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The Influence of Household Endowment on Settlement Choices in Cameroon

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Abstract

Household endowment has become a strong determinant of settlement choices. In spite of this trend, a quantitative assessment of the association between household endowment and settlement choices for policy implication is negligible in Cameroon. This paper seeks to bridge this gap by providing evidence on the extent to which household endowment influences settlement choices in Cameroon, using data from Cameroon's 2011 Demographic and Health Survey, supplemented with a multiple indicators cluster survey. The survey used a national sample of 14,214 households, with sub-samples of 15,426 women and 7,191 men. Three questionnaires were used to collect information for the survey: a household questionnaire, an individual women's questionnaire, and an individual men's questionnaire. Choice of settlement was the dependent variable; with urban settlement being the base category. The independent variables included income level measured as wealth index, educational attainment, occupation and other demographic factors. Data were analysed quantitatively using Stata 14 and the binary probit estimation technique. The results indicated that educational attainment, income, gender, age of head of household and household size had a positive influence on the likelihood of urban settlement choices; while marital status and occupations had a negative effect on the likelihood of urban settlement choices. Based on these results, it is recommended that the government should enhance the potentials of rural areas to make them more attractive for settlement, a situation which will reduce urban population pressure and attract rural development. Besides, the government should construct social infrastructures and amenities in rural areas to hearten household choice of rural settlement.

Keywords: *household endowment, settlement choices, urban settlement, Cameroon*

1. Introduction

Changes in household factors are likely to influence the relative attractiveness of a location. Given that the global population occupies about 55% of all urban residential land, and that home-based factors account for a large proportion of location decisions, residential location is one of the most important household long-term choice decisions (Jiang & O'Neill, 2017; Cohen & Simet, 2018).

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Physical wellbeing, basic educational attainment, family livelihood and landholdings are considered fundamental endowments that enable mobility decisions and subsequent career paths, settlement intentions and housing aspirations (Hao & He, 2022). Cities have become increasingly attractive to highly educated households, and the trend has risen given that households with high educational attainment are demanding amenities that city life offers, such as high wages (Maarseveen, 2021). It is estimated that Sub-Saharan Africa (SSA) is the world's fastest urbanizing region, currently containing 472m people. This urban population is expected to double over the next 25 years, with the global share of African urban residents projected to grow from 11.3% in 2010 to 20.2% by 2050 (Saghir & Santoro, 2018). The growth in Sub-Saharan urban population is characterized by differing gender, cultural, socio-economic status, and household headship. With such trends, it is paramount to understand how households make crucial choices concerning available housing options (Mubiru et al., 2022). Often, the poor tend to escape poverty by migrating out of rural areas. Rapid increase in urban growth has been mainly due to rural-urban migration, which tends to increase urban problems without reducing rural poverty.

The human capital and social status attainment theories suggest that migration is carried out as an investment to maximize socioeconomic returns at the destination in the form of higher earnings, or an improved occupational status. For most rural households, especially those residing in the less-developed hinterland, migration offers the main path to upward social mobility (Hao, 2021; Qian et al., 2016). In most cases, it is the most productive rural labour force that migrates to urban areas. Rural migration increases urban problems; including insufficient houses, inadequate safe water supply and social services provision, and insufficient removal of garbage and sewage (Dick & Schraven, 2021). Yet, urbanization can be slowed by making rural areas more attractive. Although this has long been recognized, nonetheless very little has been done in African countries to address the issue. Making rural areas more attractive -- i.e., improving the agricultural sector, creating off-farm employment opportunities, developing rural financial institutions and other facilitating infrastructures and institutions (UN-DESA, 2015) -- seems to be the most suitable solution. This goes together with rural road infrastructure, communication and transportation development, and the provision of rural markets. Rural agricultural development will link agriculture and food markets to national and international markets (FAO, 2022).

In Cameroon, the majority of the people live in rural areas, and earn their livelihood from agriculture. Most crucial is that about 90% of the Cameroonian rural households are, in one way or another, employed in agriculture; and approximately one-third of them earn their livelihood from crop exports

(Agriculture in Cameroon, 2022). Cameroon's urban population is approximately 58% of the total population of 26,545,864 people, as per the 2020 World Bank World Development Indicators; and the country is considered a highly urbanized country by SSA standards (Tanyi & Adaramola, 2023). The urban system of Cameroon has two main poles: the main port and commercial centre (Douala), and the administrative and political capital (Yaounde). The bipolarity is specific to Cameroon since, in most African countries, a large proportion of the population is concentrated in the single largest town (usually the capital). These two cities are followed by the secondary towns of Garoua, Bamenda and Maroua. As the mechanism of household location decision-making plays an important part in urban planning, it is worthwhile to study what makes people select their house locations. Deteriorating standards of living due to poor settlement choices can be traced to the lack of endowments such as employment, education, healthcare facilities, good food, potable water, proper sanitation system, poor infrastructural development, and inadequate access to land and capital/credit (Aluko, 2012; Noumba & Feunke, 2020; Ijila & Sanusi, 2020).

Substantive work in questioning the level of significance that transport plays in residential location and supporting individual characteristics as the main factor in explaining their selection is negligible. In the case of Cameroon, although there is no direct study with respect to choice preference on home location, it seems household endowments have been the main factor influencing Cameroonians in selecting their house locations. Different reasons account for people's settlement choices: whether to live in a rural area, suburban or an urban area. Some people may prefer to live in suburban areas that are quiet, free from congestion, and above all that have low crime waves. Equally, some people may prefer to live in some particular areas but will be hindered by their household endowments. As such, it is important to note that choices on housing location are, in many ways, a product of constraints. Most often, such decisions depend on transport factors, which housing types are available in particular locations and at what prices, knowledge of alternatives, societal expectations or norms, and the regulatory environment (Deeyah et al., 2021).

The significance of household endowments in determining settlement choices of households cannot be underestimated, though it has received little attention. This study, therefore, seeks to examine what role do household endowment play in determining where people choose to live in Cameroon. The rest of this paper is organized as follows. Section 2 presents the concept of household endowment, followed by the methodology. Sections 3 and 4 present and discuss the results, respectively. Section 5 concludes the study and provides policy recommendations.

2. The Concept of Household Endowment

Household endowment refers to the qualities possessed or inherited by an individual or group of individuals. These individuals may be living under the same roof, occupying separate units, or living apart. Household endowments can be in the form of human and/or physical endowments. Physical endowments refer to wealth (as in money or property), owned or accumulated by an individual, partnership, or corporation, which is used/available for use in the production of more wealth. This includes all physical infrastructure (buildings, roads, machinery) used to produce goods and services. Also, physical endowments include the physical manifestation of information, techniques, and knowledge required to produce goods and services. Human capital endowment has to do with time, personal skills, capabilities, experiences and knowledge of an individual. Human capital includes the entire life experience of an individual. All these human endowments determine what households do, how they do it, and their capability to adapt to changes beyond their control. The availability of household endowments can thus suppress opportunities for some community members, while enhancing them for others. As such, a key factor in ensuring a good and sustainable quality of life or settlement location may lie on a more equitable distribution of physical assets, combined with the human assets in a household (Ijila & Sanusi, 2020; Rashid, 2020).

The quality of life of a household also depends on the settlement location of a household. For example, a household settled in a location that is easily flooded or around areas of public waste disposal will spend more money to deal with health-related problems arising from these externalities rather than on enjoying a sustainable quality life. Physical capital and human capital are probably the two main types of household endowments that strongly affect the choice of settlement. As mentioned earlier, household members possess human capital, and the effective utilization of this capital depends on factors such as investment in their human capital, household characteristics, etc. Human capital tends to be the main asset of most households, and educational investment also is the main variable affecting the human capital endowment of household members (Guo & Qu, 2021).

3. Context and Methods

3.1 Data sources

This paper draws data from a study that utilized a cross-sectional data obtained from the fourth Cameroon Demographic and Health Survey, combined with the Multiple Indicators Cluster Survey (DHS-MICS) conducted in 2011 by the National Institute of Statistics (NIS), in collaboration with the Centre Pasteur Cameroun (CPC). The 2011 DHS-MICS is a national representative sample of about 15,060 households. This is a special demographic and health survey given that it is supplemented with questions from the Multiple Indicator Cluster Survey.

3.2 Sampling

The survey used a national sample of 14,214 households, with sub-samples of 15,426 women (aged 15–49) and 7,191 men (aged 15–59). The age range was chosen based on its reliability in providing estimates of fertility levels, marriage, sexual activity, fertility preferences, family planning methods, breast-feeding practices, nutrition, childhood and maternal mortality, maternal and child health, domestic violence, malaria, HIV/AIDS and other sexually transmitted infections (STIs): all of which program managers and policymakers can use to evaluate and improve existing programs.

3.3 Data Collection

Three questionnaires were used during the survey: a household questionnaire, an individual women's questionnaire, and an individual men's questionnaire. The samples were selected in two stages: 580 sample points (or cluster) were randomly selected in the first stage; and in the second stage, 24 households in each urban cluster and 28 households in each rural area were selected from each sample point in all regions. The sample excluded nomadic and institutional populations, such as persons staying in hotels, barracks, and prisons. Since the focus of the paper is on the influence of household endowments on settlement choices, the data was sourced exclusively from the household questionnaire.

3.4 Data analysis

3.4.1 Modelling the Effect of Household Endowment on Settlement Choices

The analytical tool used for this study is the binary probit technique. This technique was chosen because the dependent variable is categorical in nature with two categories: rural, and urban settlements. The model for the study is specified in the functional form:

$$CHOSETT = F(INC, EDUC, AG, GEND, MS, OCCUP, NOCHH) \quad (1)$$

Econometrically, this model can be specified as follows:

$$CHOSETT = \beta_0 + \beta_1 INC + \beta_2 EDUC + \beta_3 AG + \beta_4 GEND + \beta_5 MS + \beta_6 OCCUP + \beta_7 NOCHH + \mu \quad (2)$$

Where, $CHOSETT$ = Choice of settlement; INC = Income; $EDUC$ = Education; AG = Age; $GEND$ = Gender; MS = Marital status; $OCCUP$ = Occupation; $NOCHH$ = Number of children in the household; μ = Stochastic error term; β_0 = Intercept

4. Results and Discussion

4.1 Descriptive Statistics

Table 1 indicates that the total number of observations is 42,312, though with missing observations in education (38,775) and occupation (34,321). As concerns the educational categories, about 25% of the respondent have no education, 36% have primary education, 32% have secondary education, while close to 6% have higher education. With respect to the income categories, close to 21% of the respondents belong to the poorest wealth index, 24% in the poorer wealth index, 22% in the middle wealth index, 19% in the richer wealth index, and 14% in the richest wealth index. Wealth index is a composite index composed of key asset ownership variables; it is used as a proxy indicator of household level of wealth. There a number of DHS surveys that have collected such indicator variables, usually for purposes other than ascertaining economic status, but which are thought to be correlated with a household's economic status. These have included productive/non-productive assets (e.g., radio, refrigerator, television, bicycle, car, telephone, motorcycle, etc.); household amenities (e.g., source of drinking water, type of toilet facility, floor, wall and roof material, electricity, etc.); and others (such as unbuilt piece of land, ownership of a house, land, etc.).

Table 1: Descriptive Statistics of Selected Variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
Urban residential area	42312	0.603	0.489	0	1
No education	38775	0.248	0.431	0	1
Primary education	38775	0.364	0.481	0	1
Secondary education	38775	0.324	0.468	0	1
Higher education	38775	0.062	0.241	0	1
Wealth index poorest	42312	0.210	0.407	0	1
Wealth index poorer	42312	0.239	0.426	0	1
Wealth index middle	42312	0.221	0.415	0	1
Wealth index richer	42312	0.185	0.388	0	1
Wealth index richest	42312	0.143	0.350	0	1
Sex (Male)	42312	0.785	0.410	0	1
Marital status	42312	0.148	0.355	0	1
Age of household	42312	46.65	12.887	16	98
Household size	42312	7.992	4.415	1	43
Primary sector	34321	0.494	0.494	0	1
Secondary sector	34321	0.118	0.118	0	1
Tertiary sector	34321	0.387	0.387	0	1

Source: Author (2023)

Furthermore, close to 79% of the household respondents were male, aged 47 years on average, with about 15% of them being married. The average number of household members is 8 persons; with about 60% of them living in urban areas. Regarding occupational categories, approximately 49% of the respondents are in the primary sector, 12% in the secondary sector, and 39% in the tertiary sector.

4.2 Estimation of Results

Table 2 illustrates the regression analysis of the determinants of household endowment on settlement choices in Cameroon, with urban residential areas being the dependent variable. The probit and logit estimation techniques were used to carry out the regression analysis. Columns 2 and 3 present the probit results and their marginal effects; while columns 4 and 5 present the logit results and their marginal effects. The logit estimates are presented to test the robustness of the results.

Table 2: Regression Analysis of the Determinants of Household Endowment on Settlement Choices in Cameroon

Variables	**Probit**		**Logit**	
	Probit Index Coefficients (Robust Standard Error)	***Marginal Effect***	***Logit Coefficients (Robust Standard Error)***	***Marginal Effect***
No education	-0.408***	-0.160***	-0.768***	-0.189***
	(0.049)	(0.019)	(0.091)	(0.022)
Primary education	0.021	0.008	0.023	0.005
	(0.042)	(0.016)	(0.076)	(0.018)
Secondary education	0.079**	0.031**	0.136*	0.032*
	(0.403)	(0.015)	(0.073)	(0.017)
Wealth index poorest	0		0	
			(omitted)	
Wealth index poorer	2.568***	0.710***	4.542***	0.006***
	(0.039)	(0.006)	(0.076)	(0.006)
Wealth index middle	1.214***	0.415***	2.066***	0.415***
	(0.033)	(0.009)	(0.060)	(0.010)
Wealth index richer	0.378***	0.143***	0.682***	0.156***
	(0.033)	(0.012)	(0.061)	(0.013)
Sex (Male)	0.279***	0.110***	0.496***	0.121***
	(0.028)	(0.011)	(0.051)	(0.012)
Marital status (Single)	-0.004	-0.002	-0.016	-0.004
	(0.034)	(0.013)	(0.060)	(0.014)
Age of household	0.004***	0.001***	1.007***	0.001***
	(0.001)	(0.0003)	(0.001)	(0.0003)
Household size	0.023***	0.009***	0.007***	0.010***
	(0.002)	(0.001)	(0.001)	(0.001)
Secondary sector	-0.790***	-0.306***	-1.396***	-0.334***
	(0.033)	(0.012)	(0.060)	(0.008)
Tertiary sector	-0.659***	-0.255***	-1.158***	-0.275***
	(0.022)	(0.008)	(0.038)	(0.008)
Constant	-1.275***		-2.189***	
	(0.060)		(0.108)	
Observations	24,920		24,920	
Wald chi2(17)	8587.39		6799.50	
Prob > chi2	0.0000		0.0000	
Log pseudo likelihood	-10237.922		-10243.771	
Pseudo R2	0.4029		0.4046	

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1
Source: Authors (2023)

4.3 Discussion

As seen in Table 3, all the independent variables in the binary probit and logit estimation are significant at 1% level, except for secondary education, which is significant at 5% and 10% levels, respectively. Primary education and marital status are insignificant. Household head educational attainment has four categories, with tertiary education being the base category. The marginal effect of the probit analysis shows that no education is inversely related to urban choice of settlement. This implies that a household head with no education is less likely to live in an urban area by the probability of 0.160, as opposed to a household head with tertiary education, which is significant at 1%. Urbanization implies the transfer of population from agricultural to non-agricultural employment, and simultaneously the conversion of land from agricultural to non-agricultural use, and a shift in the relative importance of the economic sectors, from primary production to secondary and tertiary sectors (Patel et al., 2019; Potts, 2017). As such, household heads with no education will lack the appropriate skills to adapt in urban areas, hence will prefer rural areas where their very low educational attainment can be well suited to primary rural activities to sustain livelihoods.

Primary and secondary education are positively related to urban settlement choices, though primary education is insignificant. A household head with a primary level of education has a 0.8 probability of living in an urban area; and that with a secondary level of education has a 0.031 likelihood of living in an urban area, which is statistically significant at 5% level of significance. This result corroborates that of Testa and Sander (2016), who found that residents of the city of Chicago are increasingly likely to have a college degree (a Bachelor's degree or a graduate degree) relative to its suburban residents. According to Tang and Feng (2015), more experienced and knowledgeable travellers are more likely to obtain good and stable occupations. This is because good and stable occupations that go with higher level of education are mostly found in urban settlements. However, according to Cullen and Levitt (1999), educated households prefer living in suburban areas rather than in cities because most suburban areas are characterised by low crime wave.

Income, measured using the wealth index, had five categories, with wealth index 'richest' being the base category. The coefficient of wealth index for the poorest residents is omitted because it perfectly predicts the dependent variable; indicating that there is multicollinearity. Accordingly, there is a positive and direct relationship between the poorer, middle and richer household residents and urban choice of settlement. A poorer household has a 71% likelihood of living in an urban area, while a middle-income household has a 41.5% probability of living in an urban area. Households with a rich wealth index have a 14.3% probability of living in an urban area. The results are all

statistically significant at 1% level of significance. A critical examination of the coefficients of the wealth indexes show that as wealth indices increase, the coefficient decreases. In quantitative terms, the poorest individuals are more likely to live closest to urban areas than the richest individuals.

Poorer residents will want to live in urban areas probably because they want to search for minor jobs to sustain themselves. According to Acheampong and Anokye (2013), low income groups tend to trade-off between commuting costs and housing costs. Given their lower income levels and relatively smaller space consumption, they tend to have higher preference for central locations because of the advantage of living closer to their workplaces in central business areas. However, the finding that poorer households have a 71% likelihood of living in an urban area contradicts the findings of Becker and Murhpy (2009), and also Tabuchi (2018): according to them, the incentive to live in a city is a function of income.

Furthermore, the results showed that the gender of a household head significantly influences settlement choices. From the regression analysis, the coefficient of male is positive; showing that males are 11% more likely to live in urban areas than females, which is significant at 1%. From the logit analysis, males are 12.1% more likely to live in urban areas than females, which is also significant at 1%. This can be attributed to the gender division of labour, restrictions associated with movement by women, and the demand for women's labour and time that are associated with domesticity and subsistence provision in rural environments (Chant & Mcilwaine, 2015).

Also, while urbanization is often associated with greater independence among women as a result of better access to services and employment, lower fertility rates, and a degree of relaxation of patriarchal norms within and beyond the family, most urban women experience profound disadvantages compared to men in their daily lives (Chant & Mcilwaine, 2013b; Tacoli, 2014), which might make them prefer rural than urban settlements. However, what is perhaps less known is that women will be the majority of urban citizens in the coming decades partly due to increasing levels of female rural-urban migration (especially in regions where men have traditionally dominated population movements), and also as a result of demographic ageing: across the world, women are generally outliving their male counterparts, and many of these women are urban-based (Chant, 2013; Chant & Datu, 2015; Kinyanjui, 2014).

The result further illustrates an inverse relationship between being single and the choice of settlement. An individual who is not married is less likely to live in an urban area by 0.2%, as opposed to household heads who are married. Those who are single may not have the necessary finance to cope with the cost of living in urban areas as compared to married household heads who can easily

combine resources with their spouses to cope with the cost of living in urban areas. As such, most single individuals will prefer suburban or peripheral residencies where housing costs are relatively low compared to urban areas. According to Tang et al. (2015), urban settlement intentions of married couples might take into consideration family ties, while urban settlement choices of single individuals are characterised with high future uncertainty.

The age of a household head is positively related to urban settlement choices, implying that as the age of a household head increases, there is a 0.1% likelihood of living in an urban area, which is significant at 1%. As an individual grows old, his/her health condition depreciates and s/he will need proper health services that are mostly found in urban areas as compared to rural areas. These results, however, contradicts the findings of Yang et al. (2016) in China who found out that age has a significant negative effect on a person's urban settlement intention: one additional year of age decreased the odds of a person settling in a city in the next five years by 3.1%. Of the persons who were aged 60 years or above in China, less than 5% intended to move and settle in a city in the next five years. These result suggested that older persons who had lived in rural areas for a longer time might have difficulties in finding suitable jobs and adjusting to new urban lifestyles (ibid.).

The study results show that household size is positively related to urban settlement choices. An increase in household size will lead to a 0.9% probability of living in an urban area, which is significant at 1%. This may be due to the fact that as household size increases, household members can be engaged in productive activities, the income of which can be pooled together to support the high cost of urban living. This finding confirms that of Wegedie (2018) who elucidated that households with large family size are more likely to choose urban non-farm self-employment, and formal wage livelihood settlement environments.

The occupations of household heads was grouped into three sectors: primary, secondary, and tertiary sectors. The primary sector was used as the base category. The study found that secondary and tertiary occupations were inversely related to urban settlement choices: household heads with secondary and tertiary occupations were found to be less likely to live in urban areas as opposed to those employed in the primary sector by 30.6% and 25.5%, respectively. This might be explained by the fact that workers in secondary and tertiary occupations are high income earners relative to workers in primary sectors. As such, the former will definitely prefer calmer and less noisy suburban and peripheral environments as residential areas. Moreover, secondary sector occupations require vast land for operation, which is not readily available in urban congested areas.

5. Conclusion and Policy Recommendation

This paper examined the influence of household endowments on settlement choices in Cameroon using indicators derived from the fourth round of Cameroon's Demographic and Health Survey, supplemented with the Multiple Indicators Cluster Survey (DHS-MICS) dataset. The study revealed that educational attainment, income, gender, age of household head and household size had a positive effect on the choice of urban settlement, while marital status and occupations were inversely related to the choice of urban of settlement. The findings contribute to the literature that household endowments significantly influences settlement choices in Cameroon. Based on these results, it is recommended that the government of Cameroon should enhance the potentials of rural areas to make them more attractive for settlement. Besides, it should construct social infrastructures and amenities in rural areas to hearten household choice of rural settlements.

References

Acheampong, A. R & Anokye, A. P. (2013). Understanding households' residential location choice in Kumasi's peri-urban settlements and the implications for sustainable urban growth. Research on Humanities and Social Sciences, 3(9): 60–70.

Agriculture in Cameroon (2022). Growth, trends, Covid-19 impact, and forecasts (2022 - 2027).

Aluko, O. (2012). Impact of poverty on housing conditions in Nigeria: A case study of Mushin Local Government Area of Lagos State. Journal of African Studies and Development, 4(3): 81–89.

Chant, S. (2013). Cities through a "Gender Lens": A golden "Urban Age" for women in the Global South?' Environment and Urbanization, 25(1): 9–29.

Chant, S. & Datu, K. (2015) 'Women in cities: Prosperity or poverty? The importance of multidimensional and multi-spatial analysis', In Charlotte Lemanski and Colin Marx (eds), The city in urban poverty (Basingstoke: Palgrave Macmillan), 39–63.

Chant, S. & Mcilwaine, C. (2013b). Gender, urban development and the politics of space', e-international relations. (www.e-ir.info/2013/06/04/gender-urbandevelopment- and-the-politics-of-space/).

Chant, S. & Mcilwaine, C. (2015). Cities, slums and gender in the Global South: Towards a feminized urban future. Routledge.

Cohen, M. & Simet, L. (2018). Macroeconomy and urban productivity. in *Urban Planet: Knowledge Towards Sustainable Cities* (eds Elmqvist, T. et al.) 130–146. Cambridge University Press.

Cullen, J. & Levitt, S. (1999). Crime, urban flight, and the consequences of cities. *Review of Economics and Statistics*, 61(2): 159–169.

Deeyah, C.L., Ohochuku C. P., & Eke, S. N. (2021). Determinants of house-hold residential location choice among informal settlers in Port Harcourt. MOJES. 6(3): 104–112.

Dick, E & Schraven, B. (2021). Rural-urban migration in West Africa: Contexts, trends, and recommendations. *Global Knowledge Partnership on Migration and Development.*

Food and Agricultural Organization, (2022). The state of agricultural commodity markets. The geography of food and agricultural trade: policy approaches for sustainable development. Food and Agriculture Organization of the United Nations, Rome.

Guo, J. & Qu, X. (2022). Competition in household human capital investments: Strength, motivations and consequences. *Journal of Development Economics*, 158: 102937.

Hao, P. & He, S. (2022). What is holding farmers back? Endowments and mobility choice of rural citizens in China. Journal of Rural Studies, Vol. 89; pp. 66–72.

Hao, P. (2021). Do landholdings affect social mobility in China? A study of rural migrants in Jiangsu. *Cities*, 111.

Ijila, J. O. & Sanusi, A. W. (2020). Household endowment and poverty reduction. *J. Hum Ecol*, 72(1–3): 88–96.

Jiang, L. & O'Neill, B. C. (2017). Global urbanization projections for the Shared Socioeconomic Pathways. *Glob. Environ. Change,* 42: 193–199.

Kinyanjui, N. M. (2014). *Women and the informal economy in urban Africa: From the margins to the Centre* (Uppsala/London: NordiskAfrikainstutet/Zed).

Maarseveen, R. (2021). The urban-rural education gap: Do cities indeed make us smarter? *Journal of Economic Geography*, 21: 683–714.

Mubiru, B., Nuhu, S., Kombe, W., & Limbumba, M. (2022). Women-headed households and housing location preferences in the informal settlements: What can we learn from Luzira, Uganda? *Habitat International*, 127.

Noumba, I. & Feunke, N. L. (2020). Parental education, household health, and household standard of living: Evidence from Rural Cameroon. *International Business Research,* 13(7): 13–129.

Patel, K.S., Verma, P. & Singh, S. G. (2019). Agricultural growth and land use land cover change in peri-urban India. *Environ Monit Assess*, 191(600): 1–17.

Potts, D. (2017). Urban data and definitions in sub-Saharan Africa: Mismatches between the pace of urbanisation and employment and livelihood change. *Urban Studies*, 55(5): 965–986.

Qian, W., Wang, D., & Zheng, L. (2016). The impact of migration on agricultural restructuring: Evidence from Jiangxi Province in China. *Journal of Rural Studies*, 47: 542–551.

Rashid, U, M. (2020). Factors affecting location and siting of settlement. *SEU Journal of Science and Engineering*, 14(1): 44–53.

Saghir, J. & Santoro, J. (2018). Urbanization in Sub-Saharan Africa: Meeting challenges by bridging stakeholders. Centre for Strategic & International Studies.

Tabuchi, T. (2018). *Where Do the Rich Live in a Big City?*. Research Institute of Economy, Trade and Industry (RIETI).

Tacoli, C. (2014). The benefits and constraints of urbanisation for gender equality, environment and urbanization. Brief No. 27 (London: International Institute for Environment and Development).

Tan, S., Li1, Y., Song, Y., Luo, X., Zhou, M., Zhang, L., Kuang, B. (2015). Influence factors on settlement intention for floating population in urban area: A China study. Quality & Quantity, 51(1): 147–176.

Tang, S & Feng, J. (2015). Cohort differences in the urban settlement intentions of rural migrants: A case study in Jiangsu Province, China. *Habitat International*, 49: 357–365.

Tanyi, R. & Adaramola, S. (2023). Bioenergy potential of agricultural crop residues and municipal solid waste in Cameroon. AIMS Energy, 11(1): 31–46.

Testa, A. W. & Sander, W. (2016). Household location and economic development in the Chicago Metropolitan Statistical Area. *Economic Development Quarterly*, 30(3): 232–238.

United Nations Department of Economic and Social Affairs (UN-DESA, 2015). Rural development: Transforming our world: The 2030 Agenda for Sustainable Development. A/RES/70/1. SDGs, Knowledge platform.

Wegedie, T. K. (2018). Determinants of peri-urban households' livelihood strategy choices: An empirical study of Bahir Dar city, Ethiopia. *Cogent Social Sciences*, 4(1): 1–22.

Yang, C., Xu, W., Liu, Y., Ning, Y. & Klein. K. (2016). Staying in the countryside or moving to the city: The determinants of villagers' urban settlement intentions in China. *The China Review*, 16(3): 41–68.