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Spatial Pattern and Dominant Migratory Groups of Rural–Urban Migration in Rivers State, Nigeria

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ABSTRACT

This study examined the spatial pattern of rural–urban migration and identified the dominant migratory groups in Rivers State, Nigeria. The paper was derived from a broader doctoral study on rural–urban migration and its implications for public utilities. A cross-sectional survey design was used, drawing on responses from 1,087 migrants within Rivers State. Data were analysed using descriptive statistics and inferential comparison across local government areas. The findings show that migration is strongly concentrated in major urban destinations, with Port Harcourt Local Government Area accounting for 47.7% of identified migrant destinations, followed by Obio-Akpor (13.6%) and Ikwerre (9.2%). Migration is predominantly permanent (66.0%), and most respondents had resided in urban areas for 6–15 years, indicating long-term settlement rather than short-cycle movement. The dominant migrant profile was male (61.7%), aged 30–39 years (50.5%), married (63.6%), and educated to at least secondary level (60.3%). Most migrants also came from low socioeconomic backgrounds (79.6%). The study concludes that rural–urban migration in Rivers State is highly selective, favoring economically active adults and concentrating in a small number of urban nodes. The pattern suggests persistent structural imbalances between rural and urban areas and raises important planning implications for housing, labour absorption, and urban service forecasting.

Keywords: rural–urban migration; migrant profile; urbanization; Rivers State; internal migration

INTRODUCTION

Rural–urban migration remains one of the most persistent forces shaping urban growth in developing countries because it redistributes people, labour, and demand from rural settlements to urban centres. Ravenstein's classical migration logic helps explain why movement tends to follow opportunity gradients, while Lee's push–pull framework clarifies how rural deprivation and urban attraction combine to influence migration decisions. In the Nigerian context, this pattern is intensified by uneven development, poor rural infrastructure, and concentrated economic opportunity in major cities. As Nwaka and Onyia (2021) argue, migration is not only a population movement issue but also a development process with implications for labour markets, welfare, and sustainability. Similarly, Auwalu and Bello (2023) note that rapid urbanisation in Nigeria often expands faster than planning systems can respond, thereby producing infrastructure stress and social strain. Adesina and Owoeye (2019) further show that urban growth in Nigeria frequently outpaces access to basic infrastructure, while Emenike and Onah (2020) link rural–urban migration directly to mounting pressure on utilities and city systems. Together, these arguments

suggest that migration is best understood as both a demographic and structural process, especially in places such as Rivers State, where urban centres continue to attract migrants from multiple localities.

The relevance of Rivers State lies in the fact that its leading urban centres, especially Port Harcourt, Obio-Akpor, and Ikwerre function as strong metropolitan magnets. This means migration is unlikely to be random; rather, it is shaped by the geography of jobs, services, transport access, and social networks. Lee's theory helps explain this concentration because the strongest pull factors tend to cluster in the most economically active places. Harris and Todaro's labour-migration logic is also useful here, since migrants often relocate based on expected urban opportunities rather than guaranteed employment. In related Nigerian and African studies, Ezeanya and Onah (2020) show that migration can weaken access to public services when urban systems are unprepared, while Kalu and Ukeje (2019) and Okoli and Akpoveta (2019) both argue that migration-driven urban growth can overwhelm existing utilities. Ahmad et al. (2020) report similar pressures in Pakistan, suggesting that this pattern is not uniquely Nigerian. Mitiku and Mulatu (2021) also show that rural unemployment and low productivity continue to push migrants toward urban centres, while Yusuf et al. (2025) argue that quality-of-life expectations increasingly shape movement decisions. These studies collectively reinforce the view that migration is governed by layered motivations and spatial inequality, not by a single isolated factor.

Despite this growing literature, a clear gap remains. Much of the existing scholarship focuses on why people move or on the consequences of migration for infrastructure, but fewer studies isolate the spatial pattern of movement and the social composition of those who migrate (Adesina & Owoeye, 2019; Emenike & Onah, 2020; Nwaka & Onyia, 2021). This matters because cities do not simply absorb numbers; they absorb particular kinds of people with distinct age, gender, marital, educational, and socioeconomic characteristics, and those characteristics shape labour supply, housing demand, service consumption, and long-term urban planning (Auwalu & Bello, 2023; Ezeanya & Onah, 2020). Sjaastad's (1962) human investment theory suggests that migration is often a calculated decision linked to anticipated returns, but such returns are distributed unevenly across social groups. Lewis's (1954) dual-sector model similarly helps explain why movement is concentrated among economically active adults seeking transition from lower-productivity rural settings to better-paying urban opportunities. Yet, while these frameworks explain why migration might occur, they do not by themselves identify who is actually moving, where they are concentrating, and how long they are likely to remain in a specific context such as Rivers State. That unresolved issue formed the central problem this study addressed: the limited context-specific evidence on destination hierarchy and dominant migrant groups in Rivers State.

To respond to this gap, the study examined the spatial pattern of rural–urban migration and identify the dominant migratory groups in Rivers State, Nigeria. In doing so, it answered two key questions: what is the pattern of rural–urban migration in Rivers State? and who are the dominant migratory groups in terms of age, sex, marital status, education, and socioeconomic background? Without such evidence, policy responses may continue to treat migration as a general urbanization problem rather than a socially selective process that requires targeted planning for the groups most likely to relocate, settle, and shape long-term urban demand.

METHODOLOGY

This study adopted a cross-sectional survey design with a quantitative approach to examine the spatial pattern of rural–urban migration and identify the dominant migratory groups in Rivers State, Nigeria. The design was appropriate because the study aimed to measure observable migration characteristics across a large population at one point in time rather than explore personal narratives in depth. Creswell's survey logic supports this type of design where the objective is to describe population tendencies and compare groups statistically, while Lee's push–pull model and Harris–Todaro's migration logic provided conceptual support for selecting variables linked to destination pattern, permanence of movement, and migrant characteristics. The study setting was Rivers State, a major urbanising zone in southern Nigeria, where metropolitan concentration around Port Harcourt and adjoining local government areas creates a relevant context for measuring movement and urban settlement dynamics. The study specifically

examined migration outcomes across urban destinations and local government areas, with analytical attention to Port Harcourt, Obio-Akpor, and Ikwerre because these emerged as the strongest destination nodes in the reported results.

The target population consisted of adults aged 20 years and above in Rivers State, reported as 3,914,854, from which a sample of 1,200 respondents was determined using a multi-stage sampling procedure. However, the specific analytic subset used for this article was the 1,087 migrant respondents reflected in the migration tables. This distinction is important because the broader survey included the full sample frame, but the present analysis focuses only on those respondents who met the migration-related criteria used in the article's tables. The sample size is methodologically defensible because it is large enough to support descriptive profiling and inferential comparison across local government areas. The multi-stage approach also improves coverage across a geographically dispersed state, although, like many survey strategies, it may still underrepresent highly mobile or hard-to-reach populations. In substantive terms, the use of a large state-level sample strengthens confidence that the identified patterns such as concentration in Port Harcourt and dominance of permanent settlement reflect more than isolated local anomalies.

Data were collected using a validated self-structured questionnaire titled the Rural Urban Migration and Public Utilities Questionnaire (RUMPUQ), which consisted of 30 items and recorded a reliability index of 0.84 in the fuller study, indicating good internal consistency. The instrument was designed to capture key migration variables relevant to this article, including destination pattern, local government destination, nature of migration, duration of migration, and demographic and socioeconomic characteristics. The published extraction also notes that the instrument was structured and suitable for quantitative coding, while a related publication version states that online administration through Google Forms supported wider reach and efficient response capture. For this article, the data used were those directly relevant to migration profiling rather than the public utility items contained in the broader instrument. One limitation of questionnaire-based migration research, however, is that it depends on self-report and recall, which may affect accuracy in reporting duration of migration or reasons for movement. Even so, structured questionnaire design remains appropriate where standardized comparison across a large sample is required.

Data analysis was conducted primarily with SPSS, using frequencies, percentages, and ANOVA to describe migration patterns and test whether aspects of migration differed across local government areas. Descriptive statistics were used to establish destination hierarchy, permanence of migration, duration of settlement, and dominant migratory groups by gender, age, marital status, education, and socioeconomic status. Inferentially, ANOVA was used to test variation in primary reasons for relocation, nature of migration, and duration of migration across LGAs. The results showed significant LGA differences for reasons for migration ($F = 6.228$, $p = .000$) and duration of migration ($F = 12.954$, $p = .000$), but not for nature of migration ($F = .516$, $p = .724$), indicating that why migrants move and how long they stay vary spatially, even though the temporary/permanent pattern does not vary significantly. Ethical clearance was obtained from the University of Port Harcourt Ethics Committee and UPTH, and participants provided informed consent, which supports the study's compliance with accepted human-subject research standards.

RESULTS

Question 1: *What is the Pattern of Rural Urban Migration in Rivers state?*

Table 4.1: Analysis of Pattern of Rural-Urban Migration in Rivers

Pattern of Rural Urban Migration		Frequency	Percent
Urban areas of Migrants destinations	Abonnema	7	0.6
	Afam	17	1.6
	Ahoada	11	1.0
	Akuku-Toru	8	0.7
	Alesa	4	0.4

	Amadi Flat	84	7.7
	Asa	16	1.5
	Bolo	8	0.7
	Bonny Town	21	1.9
	Bori	17	1.6
	Borokiri	84	7.7
	Buguma	14	1.3
	Choba	24	2.2
	Chokocho	10	0.9
	Diobu	84	7.7
	Egwi	9	0.8
	Ele	9	0.8
	Elele	25	2.3
	Eleme Town	10	0.9
	Eteo	11	1.0
	GRA	78	7.2
	Igwuruta	25	2.3
	Isiokpo	25	2.3
	Kom Kom	11	1.0
	Kpor	24	2.2
	Ogu Mini	10	0.9
	Ogu Town	9	0.8
	Okehi	7	0.6
	Okrika Mainland	25	2.3
	Omagwa	25	2.3
	Omoku	24	2.2
	Onne	13	1.2
	Oyigbo Town	20	1.8
	Rumuodara	25	2.3
	Rumuodomaya	25	2.3
	Rumuogba	24	2.2
	Rumuokoro	65	6.0
	Rumuokuta	25	2.3
	Rumuola	61	5.6
	Trans Amadi	63	5.8
	Ulakwo	5	0.5
	UniPort	25	2.3
	Total	1087	100.0
Local Goverments of Migraant destinations	Ahoada East	11	1.0
	Akuku-Toru	15	1.4

	Bonny	21	1.9
	Eleme	38	3.5
	Etche	31	2.9
	Gokana	24	2.2
	Ikwerre	100	9.2
	Khana	17	1.6
	Obio-Akpor	148	13.6
	Ogba/Egbema/Ndon	24	2.2
	Ogu–Bolo	36	3.3
	Okrika	25	2.3
	Oyigbo	64	5.9
	Port Harcourt	519	47.7
	Total	1087	100.0
Nature of migration	Temporary	370	34.0
	Permanent	717	66.0
	Total	1087	100.0
Duration of migration	<1 year	19	1.7
	1-5 years	179	16.5
	6-10 years	397	36.5
	11-15 years	471	43.3
	16 years and more	21	1.9
	Total	1087	100.0

Table 4.1 shows the pattern of rural-urban migration in Rivers State reveal a dynamic movement of individuals from rural to urban areas within the state. Among the urban areas, Amadi Flat, Borokiri, Diobu, GRA, Rumuokoro, Transamadi and Rumuola emerged as major destinations for migrants, with frequencies ranging from 60 (5.5%) to 84(7.8%) individuals. Conversely, areas like Alesa, Egwi, and Ulakwo experienced lower levels of migration, each receiving fewer than 10 migrants. A total of 1087 migrants were recorded, with various urban areas and local government areas (LGAs) serving as destinations. Port Harcourt LGA stood out as the most attractive destination, drawing 519 migrants, representing 47.7% of the total migrants, followed by Obio-Akpor LGA with 148 migrants (13.6%), and Ikwerre LGA with 100 migrants (9.2%). This distribution highlights the concentration of migrants in key urban centers and LGAs within the state. Additionally, the nature of migration showed that 717 individuals (66%) migrated permanently, while 370 individuals (34%) migrated temporarily. This indicates a significant trend towards permanent settlement among migrants. These findings underscore the complex nature of rural-urban migration in Rivers State, influenced by factors such as economic opportunities, social amenities, and quality of life in urban areas. Also, the data on the duration of migration from rural to urban areas in Rivers State indicates that the majority of migrants have been living in urban areas for a significant period. Among the respondents, 36.5% reported migrating 6-10 years ago, while 43.3% migrated 11-15 years ago. This suggests a trend of long-term settlement in urban areas among migrants. In contrast, a smaller proportion of migrants have more recently moved, with 16.5% having migrated 1-5 years ago and only 1.7% migrating within the last year. Additionally, a negligible percentage of migrants (1.9%) have been living in urban areas for 16 years or more. Overall, these findings indicate that the majority of migrants from rural to urban areas in Rivers State have been

residing in urban areas for a considerable period, highlighting the trend towards long-term urbanization among this population.

Question 2: *Who are the dominant migratory groups on the basis of age, sex, educational standards, marital status and socio-economic characteristics of rural-urban migrants in Rivers State, Nigeria?*

Table 4.2: The Dominant Migratory Groups on the Basis of Age, Sex, Educational Standards, Marital Status and Socio-Economic Characteristics of Rural-Urban Migrants in Rivers State, Nigeria.

the most migrant groups (N=1087)		**f**	**%**
Gender	Male	671	61.7
	Female	416	38.3
	Total	**1087**	**100**
Age	20-29 years	155	14.3
	30-39 years	549	50.5
	40-49 years	321	29.5
	50-59 years	41	3.8
	60 years and above	21	1.9
	Total	**1087**	**100**
Marital Status	Single	102	9.4
	Married	691	63.6
	Separated	254	23.4
	Divorced	20	1.8
	Widowed	20	1.8
	Total	**1087**	**100**
Educational Level	Primary	49	4.5
	Secondary	655	60.3
	Tertiary	383	35.2
	Total	**1087**	**100**

Table 4.2 revealed interesting patterns across various demographic categories. In terms of gender, male migrants constitute the majority at 61.7%, compared to females at 38.3%. This suggests a gender disparity in migration, with males being more likely to relocate to urban areas. Regarding age, the largest age group among migrants is 30-39 years old, comprising 50.5% of the total, followed by 40-49 years old at 29.5%. This indicates that middle-aged individuals are the most common migrant group, possibly driven by economic or career opportunities. In terms of marital status, married individuals constitute the largest group at 63.6%, followed by separated individuals at 23.4%. This suggests that family dynamics and economic reasons may play a role in migration decisions. In terms of educational level, migrants with secondary education are the most common at 60.3%, followed by those with tertiary education at 35.2%. This indicates that migrants tend to have at least a secondary level of education, which may influence their ability to access employment opportunities in urban areas. Finally, in terms of socioeconomic status, migrants from low socioeconomic backgrounds constitute the largest group at 79.6%, followed by middle-class migrants at 14.8%, and high-income migrants at 5.6%. This suggests that economic factors

strongly influence migration decisions, with individuals from lower socioeconomic backgrounds being more likely to migrate in search of better opportunities.

Hypothesis 1: The pattern of rural-urban migration do not significantly differ across the Local Government Areas in Rivers State.

Table 4.8: ANOVA Analysis of the Difference in Pattern of Rural-Urban Migration Across the Local Government Areas in Rivers State.

Patterns of Migration		Sum of Squares	Df	Mean Square	F	Sig.
What was the primary reason that made you relocate to the urban area	Between Groups	35.279	22	8.820	6.228	.000
	Within Groups	1532.402	1064	1.416		
	Total	1567.682	1086			
Nature of migration	Between Groups	.464	22	.116	.516	.724
	Within Groups	243.593	1064	.225		
	Total	244.057	1086			
How long have you migrated from rural to urban	Between Groups	33.335	22	8.334	12.954	.000
	Within Groups	696.062	1064	.643		
	Total	729.397	1086			

The ANOVA analysis presented in Table 4.5 evaluates the differences in patterns of rural-urban migration across various local government areas (LGAs) in Rivers State based on three aspects: primary reasons for relocation, nature of migration, and duration since migration. For the primary reason that motivated relocation, the F-statistic of 6.228 with a significance (p-value) of .000 indicates that there are statistically significant differences in the reasons for migrating among the LGAs. In contrast, the nature of migration shows an F-statistic of .516 with a p-value of .724, suggesting no significant differences in how migration is conducted across the LGAs. Finally, the analysis of the duration since migration reveals a significant variance with an F-statistic of 12.954 and a p-value of .000, highlighting significant differences in the length of time residents have been urban dwellers across different LGAs. This suggests that while the duration and reasons for migration vary significantly across LGAs, the method or nature of migration does not.

DISCUSSION

These findings indicate that rural–urban migration in Rivers State is both spatially concentrated and socially selective. The dominance of Port Harcourt, Obio-Akpor, and Ikwerre reflects the strong pull of metropolitan centres where employment, infrastructure, and social services are perceived to be more available. Because the majority of migrants settle permanently and remain for many years, migration contributes directly to the long-term reconfiguration of the state's urban population, rather than merely producing temporary population spikes. The dominance of males, middle-aged adults, married persons, and lower-income migrants suggests that migration is driven by economic responsibility and household survival. The data imply that the typical migrant is not the most privileged resident but rather someone with enough educational capacity to navigate urban opportunities, yet enough economic constraint to be pushed out of rural conditions. This makes the migrant stream both productive and vulnerable: productive because it supplies labour to the city, and vulnerable because it intensifies demand for employment, housing, and social services in precisely those places already under growth pressure.

These findings are broadly consistent with supporting evidence from related studies. Emenike and Onah (2020), Ezeanya and Onah (2020), and Adesina and Owoeye (2019) all indicate that rural–urban migration in Nigeria tends to channel people toward cities where infrastructure and opportunity are concentrated, even when those systems are already strained. Okoli and Akpoveta (2019) and Kalu and Ukeje (2019) similarly argue that migration-driven urban growth often outpaces service expansion, which helps explain why the same destinations remain attractive despite rising pressure. Outside Nigeria, Ahmad et al. (2020) and Mitiku and Mulatu (2021) likewise show that migration is frequently driven by a combination of economic need and service-seeking behaviour, which aligns with the Rivers State profile of predominantly working-age, lower-income migrants. The present findings also complement Okoye et al. (2025), who argue that migration in Nigeria is increasingly shaped by governance failures and uneven territorial development.

However, the findings sit less comfortably with more optimistic urban transition arguments that assume migration will gradually diversify across urban systems as development spreads. Adesina and Owoeye (2019) argue that urbanisation in Nigeria often reduces access to essential infrastructure because growth is concentrated in already pressured cities instead of being distributed across multiple urban systems. In the same vein, Auwalu and Bello (2023) note that rapid urban growth intensifies infrastructure deficits when planning and investment fail to expand alongside population movement. Ahmad et al. (2020) similarly found that migration-driven urban growth places the greatest strain on dominant urban centres. The Rivers State data reflect this pattern, with Port Harcourt alone receiving 47.7% of migrants. In Rivers State, the continued dominance of Port Harcourt suggests that opportunity remains too concentrated for such dispersion to occur meaningfully.

The study strengthens migration scholarship in three ways, while also exposing important constraints. Theoretically, it extends push–pull and labour-transition explanations (Kumar et al., 2020) by showing that migration in Rivers State is not only driven by opportunity but sorted by social profile: the urban pull is strongest for economically active adults who possess enough educational capacity to navigate the city but enough economic pressure to need relocation. Practically, this means migrant inflow is simultaneously productive and vulnerable: productive because it expands the urban labour pool, and vulnerable because it intensifies demand for housing, transport, utilities, and employment in already congested spaces. Policy-wise, the findings imply that planning should anticipate who is arriving, not merely how many are arriving. Yet the study also has limits. Its cross-sectional design captures established patterns but cannot track migration trajectories over time or fully explain causality. Because it relies on structured self-report, it may understate informal mobility or circular migration. Even so, the combination of a large sample, clear demographic profiling, and inferential comparison across LGAs gives the study strong descriptive and planning value. The evidence therefore supports more targeted urban forecasting, rural development investment, and service planning that responds to migrant selectivity rather than aggregate growth alone

CONCLUSION

This study showed that rural–urban migration in Rivers State is both spatially concentrated and socially selective. In spatial terms, migration is heavily directed toward a few dominant urban destinations, especially Port Harcourt, followed by Obio-Akpor and Ikwerre, which confirms that movement is shaped by uneven access to opportunity, infrastructure, and urban services. In social terms, the migrant stream is dominated by economically active adults, particularly males, married persons, and individuals with secondary education from lower socioeconomic backgrounds. These findings demonstrate that migration in Rivers State is not a random population shift but a patterned and selective process with clear implications for labour supply, housing demand, infrastructure use, and long-term urban planning. The study therefore concludes that effective responses to migration must move beyond counting migrant numbers and instead address where migrants are concentrating and which social groups are most likely to relocate and remain in the urban system.

RECOMMENDATIONS

Based on the two major findings of the study, the following recommendations are proposed.

1. Regarding the finding that migration is heavily concentrated in a few urban destinations, the Rivers State Ministry of Urban Development and Physical Planning, in collaboration with Port Harcourt, Obio-Akpor, and Ikwerre local planning authorities, should strengthen city-regional planning, infrastructure forecasting, and land-use regulation in the major receiving urban centres to reduce the pressure associated with clustered migrant settlement.
2. Regarding the finding that migration is socially selective and dominated by specific groups, the Rivers State Government, particularly the ministries responsible for employment, social welfare, and economic planning, should design targeted livelihood, housing, and social support programmes for the dominant migrant groups especially working-age low-income adults to ensure that urban absorption is better aligned with the needs and vulnerabilities of those most likely to relocate and remain.

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