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# Regional Development Studies

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Regional Development Planning in Nigeria



Nagoya, Japan



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# **Editorial Introduction**

**Peter M. Ngau** University of Nairobi

Volume 14 of *Regional Development Studies* (*RDS*) presents nine articles. The first article investigates the behaviour of firms on locational decisions and determinants of firm transformation in Jamaica and Kenya, respectively. The second group comprises four articles examining separate themes at the household and local levels, one on "determinants of family size in Nyeri, Kenya," second on "household-level food security in Sri Lanka," third on "household health effects of the use of biomass fuels in Ghana," and fourth on the "role of housing licenses in accessing loans in Tanzania". The third set consists of three articles at the national and regional levels: one examines a new framework for an alternative tourism model for the Caribbean territories; a second article examines the extent and determinants of intra-national digital divide in Kenya; and the last article examines the evolution of regional development policy and practice in Nigeria. The nine articles present stimulating case studies from the African, Asian, and Caribbean regions.

The first article, entitled "Predicting the Likelihood of Firms Locating along a New Road Facility: The Impact of Transportation Variables on Entrepreneurs' Decision Making" is by Sandria Tennant. It revisits a longstanding debate on the role of transport in regional development. Unlike several studies that have examined the impact of transport infrastructure investment on socioeconomic development, the contribution of this article lies in investigating the likelihood of a new transport infrastructure project in influencing the decision of entrepreneurs to relocate their business to sites along the new infrastructure. The article applies logistic regression techniques to predict the likelihood of business clustering along the corridors of a newly constructed highway in Jamaica.

It is organized into four main sections, including the introduction. The second section provides a brief overview of the literature, third section details the data, model, and methods used in the analysis, while the fourth section presents the empirical findings. The author provides a brief overview of factors that influence business locational decisions. The literature identifies two schools of thought; first, the cost-centred theories which highlight a firm's optimal location as that which allows inputs to be factored in production processes at the least cost. The second school consists of theories that seek to examine the influence of scale considerations in a firm's willingness to locate in a particular region. Such considerations include the possibilities of economies of scale, localization economies, and urbanization economies. The research sought to test which variables have the most significant bearing on businesses' choice to locate in a particular area. The author describes the data, model, and method of investigation, including sampling frame, survey instrument, and procedures for analysis, followed by the results of analysis. A summary of executives' views as to the relative influence of a number of factors on their locational decisions is presented. The results reaffirm recent trends which show that firms have moved away from giving greater consideration to factor input costs while proximity to markets and labour supply heavily influenced the concentration of firms in the urban centres. In the case of Jamaica, the study reveals that businesses' decisions as to where to locate are not significantly driven by traditional cost considerations such as labour, utility, and access to raw material. The final decision to locate a business can be based on subjective parameters rather than the traditional objective cost and market access factors.

The second article by Peter Kiko Kimuyu, titled, "Do Small Firms in Developing Countries Ever Transform? Evidence from Small Manufacturers in Kenya" explores the question whether or not small firms ever transform and, if they do, how such transformation affects firm performance. What characterizes firm transformation and its depth? According to the author, these firms not only transform, but often enjoy deep transformation. Analysis of data collected on the growth and transformation of small enterprises reveal that transformation of small manufacturing firms in Kenya is shaped by firm age, size at start-up, and level of start-up capital. On the other hand, the results pick a negative association between start-up size and transformation. The article breaks new ground in presenting a quantitative analysis of small firm transformation.

The article is organized in five sections, starting with the introduction. Section two is a review of literature on firm dynamics as it applies to small firms. Empirical results are presented in the third section where the incidences of different dimensions of enterprise transformation are analysed before turning to the structure of such transformation in section four. Section five is the conclusion. In the review of literature on small firm dynamics, the author observes unique characteristics of firms in Africa such as the "missing middle" phenomenon. He looks at the studies that have sought to explain this state of affairs and the continued existence of micro-enterprises. The author then discusses literature explaining the structure of firm dynamics by factors such as size of firm, entrepreneurship, firm age, and managerial capability. Also covered are studies that identify key constraints to expansion of small firms and relationship between education and business success.

In the third section, the author explains the concept of transformation and presents empirical results that demonstrate evidence of transformation as small firms experience change. According to the author, small manufacturing firms in Kenya experience a wide range of transformation-related dynamics, which include formalization of operations through registration of business operations and keeping books of accounts for firms hitherto operating informally. In section four, the formal structure of the transformation of small manufacturing firms is explored using probit methodology and poisson methodology. The results show that transformation of small manufacturing firms in Kenya is shaped by firm age, size at start-up, and level of start-up capital. There is also an inverse firm size factor in the firm transformation process. In conclusion, the author demonstrates that not only do small manufacturing firms in Kenya transform, they also experience broad transformation.

The third article is by Tabitha W. Kiriti-Nganga, titled "Socioeconomic Determinants of Family Size in Nyeri District of Rural Kenya". The objective of the article is to investigate the impact of social and economic factors on family size in rural Kenya and draw public policy implications from the results. The study uses social and economic theories of family size to investigate the determinants of family size in a rural setting, Nyeri in Kenya. According to the author, households with high income in rural Nyeri have more children unlike in developed countries where the more the income that households have, the fewer the children that they would like to have. According to the author, the case of Kenya can be explained by the fact that these incomes are comparatively small, which makes the income effect quite small and other sociocultural effects are more at play in determining family size than income.

The article is organized into six sections. The first section, background, reviews Kenya's economic performance over the last five decades against trends in population growth, total fertility rate, and child mortality. Economic performance has been erratic with major slumps. On the other hand, population growth has been exponential. Fertility rate has remained high at 5.0. Combined with declining mortality, Kenya has one of the world's fastest population growth. The projected population for 2050 has been revised from 54 million to 83 mil-

lion. The author observes that a high fertility rate not only has effect on population growth, but also may translate into low per capita income. Fertility rate can be influenced by a number of factors. In the second section, the author examines diverse theories that seek to explain the number of children demanded by a household. From the reviewed literature it emerges that family size is affected by the interaction of social, cultural, economic, and environmental factors on the one hand, and biological and behavioural factors on the other. The study examines the combined influence of social and economic factors as determinants of family size.

The third section presents the conceptual framework, study site, and sampling frame. The model consists of both proximate determinants and what the author refers to as background factors that influence fertility level and family size. Section four discusses the result of data analysis. Using multiple regression analysis, the author discusses the importance of factors such as age of woman, education, employment, ownership of livestock, gender composition, and availability of ample land for cultivation and, lastly the conclusion. The author reiterates that the variables found to significantly explain variations in family size in the Nyeri case were age, ownership of livestock, preference for male children, use of free child labour, and farm size. In view of the above, the author advances a number of policy recommendations.

The fourth article, titled "Food Security and Rural Poverty Reduction: Empirical Evidence from Sri Lanka" is by Rupananda Widanage. The article aims to investigate the link between food security and household-level poverty, and present policy strategies for improving the food security of farming households. The study demonstrates that an increase in household income leads to improved food security of farming households. Furthermore, an estimated income function identifies the policy strategies for rural poverty reduction, and thereby improving food security. The author argues that the link between poverty and food security at the household level, or micro level, is significantly different from those at the national level. Macro-level studies fail to adequately analyse rural food insecurity at the household level because their main focus is urban areas, rather than rural areas. In this regard, national-level food self-sufficiency is not a sufficient condition in achieving household-level food security.

The article is organized into seven sections, including the introduction. In the introduction, the author defines concepts of poverty and food security. It also notes the limitations of macro-level studies in addressing food security at the household level. Next, the article elaborates upon the relationship between poverty and household-level food security in Moneragala district. The author reports that poverty in the rural areas is three times higher than in the urban areas and severity of poverty in Moneragala district is higher than in other districts in Sri Lanka. The third section of the article provides a conceptual framework for analysing household-level food security in the district. The author develops functions for household-level food security and for identifying factors that lead to increasing income and improvement in household-level food security. A brief description of the research design is provided in the fourth section. There were three steps to data collection. In the first step, a rapid rural appraisal was used to gain background information about the socioeconomic problems associated with farming households in the district. This was followed by focus group interviews with selected farmers and local development officers. At the third step, a questionnaire survey was conducted where 200 households were interviewed.

The fifth section gives results of econometric analysis of the link between income poverty and household-level food security. The model (estimated income function) is found to be significant and explains 64.5 per cent of the variation. An increase in household income improves the food security by raising the purchasing power of farming households. The sixth section presents the policy implications of improving food security of farming households and improving rural poverty reduction in Moneragala district, Sri Lanka. The author

points at the need to increase household income in order to improve the food security status of faming households. The seventh section is the conclusion. According to the author, policymakers should pursue strategies, as identified in this article, that lead to improving the food security of farming households in the district.

The fifth article is by Aba Obrumah Odoi-Agyarko and Daniel K. B. Inkoom, titled "The Impact of Biomass Cooking Fuels and Human Health in Rural Ghana". The article examines the socioeconomic and health consequences of wood fuel usage in the traditional cooking stove in Ghana. The study also examines the structural characteristics of the traditional cooking stove and the amount of wood fuel consumed. The results showed that almost 99 per cent of all households use biofuels and that indoor air pollution (IAP) is indeed a problem in the study area. The authors report that users are exposed to pollutant concentrations ten times the amount allowable by the World Health Organization (WHO). In addition, women undergo a lot of drudgery due to the use of biofuels. They walk approximately 3 km to collect fuel wood and about 42 hours per month per household are expended in fuel-wood collection and transportation. The analysis suggests that considerable welfare gains can be achieved from improvements in stove and kitchen ventilation.

The article consists of four sections, including the introduction. The introduction highlights the global use of fuel wood and the epidemiological consequences. The second and third sections cover research methodology and data analysis. The study employed a multistage sampling design for collecting detailed primary data on household-level exposure indicators from a large sample of 625 households. The study also entailed IAP monitoring which covered a smaller sample of forty-five households. Descriptive statistics and logistic regression analysis were used to examine trends and relationships of exposure to IAP and health outcomes. The fourth section discusses results in terms of basic characteristics of the study population, household energy consumption and use patterns, health and wellness of households in relation to their energy use, results of IAP monitoring, and local health problems associated with IAP. The study was conducted in Bongo district in the Upper East region of Ghana. According to the authors, the population is characterized by large families, very low education levels, predominance of subsistence agriculture, and traditional housing. Among the community there is limited awareness of health risks associated with IAP. The results of analysis showed high prevalence of smoke-related diseases: couching, eye irritation, and headache. These are, in turn, related to type of fuel used and kitchen ventilation. The fifth section forms the conclusion. The study concludes that cooking with biomass fuels in traditional stoves emit severe gaseous pollutants, which are highly hazardous for human health, especially for women and children who are exposed to that air for a long time. Four recommendations are made: improved cooking stoves, plantations of fast-growing fuel-wood species, alternative renewable energy sources, and better understanding of the epidemiology and effects of IAP.

The sixth article is by Riziki Silas Shemdoe, titled "Role of Housing Licenses in Accessing Loans as a Strategy to Urban Poverty Alleviation in Tanzania". According to the author, housing licenses is a key strategy which the Tanzanian Government has implemented since 2004 aimed at addressing the issue of insecure tenure in informal or squatter settlements. The article examines the use of the licenses issued after the formalization process, and the acceptability of housing licenses to the credit and loan-giving facilities. It is organized into four sections consisting of the introduction, methodology, results and discussion, and conclusion.

In the introduction, the author reviews initiatives for addressing insecure tenure facing informal or squatter settlements in Africa. A critical question in all the initiatives is what happens after the poor are provided with legal rights to residential property. In Tanzania, the government has piloted giving residential licenses to the urban poor in informal settlements since 2004. The study examined the willingness of families to use the housing li-

censes to access credit and the acceptability of the issued licenses to credit institutions. In section two, the author presents the methodology. He describes the study area and methods of data collection. Three wards in Dar es Salaam were selected for data collection. Data collection followed three approaches: household interviews, key informant interviews, and secondary data from published reports.

Results of the study are presented in the third section, beginning with characteristics of the community in the study area. About 38 per cent of the respondents were of age 31-45 years, and 44 per cent were 46-60 years. Concerning occupation, 53 per cent owned small businesses and 25 per cent were dependents. The author also reports that 96 per cent were owners of houses and about 84 per cent had acquired licenses of houseownership. The author found that community perception was divided concerning the formalization process; about 30 per cent perceived the process to benefit the government through tax collection while 26 per cent perceived the process to benefit the community by providing property rights.

When interviewed with regard to taking loans, only 5.6 per cent of the respondents mentioned to have taken loans. However, about 65 per cent of the interviewed household heads indicated willingness to take loans, and about 56 per cent of the interviewed households were aware of the financial institutions which accept housing licenses as collateral. Furthermore, the study revealed that households with housing licenses are required to have an ongoing business and the house must be insured in order to qualify for loans. According to the author, the role of housing licenses in poverty reduction is minimal as the communities perceive these licenses to even bring a burden to the minimal resources. On the other hand, the programme has been beneficial to the municipalities by expanding their revenue base. To address challenges associated with the programme, the author makes several recommendations for the benefit of the urban poor in informal settlements. They include sensitization and popularization of the project and increasing the validity of the licenses.

The seventh article, titled "Mass Tourism and Endogenous Development: The Caribbean Experience" is by Jessica Bailey, Anthony Clayton, and Nikolaos Karagiannis. The article examines the challenges and dilemmas of a tourist dependent economy, and while recognizing the factors that contribute to current problems the authors propose an alternative tourism model for the Caribbean countries. In this regard, the article describes the means of improving the competitiveness of Caribbean tourism while boosting local development prospects and retaining more of the industry's earnings in the region. The article reviews tourism literature and utilizes data from secondary sources and available statistical information on the Caribbean region.

It is organized into four sections, including the introduction. The second section analyses the Caribbean tourism industry according to its principal characteristics, and sets the sector in the context of economic development. The authors observe that Caribbean nations have a genuine comparative advantage in tourism and have developed very successful tourism products. Tourism has delivered enormous benefits in terms of income and job creation. According to the authors, gross tourism receipts are above one-third of exports and the industry directly employs more than half of the labour force in some Caribbean countries. By 2000, the region had over 20 million tourist arrivals with more than 12 million cruise passenger arrivals, and received over US\$18 billion in tourist receipts.

The third section discusses developmental, economic, social, and environmental impacts and challenges that emanate from tourism growth in the Caribbean. The authors, in a detailed exposé, seek to demonstrate the extent to which currently tourism perpetuates material relations of highly unequal exchange in the periphery. The dominant role of foreign capital and ownership in the industry is well entrenched in the Caribbean. The authors observe that although there are a large number of small locally-owned hotels throughout the region, they are finding it increasingly difficult to compete with the big name all-inclusive

(foreign-owned) resorts. Another major challenge facing Caribbean tourism is its high import content and the attendant consequence that much of the revenue earned from the industry does not remain in the local economy. In addition to the high leakage rates, the sector has weak inter-sectoral linkage with the rest of the domestic economy. The authors also observe that tourism is often associated with adverse social, cultural and environmental impacts. The fourth section of the article provides policy measures for addressing the problems associated with Caribbean tourism, in ways which support local endogenous development. The proposal is for a proper tourism strategy, which includes a regional/local approach to tourism planning, intelligent planning and regulation of the industry, a more diversified product, and greater local involvement in the process.

The eighth article is by Koech K. Cheruiyot, titled "A Spatial Analysis of the Intra-National Digital Divide in Kenya as a Regional Development Dilemma". The article examines the extent and the determinants of the intra-national digital divide in Kenya as well as explores the link between the country's intra-national divide and the pattern of economic development. By employing spatial analysis on regional-level Internet café data, the article shows the marked extent and determinants of Kenya's intra-national digital divide.

The article is organized into four sections, including the introduction. In section two, the article reviews both theoretical and empirical literature. Here, the author turns to three possible theories to explain spatial digital divide in Internet diffusion, which are the diffusion theory, knowledge gap theory, and cumulative causation theory. The author further discusses scales of digital divide (global, intra-national, and intra-urban), followed by an account of information communication technology (ICT) development in Kenya, telecommunication in general, and the Internet in particular. The third section of the article outlines the methodology employed in the study. The study covers the entire country using sixty-two districts as the unit of analysis. Data collected consisted of number of cafés while so-cioeconomic, demographic, and infrastructure variables are used as explanatory variables. The author discusses techniques employed for data analysis, which include chloropleth mapping, measures of spatial concentration, correlation, regression analysis, and a variety of statistical tests.

The fourth section of the article covers data analysis and interpretation. The author begins by depicting the current distribution of electricity, fixed telephone lines, and Internet cafés all over the country. This is followed by an analysis of Internet café concentration using a variety of techniques. Finally, the article examines the spatial determinants of Internet diffusion in the country. Factors tested include household income, urbanization, demography, education, and infrastructure. The results of the above analysis show strong evidence of spatial clustering reflecting presence of a digital divide in Internet diffusion in the country. It shows that the spatial digital divide in Internet diffusion in the country is strongly associated with regional income, degree of urbanization, population concentration, and level of infrastructure development. In conclusion, the author observes that the existing pattern of digital divide in Kenya roughly mirrors the existing disparities in economic development. This means that for ICT-related development to lead to convergence there is need for deliberate demand-and-supply-side policy prescriptions aimed at enabling lagging regions to increase their adoption and use of the Internet and related ICTs.

The ninth article is by Don C. I. Okpala, titled, "Regional Development Planning in Nigeria: The Genesis and Historical Evolution of the Process". The article reviews the genesis and evolution of regional development planning thought, policy, and practice in Nigeria since independence in 1960. The article describes some of the regional development programmes and projects undertaken by the national government over the years. It is organized into six main sections. In the first section, the author introduces the geography and political organization of the federal government of Nigeria. According to the author, Nigeria is naturally highly endowed, but her socioeconomic development (life expectancy,

literacy, and poverty incidence) is poor. Nigeria has a federal government system and over time the country has seen successive creation of states and local governments in search of decentralization such that today it comprises thirty-six states and 774 local government units.

In the second section, the author examines the evolution of development planning in Nigeria since independence 1960. Three distinct phases are identified: the initial phase (1960-1970) was dominated by national and sectoral development planning, with little regional development planning in the classical sense. The only exception was the Niger Delta which was designated as a special development area. In the second phase (1970-1985), there emerged greater appreciation of regional development planning in Nigeria. The author attributes this to growing intellectual input from the University of Ibadan where leading scholars highlighted the necessity of a regional approach to development planning given the complex ethno-socio-political composition of the country and in the aftermath of the Nigerian civil war. They called for equal amount of public investment to minimize regional inequality and ensure social justice in spatial context, political stability, and national integration. Due largely to the growing influence of such views, the second and third National Development Plans reflected a changed development planning perspective by incorporating a spatial dimension in development planning and paying greater attention to regional development. During the third phase beginning with the 4th National Development Plan (1985), Nigeria reverted to sectoral development planning at the federal level while regional development planning remained ad hoc. However, the focus gradually shifted to regionalization of development planning informed by more or less a home grown development and poverty reduction agenda emphasizing democratic principles, economic prosperity, social inclusiveness, and environmental sustainability.

In the third section, the author demonstrates in greater detail the practice of regional development planning in Nigeria at the state and local government levels. The author observes that each state-level sectoral ministry and department identify development needs and expected benefits guided by a prior generation and analysis of data on the state's or region's economy. The main organs responsible for coordination of development proposals at the state level are the department of finance and/or economic development, while approval is given through the state executive council. At the local government and community levels, development needs are articulated through a participatory process (stakeholder consultations/meetings) followed by contributions and project implementation. In the fourth section, the author describes the three main areas that are the focus for regional development at the state level which are – transport infrastructure, educational infrastructure, and health infrastructure development.

In the fifth section, the article examines institutional framework and financing for implementation of regional development plans. The institutional framework for implementing development plans at the state/regional level consist of government sectoral ministries and respective parastatal agencies. Revenue generation in Nigeria is highly centralized with the federal government accounting for up to 95 per cent of revenue. The centrally collected revenue is shared at set proportions (federal government 56 per cent; state governments 24 per cent; and local governments 20 per cent). Thirteen per cent of the revenue is set aside and shared among state/local governments, from which the mineral revenue is derived. The author observes that generally the performance of both state and local governments in the utilization of the shared revenue varies unevenly across, but generally has not been profound.

At the conclusion, the author notes that regional development planning in Nigeria has had limited scope, except for the Niger Delta Special Development. The practice in Nigeria is best described as "regionalization of development planning" in which the sub-national political units are responsible for, and undertake, the planning and development of their respective regions.