors are expected to influence migration, findings shows limited statistical support for their impact as indicated by low F-values ($F= 3.987$, $F= 1.765$, $F= 0.018$ respectively). Contrary to respondents' perceptions, field observations however, indicate that Odo-Otin LGA has a measurable level of infrastructural development that should in theory discourage migration. To unlock the potentials and mitigate excessive rural-urban migration, the study therefore locates absence of appropriate knowledge and awareness of entrepreneurial capacity among the youths, and hence stresses the need for other forms of 'soft infrastructures' -institutions, systems and services that are not physical in nature such as value re-orientation, and youth re-conscientisation and extension education of the rural dwellers for better awareness on how to utilise hard infrastructures that are physical and tangible structures presently available in these areas. As a new perspective in solving rural-urban migration, the study recommends that soft infrastructural initiatives like value orientation, community re-conscientisation and re-awakening, and extension education programmes, be accorded attention in rural-urban migration-development discourse. Through this approach, the

tides of rural-urban migration among the productive youthful populace in Odo-Otin LGA and elsewhere can be minimized to harness the development potential of rural communities.

Keywords: Rural development, rural-urban migration, socio-economic development.

Introduction

Rural-urban migration in Nigeria is a complex phenomenon driven by a combination of factors, including natural population growth, socio-economic challenges, neglect of rural needs, inadequate infrastructure, and security concerns (Anselm, 2021; Mini, 2001, 2019). The trend of rural-urban migration in Nigeria has been exacerbated by issues like low agricultural productivity, food insecurity, and poverty (Todaro & Smith, 2017). Other varieties of socio-economic factors, such as household poverty, unemployment, income inequality, and inadequate infrastructure in rural areas, have contributed to the ongoing trend of migration from rural to urban centres (Akpoko & Adefila, 2014; Edeh et al., 2021; Olowa & Awoyemi, 2012). Equally, Nwakeze (2014) and Chinuiké et al. (2022) point out that rural-urban wage differentials, alongside factors like soil quality, climate, and socio-cultural conditions, also play a significant role in influencing migration.

Scholars like Edeh, Ndukwe, and Nwuzor (2021), along with Olayide (2019), in their contributions aimed at achieving balanced development and discourage migration, have emphasised the failure of successive Nigerian administrations to reform rural areas, where over 75% of the population resides. However, notwithstanding efforts to improve conditions in some rural areas, Nigeria continue to experience rapid urban population growth, with urban areas growing at a rate of 5.5% annually compared to a national population growth rate of 2.8% (National Bureau of Statistics, 2017). In fact, migration has become such a prominent issue in Nigeria that approximately three million people move from rural areas to urban centres every five years, significantly impacting both rural and urban economies (National Population Commission & National Bureau of Statistics, 2016).

Despite the significant scale of this migration, governments have generally failed to track demographic mobility systematically, which has hindered efforts to address the root causes of migration. According to Todaro and Harris (2017) and Hathaway (2014) in economies with abundant land like Nigeria, migration from rural areas results in lower agricultural productivity, an aging rural workforce, and stagnation in rural economies, thus, further deepening rural poverty and food insecurity. Although, Nigeria possesses a favourable landmass, climate change and long-standing institutional neglect have undermined its agricultural and rural development potential. According to Agbaje(2014), climate has become a nodal factor defining global balance and livelihood. Effective policy intervention is essential for achieving a sustainable social environment. But, in climes such as Nigeria, where the connection between environment and livelihood has suffered neglect, it insists on the need for deliberate government intervention and communal enlightenment. The National Bureau of Statistics (2017) highlights the failure of rural areas to experience meaningful effort to propel development. This has led to the paradox of ongoing rural-urban migration in Odo-Otin LG area. The study area is geographically close to several urban centres with availability of modern facilities such as higher institutions; local, state and federal government institutions and proximity to state capitals, that should ideally foster rural development. This trend

appears paradoxical given the area's geographic and institutional advantages, Odo-Otin continues to experience significant rural-urban migration, with no clear understanding of the specific drivers behind this trend. This gap in knowledge necessitates further investigation to, on one hand identify the role of socio-economic, political, and technological development in shaping migration patterns in this area, and on the other, unearth other plausible causes of rural-urban migration. Therefore, the study investigates other variables, beyond physical infrastructures, that can act as countermeasures to rural-urban migration in Odo-Otin, Osun State, Nigeria. The research finds that efforts to promote awareness and re-orienting rural dwellers on how to leverage existing infrastructure in their rural communities could have positive effect. Hence, this study offers a fresh insights into how 'soft infrastructures' can be leveraged as a tool to reduce rural-urban migration in Osun State and elsewhere.

Conceptual Clarification, Review of Literature and Theoretical Framework

This section aims to provide contextual explanations of key concepts to ensure clarity in the discourse, with a focus on rural-urban migration, its effects on development, and migration factors, soft and hard infrastructures.

Rural-Urban Migration

Migration refers to the process by which people change their residence, either permanently or semi-permanently, often across administrative boundaries (Edeh et al., 2021; Udo, 2012). Migration is driven by factors like economic opportunities, social, cultural, political factors, and environmental conditions (Adewale, 2015). People often migrate due to poor living conditions in rural areas such as violence, lack of economic opportunities, and adverse environmental conditions. Urban areas offer better employment prospects, improved housing, and access to amenities, making them attractive destinations (Sennuga et al., 2021).

Omonigho and Olaniyan (2013) define rural-urban migration as internal migration, where people move from rural areas to urban centers. This movement is typically influenced by a desire for better living conditions and job opportunities. The "push-pull" theory explains this migration, where "push factors" like economic instability and lack of amenities drive people from rural areas, and "pull factors" like job prospects and better infrastructure attract them to urban centers (Sennuga et al., 2021b).

Effects of Migration on Rural-Urban Development

Migration has significant implications for rural-urban development. Ojo et al. (2022) note that migration influences local development through remittances, which can boost investments in agriculture and other sectors. However, migration can also lead to labour shortages in rural areas, negatively impacting agricultural productivity (Rozelle et al., 2019). The loss of skilled labour and the failure of automation in small-scale agriculture further exacerbate these issues.

Adeyemi (2016) highlights that mobility, especially in major cities like Lagos, creates challenges such as overcrowding and strain on transportation systems. Nweke (2016) critiques traditional frameworks on migration, particularly the confusion between defense and security, noting that migration is often driven by poverty and lack of opportunities, which is exacerbated by inadequate national security policies. Nigeria, at present, is a typical theatre of urban transformation. Across Nigerian history of underdevelopment, the lot of the poor has been most negatively affected. Of all social classes, their interest has continued to be the opportunity cost of modernisation (Agbaje, 2014). This is the reason

the poor youths are always on the move, rushing to the urban centres chasing the elusive dream of going to make it big at the cities.

Migration Factors

Migration is influenced by both economic and non-economic factors. According to Jansen (2017), migration patterns are increasingly complex and depend on both push and pull factors. Push factors include violence, crop failure, and economic instability, which force people to leave rural areas, while pull factors include job opportunities and better living conditions in urban centers (Bilsborrow et al., 2015). In developing countries, the lack of agricultural productivity in rural areas is a significant push factor.

Crisis in Rural Nigeria: An Impetus to Rural-Urban Migration

Ajeagbu (2016) discusses how rural-urban migration in Nigeria is driven by inadequate attention to small-scale farmers and insufficient public investment in rural areas. The government's focus on large-scale, capital-intensive projects has neglected rural needs, pushing people to migrate to urban centers in search of better opportunities. This has led to a decline in rural economies, where activities such as agriculture, fishing, and manufacturing are undermined due to inadequate government support (Agbaje, 2014; Adeyemi, 2016).

Across literature, the failure of the governments to provide infrastructural facilities has been well pronounced. However, little attention has been paid by analysts to understanding the shocking non-optimal utilisation of such facilities in places like Odo-Otin LG area where they are readily available. It therefore becomes necessary for this study to identify what other measures are needed to ensure that local potentials, where available, are best tapped for development, hence the interrogation of the concept of infrastructure to embrace the idea of 'hard and soft infrastructures' as critical non-mutually exclusive factors in rural development discourse.

Hard and Soft infrastructure as factors of development

Todaro & Smith, (2015) opine that rural-urban migration is a phenomenon deeply influenced by the availability and quality of both hard and soft infrastructure, which serves as a critical push and pull factor in migration dynamics, a socio-economic process driven by disparities in living conditions, economic opportunities, and infrastructure development between rural and urban areas.

Hard infrastructure

Hard infrastructure refers to the physical assets that support economic activities and societal functioning, such as roads, electricity, water supply, telecommunications, and transportation systems (World Bank, 2020). In rural areas, underdeveloped hard infrastructure limits access to markets, services, and employment, acting as a push factor for migration. Poor roads, unreliable electricity, and lack of clean water constrain productivity and quality of life (Tacoli, 2004). Conversely, urban centers often offer better transportation, communication networks, and housing facilities, attracting rural dwellers (Bilsborrow, 2002). For instance, access to reliable transport in cities enables better job matching and labour mobility, reinforcing urban areas as migration destinations (UN-Habitat, 2016). However, rapid migration from rural areas can also overburden existing infrastructure, leading to urban sprawl, congestion, and informal settlements (Cohen, 2006), hence the need to also pay attention to rural hard infrastructures.

Soft infrastructure

Soft Infrastructure refers to the intangible systems, services and institutions that are essential for maintaining socio-economic standard of living. To Amin (2000) these include education, healthcare, public administration, legal systems, and governance frameworks. Rural areas often suffer from weak institutional support, inadequate schools and clinics, and limited public services. These conditions reduce human capital development and incentivise migration to urban areas where such services are more accessible and reliable (Lipton, 1980). In urban areas, strong soft infrastructure enables better health outcomes, administrative efficiency, and social mobility. However, when migration increases rapidly, the urban soft infrastructure such as schools and hospitals may become overstretched, leading to declines in service quality (Satterthwaite, 2007). With further study, the concept of soft infrastructure have been seen to include such other components as local security and safety measures, youth and communal reorientation, vocational training and other targeted agro-processing extension education programmes aimed at improving communal productive consciousness and geared towards identification, deployment, and optimal utilisation of local potentials, as well as constant monitoring of the progress. On the whole, strengthening soft infrastructural measures in rural communities has the potential to act as powerful pull factor in reducing rural-urban migration pressures.

Focusing on traditional farm settlements in the Odo-Otin Local Government Area of Osun state, Agbaje and Omodunbi (2022) unveiled measures to counter the factors responsible for the decline in agricultural practices among the indigenous farming communities in Nigeria. Their submission well corroborates the findings of this study. The study, noticing the presence of critical physical infrastructures submitted: "What is further needed to make notable socioeconomic sustainable development a feasible feature of Nigeria, is that decision-makers must move out of their comfort zones to encourage and improve the investment of needed manpower, equipment and finance in developing grassroots agriculture starting with some of the existing wasting productive factors, resources, and capacities in traditional farm settlements scattered all over the Nigerian southwest states"

Interlinkages and policy implications

1. Strengthening education and skills development

A robust education system in rural areas can reduce out-migration by equipping residents with relevant skills for local employment and entrepreneurship. Rural youth often migrate to urban areas in pursuit of better schooling or vocational training. Investing in rural schools, teacher training, and digital education platforms can help retain young people and reduce educational inequalities. In addition, local skills development programmes tailored to rural economies such as agriculture technology, artisan training, and digital entrepreneurship can create job opportunities that match the aspirations of rural populations (de Brauw et al., 2014)

2. Enhancing rural healthcare services

Strengthening rural healthcare systems through improved staffing, mobile clinics, telemedicine, and preventive care programs can enhance the quality of life and reduce the perceived need to migrate for health-related reasons (UN-Habitat, 2016).

3. Strengthening governance and institutional capacity

Building strong local governments, enhancing participatory planning, and ensuring transparency and accountability can empower rural populations (Amin, 2000). When communities trust local institutions, they are more likely to invest in local development and less likely to migrate.

Decentralization policies that give local governments control over education, health, and economic planning have proven effective in making rural areas more autonomous and responsive to local needs (Ellis & Sumberg, 1998).

4. Supporting financial services and social protection

Access to rural financial institutions such as microfinance, cooperatives, and savings schemes empowers residents to invest in farming, small businesses, and housing. Financial exclusion often compels rural dwellers to seek livelihoods in cities (Lipton, 1980). Strengthening rural credit systems and offering social protection programmes (e.g., unemployment insurance or conditional cash transfers) can reduce economic shocks and improve rural resilience (World Bank, 2020).

5. Promoting cultural and social capital

Soft infrastructure also includes intangible elements like community networks, cultural institutions, and social cohesion. Strengthening these can build a sense of belonging and reduce the social pressures to migrate. Community-driven development projects, cultural preservation, and participatory governance enhance local identity and pride (Cohen, 2006).

Theoretical Review

This examines relevant theoretical analysis of the subject matter of the study. It reviewed the submissions of scholars who have previously studied the key variables of the research and their positions on the linkage between them.

Ravenstein's Laws of Migration

Ravenstein's laws, developed in the 1880s, suggest that migration tends to occur over short distances, with fewer individuals willing to travel long distances. Migrants usually move toward urban centers due to economic opportunities. Migration typically follows a step-by-step pattern, and each migration flow is balanced by a counter-flow (Bailey, 2014; Egboduku et al., 2021). The expansion of industrialisation and transportation systems increases migration levels, highlighting the need for rural development to mitigate urban migration pressures.

Lee's Theory of Migration

Lee's push-pull theory (1966) emphasises the factors influencing migration, categorising them into "push" (origin) and "pull" (destination) factors. Lee also introduced the concept of intervening obstacles and individual traits in the migration process. While Lee's theory has been applied predominantly to urban-urban migration in developed countries, it is also relevant to rural-urban migration in developing nations, though it is less comprehensive (Mazur, 2019).

Okorafor et al. (2014) argue that urban centers face overcrowding and poor infrastructure due to migration, while rural areas suffer from labor shortages and underpopulation, particularly among the youth (Awumbila et al., 2015). The strain on urban infrastructure, including transportation and sanitation, further complicates migration dynamics (IOM, 2014).

Research Methodology

The study employed both primary and secondary sources of data collection. Secondary data were sourced from books, journals, newspapers, internet sources, magazines and other published and

unpublished materials. Primary data were collected through the administration of questionnaires to residents of Odo-Otin Local Government Area of Osun State Nigeria. The study adopted a survey research design which involved the systematic collection, presentation, and analysis of data on the theme: Reversing Rural–Urban Migration in Odo-Otin Local Government Area, Osun State: A Soft Infrastructural Approach. It employed a quantitative research method which implies collection of data through the administration of questionnaire. The study was conducted in selected towns in Odo-Otin Local Government Area, including Ekusa, Ijabe, Inisha, Okuku, and Oyan. The study population includes citizens of Odo-Otin local government. A total of 399 respondents were identified based on the projected population of the citizen in Odo-Otin Local government as at 2024 according to National Population Commission of Nigeria (web), National Bureau of Statistics (web) is 171,500 and using the position of Taro Yamane Formular (1967) on sampling, a total number of 399 residents of Odo-Otin Local government were selected equally for questionnaire administration using simple random sampling techniques. The data collected were subjected to descriptive statistics and inferential statistics. Descriptive statistics, including frequencies, percentages, and means, were used to summarize the data. Inferential statistics, such as standard deviation, linear regression analysis, and Analysis of Variance (ANOVA), were employed to examine relationships between variables.

Model Specification

This study examined the influence of rural development on rural-urban migration in Odo-Otin local government of Odo-Otin, Osun state, Nigeria. The econometric model used for this study is given below:

$$RUM_i = a_0 + \beta_1 RD_i + e_i \dots\dots\dots(1)$$

$$RUM_i = a_0 + \beta_1 Rural\ Development_i + e_i \dots\dots\dots(2)$$

Thus the regression equation for each hypothesis for the study as stated thus:

$$RUM_i = a_0 + \beta_1 SED_i + e_i$$

$$RUM_i = a_0 + \beta_2 PLD_i + e_i$$

$$RUM_i = a_0 + \beta_3 TCD_i + e_i$$

Where: RUM_i = Dependent Variable, (Rural Migration) e_i is the constant term, $\beta_1 RD_i$ represents independent variable (Rural Development) and its change (β_1), and e_i is the error term, rural development are classified as: Socio-economic development (SED); Political Development (PLD); and Technological Development (TED).

Data Presentation and Analysis

Data Presentation

Of the three hundred and ninety-nine (399) questionnaires that were administered, three hundred and seventy-six (376) were returned while three hundred and sixty-five (365) were considered to have been satisfactorily completed, resulting in a response rate of 91.48%. The study considered this to be a good representative for the data analyses.

Presentation and Demographic Distribution of Data

Table 1 Descriptive statistics on demographic variables of Means and Standard Deviations of bio data which are: gender, age bracket, academic qualification, rural area living, present type of work, nature of work and others.

Table 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender	365	1.00	2.00	1.2348	.46318
Age Bracket	365	1.00	4.00	2.7512	.45211
Highest Academic Qualification	365	1.00	5.00	2.8233	.23425
Rural Area Living	365	1.00	5.00	2.3412	.23456
Present type of work	365	1.00	5.00	2.8160	.9349
Nature of work	365	1.00	4.00	2.7985	.74236
How long have you been living in your area	365	1.00	5.00	2.8613	.80562
Would you want to leave your current local area to urban city	365	1.00	4.00	1.0711	.29871
If your answer to the above is YES, state the Reason(s)	343	1.00	4.00	1.1263	0.57621
Valid N (listwise)	365				

(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.0)

From table 1 above and descriptively, it can be seen that gender has a mean and standard deviation of 1.2348 and 0.4613 respectively. Age bracket has a mean and standard deviation of 2.7512 and 0.4521 respectively. The respondent's highest academic qualification has a mean and standard deviation of 2.8233 and 0.2343 respectively. Rural area living has a mean and standard deviation of 2.3412 and 0.2346 respectively. Their present type of work has a mean and standard deviation of 2.8160 and 0.9349 respectively too. The nature of their work has a mean and standard deviation of 2.7985 and 0.7424 respectively and the number of years living in a local area has a mean and standard deviation of 2.8613 and 0.8056 respectively too. While the mean and standard deviation of respondents who would want to leave their current local area to urban cities are 1.0711 and .2987 respectively and finally, the mean and standard deviation of those who chose Yes in the last statement gave reason as 1.1263 and 0.5762 respectively.

Pre-Estimation Test-Homogeneity of Variance

The study conducted Levene's test of homogeneity of variance to know whether or not Analysis of Variance would be a suitable tool in estimating the specified model. The results of the test are provided in tables 2 through 4 .

Socio-Economic Development Dimension

Results in table 2 showed that p -value of 0.823 is greater than the level of significance of 0.05. These results compel the rejection of null hypothesis of homogeneity of variance and the acceptance of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that supports the appropriateness of the use of Analysis of Variance using *Socio-Economic Development* as one of the independent variables.

Table 2: Results of Test of Homogeneity of Variance on *Socio-Economic Development* Dimension
Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
SED	Based on Mean	3.231	8	355	.823
	Based on Median	1.998	8	355	.752
	Based on Median and with adjusted df	.1998	8	354.675	.752
	Based on trimmed mean	2.928	8	355	.554

(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.0)

*** p -value < 0.01; ** p -value < 0.05

***Political Development* Dimension**

Results in table 3 show that p -value of 0.717 is greater than the level of significance of 0.05. These results compel the rejection of null hypothesis of homogeneity of variance and the acceptance of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that supports the appropriateness of the use of Analysis of Variance using *Political Development* as one of the independent variables.

Table 3: Results of Test of Homogeneity of Variance on *Political Development* Dimension

		Levene Statistic	df1	df2	Sig.
FP	Based on Mean	.757	4	360	.717
	Based on Median	.149	4	360	.570
	Based on Median and with adjusted df	.149	4	359.12	.570
	Based on trimmed mean	.486	4	360	.519

(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.0)

*** p -value < 0.01; ** p -value < 0.05

***Technological Development* Dimension**

Results in table 4 show that p -value of 0.359 is greater than the level of significance of 0.05. These results compel the rejection of null hypothesis of homogeneity of variance and the acceptance of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that

supports the appropriateness of the use of Analysis of Variance using *Technological Development* as one of the independent variables.

Table 4: Results of Test of Homogeneity of Variances on *Technological Development*

Dimension

		Levene Statistic	df1	df2	Sig.
FD	Based on Mean	2.874	3	361	.359
	Based on Median	.970	3	361	.325
	Based on Median and with adjusted df	.980	3	360.875	.325
	Based on trimmed mean	1.871	3	361	.314

(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.0)

*** p -value < 0.01; ** p -value < 0.05

Rural Urban Migration Dimension

Results in table 5 show that p -value of 0.326 is greater than the level of significance of 0.05. These results compel the rejection of null hypothesis of homogeneity of variance and the acceptance of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that supports the appropriateness of the use of Analysis of Variance using *Rural Urban Migration* as the only dependent variable.

Table 5 : Results of Test of Homogeneity of Variances on *Rural Urban Migration*

		Levene Statistic	df1	df2	Sig.
FD	Based on Mean	2.879	5	359	.871
	Based on Median	.987	5	359	.538
	Based on Median and with adjusted df	.987	5	358.586	.538
	Based on trimmed mean	1.762	5	359	.421

(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.0)

*** p -value < 0.01; ** p -value < 0.05

Test of Reliability

The reliability of the research measures, particularly with regard to the internal consistency of the scale employed and, consequently, its appropriateness was assessed using Cronbach's Alpha test of reliability. The test's results are displayed in table 6 below:

Table 6 : Reliability Coefficient for all Research Statements

Dimensions of Variables	Cronbach's Alpha Coefficient	Number of Items

Dimensions of Independent Variable

Socio-Economic Development	0.875	9
Political Development	0.758	5
Technological Development	0.789	4

Dimensions of Dependent Variable

Rural-Urban Migrations	0.791	6
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(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.

Table 6 data suggest that the study's scale is internally consistent because it displays a coefficient that is above 0.60, a benchmark set by Heliyon (2022) avail that result between 0.60 – 0.80 is good. This implies that the research measures are considerably reliable.

Test of Hypotheses

Hypothesis 1

H₀₁: There is no significant influence between socio-economic development and rural-urban migration in Odo-Otin, Osun state, Nigeria.

Table 1: Model Summary for Hypothesis One

Table 1.1. Hypothesis One: Regression Results on the influence of socio – economic development on rural – urban migration in Odo-Otin, Osun state, Nigeria.

Model	Std. Error	Beta	T	Sig.	R	R ²	Adj. R ²	F-Value	Sig	Durbin Watson
SED	0.9796	2.976	1.864	.154 ^b	0.898	0.806	0.761	3.987	0.00	1.253

Dependent Variable: Rural Urban Migration

a. Predictors: (Constant), SED

As noted in table 1.1, the R Square of 80.60% suggests a very strong model. The 80.60% R Square revealed that total variation in the Rural-urban migration in Odo-Otin Local Government Area is attributed to socio-economic development in the model while the remaining 19.40% of the total variation in the socio-economic development is accounted for by other variables not captured in the model. The overall fitness of the model is established based on the results in table 1.1, from which it can be inferred that socio-economic development has no significant influence on rural-urban migration in Odo-Otin LGA, (F= 3.987, *p*-value =0.000). Results in table 1.1 revealed that the partial elasticity coefficient of socio-economic development with respect to rural – urban migration in Odo-Otin LGA is 0.812, indicating that socio economic development do not influence rural – urban migration in Odo-Otin LGA. This coefficient (*t*=1.864, *p*-value>0.05) is however not significant at the 5% level. With these results, the null hypothesis cannot be rejected, while the alternative hypothesis is accepted. The inference therefrom is that there is no significant influence between socio – economic development and rural-urban migration in Odo-Otin, Osun state, Nigeria. Also, going by the evidence

from field observation of the presence of requisite physical infrastructures, this tends to confirm the notion that the generality of the respondents in their perception failed to really understand what forms of infrastructures are needed to jumpstart local communities into development, because, the area under study indeed has several infrastructures that have not been fully utilised to promote local development. This therefore commends the need for better and appropriate reorientation of the public about the factors necessary to promote development.

Hypothesis 2

Ho₂: There is no significant correlation between political development and rural-urban migration in Odo-Otin, Osun state, Nigeria.

Table 2. : Model Summary for Hypothesis Two

Table 2.1. Hypothesis Two: Regression Results on the impact of political development on rural – urban migration in Odo-Otin, Osun state, Nigeria.

Model	Std. Error	Beta	T	Sig.	R	R²	Adj. R²	F-Value	Sig	Durbin Watson
PLD	0.99871	1.853	1.988	.166 ^b	0.463	0.214	0.191	1.765	0.00	1.198

Dependent Variable: Rural-Urban Migration

Predictors: (Constant), PLD

As noted in table 2.1, the R Square of 21.4% suggests a strong model. The 21.4% R Square revealed that the total variation in the rural-urban migration in Odo-Otin, Osun state, Nigeria is attributed to political development, while 78.6% of the total variation in rural-urban migration in Odo-Otin, Osun state, Nigeria is accounted for by other variables not captured in the model. The overall fitness of the model is established based on the results in table 2.1, from which it can be inferred that political development has significant influence on rural-urban migration in Odo-Otin, Osun state, Nigeria (F= 1.765, *p*-value =0.000). Results in table 2.1 revealed that the partial elasticity coefficient of political development with respect to rural-urban migration in Odo-Otin, Osun state, Nigeria, indicating that political development induces rural-urban migration in Odo-Otin, Osun state, Nigeria. This coefficient is also statistically significant (*t*=1.988, *p*-value<0.05) to individually political development induces rural-urban migration in Odo-Otin, Osun state, Nigeria. With these results, the null hypothesis is rejected, while the alternative hypothesis is accepted. The inference here is that absence of political development significantly induces rural-urban migration in Odo-Otin, Osun state, Nigeria. In pursuance of our curiosity to unearth other variables of development, we contend validly that based on field observation Odo-Otin does not lack presence of political structures and institutions as to warrant the conclusion that low level of political development is a factor predisposing youth to migration. Rather, as found in earlier test, what we find again is that there is lack of understanding of what factors are needed to initiate development. This is because within this vicinity, there is a local government headquarters, universities, federal institution, security infrastructures within a radius of 3 kilometres to every community, in addition to banks and other private concerns.

Hypothesis 3

H₀₃: There is no significant effect between technological development and rural-urban migration in Odo-Otin, Osun state, Nigeria.

Table 3: Model Summary for Hypothesis Three

Table 3.1. Hypothesis Three: Regression Results on the effect of technological development on rural – urban migration in Odo-Otin, Osun state, Nigeria.

Model	Std. Error	Beta	T	Sig.	R	R ²	Adj. R ²	F-Value	Sig	Durbin Watson
TCD	0.98121	1.025	i.186	.106 ^b	0.216	0.047	0.042	0.018	0.00	1.185

Dependent Variable: Rural – Urban Migration

As noted in table 3.1, the R Square of 4.7% suggests a very weak model. The 4.7% R Square revealed that the total variation in rural-urban migration in Odo-Otin, Osun state, Nigeria is attributed to technological development, while 95.3% of the total variation in rural-urban migration in Odo-Otin, Osun state, Nigeria is accounted for by other variables not captured in the model. The overall fitness of the model is established based on the results in table 3.1, from which it can be inferred that technological development has weak significant effect on rural-urban migration in Odo-Otin, Osun state, Nigeria (F= 0.018, *p*-value =0.000). Results in table.3.1 revealed that the partial elasticity coefficient of technological development with respect to rural-urban migration in Odo-Otin, Osun state, Nigeria 3.1, indicating that technological development affects rural-urban migration in Odo-Otin, Osun state, Nigeria. This coefficient is also statistically significant (*t*=1.186, *p*-value<0.05) to individually technological development affects rural-urban migration in Odo-Otin, Osun state, Nigeria. With these results, the null hypothesis is rejected, while the alternative hypothesis is accepted. The inference is that there is significant effect between technological development and rural-urban migration in Odo-Otin, Osun state, Nigeria also, against the perception of the respondents, Odo-Otin has a measure of presence of technological development. This is to say that, if public awareness is rightly placed, there is no reason on the basis of technology (ICT, telecommunication, electricity etc) for heightened migration from Odo-Otin to urban centres, thus, rightly justifying our call for youth reorientation.

Post Estimation Tests

Normality of Residuals

As shown in table 4, the mean residual of is 0.0000, indicating that the residuals from the estimated ordinary least square regression are normally distributed and the variance of the residuals is the same for all values of the independent variable.

Table 4.: Results of Residual Statistics

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.8873	4.2321	2.9986	.47645	365
Residual	-3.2675	1.7845	.00000	.87870	365
Std. Predicted Value	-3.223	1.9680	.0000	1.0000	365
Std. Residual	-3.218	1.769	.0000	.9432	365

a. Independent Variable: Socio-Economic Development

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.7612	5.0783	3.3981	.39820	365
Residual	-3.24436	1.46521	.00000	.9655	365
Std. Predicted Value	-2.451	2.257	.000	1.000	365
Std. Residual	-3.348	1.337	.000	.893	365

a. Independent Variable: Political Development

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.5452	5.3416	4.3231	.3424	365
Residual	-3.41821	1.65131	.00000	.9304	365
Std. Predicted Value	-3.274	2.231	.000	1.000	365
Std. Residual	-3.271	1.657	.000	.987	365

a. Independent Variable: Technological Development

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.7662	5.3982	4.3876	.3348	365
Residual	-3.41821	1.65131	.00000	.9872	365
Std. Predicted Value	-3.274	2.231	.000	1.000	365
Std. Residual	-3.271	1.657	.000	.852	365

a. Dependent Variable: Rural Urban Migration

(Source: Field Survey, 2024 & Computations Aided by SPSS Version 25.0)

Discussion of Findings

Analyses from the previous sub-sections revealed that the selected areas in Odo-Otin Local Government Area of Osun state witnesses combined measures of rural development and rural-urban migration. Inferential results using regression analysis show as noted in table 1.1, the R Square of 80.6% suggests a very strong model. As noted in table 2.1, the R Square of 21.40% also suggests a very strong model. Finally, table 3.1 showed that the R Square of 4.7% show a very weak model. The 80.60% R Square revealed that total variation in the rural-urban migration in Odo-Otin local Area, Osun state is by general perception attributed to socio-economic development while 19.40% of the total variation in the rural development is accounted for by other variables captured in the model. As noted in table 2.1 , the R Square of 21.4% suggests a strong model. The 21.4% R Square revealed that the total variation in the rural urban migration in Odo-Otin local area is attributed to political development, while 78.4% of the total variation in the rural development is accounted for by other variables not captured in the model. Finally, noted in table 3.1, the R Square of 4.7% suggests a very weak model. The 4.7% R Square revealed that the total variation in the rural urban migration in Odo-Otin local area is attributed to technological development, while 95.3% of the total variation in the rural development is accounted for by other variables not captured in the model.

Using ANOVA, it can be inferred that the overall fitness of the model is established based on the results in table 1.1, from which it can be inferred that socio – economic development has no significant influence on rural – urban migration in Odo-Otin Local area, Osun state, Nigeria (F= 3.987, p-value =0.000).The overall fitness of the model is established based on the results in table 2.1 from which it can be inferred that political development has significant influence on rural – urban migration in Odo-Otin Local area, Osun state, Nigeria (F= 1.765, p-value =0.000). Finally, the results in table

3.1, confirms that technological development has significant influence on rural – urban migration in Odo-Otin Local area, Osun state, Nigeria ($F= 0.018$, $p\text{-value}=0.000$). Result from table 1.1 shows the coefficient is however significant ($t=1.864$, $p\text{-value}>0.05$) to singularly socio-economic development influence affects rural – urban migration in Odo-Otin Local area, Osun state, Nigeria. With these results, the null hypothesis is rejected, while the alternative hypothesis is accepted. The inference therefrom is that there is significant relationship between socio-economic development and rural – urban migration in this area, Osun state, Nigeria. Results in table 2.1 revealed partial elasticity coefficient of political development with respect to rural – urban migration in Odo-Otin Local area, Osun state. This coefficient is also statistically significant ($t=1.988$, $p\text{-value}<0.05$) revealing that political development affects rural – urban migration in Odo-Otin Local area, Osun state. With these results, the null hypothesis is rejected, while the alternative hypothesis is accepted. The inference therefrom is that political development significantly influences rural – urban migration in the study area. Finally, similar statistically significant result ($t=1.186$, $p\text{-value}<0.05$) and inference is obtained for technological development in table 3.1 affects rural – urban migration in the area studied.

The results of this study are consistent with those of Dokubo et al. (2023), who discovered that rural-urban migration had a substantial impact on the socioeconomic lives of rural residents. They discovered that factors such as economic uncertainty push and pull factors, and migration have a negative impact on the agricultural productivity and way of life of the study area. The results of Igene, Onymekonwu, and Ehiwario (2023) also supported this, with farmers reporting an average household size of five people and an average of two migrants per home. Among the methods for lowering rural migration, adequate extension education was ranked highest (mean=1.16). The results of multiple regression analysis revealed that the migrant member of a household was significantly correlated with their marital status (18.775 , ≤ 0.05), education (20.900 , ≥ 0.05), and household size (20.025 , ≤ 0.05). It was discovered that migration had a big impact on respondents' perceptions of the labour shortage and that there was a substantial correlation between respondents' marital status, level of education, and number of respondents per household. The results of this study are consistent with those of Ikezue (2023), who found that improved educational attainment and the pursuit of better employment possibilities were significant contributing factors to the state's rural-urban movement.

The results of this study contradict those of Nwalusi et al. (2022), whose findings highlight a few effects of urbanization such as a severe housing shortage, rising housing rents, and high land values in the city, which have led to the emergence and growth of numerous squatter settlements on the outskirts of the city; instances of haphazard development situations; violations of planning guidelines; changes in land uses; subpar amenities and inadequate infrastructure; and slum conditions in their study area. For Odo-Otin LG such live constraining variables as house-shortage, rising rents, development of squatter settlement poses no challenge.

The results of Joshua and Aziz (2021) also showed both beneficial and detrimental effects of migration on urban and rural locations. Remittances, increased wellbeing, and beneficial community initiatives are experienced by rural populations; yet, migration's negative effects included population instability, low agricultural productivity, and food insecurity. While urban congestion, excessive use of facilities, and unemployment were some of the drawbacks of rural-urban migration in metropolitan centers; cheaper labour, more population, and improved output were some advantages. Migration from rural to urban areas also has a negative economic impact because it directs government attention away from rural areas and toward urban development. The study's conclusions are consistent with those of Ogunmakinde, Oladokun, and Oke (2015) on socioeconomic development, who named a number of variables, including modernization, neglect of the rural community, and a lack of social infrastructure, as causes of migration from rural to urban areas. The socioeconomic characteristics of gender ($b =$

0.941; $t = 0.06$), age ($b = -1.063$; $t = 0.41$), education level ($b = 2.827$; $t = 0.19$), farm experience ($b = 1.544$; $t = 1.17$) and annual farm income (-2.623 ; $t = 0.491$) were found to be significant variables contributing to the rate of youth migration, in line with the findings of Okwuokenye and Abdurrahman's study.

Based on perception, the outcome of this study of Odo-Otin LGA shows that the generally held view about factors predisposing populace to migration especially from rural to urban area still holds for most of the respondents. But, if tested against field observation, such conclusion may not be valid for Odo-Otin where the presence of some of these modern facilities are evident. This, thus necessitate the need for government, researchers and analysts to begin to extend their probes to other factors, beyond physical infrastructures, to such factors that could help to reverse the increasing pace of rural-urban migration. This study, beyond physical infrastructure, has identified citizens' reorientation, improved and targeted youth re-awareness about factors of development, vocational training on simple agro-processing technologies to meet local needs, better awareness about local resource and potentials, as well as adequate extension education as key factors needed to initiate development and retain productive population in rural communities

Reversing rural-urban migration in Nigeria: Implications and evidences from other less-development countries

In Nigeria, as it is in the rest of Africa, Asia and Latin American nations, rural-urban migration has historically been driven by stark disparities in access to services, employment, and quality of life between urban centers and rural hinterlands (UN-Habitat, 2020). While much attention has been given to hard infrastructure such as roads, housing and utilities, recent literature increasingly emphasizes the transformative role of soft infrastructure in addressing the root causes of rural outmigration and fostering sustainable rural development. According to Cano and Rodríguez (2018), improving access to quality education in rural areas of Colombia has led to measurable reductions in youth migration by equipping local populations with skills applicable to emerging rural economies. Similarly, the World Bank (2019) underscores that enhanced rural healthcare delivery in Peru has contributed to greater retention of working-age populations by reducing health-related vulnerabilities.

Decentralized governance also plays a crucial role in reversing migration flows. In Chile, local participatory governance programmes have empowered rural communities to shape development agendas tailored to their unique socio-economic contexts, strengthening civic engagement and reducing the appeal of urban migration (Bebbington & Kopp, 2017). Furthermore, integrated rural development programmes in Brazil that combine education, health, and local institutional support have demonstrated the potential of soft infrastructure to improve quality of life and economic opportunity without requiring relocation (de Janvry & Sadoulet, 2021). Much of the unfolding progress in Bangladesh results from skill development and productive engagement of women and rural population which has significantly contributed to the country's economic growth and social development.

Similarly, rural-urban migration in Asian countries such as Indonesia has been a persistent trend, driven by unequal access to services, job opportunities, and overall quality of life between rural and urban regions (Firman, 2017). In Indonesia also as it is in Nigeria and other African countries, efforts have often centered on improving hard infrastructure. There too, recent studies see growing importance of soft infrastructure in addressing the underlying socio-economic drivers of migration. According to Natawidjaja and Rahayu (2020), enhancing rural education through targeted teacher training, improved school facilities, and local curriculum relevance in remote Indonesian regions like

Papua and Nusa Tenggara has shown promise in reducing youth migration by increasing local opportunities. Similarly, Nugroho et al. (2018) argue that accessible and culturally appropriate healthcare services in rural Java have helped reduce the health insecurity that often drives migration to cities.

Decentralization policies in Indonesia have also played a role in strengthening soft infrastructure. The implementation of Village Funds (Dana Desa) under Law No. 6/2014 has empowered local governments to prioritize development based on community needs. As noted by Pramono and Purnomo (2021), when these funds are invested in health, education, and administrative capacity building, they contribute significantly to improved living conditions in rural areas, reducing the urban pull factor. Furthermore, community-based development models such as the PNPM (National Program for Community Empowerment) have shown that soft infrastructure investments, including local leadership training and women's empowerment programs, not only improve rural governance but also foster social stability and engagement (World Bank, 2014). These efforts have demonstrated potential in curbing rural-urban migration by making rural areas more liveable and economically dynamic.

These findings suggest that a soft infrastructural approach centered on human development and institutional strengthening can effectively counterbalance the urban pull by making rural areas more viable and attractive places to live. As Latin American governments seek to manage urban growth and promote territorial equity, investing in soft infrastructure emerges as a strategic pathway to not only stem rural depopulation but also foster inclusive national development.

Conclusion and Recommendations

The challenges of rural-urban migration in Nigeria as obtained in developing countries generally, and Odo-Otin Local Government Area, Osun State specifically extends beyond hard infrastructural facilities. There is increasing need to address the near absence of soft infrastructures which speaks to reversing rural-urban migration through value orientation, re-conscientization/re-awareness as well as facilitation of targeted skill acquisition and vocational education on how to make use of the hard infrastructural facilities that are available across local communities. The solution calls for more beyond creating physical infrastructural facilities to awakening the consciousness of the people about the need to tap into the underutilized resources in the rural areas. Empirical evidence shows that the local government area under study has the presence of essential facilities which include medical centers along with educational facilities, ICT hubs, cultivatable land and local markets. The fundamental problem emerges from youth reluctance to use existing resources since they strongly believe urban settings only holds the opportunities and measures of success. Effective sustainable development requires a fundamental perspective change through which the local population especially youth can exploit their present resources for developing sustainable initiatives. It is recommended that a comprehensive change of direction should follow through with community outreach activities and support local business start-ups that make use of available infrastructure systems.

Such circumstances exist not only in Odo-Otin LGA but also throughout Nigeria. Rural migration continues throughout Latin America and Asia despite the substantial investments in local infrastructure because rural inhabitants hold specific cultural beliefs and fail to fully take advantage of their surroundings. According to Tacoli (2004) migration patterns in developing regions maintain their steady flow because rural residents primarily seek social goals along with perceived chance differences beyond missing infrastructure. The development process needs human-focused methods

that involve local people while changing traditional mindsets in addition to building new physical structures. A complete solution to manage rural-urban migration within Odo-Otin must combine several essential measures which enhance current resources alongside public sensitization to modify societal attitudes. A community-wide commitment to engage locally and support entrepreneurship, enables asset transformation into growth tools which decreases migration and builds sustainable rural development.

Based on longheld preconceptions about sustainable development, the views of the respondents negates the existential realities within Odo-Otin LGA. Field observation shows that numerous facilities currently exist within this specific area but the community lacks effective engagement strategies. The young people and residents fail to recognise the potential opportunities and infrastructural provisions present within the communities that could aid development within their area. To reverse this trend, the following recommendations are made:

- 1) Through curriculum modification, young people need education about rural life to understand the economic potentials within their community.
- 2) From primary education to tertiary level, the education system should teach local development courses and arrange school field trips to farms industrial sites and cultural landmarks to strengthen student-environment relationships.
- 3) Local government authorities need to facilitate, educate and empower local youth committees/groups and imbued them with oversight responsibilities towards making use of essential modern facilities that are presently available within the communities. Local development and ongoing project assessment should be managed through community-led forums where quarterly youth meetings will evaluate knowledge and be aware of progress while receiving citizen feedback. The participation will let young people take control of their community decisions and development planning processes.
- 4) A community-wide programme of value-based education must begin to eliminate wide-held negative beliefs about living in rural areas. The youth receive revitalized purpose through original pride programming delivered by schools alongside religious institutions and traditional community groups.
- 5) Citizens generally need to be aware of the opportunities that are in their rural areas. Therefore the existing community spaces and facilities should be leveraged to serve as venues for organizing regular youth engagement programmes where students can learn agricultural practices, enterprise management and digital competencies.
- 6) People living in rural areas should see examples of local accomplishments that demonstrate prosperity can be achieved in their environment. The repetition of positive rural narratives through community broadcast and social media platforms as well as WhatsApp groups should function to transform public opinion.
- 7) In Nigeria and across developing regions, educational facilities/institutions need to participate actively in rural development objectives through programmes that allow students to execute resource-based tasks which resolve community needs.

It is a fact that absence of adequate infrastructural development is a drawback in Nigeria and developing countries. However, for Odo-Otin LGA, the infrastructural need is not so acute to encourage excessive rural-urban migration is necessary support measures that we here refer to as soft infrastructure are put in place. The residents of Odo-Otin LGA needs to take better advantage of the facilities in their surroundings. Establishment of viable businesses in Odo-Otin should be encouraged through public recognition of young entrepreneurs, and by provision of both small grants and

mentorship programmes. Innovative competitions together with entrepreneurship fairs should be established to support local enterprise. Productive initiatives should, through practical solutions, leverage the available local resources and facilities for communal development. These strategies seek dual purposes of lowering migration while creating Odo-Otin into a youth-led destination for rural development.

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