Vol.16, 2012

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United Nations Centre for Regional Development Nagoya, Japan



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An Annual Journal of the United Nations Centre for Regional Development Published in Collaboration with the University of Nairobi

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should be sent to: UNCRD/RDS Committee United Nations Centre for Regional Development Nagono 1-47-1, Nakamura-ku Nagoya 450-0001, Japan

Annual Subscription Rate (including postage by surface mail):
Developing Countries

Developed Countries US\$20.00

US\$15.00

Please send subscription order to:
Publications

UNCRD Nagono 1-47-1, Nakamura-ku Nagoya 450-0001, Japan Tel: (+81-52) 561-9377 Fax: (+81-52) 561-9375 E-mail: info@uncrd.or.jp

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Editorial Introduction

Peter M. Ngau University of Nairobi

This issue of *Regional Development Studies (RDS)*, Volume 16 presents nine selected articles, three covering broad issues of regional development at country and regional level, four on environmental issues, and two focusing on sectoral aspects on agriculture and urban transport.

The first article by Innocent Chirisa and Smart Dumba, entitled "The Political Economy of Spatial Planning in Matabeleland South Region, Zimbabwe" examines the link between the political economy and spatial planning practice in Zimbabwe, using the case study of Matabeleland South. The authors seek to demonstrate that the public planner's role is highly influenced by the prevailing political actors and ideology. The article is organized into five parts consisting of introduction, methodology, review of literature, spatial planning in Matabeleland South, discussion of emerging issues, and conclusion.

The introduction provides a brief political history of Zimbabwe from colonial to post independence period, highlighting the evolving institutional structures, geo-political tension, and socio-economic consequences. The main objective of the paper is to examine the nature and extent to which spatial planning has transformed Zimbabwe. The paper is based on research conducted through a mixed approach of oral interviews, focus group discussion, observation and secondary data analysis. The second part of the paper provides a review of theoretical and empirical literature. Beginning with definitions, the paper revisits the debate on whether town planning is a neutral and value free activity. Utilizing a review of development trajectory of colonial and post- independence Zimbabwe the authors provide an account of how interests of the dominant political and economic actors shaped the evolving political, institutional and organization of the country. During the colonial period segregation policies created distinct spaces for whites and Africans in both urban and rural spaces. In the post-independence period attempts were made to restructure the spatial landscape of the country through institutional and planning reforms, largely to redress imbalances created during colonial period. However, the reforms created a crisis, first involving communities invading state farms as well as large white-owned commercial farms. Later the war veterans took to invading white farms with tacit support of the government, leading to international condemnation, trade embargo and economic turmoil.

In the third part of the article the authors present spatial planning in Matabeleland South province to illustrate the link between political economy and spatial planning in Zimbabwe. During the colonial period, much planning focused on the European settled areas which relied on exploitation of the region's natural resources and channeling the proceeds towards the development of urban infrastructure in the exclusive white urban areas. The economic improvement of European areas (towns and farming areas) was inversely related to the impoverishment of the Africans through displacement, labor control and poor living conditions. The authors observe that this engendered African opposition which translated into nationalist politics. In response the Rhodesian government began to plan for the native people, as a reactionary measure. In the post-independence period spatial planning initially emphasized social development (1986-1991) but later emphasized economic development in the period of

Structural Adjustment Programme (1991-1996). In the rural areas a growth centre policy focusing on physical and social infrastructure was used to redress the imbalanced nature of colonial development. Another factor affecting spatial planning was political unrest and marginalization of the region before the unity accord of 1987.

In the last part of the article the authors focus on the current trends and observe two areas of concern: first, illegal developments and uncoordinated development, and second, increasing corruption involving planners and developers both undermining development control. The authors give two examples to illustrate these trends. One is the development of a shopping mall in the midst of Victoria Falls rainforest facilitated through political patronage. The second case is the construction of vehicle weighbridge in Beitbridge town in defiance of planning guidance. From the foregoing, the authors argue that spatial planning far from being value free and apolitical tends to be immersed in an environment determined by powerful state and business interests.

The second article, entitled "Impact of Services Liberalization on Cross-border Agricultural Trade in the East Africa Region" is by Christopher Hugh Onyango. The article utilizes the gravity model to analyze the effects of service liberalization on cross-border trade in agricultural commodities within the East Africa community. Overall, the empirical results indicate that liberalization of business, insurance, and communication services significantly influence cross-border agricultural trade in the region. The article is organized into five main parts, consisting of introduction, literature review, methodology, results and summary, conclusion and recommendations. The introduction takes note of the importance of agricultural and service sector in the East African economies. The author points at the challenge facing agriculture in the region where there is limited cross border trade in agricultural commodities. In this regard, the author points out that the linkage between agricultural trade and services is quite often overlooked.

In the second part, literature review, the author explores the gravity model concept from both theoretical and empirical perspective. Application of the model in international trade analysis is reviewed briefly. For the East Africa case, the author provides model specifications for the application of the gravity model to estimate the effects of international trade in services on agricultural trade in East Africa. The equation is estimated using data set of 180 observations on bilateral agricultural trade and trade in services in the five East Africa partner states for the period 2004-2008 for the commonly traded agricultural commodities, namely beans, maize and rice. The fourth part of the article discusses results of the analysis beginning with descriptive statistics on both services and agricultural trade, followed by econometric results for estimating the gravity model. The results show that the model explains 22 per cent of the variation in bilateral agricultural trade flows within the East African countries. Results from aggregated services (based on 2 stage least squares) are then presented. These show a positive relationship between total trade in services and cross border trade in agricultural products. Finally, results by service sectors are presented.

In the conclusion, the author observes that empirical results from the study support the argument that trade in services positively influence agricultural trade in the East Africa region. In view of the above, the study makes recommendations for removal of restrictions on trade in services, reform of rural credit institutions and provision of incentives to support agricultural credit, fast-tracking of implementation of the regional framework agreements on trade in services, and finally development of mechanisms for collection or reporting of services and service related information and data.

The third article, by Marie Freckleton and Patrice Whitely, is entitled, "Regional Integration, Institutions and Export Performance in CARIFORUM Countries." The article examines the role of institutions in export performance of CARIFORUM countries. According to the authors, developing countries are increasingly entering into regional trade agreement intended to increase market access and expand exports. In this article, a gravity model is used

to analyse the impact of regional integration and institutions on export performance in CARIFORUM countries over the period 2004-2009. The findings of the study suggest that regional integration had a positive effect on export while institutional factors constrained export growth.

The article is organized into six main parts, being the introduction, institutions and trade, overview of CARIFORUM trade environment, methodology, estimation of results, and the conclusion. In the introduction, the authors observe the potential benefits of regional trade agreements but also the role of institutions in export performance. In part two of the article, theoretical arguments and empirical support on the role of institutions are advanced while, in part three, an overview of CARIFORUM trade environment is outlined. These are structural and institutional constrains faced in the region, with emphasis on infrastructure, customs administration and quality of contract enforcement. Part four of the article presents the methodology and sources of data while part five discusses findings from the study. In this study variables representing aspects of the institutional environment include average time required to export or import, the average number of days required to settle contract, and a dummy variable to capture the effects of regional trade agreements. In the findings the negative coefficients on export/import time as well as average time required to settle contracts is interpreted to indicate that the region's export performance is adversely affected by insufficient customs procedures and quality of institutional arrangements for enforcement of contracts. Given the impact of institutional quality the authors argue for policies designed to build the institutional capacity required for international competiveness.

The fourth article, "Assessment of Waste Management and Urban Governance in Lagos Metropolis," by Leke Oduwaye and Ilechukwu Victor examines the relationship between governance and waste management in Lagos. It uses descriptive statistics and regression analysis to examine the contribution and relevance of urban governance to the explanation of solid waste management. The article is organized into six main parts consisting of introduction, literature review, the study area, methodology, data analysis and results, and conclusion. In the introduction the article highlights the phenomenon of rapid urbanization and the consequences for solid waste generation and management in cities like Lagos. Faced with such challenge many cities tend to focus on technical and financial issues with little or no consideration on governance issues such as transparency, equity, accountability and participation.

In part two of the article literature is reviewed on definition of key terms such as solid waste, solid waste management, and governance, the link between governance, solid waste management and urbanization and trends in solid waste generation. In the third part, the article provides description of Lagos, the study area, including a brief history of its solid waste management. According to the authors, solid waste in Lagos has been increasing at 6 per cent in tandem with population increase. The institutional framework established to manage solid waste consists of the Lagos State Waste Management Authority (LAWMA), private sector participation, and the Ministry of Environment. Despite this, Lagos metropolitan area is littered with refuse. In part four, the article presents the study methodology leading to analysis of the relationship between governance variables and solid waste collection. A multi-stage sampling procedure was used to select 224 households from across nine wards in the metropolitan Lagos. A regression analysis model is used in order to determine collective and individual contribution of urban governance variable. The article concludes that solid waste management is significantly determined by urban governance variables including consistency in waste collection by the agency, how the agency communicates to the waste generators, how citizens present complaints and the level of their participation in waste management decisions.

The fifth article by Akinbamijo Olumuyiwa Bayo and Olugboji Olanike Olubunmi, entitled, "Environmental Justice and the Missing Links: A Study of High Density Residential

Districts of Kaduna, Nigeria," examines the extent to which environmental justice is provided or denied among neighbourhoods in Kaduna, Nigeria. Using data from household questionnaire, interviews of planning and environmental management officials, and focus group discussion the article shows the limitations of the current practice of land use planning agencies (public and private) and environmental enforcement agencies in promoting environmental justice in Kaduna. The article is organized into five main parts consisting of introduction, literature review, methodology, discussion of results, and conclusion. In a brief introduction, the article traces the origins and mandate of planning, to deal with social-physical and health problems of the emerging city. The article aims to examine the consequences of physical planning and environmental management in promoting environmental justice in Kaduna.

The article provides a brief introduction and a literature review. Here the key principles underlying urban planning and environmental justice are presented and an account of planning and environmental legislation in Nigeria is given. According to the authors, rapid urbanization and uncontrolled industrial practices have undermined environmental justice. Physical planning and environmental management have both failed to address the environmental consequences of rapid urbanization and industrialization. Part three of the article is on research methodology. The study data was derived from questionnaire targeting selected residents, interview with officials of planning and environmental management agencies and focus group discussion in Kaduna.

In the fourth part, the article discusses results of the data analysis. It is revealed that the environmental abuse (reflected in reported complaints) is widespread, but more concentrated in low income neighborhoods close to the industrial zone of the city. Here the quality of state infrastructural services is poor. It is observed that a large number of low incomes have their residence here owing to low rent and proximity to work and trade. The article points out that much of planning by both public and private agencies in Nigeria is technocratic and disengaged with limited impact for environmental well-being of the urban poor. Its main limitation includes political interference, poor funding and inadequate technical staff. In the conclusion the article highlights the environmental injustice reflected in the poor living conditions of the urban poor neighborhoods. Current planning contributes to marginalization of the urban poor and lack of basic infrastructure places heavy burden of environmental injustice on them. The article presents a strong argument for planning that strives to establish a just society.

The sixth article, entitled"Gold or Health? A Survey of Wassa West Mining District in Ghana," is by Patrick Kamla Agbesinyale and Daniel Kweku Baah Inkoom. The article examines the effects of surface gold mining on health of host communities in the Wassa West District of Ghana. The findings of the study reveal an upsurge of diseases like malaria, upper respiratory tract infections, water borne diseases, sexually transmitted diseases, anemia and mine injuries which appear to correlate strongly with the increasing intensity of surface mining. The article is organized into six main parts, the introduction, theoretical underpinnings, conceptual framework, methodology, findings and discussion, and conclusion.

In the introduction, the article gives a brief background on Ghana's economic policy from mid 1990s which aimed to attract foreign direct investment (FDI) in the mining sector, including gold surface mining. According to the article, the policies resulted into high inflow of FDI in the sub sector and steady growth in gold output and revenue. The question remains about the ecological, economic and social costs of the mining activities. The article presents a brief cross-national review of mining health implications and justification for examining the health implications of FDI driven surface gold mining in Wassa West district in Ghana. Part two and three of the article cover theoretical underpinnings and conceptual framework, respectively. From a theoretical perspective, the article explores the dual debate, on the one hand, the neo-liberal economic argument that supports FDI and the counter argument, re-

ferred to as, 'resource curse syndrome' which is the sad fate often associated with poor mineral rich countries. According to the neo-liberal economic theory FDI compensates for lack of domestic capital for national development, including mineral exploitation. The counter argument posits that most poor mineral rich countries tend to perform poorly in economic growth and quality of life. Following on the above theoretical debate, the article utilizes a simple cause-effect framework to test the link between common mining related diseases and specific mining activities, operations and processes.

Part four of the article presents the research methodology. The study utilized both primary and secondary data sources; the former included household survey, key informant interviews, focus group discussion, observations, and transect walks. Part five forms the bulk of the article devoted to discussing the findings of the study in subsections covering health related effects of mining, air pollution and respiratory infections, water pollution and water-borne diseases, noise pollution and its effects, malnutrition and related health conditions, and mining related injuries. The authors while cautious that there is hardly any direct causal link between surface gold mining to the various health problems also argue that the evidence presented from the field does suggest a strong correction between the upsurge in the diseases and other health implications and the expansion in surface gold mining operations in the district from the mid-1990s onwards. The article suggests that extension of surface gold mining in Wassa West district has led to ecological and health crisis aggravating diseases and ill-health conditions for the local communities.

The seventh article by Francis Mwaura, is entitled, "The Geographic Pattern and Temporal Trend of Natural Hazards and Disasters in Kenya." The article attempts to evaluate the status of natural hazards and disasters in Kenya by considering their typology, geographic hotspots and temporal trend for the 1900-2010 period. Over the period, the article reports that weather related disasters accounted for over 70 per cent of all disasters in the country with floods, drought and landslides as the most dominant. The article is organized into five main parts consisting of introduction, the study area, methodology, findings and discussion, and conclusion. The introduction provides definitions of the terms natural hazard and disasters, followed by a brief account of occurrence of major world disasters. The article provides evidence of increasing frequency of natural hazards and disasters in the world while also showing that areas of population concentration and poverty are more vulnerable to environmental disasters. It then discusses global and African response to occurrence of natural disasters through the Hyogo Framework of Action (2005) and Africa's Programme of Action (POA) for the Hyogo Framework of Action. Despite the author observes that there is limited empirical information on occurrence of disasters and limited theoretical understanding of the relationship between environment and society.

The second part of the article gives a brief background of the study area. It is observed that Kenya is characterized by diversity of landforms which are susceptible to a wide variety of natural hazards and disasters. Part three of the article presents the research methodology. The analysis relied largely on secondary data obtained from the National Disaster Operation Centre (NDOC) and print media sources. Clearly both sources do reflect a limitation to the extent that recording and reporting of disaster occurrence has improved over time. Findings and discussion of results is given in part four of the article, with the main highlights being: that weather related events (flooding, droughts, and landslides) formed the most frequent form of natural hazards and disasters in Kenya (accounting for 70 per cent of all disasters) in the 1900-2010 period; that natural hazards and disasters frequency increased in the 2000s; that about 28 per cent of the disasters had a country-wide occurrence; that the specific regions which were much vulnerable to natural hazards and disasters were the Rift Valley and Coast regions, followed by Nyanza, Eastern and North Eastern. Part five of the article is the conclusion which, in line with the foregoing analysis points that Kenya is faced with natural hazards and disasters of dynamic character, with the typology changing from

time to time, the main types being flooding, drought and landslides. It is also revealed that Kenya is experiencing increasing trend in natural hazards and disasters since 2002.

The eighth article, entitled, "Sources of Agricultural Productivity Growth in Orissa, India: A Regional Perspective," is by Anugu Amarender Reddy. The article examines agricultural growth patterns in Orissa state, India focusing on sources and magnitude of interstate and inter-district disparities before and after liberalization policies started in the early 1990s. The article reports that during the period 1991 to 2008 the growth rate of agriculture in Orissa was slower than all India, but growth rates picked up in recent years. It also shows that there is perceptible increase in regional disparities within Orissa, resource rich regions showed faster growth than resource poor regions. The paper is organized into five main parts, consisting of introduction, literature review, conceptual framework and methodology, results, and policy options.

In the introduction, the article opens with the debate on causes and remedies of regional disparities in periods of policy transition. The case of Orissa is then presented, as one of the poorest states in India. The central research problem for the article is then to investigate and account for the growing inter-state and inter-district disparities in Orissa at a time of policy transition. In part two, the article reviews theoretical debates on regional growth seeking to identify testable hypothesis. Part three of the article presents the conceptual framework and methodology in seeking to test the divergence or convergence of agricultural growth in Orissa state, first focusing on inter-state disparities followed by inter-region and inter-district disparities. The study applied the Bettase and Coelli technical efficiency model.

In part four, the article discusses results of data analysis. From an inter-state perspective, the results show stagnation in Orissa agriculture during both the pre-liberalization period (1971-1991) and post-liberalization period (1991-2008). Furthermore, in all development indicators, Orissa is much below that of all India and its agricultural is trapped in a low-input-low-output vicious cycle. Turning to inter-regional disparities within the state, the article shows persistent disparities between the four regions that comprise Orissa in terms of productivity and efficiency. Inter-district disparities within Orissa state are high and increasing, influenced by level of input use, farm mechanization and other factors such as road density and rural literacy rate. In the final part (five), the article advances policy options for addressing stagnation and disparities in agricultural growth in Orissa. These include crop diversification from paddy to high value crops (pulses and oil seeds), improved literacy rates, irrigation, marketing infrastructure, and transport facilities.

The last article in this issue is by Michael Poku Boansi, Dennis Kwadwo Okyere, and Kwasi Kwafo Adarkwa, entitled, "Sustainability of the Urban Transport System of Kumasi, Ghana." The article seeks to examine sustainability of Kumasi's transport system applying relative indicator approach whereby the city's level of sustainability is compared with that of other selected cities. The article is organized into seven main parts. Following the introduction, part two explores the nexus between transport and sustainable development. The approach and methodology of the article is presented in part three. In part four, empirical data on modal split, accessibility, fuel consumption, traffic emission, and safety are presented. Part five provides the framework for measuring the sustainability of Kumasi's transport system, followed by the measurement of Kumasi's transport system towards sustainability in part six. Part seven provides policy recommendations on sustainable urban transport for Kumasi.

In the introduction, the article observes that Kumasi while forming a central hub of major transport routes in Ghana is faced with multiple problems. Review of literature in part two covers the role of transport in the achievement of sustainable development, as well as the challenges of transportation to sustainable development. The former includes key benefits of the transport sector, namely, economic growth, access to education, and access to

health. The challenges of transportation to sustainable development include dependency on nonrenewable fuels, contribution to climate change and road accidents. The research methodology is presented in part three and includes the sampling frame leading to selection of six suburbs as study sites and 155 households, while data for the study was collected from both primary and secondary sources.

In part four, the article presents results of analysis on modal split, accessibility, fuel consumption, traffic emission and safety. The results paint a bleak picture of the transport status in Kumasi. In part five, the framework for assessing the sustainability of Kumasi's transport system is presented. It comprises of five variables on sustainability, denoting key transport sustainability indicators. Comparison is done between Kumasi and four cities, namely, Mexico city (Mexico), Bogota (Colombia), Istanbul (Turkey), and Lagos (Nigeria). Three of the four cities (Mexico, Bogota, and Istanbul) have received sustainable transport awards. Overall comparative analysis of Kumasi's transport sustainability is presented in part six of the article, using a scale of 1-5. From the analysis, Kumasi's transport system is the most unsustainable, taking the fifth position of all the five cities.

Part seven of the articles concludes with recommendations for sustainable urban transport in Kumasi. It is recommended promoting non-motorized transport infrastructure, promoting roadway bus system and infrastructure, promoting multi-nuclei centres and mixed development, and improving energy efficiency of travel.