

## Recent Observations on Rural Geographic Research in Nigeria

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**Abstract:** Rural areas are identified based on diverse criteria including low population concentration, scattered settlement pattern, predominance of primary production, few basic/social infrastructure among others. Traditionally, researches and fieldworks in these multidimensional aspects of rural conditions are relatively scanty with the notable exception of agriculture which incidentally is a component of rural production. In fact, agriculture in some circle is erroneously taking as being synonymous with rural areas. Though it is not intended to argue that agriculture has lost relevance in Nigerian rural research, this research makes effort to draw attention of rural geographers to other neglected but equally important emerging aspects of rural investigation. It further discusses general methodology for rural empirical studies and concludes by identifying some principles (or precepts) to be considered for successful, rewarding and less frustrating efforts in rural researches.

**Key words:** Environment, field work, health deprivation, rural geography research, technical and human development, urban system

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### INTRODUCTION

Research in rural geography, like rural geography itself is wide cutting across several issues. Rural studies straddle various aspects of human enquiries employing perspectives, methodologies and theories from diverse disciplines. Of all these multidiscipline, rural geography focuses more on interaction of rural dwellers with environment through spatial analysis.

Definition of rural geography can be viewed as an extension of either commonplace or informed opinion on rural areas and rurality. As such, "rural" is viewed from a subjective (perceptual) angle or objective (quantitatively determined) criteria (Gilg, 1996). In some contexts, rural area is defined by exclusion from urban; hence any phenomenon that is not urban is rural. In the US for instance, amidst several criteria, any area, which is non-metropolitan, is considered as rural while in the United Kingdom, areas with less than 26% of its population living in a market town or settlement with less than 2,500 populations is a rural area. In Nigeria and in some African countries, low population density, pre dominance of agricultural related livelihood and poor infrastructural services are criteria for identifying rural areas.

For specific research purposes, rural geography is a description of several realms of geographical investigations. It includes economic geography of agriculture, local periodic market, settlement distribution, natural resource exploitation, population dynamics, environmental management and other themes. This perhaps informs Clout (1972)'s definition of rural geography as the study of recent social, economic, land use, and spatial changes that have taken place in less-

densely populated areas, which are commonly recognized by virtue of their visual components as "countryside".

Going by Gilg (1985), rural geography encompasses agricultural geography, forestry, rural settlements and rural housing, transportation and services, recreation and tourism, land use and land management, and rural planning development. Also, Johnston *et al.* (1994) viewed rural geography as the study of people places, and environment in rural areas, with special reference to society, economy, politics and culture in the developed world, although such study can be also applied to third world contexts. Rural geography deals with space and time dimensions in its analysis of rural environment.

The foregoing is not to catalogue definition of rural geography for the sake of just doing it. Rather it is to show the complexity of defining rural and rurality, demonstrate the extent to which various definitions underscore the multitude of research questions and field work opportunities for rural geographers; and emphasize the need to continuously advance the existing body of knowledge on meaning, content, and focus of rural geography.

What follows this introductory section is the thrust of the paper. The study set out to achieve three major objectives (i) emerging issues in rural geographic researches (ii) triangulation in rural fieldwork, and (iii) guiding principles of conducting rural research.

Studies in rural geography have focused considerably on agriculture, migration, infrastructural facilities and regional issues (Okafor and Akinbode, 1998; Kaloko, 1983). In Europe and America, settlement pattern, influence of urban system or rural resources (rural urban continuum), rural industrialization, return migration, and,

resources conservation and rural planning were focuses on extensively (Clout, 1972; Huggart, 1988; Gordon and Dick, 1982; Troughton, 1995) among others.

With special focus on Nigeria, agriculture is widely researched that agricultural development is in some circles erroneously taken as synonymous with rural geography. Admittedly, agriculture remains the predominant rural occupation (Adedayo, 1998), it is not the only issue. Other issues are equally relevant in research and are worthy of being investigated in their own right.

### **EMERGING ISSUES IN NIGERIAN RURAL GEOGRAPHIC RESEARCH**

**Sustainable Development and Environmental Scarcities:** Sustainable development according to world commission on environment and development (1987) is the use of resources in manner that will leave to the next generation, a stock of quality of life assets no less than those inherited. Rural production systems are primary productions that are environmental resources-dependent. However, the where, why, and how of the sustainable development issues and their impact on rural dwellers have not be given considerable attention. Variation in overexploitation of resources has grave yet varied consequences on rural people, but unless these are properly understood through research, the opportunity of proactively tackling these problems will be lost.

Rural dwellers suffer differently from environmental blights such as drought, flood, erosion, pollution and so on. These have aggravated incidence of conflict and heighten rural environmental and socio-economic insecurity. These issues need intensive and extensive research because understanding them put rural geographers in their right place as environmental analysts. They also contribute to intergenerational and intra generational equity, justice and social development. Geographer could contribute to standardization of factors and variables of measuring rural environmental scarcities, injustice and insecurity.

**Rural non-farm employment and livelihood analysis:** In Europe and America, agriculture has been eroded as the determiner of economic and social relations of rural areas (Redclift and Whatmore, 1990). Consequently research attentions have focused on two dimensions of pattern and process of rural change. These are i) the diversification of economic and land use role of rural areas through the process of rural restructuring ii) the multiplicity of strategies by which rural dweller make a living.

The import of this is not a blind replication of phenomena in developed countries; rather it is a challenge on rural geographers from developing societies to initiate

research on diversification of non-agriculture rural employment (NARE) opportunities. In Nigeria, available evidences show that income from farming activities has continued to decline due to economic shock and environmental uncertainties. Level of poverty among families solely dependent on farming is reportedly high compared to families with diversified livelihood opportunities.

**Rural demographic and health issues:** One major aspect of rural disadvantages is health deprivation. It goes without saying that rural areas are underserved with basic and ancillary health services and facilities. However, the spatial and temporal pattern of disease occurrence, mortality, morbidity, peculiar health needs of rural residents and health risks associated with rural production and environmental systems are areas rural geographic researches are under represented.

With notable exceptions of Guinea worm, Schistosomiasis, and Onchocerciasis, parasitic diseases have not being substantially investigated. Diseases of livestock and pests of crops threaten rural dweller, as do socio policy failures. Yet they are obscured. The demographic change in rural areas calls for researches that will help constantly and continuously to understand processes and impacts of these dynamics on rural environment. For Instance slowing down the population growth rate to about 2.0 by 2015 is the policy target of the Nigerian government, the rural areas due to endemic poverty and deprivation requires a lower benchmark which cannot be achieved unless research attention is sustained to understand the various issues impacting rural demographic changes.

**Technology in Nigerian rural development:** Information and Communication Technology (ICT) and Biotechnology are two forms of technological advances that have grown in this century. Geographers are adequately equipped to asses their impacts on the rural space. In recent past, High Yielding Varieties (HYVs) are outcomes of technologically motivated "Green Revolution" which have ambivalent impact on rural environment. The cost of input to support them is prohibitive to small-scale farmers. Can the same be said of biotechnology? What are the impacts of ICT on rural dwellers? What are relationship between these advancements and rural indigenous knowledge (IK)? These are areas of profitable research interests to rural geographers.

**Human capital development in Nigerian rural centers:** Human capital underdevelopment in rural areas has continued to deny people at the grassroots the opportunity to contribute to and benefit substantially from global development. Humans needs, aspiration, and motivation

to propel them into developmental actions. Why is this not so among rural dwellers? What are the motivations (or lack of it) that impact on rural people? How do these occur over space? Are their intrinsic or extrinsic factors that lead to stagnation or progress in rural settings? These are issues pertinent to rural people where geographers should contribute to using various research techniques.

### **TRIANGULATION IN NIGERIAN RURAL FIELDWORK**

A research work includes three major interrelated stages; i) statement of the topic and defining the problems to be investigated ii) collection of information, and iii) analysis and explanation of the information and comment on the result. Geographers carry out those stages systematically.

Measurement in geographic research has either been qualitative or quantitative in approach reflective of the prevailing trend during the historical development of the discipline. This section is obviously not to contribute to the quantitative versus qualitative methodology debate, rather it is to emphasize to beginning researchers, the need to synthesize both towards achieving whatever research objectives rural geographers might set in their investigations. This is the essence of triangulation or multiple methods, which actually reflects a continuum instead of a split into distinct categories.

Montello and Sutton (2006) viewed quantitative data as consisting of numerical values measured at least on ordinal or metric level while qualitative data are non-numerical consisting of words, drawings, photographs etc. The authors stated further that quantitative methods impose great amount of prior structure on collected data compared to qualitative methods.

Mostyn (1985) and Hammersley (1992) both cited in Winchester (2000) identified the dualisms between quantitative and qualitative methods. To them, quantitative methods utilize quantitative data, work best in experimental settings, identify behaviour, are adopted by natural science, employ deductive approaches, pursue scientific laws and are hinged on realist perspective. Qualitative methods on the other hand collect qualitative data, work best in natural settings, search for meaning, not favoured by natural science, favour inductive approaches identify cultural patterns and are hinged on idealist perspective.

Moreover qualitative methods tend to be holistic in perspectives, associated with small-scale studies, associated with emergent research design and associated with researcher's involvement. Qualitative methods in contrast tend to be specific in focus, associated with large-scale studies, associated with predetermined research design and associated with researcher's detachment.

A close examination of various researches in rural geography will show convincingly that both methods have been excellently combined. For instance, quantitative methods are used to establish relationships and differences between places and phenomena while qualitative methods are used to explain how individual experiences shape their action and reaction within the socio-cultural structures of the rural environment.

An example will suffice to drive the point home. In a study on impact of fertilizer inaccessibility on sustainable agriculture, Yusuf (2010) used focus group discussion, (FGD) in-depth interview and non-participant observation (qualitative methods) to generate questions asked in the questionnaire survey (qualitative method). Analysis of the questionnaire were subjected to correlation analysis to enable generalization be made. Further analysis of FGD and non-participant observation revealed a deep-rooted apathy towards the socioeconomic structures of the society. Rural farmers clearly express their views on the rural structural system were by only those who are politically connected have access to chemical fertilizer. Such analysis is important for a better understanding of rural political, economic and social structures which questionnaire survey alone would not adequately capture. This is a benefit of mix method.

Triangulation is an appropriate method of field investigation for rural geographers. Among several other benefits, it affords investigation the opportunity to understand, analyze and present rural dwellers individuality and spatio-structural experience while also generalizing and deducing from current situation.

As forms of primary data collection, which are triangulation method of field measurement, questionnaire survey and interview are discussed further. They are selected because they are the most widespread used form of explicit research instruments. Other forms of explicit instrument are sociometric ratings, activity diaries, contingent analysis, protocol analyze and tests (Montello and Sutton, 2006). However interview is discussed more elaborately because experience has shown that many student researchers find it difficult to analyze interview data.

A questionnaire is a research instrument constructed such that respondents answer question about their opinions, attitudes, preferences, activities and so on in a written form. A questionnaire is usually structured based on the scale adequately enough to facilitate quantitative analysis. Questionnaire can be open-ended or closed-ended.

Interview schedules gather information about opinions, viewpoints, and activity of people in an oral form. Interviews are done in a way that facilitates qualitative analysis. Interview is a systematized form of inter personal communication where by one person objectively elicit information from another. Interviews

can be structured, semi-structured or unstructured. Structured interview follow a predetermined and standardized list of questions asked in the same way and order (Dunn, 2000). Unstructured or semi-structured interview used guide which is a list of general issues needed to be covered while interview schedule which is a list of carefully worded questions is used in structured interviews. Structured and semi structured are question and content focused respectively while instructed interview is informant focused.

Questions in interviews are grouped as primary (original) and secondary. Primary questions are opening questions used to initiate discussion on a theme while the secondary are prompt to expatiate on issues primarily raised. For example in a research on impact of conflict over grace and on herding house hold, primary questions could include "have you ever been involved in conflict over access to resources?", "How many member of your family sustained in injury?", and "what are proactive measures put in place to forestall recurrence?" Secondary question may include "could you explain the origin of the conflict?", "How does the conflict affect household responsibilities?" and so on.

Due to low level of literacy on many rural communities, questionnaire administration can be extremely arduous. Often times, researchers have to fill the questionnaire for the respondents. This situation has a tendency to be confused with interview among beginning researchers. It need to be emphasized that reading questions on a questionnaire to respondents while they provide answers is not an interview and should not be considered as such. Interview and questionnaire address different forms of issue, their structures and analysis also take different forms.

In analyzing questionnaire, qualitative methods are preferred. Both inferential and descriptive statistics are used. These range from Percentiles, Tabulation and Cross tabulation, Nearest Neighbour Analysis to Linear and Multiple Regression Analysis, Correlation Analysis, Principal Component and Factor Analysis and many more. There are numerous standard texts such as Robinson (1998), Toyne and Newby (1971), Ebdon (1977), Harmond and McCullagh (1974) and Mathew (1981) that discuss these techniques sufficiently and exhaustively. Many of these can be used in delineating research results in cartographic and map techniques.

Compared to quantitatively sourced data, analysis of qualitative data has been observed to give student researchers problems. Based on this, interpreting interview (and other similarly sourced data) is discussed further.

Interview can either be recorded manually (by note taking) or electronically (by audio tape). However, due to the inherent shortcomings in either, the two are recommended in combination (Dunn, 2000).

During note taking, a researcher should use shorthand or abbreviations he/she is accustomed to. This will aid interpretation. Interview notes should be typewritten or written in full soonest after interview to reduce forgetfulness. This is transcription. According to Minichiello *et al.* (1995), field notes or transcription file can be assembled into personal log and analytical log. The personal log usually in the left contains issues relating to conduct of interview such as wording of primary and secondary questions, ethics and overall method. The analytical log usually in the rights contains the annotations on the real issues addressed by the interview. The analytical log is used to establish links between the data gathered against established theory and literature.

After transcription, the next is to seek meaning from data. This is done through content analysis. Content analysis can either be manifest or latent content.

Manifest content analysis examines the visible, surface content of the interview transcript by tallying the appearance of a word or a phrase. Repetition of such phrases is a pointer to how significance they are to the issue being discussed. Latent content analysis is the search for themes and determination of meanings in the interview. To effectively do this, coding is done. Coding can be based on the objectives of the research or the perspectives of various stakeholders. For instance, an investigation of nature of human capital development in a village can involves coding information from illiterate adults male, illiterate female adults, literate teenagers, local educational authority personnel so as to grasp various dimension of the issue.

In presenting interview data, it is often difficult to find a statement that is representative of the variety of ideas collated. In most case, the salient themes should be identified and presented. To give validity to the interview data, it is appropriate to cite transcript files indicating which informant expressed which opinion. The researcher should endeavour to give a hint of the spatio-structural and socio-cultural characteristics of the respondents to allow readers understand the prejudices of the respondent. Effort should be made to provide a transparent account of research procedures and state the subjectivity of the researcher including the probable influence these might have on the interview processes. On the whole, research reports by rural geographers should be able to present the preliterate people whose lives experience; perceptions and problems are opened to the reader as a real people occupying space, but not just numbers.

#### **GUIDING PRINCIPLES IN RURAL FIELD WORK**

Fieldwork in rural geography (and human geography as a whole) has certain ethics, which are upheld by researchers. These ethical issues border on the

responsibilities and obligations of researcher to those involved in the research particularly the subjects/informants of research. These include privacy and confidentiality, informed consent and non-exposure of the researcher or the researched to any form of harm be it social, political, economic, or physical (Dowling, 2000).

However the guidepost discussed here are basically non-ethical but to aid beginning researchers in achieving success, four of the principles are identified as.

**Cognizance of the socio-cultural peculiarities of the informants:** Rural communities have marked social homogeneity and loyalty to traditional authorities. In the event of the need to collect information from rural people, unless there is evidence that the community head is aware of such research; the researcher may not be given co-operation. It is thus advisable that the consent of the community leader be sought. In fact such people could act as key informants and facilitate the research.

At the same time, the researcher should be wary of power relation of the community hence be meticulous enough to understand how structure affect situations. This will enable him/her to avoid the pitfall of projecting the view of the powerful while silencing the voice of the powerless.

**Consideration for the space- time dimension of rural activities:** Rural people engage in multiple activities in different season. Farming season takes up family labour during the day hence a survey at that time could be conducted in the evening. During the dry season farmers can change location and/or occupation to boost their incomes; hence a study directed at the active population may be compromised during this time.

**Recognition of inconsistency of official document with reality:** In society where vital statistics are not regularly taken or updated and where policy document are published to serve official intended purposes, government document should be cautiously relied on. For instance there are published statistics on rural farming cooperatives that are supposedly assisting rural farmers to access loans and input but research survey to some grass root areas usually reveal the contrary.

For example, a student was conducting a research on accessibility of rural cotton growers to NACRDB loans in Funtua local government area of Katsina state. He got to the field only to discover that no farmer was given loan for such purpose and very few large-scale farmers could actually access loans. This emphasized the need for a reconnaissance survey before fieldwork.

**Considerations for rural dwellers suspense of researchers:** Due to accumulated failure from previous researches, rural dwellers tend to be indifferent to

researchers. At time they tell researchers that they should be paid after all the researchers will submit the report to the government and be handsomely paid. It takes preparedness, patience and empathy to explain the true purpose of research to the rural people. In other words, a researcher should not lie in order to get information because a promise unfulfilled sticks in the psyche of the people and they bring it to interacting with future researchers.

As a matter of fact, rural researchers should disabuse their minds of preconceived prejudice against the knowledge of rural people. They may not be literate that does not mean they are uninformed.

## CONCLUSION

This research has attempted a description of research focus of rural geography in order to reiterate the necessity to focus more on other rural issues apart from agriculture. Some of these are sustainable development and environmental blight of rural areas, human capital development, rural non-farming employment, demographic and health issues, and technological development.

Due to the dichotomy between quantitative and qualitative methodologies, the paper draws attention to importance of triangulation, which combines both methods for a purposeful rural research in Nigeria. Questionnaire and interview were discussed further. Apart from research ethics, some principles, which could guide rural investigator to a promising and less frustrating rural investigation, were also identified.

Issues raised in this study are not for the sole purpose of research and field survey. The fact that research is the key to the development of any society underscores the importance of these issues to efforts at developing the rural sector of Nigeria. The proactive and pragmatic approach suggested is long overdue which neglect in the past is one of the major reasons for the backwardness being experienced in Nigerian rural development efforts.

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