Spatial distribution of women informal economic activities in the rural areas of Imo State, Nigeria

Emmanuella Chinenyene Onyenechere

Department of Geography/Environmental Management, Evan Enwerem University, Owerri, Nigeria. E-mail: emmazob@yahoo.com. Tel: +2348033743055.

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Utilizing a feminist perspective, the paper examines the spatial distribution of informal economic activities engaged in by women in the rural areas of Imo state and ascertains if there is spatial variation in the type of informal economic activities executed by these rural women. For the study, data were collected at household and institutional levels. Field observation and the focus group discussion method were used to further elicit information. The data collected were subjected to various methods of analytical techniques, such as analysis of variance and other simpler statistical methods. The findings of the research are as follows; 39.7% of the respondents are engaged in petty trading followed by farming (29.1%), 27.4% are found in food processing; the least percentage ratio of 3.8% is in crafts. Analysis of variance reveals that economic activities vary significantly among communities and local government areas in Imo state, Nigeria. This is because these areas do not have the same natural endowments and do not all exist within the same ecological/geomorphologic zones though they are in the same state. Equally important is the fact that they are areas of high patriarchy. Some gender specific strategies to enhance the rural women’s informal economic activities in the study area and to address the observed variance/inequality were recommended.

Key words: Distribution, informal sector, Nigeria, spatial, rural, women, Imo State.

INTRODUCTION

The shock from the petroleum industry in Nigeria in the late 1970s and subsequent depression of the economy ushered in structural adjustment programmes (SAPs) of the 1980s, and presently, the acceleration of the forces of economic deregulation, liberalization and globalization. The result is that the Nigerian economy is far oriented to the market, and the labour market has become increasingly ‘informalised’. The accompanying downsizing of the public sector as a result of SAP left many with insecure livelihood strategies in the informal sector. Similarly, the global economic crisis of the 1980s intensified poverty throughout the world; among the effects have been changes in the economic roles of women and men. With men's labour returns from cash cropping diminishing, women are left to manage farms while their husbands migrate elsewhere (mostly to cities) in search of employment. The increasing detachment of women and children from men's income has led to an upsurge in the involvement of rural women in informal economic activities. Thus, the emerging trend is such that most men cannot provide for their families unaided; and thus such rely on their wives for the families’ sustenance. Consequently, rural communities have strong female employment. In the USA, women too are picking up the slack due to job losses for the male population in the face of globalization trends and automation (http://earlywarn.blogspot.com/ accessed 8/10/2010).

Women informal economic activities and poverty alleviation are of growing concern to individuals, groups and governments, largely because the worsening levels of productivity and poverty in the rural areas directly threaten the food security and living standards of the average ruralite. Previous researches show that in sub-Saharan Africa, female labour is largely concentrated in the agricultural sector. This scenario appears to have motivated Nkom (2000) to observe that more than 90% of Nigeria’s food supply comes from the informal sector of economic activities which are dominated by rural women. Women’s irregular, casual forms of work in the informal economy can be tagged as activities done for pay or profit. In Africa, women’s labour force participation has always been higher when compared with men’s. How be it, women face certain restrictions in terms of work relative to men and these vary across the world. There is
a pressing need in the academia to investigate the spatial distribution of women informal economic activities in the development process of the rural areas in Imo state.

Rural women activities mainly range from petty trading, vocational enterprises, handicraft, and farming to agro-processing. Throughout the Third World, most low-income women have an important productive role. Women are also involved in producing agricultural raw materials for our industries. Almost all agricultural production and marketing activities including animal husbandry activities are performed by women. There is seemingly a good number of women in rural farming, processing and marketing. It is these income yielding informal economic activities by women that make them indispensable in the process of rural development, a fact corroborated by Aspaas (1998) and Barrett (1995). There is however an observable change in the pattern of women’s work in recent times as their participation is declining in agriculture but increasing in petty trading; which according to Bryceon (2000) is called diversification out of agriculture. The geography of gender difference in labour market participation has equally changed. Prior to this period, the role of women in the social and economic development of Third World countries and communities was invisible as well as the ‘plight’ of low-income women. The enquiry into an understanding of the complexities of women’s employment and their productive activities should be limitless.

The OECD (Jutting and de Laiglesia, 2009) reports that, “Informal employment is the norm, not the exception in many parts of the world”. The literature on the informal sector concentrates mainly on the urban environment in most of the developing countries rather than the rural (Teilhet-Waldorf and Waldorf, 1983; House, 1984; Shaw, 1985; Portes et al., 1986; Tripp, 1988; Rogerson, 1988; Lanzetta De Pardo et al., 1989; Lubell and Zarour, 1990; Pradhan and Van Soest, 1995; Funkerhouser, 1996; Dijk, 1997; Reddy et al., 2003). As a result of Geography being male-dominated and gender-blind, most of these researchers who have done studies in cities (that is, urban areas) concentrating on the informal economy have shown little interest in the number of women working in it and the types of work they do. However, Abumere et al. (1998), Kantor (2002), Agarwal and Dhakal (2010) and Cling et al. (2010) attempted to infuse a gender perspective into their study of the informal sector in the urban area. While, Soetan (1993) and Vu and Tran (1999) studied only women in the urban informal sector, spatial dimensions of rural informal sector in Nigeria are yet to be explicitly examined by any scholar alongside gender. In the informal economy of Third world countries, most women sell their wares in the market places. In the same market, some practice skills they learnt in the home. Some studies reveal that the representation of women in the informal sector is higher than that of men (Berger and Byvinie, 1989); however, the participation of women is underestimated (Soetan, 1993; Aspaas, 1998).

The informal economic activities sector, serves as the single most important source of employment in rural Nigeria. There was an estimated 16 million women in sub-Saharan Africa engaged in the sector in 1990 (ILO, 1990). The sector is essential as it provides an opportunity for a large majority of the rural women who form the bulk of the rural populace for self-actualization, self-reliance and fulfillment. It contributes to financial capital accumulation and the formation of human capital, both of which are essential in gradients of accelerated development.

Geography is a science of location interested in decoding spatial similarities and variations. One cannot say for sure if the informal economic activities carried out by women in Imo State are uniformly the same or whether there are shades of variations from one administrative unit to another. It is a geographical fact that there is spatial variation in the geology and by inference geomorphology in Imo State. The question to ask is whether there is a relationship between the ecology and the type of informal economic activities women engage in.

Presently, as more men leave for the urban areas, rural – urban migration being more selective of adult males, more and more women are left to head rural households and provide them sustenance; one wonders if rural women informal economic activities are distributed in such a way that they can contribute significantly to the rural development process in Imo State and in what areas of the rural economy are women prominent? Is there any spatial variation in the involvement of women in informal economic activities of the rural landscape in Imo State? Answers to these questions form the focus of this research work. Previous studies by Nigerian Geographers ((Mabogunje and Filani, 1977; Mabogunje, 1980; Abumere, 1995; Abumere et al., 1998) concentrated mainly on studying this phenomenon in urban areas of Nigeria. No spatial study of this nature concerning women has been conducted in rural areas of south eastern region of Nigeria, especially Imo State. Since women cannot be viewed in isolation, it would focus on gender relations. The purpose of this study is to examine the spatial distribution of informal economic activities engaged in by women in the rural areas of Imo State, Nigeria and to ascertain, if there is spatial variation in the type of informal economic activities executed by rural women in Imo State and relate same to the varying ecological opportunities of the state as well as the gender relations inherent in it.

**RESEARCH HYPOTHESES**

Two hypotheses are considered in this study. They address spatial variations and prevalence of rural women...
informal economic activities among communities as well as LGAs in Imo State, Nigeria. The first hypothesis tested in this study states that rural women informal economic activities vary significantly among communities in Imo State, Nigeria. The second hypothesis tested in this study states that rural women informal economic activities vary significantly among LGAs in Imo state, Nigeria.

THEORETICAL CONSIDERATION

Rural studies just like other aspects of geography have theories, none of which is gender specific. This makes the mainstream geographical perspective limited as a framework for understanding the inter-relationship between women and their employment in the informal sector. In the past, there has been a range of analyses of gender inequalities undertaken within these geographical perspectives. Drawing from the works of feminist geographers, research effort in the last three decades has been devoted to gender related human geography which embodies rural studies. Works such as Bowbly et al. (1989), Rose (1993), Massey (1992), Little and Austin (1996), Hughes (1997), Little (1997), Bennett (2001), Little (2002), Little and Panelli (2003), Hanson (2003), Bondi (2004), Pratt (2004), England and Lawson (2005), McDowell (2004, 2006), Moss (2007) and Little (2007) are a few of these. Many of the early feminist geographers viewed geography as a masculine discipline. In their opinion, masculine assumptions operate in the realm of geographical and social theory, which in turn led to a tradition of ‘gender neutral’ theories in geography and marginalized women’s issues.

For the purpose of this study, the feminist theory will be the most appropriate. This is because it adopts post-rational, post-modern and post-structuralist feminism which addresses all ramifications of the study. Recent developments in feminist geography include writings about the construction of gender identities in different spheres of life, that is, at home, at school, in the community and in the workplace. It is noted that feminist geography is actually part of a broader postmodern, critical theory approach, often drawing from works of Foucault (1979), Derrida (1981) and Butler (1990). It is an aspect that focuses on gender divisions; geographical differences in gender relations and gender equality, the geography of women and the construction of gender identity through the use and nature of spaces and places. To introduce a spatial perspective to feminist inquiry and to introduce a gender aspect to geographic studies enhances women’s studies by adding dimension of theory and empirical research.

The rapid succession of rural development theories in the 20th Century largely ignored gender. Gender studies in rural geography was a late comer and it had a slow start, first it concerned itself with gender role theory which described the expectations and contributions of men and women. It later embraced gender relations theory which it employed in critiquing the inequalities that occurred in agriculture in the late 1980s and the early 1990s up to the mid 1990s. As it began to flourish, post-structural and post-modern theory in gender studies and rural geographies are now employed to read and deconstruct the ways gender identities and performances are constructed, contested and occasionally reinvented. According to Little (1997) some of the fields in which scholars have approached rural women and men are community, work, environment and sexuality. Thus, feminism itself cannot be simplistically understood as a single theory; the range and scope of its inquiry go beyond body politics to question the gendering of power relationship in all areas of human life. This equally shows that feminism cannot be construed as a finished theory.

Feminist (gender) theories are usually taken as given by geographers are primarily concerned with variables associated with women’s productive and reproductive roles in the community. These theories stand on one basic premise, which is: That women’s economically disadvantaged position is caused by, and is a reflection of, patriarchy and women’s subordinate position in society and the family (Monk and Hanson, 1982; Stebbing, 1984; Dempsey, 1990, 1992; Poiner, 1990; Sacksmann and Hassermann, 1994; Hoven, 2001; O’Toole and Macgarvey, 2003; Henderson and Hoggart, 2004; Owusu and Lund, 2004; England and Lawson, 2005). Gender theory makes a valuable contribution to explaining cultural positions by pointing out how closely cultural practices correspond to reinforcement of masculine beliefs and behaviours (Macklin, 1995; Campbell and Phillips, 1995; Little and Austin, 1996; Hughes, 1997; Buhler, 1998; Liepins, 2000; Duncan and Smith, 2002; Little, 2002; Martinez, 2002).

Despite women’s less accumulation of human/economic capital and perpetuated gender inequalities which confront them, they have carved a unique position for themselves within farm families (Beneria, 1982; James, 1982; Bouquet, 1982; Sachs, 1983; Symes and Marsden, 1983; Whatmore, 1991; Deseran and Simpkins, 1991; Williams, 1992; Evans and Ilbery, 1996; Hapke, 2001; Angeles and Hill, 2009; Basu, 2009). This has been central to both theoretical and empirical development of feminist rural geography. The aim of most feminist analyses was to demonstrate the important role of women’s domestic or household related work to the survival of family and the farm business. It was also to highlight its inclusion in agricultural labour (an aspect of capitalist labour relations) as well as drag in issues of gender relations and gender identities inherent in them. Shortall (1992) and Bennett (2001) accomplished this in their study. The trend has since shifted to investigating the position of rural women in the labour market (Little, 1991; Morris and Little, 2005; Atieno, 2008), notions of gender identity (Little, 1997; Leyshon, 2005), and variations in gender division of
labour (Bryant, 1999; Peter et al., 2000).

Feminist analyses try to reveal how ideas of rurality are folded into the ways in which gender identities are constructed and reconstructed on a daily basis. According to Little (2007), there is stress on co-construction of rurality and gender which suggests that the two are being constantly negotiated in that they come together in specific cases. Recognition is being given to the varying and multiple ways in which this relationship develops in different places amongst different individuals and groups. The idea of feminist geographers that gender relations produce spatial structures and that in turn these structures help maintain these relations disclosed a remarkable and lingering differences in women's role pattern and, by extension, the male role pattern (Stuycyk et al., 2008). The differences among women and amongst men became as important as those between men and women (Valentine, 1993; McDowell, 1999; Dwyer, 2000). Therefore the hypothesis is, these observations if true would help “create” a broader understanding of the fairly strong tendency for male and female employment to vary often times along the lines of patriarchy; depending on where they live (e.g. village, region, and country).

Though ‘Patriarchy’ is a theoretical concept essential to greater understanding of the gendering of space, McDowell (1992) recognizes that feminist research cannot rest on only a single unproblematized concept of patriarchy or capitalist patriarchy but needs to incorporate a set gender relations which varies over time and place. This accounts for the shift from the study of women as an “undifferentiated” category (McDowell, 1993) to think about social and economic dimensions that divide women. A focus on how the characteristics of masculinity and femininity vary between different classes, races, ethnicities, sexualities and ages and on how such characteristics are spatialized is gradually becoming the norm. It is the reason behind the upsurge of work in Britain and other parts of the world on localities. It marks in the milieu a renewed awareness of the importance of variation over space in the form and nature of social relations and renewed recognition that an investigation of a number of important social and economic changes will not be satisfactory unless an analysis of how these are embedded within different distinct localities is incorporated, a fact corroborated by Bowbly et al. (1989) and Kesby (1999). The locality is the appropriate level of analysis, which Foord et al. (1986) recognized that it has not been treated as important in its own right. The growing legitimacy of studies on gender serves rural geography by making it efficient in its examination of social and economic relations in rural communities and spaces and its exploration of the ways in which gender and rural space though different are mutually constituted.

In conclusion, it is clear that the part women and men play in production and accumulation and the form that their involvement takes, vary across places and cultures. Different rules, norms and values govern the gender division of labour and the gender distribution of resources, responsibilities, agency and power. Women and men’s work vary spatially primarily because, of regional differences in the institutions of kinship and family; the household patterns they have given rise to; and the associated gender division of resources and responsibilities. All these have given rise to regional differences in the gender division of labour between production and reproduction, paid and unpaid work and the domestic and public domains.

MATERIALS AND METHODS

The measurement of informal sector activities is not easy. Indeed, Feige (1990) argues that any attempt to measure a phenomenon such as the informal sector whose raison d’etre is to defy observation is fraught with serious empirical difficulties. To obtain data within tolerable limits of error therefore information has been obtained from different sources and different methods (that is, formal and informal methods). Institutional data were gathered from the State Ministries and other government establishment as they relate to the informal sector. The main source of data consists of information from sample survey with 2,340 women respondents to copies of a questionnaire of 47 variables designed to elicit the informal economic activities of the women in Imo State and how they use same in the development process of their areas. Oral interviews were used to extract relevant information from government circles and from town union officials in order to abstract independent information on the role of women informal economic activities in the development process of the rural area in Imo State, Nigeria. Following the tradition of feminist empirical studies, the study adopted both quantitative and qualitative approaches with a commitment to sharing research findings with research subjects.

The questionnaire was one considered suitable for data collection because it is often used in empirical social research in human geography. Another method that was employed was the focus group discussion (FGD) method study. The FGD method of data collection was used on the strength of Krueger (1988) and Nyanzi et al.’s (2000) suggestion that it yields more accurate, detailed and comprehensive information more quickly and at less cost than individual interviews and Pini’s (2002) assertion that it is a valuable method for feminist rural social research. It is used to gather information from respondents where the questionnaire may not be very appropriate. According to Dawson et al. (1992), FGD is a valuable method for understanding about ideas and beliefs from illiterate communities and it has been used by social scientists since the 1930s.

For the purpose of primary data collection, one set of questionnaire was designed and administered on the rural women. The questionnaire contained forty-eight questions distributed into six sections which were answered by ticking, filling in the appropriate scores or completing the appropriate spaces. These questions cut across demographic characteristics, socio-economic issues, infrastructural facilities, constraints and coping strategies, and developmental issues.

There are 27 Local Government Areas (LGAs) in Imo State of Nigeria, politically divided into three senatorial district or geopolitical zones of the Orlu, Owerri and Okigwe. Each senatorial district (SDs) was taken as a strata in the stratified sampling frame. The rationale for using the SDs as strata was to ensure equitable coverage so that the peculiarities of each zone are captured in our survey. In each stratum, the local government areas were arranged alphabetical and systematically selected at intervals of three. The
The result of the exercise was the selection of 9 local government areas out of the 27 for the purpose of administering the questionnaire. The number of local government areas sampled from each stratum is in proportion to the number of Local Governments in the zone. Thus, from Orlu zone with 12 LGAs, Owerri with 9 and Okgwe with 6, the numbers of sampled local government areas were 4, 3 and 2 respectively. Within each sampled local government area, two communities were randomly selected using the Table of random numbers. In all, 18 autonomous communities were covered by the survey. It is to be noted that each local government area and each community served as a stratum so that the emergent technique is best described as randomized systematic stratified sampling technique.

Respondents were selected from households along the major roads or route ways in the community. Systematic sampling technique was used, at intervals of ten, to select the household for the survey. In each household, the wife of the head of household is chosen as the respondent. If the head of household is a polygamist, the first wife of the household is selected. Where the head of the household is a woman, then she is automatically chosen. Where the sampled head of household has no wife, the next house is chosen and thereafter the sampling interval of every tenth house is adjusted and maintained. Aspects of moral accountability in intrusive research pointed by Bailey (2001) were taken into consideration, in this household research.

All the adult females (women) in the 27 LGAs of Imo State, Nigeria, numbering projected to about 1,774,743 constitute the population for the study. The Nigerian National population Commission projected population for Imo State is 3,479,889. The figures under reference are indicative that women account for 51% of the population. Based on this, the population of women is estimated at 1,774,743. Sampling at the 1.4% of the total population; a sample size considered adequate and reasonable is 2,307. This figure was approximated to 2,340 for ease of administration at 130 copies of the questionnaire per community. Thus the sample size is put at 2,340, and percentage of sampled population is 36.7.

The data collected were collated and homogenized by grouping them into sections on the basis of the aim and objectives of this research for the analysis. Existing techniques for analyzing data for purpose of identifying patterns in geographic space are many. The analysis of variance test (ANOVA) was employed and co-efficient of variation was used where relevant. The use of ANOVA a function of the nature of data generated and the hypothesis being tested. ANOVA test brings out more clearly or rather elicits more detailed/pointed information; this is because it is used to check the equality of several means using their variance. The statistical package for the social sciences (SPSS) software was used for data processing by the computer to cross tabulate the variables obtained during the fieldwork for the survey. Statistical analysis system (SAS) software was used for data processing by the computer to analyze the data gotten during field work for the survey using analysis of variance test (ANOVA). Where the head of household is a woman, then she is automatically chosen. Where the sampled head of household has no wife, the next house is chosen and thereafter the sampling interval of every tenth house is adjusted and maintained.

RESULTS AND DISCUSSION

Many of the households in this study are women headed households in which their partners are 'temporarily' absent. As stated by Moser (1993: 17) "Here the woman is not the legal household head". She is often perceived as a dependant although she may, for most of her adult life, have primary if not total responsibility for the financial as well as the organizational aspects of the household (Aapaas, 1998). As part of the discussion, it is pertinent that the complexities of gender relations and divisions of labour in this socio-economic context be explained. In these study communities, the men traditionally migrate, leaving the women behind to cater for households by embracing informal sector activities. The estimated numbers of female headed households are high. Patriarchal power is most often seen as the basis for women’s inequality and is responsible for exposing women to the more problematic aspects of rural life especially the lack of opportunity in terms of formal sector employment. Gianotten (1994), Rahman (2000), and Oberhauser and Pratt (2004) are researches on the complexities of women’s productive work. They clearly identify the extent to which gender divisions of labour continue to reinforce women’s subordinate position in productive work.

Patriarchy as a global process shape rural women and men’s lives. Thus, the stereotype of the man as breadwinner (Davis, 1993; Blossfeld and Drosni, 2001) which predominates in most Third World societies is not borne out in reality. Rather it is a vehicle for the subordination of women because it emanates from the ideology of patriarchy, and has produced asymmetrical gender relations in productive work. Pressures to conform to classic gender roles are part of a rural patriarchy that remains largely uncontested in rural communities. Rural society and communities place a powerful set of expectations and assumptions on women in relation to the operation of their gender role. This actually takes a particular form in rural areas and communities that make the operation of gender relations potentially different from those taking place elsewhere.

Rural women are subject to much more conventional gender relations due to the overwhelming conservative and traditional nature of rural society. Hughes (1997) showed how rural women were subject to strong ‘cultures of domesticity’; while Little (1997) showed how they occupied an important place in the centre of the family and rural domestic life. The domestic role was seen to spill out into the community. According to Little (2007), part of the accepted role of rural women was as the ‘linch pins’ of the rural community, both practically and ideologically. Women’s domestic obligations influence their scope for engaging in economic activities (Hilhorst and Oppenooth, 1992). Brydon and Chant (1989) noted that the bargaining position and income of women who are self-employed traders, artisans or farmers is higher than that of women who are confined to purely domestic or subsistence activities. The difficulties associated with living in remoter environments, restricts their employment. All of these likely have implications for rural women’s participation in the labour market and the distribution of their activities in space.

Rural women informal economic activities are not evenly distributed as can be seen from Tables 1 and 2; the resultant patterns are equally graphically represented in Figures

Figures
1 to 4. Table 1 shows the distribution patterns of informal economic activities such as handicrafts, farming, food processing and petty trading among the communities studied. It shows that petty trading is the most popular one engaging 39.7% of the women. This is closely followed by farming that employs 29.1% of the women; while the rest women find employment in food processing (27.4%) and handicrafts that engage 3.8% of the population. Haggblade et al. (1989) opines that commercial and services sectors in which women are often predominant, become important. These figures however vary among the communities. Downing (1991) noted that, the percentage of women engaged in informal economic activities often varies greatly by sector and scale of enterprise.

The intensity of informal economic activities varies from one community to another. As shown in Table 1, handicrafts dominate Umuna community with 67.0% of the population in the trade, while Amaraku and Oguta have 11.0% of the people in the trade. Farming seems to be widely spread among women and across the communities. However women in Ifakala and Orodo communities record over 10.0% of the farming population and to be closely followed by Isiekenesi (7.4%), Okuku (5.9%), Otulu (5.9%) and Umunkwo (5.9%). Food processing is most popular in Nguru Nwenkwo (11%), Oguta (12.5%) and Orsu Obodo (8%). Petty trading cuts across communities but notable in Dikenafai, Mgbidi, Nkwerre, and Otulu, each scores 7%. It should be noted that fish processing is very popular at Oguta and Orsu Obodo because of geographical advantage of Oguta Lake and River Orashi passing through the district.

Farming activity by rural women in the study area is dense in only Mbaitejol local government represented by Ifakala and Orodo communities. From Table 2, it can be seen that Mbaitejol LGA accounts for 22.06% of those with rural women engaged in farming activity, thus ranking highest in this category, while farming activity by rural women in the study area is moderate in the other eight studied LGAs (Oguta, Owerri West, Ori West, Ideato South, Onuimo, Nkwerre, Isiala Mban and Aboh Mbaize). From the spatial distribution of farming activity by rural women in the study area, there is no study local government area (LGA) showing a non-existent/sparse pattern (Figure 1). Thus, the pattern is not much different in farming activity by rural women. One observation is that Ideato South L.G.A., Onuimo L.G.A. and Owerri West L.G.A. account for 11.76% each of those respondents in the farming category. Oguta LGA, Nkwerre LGA and Aboh Mbaize LGA rank lowest with 7.35% each.

The pattern shown from the spatial distribution of food processing activity by rural women in the study area is not even. Food processing activity by rural women is dense in Oguta LGA where fish smoking and drying prevails, Owerri West LGA where cassava processing dominates the economic landscape and Aboh Mbaize LGA where palm oil processing is predominant. However, food processing activity by rural woman is moderate in the other five study LGAs: Ori West, Ideato South, Isiala
Table 2. Frequency distribution of informal economic activities among L. G. As.

<table>
<thead>
<tr>
<th>L.G.As</th>
<th>Artisan/crafts (%)</th>
<th>Farming (%)</th>
<th>Food processing (%)</th>
<th>Petty trading (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboh Mbaise</td>
<td>0(0)</td>
<td>50(7.35)</td>
<td>120(18.75)</td>
<td>90(9.68)</td>
<td>260</td>
</tr>
<tr>
<td>Ideato South</td>
<td>0(0)</td>
<td>80(11.76)</td>
<td>50(7.81)</td>
<td>130(13.98)</td>
<td>260</td>
</tr>
<tr>
<td>Isiala Mbano</td>
<td>10(11.11)</td>
<td>70(10.29)</td>
<td>70(10.94)</td>
<td>110(11.83)</td>
<td>260</td>
</tr>
<tr>
<td>Mbaitolie</td>
<td>0(0)</td>
<td>150(22.06)</td>
<td>10(1.56)</td>
<td>100(10.75)</td>
<td>260</td>
</tr>
<tr>
<td>Nkwerre</td>
<td>0(0)</td>
<td>50(7.35)</td>
<td>70(10.94)</td>
<td>140(15.05)</td>
<td>260</td>
</tr>
<tr>
<td>Oguta</td>
<td>10(11.11)</td>
<td>50(7.35)</td>
<td>130(20.31)</td>
<td>70(7.53)</td>
<td>260</td>
</tr>
<tr>
<td>Onuimo</td>
<td>60(66.67)</td>
<td>80(11.76)</td>
<td>40(6.25)</td>
<td>80(8.6)</td>
<td>260</td>
</tr>
<tr>
<td>Oru West</td>
<td>0(0)</td>
<td>70(10.29)</td>
<td>30(4.69)</td>
<td>160(17.2)</td>
<td>260</td>
</tr>
<tr>
<td>Owerri West</td>
<td>10(11.11)</td>
<td>80(11.76)</td>
<td>120(18.75)</td>
<td>50(5.38)</td>
<td>260</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>680</td>
<td>640</td>
<td>930</td>
<td>2,340</td>
</tr>
</tbody>
</table>

Source: Author’s fieldwork.

Mbano, Mbaitolie, Onuimo and Nkwerre (Figure 2). Our questionnaire responses revealed that Oguta LGA (20.31%) ranks highest in the food processing category, closely followed by Aboh Mbaise and Owerri West L.G.As with 18.75% each. The least ranking LGA in the food processing category is Mbaitolie LGA with 1.56%. Ironically, Mbaitolie with dense farming activity lags behind in food processing, which is attributable to the peoples’ attitude and shortage of processing equipment. The other LGAs account for Ideato South (7.81%), Isiala Mbano (10.94%), Nkwerre (10.94%), Onuimo (6.25%) and Oru West (4.69%) respectively (Table 2). Local government areas with dense petty trading activity by rural women are Oru West LGA, Mbaitolie LGA, Nkwerre L.G.A., Isiala Mbano LGA, Ideato South LGA (Figure 3). Whereas, for Oguta, Onuimo, Owerri West and Aboh Mbaise LGAs it is moderate.

Artisan/crafts activity by rural women in the study area is not dense at all. The pattern is that, it is moderate in some local government areas and non-existent/sparse in others. Of the nine (9) local government areas that make up our study area, artisan/crafts activity by rural women is moderate in only four (4) local government areas. These are Oguta, Owerri West, Onuimo and Isiala Mbano LGAs, while it is non-existent/sparse in Oru West, Mbaitolie, Aboh Mbaise, Nkwerre and Ideato South LGAs (Figure 4). One remarkable feature of the frequency distribution of rural women artisan/craft activities among the study LGAs that has been portrayed by our examination of Table 2 is that Onuimo LGA with 66.67% is the local government area with the largest number of those in this category. Isiala Mbano, Oguta and Owerri West LGAs have 11.11% each. The rural women of Umuna community of Onuimo LGA are renowned and noted for their handicraft which is mat weaving and production of hand fans. The mats and hand fans are made from dyed ropes, a local resource. In Oguta knitting of fish nets/meshes and boat making is the craftwork of some rural women. Pockets of rural women in Isiala Mbano and Owerri West produce soap and other local cosmetics.

TESTING OF HYPOTHESES

There are two hypotheses propounded for testing in this research. The research was left with the question of which statistical, quantitative or mathematical model could best explain the situation. A survey of quantitative modeling tools available suggested that the analysis of variance analytical technique would provide the desired clue and enhance the analytical skill of the research in accepting or rejecting the hypotheses. The essence of the analysis of variance is to establish variance between intervening variables.

Hypothesis one

H₀: Rural women informal economic activities do not vary
significantly among communities in Imo State. $H_0$: Rural women informal economic activities vary significantly among communities in Imo State. In testing this hypothesis, an analysis of four activities (Artisan/Handicrafts, farming, food processing, petty trading) as it related to the eighteen study communities (totaling, seventy-two number of observations) was used.

Table 3 is a summary of the results of the analysis. The summary shows that the $F$-calculated is 19.37. Since the $F$-tabulated value of 2.76 is less than the $F$-calculated, then the test is significant at 0.95. Thus, we reject the null hypothesis ($H_0$) and accept the alternative ($H_1$). That is, rural women informal economic activities vary significantly among communities in Imo State, Nigeria. This implies that the rural women informal economic activities in the different study communities are not similar. This is likely due to the fact that, Amaraku, Dikenafai, Enyiogugu, Ifakala, Isiekenesi, Mgbidi, Nguru Nwenkwo, Nkwerre, Okuku, Okwelle, Orodo, Orsu-Obodo, Otulu, Owerre Nkwoji, Umuguma, Umuna, and Umunkwo do not have the same natural endowments and resources, and they do not all exist within the same ecological/geomorphological zones (there are slight differences), hence Amaraku, Dikenafai,
Figure 2. Map showing the spatial distribution of food/fish processing activity by rural women in the study area.

Enyiogugu, Ifakala, Isiekenesi, Mbidi, Nguru Nwenkwo, Nkwerre, Oguta, Okuku, Okwelle, Oredo, Orsu-Obodo, Otulu, Owerre Nkwoji, Umuguma, Umuna and Umunkwo, end up having different intensities for all their informal economic activities by rural women (farming, petty trading, food processing and artisan/handicrafts).

However, our interest is also to find out if there are
some activities that actually vary from one community to another. The LSD (least significant different) test was employed to determine those activities that actually vary from one community to another. Results show significant difference between petty trading and farming, petty trading and food processing, petty trading and artisan/handicraft, farming and artisan/handicraft, food processing and artisan/handicraft activities in the eighteen study communities.

**Hypothesis two**

$H_0$: Rural women informal economic activities do not vary significantly among LGAs in Imo State, Nigeria.

$H_1$: Rural women informal economic activities vary significantly among LGAs in Imo State, Nigeria.

In testing this hypothesis, an analysis of four activities (Artisan, Farming, Food Processing, Petty trading) as it
related to the nine study local government areas (totaling thirty-six number of observations) was used.

Table 4 is a summary table, showing the results of the second analysis of variance test. The above summary shows that the F-calculated is 12.48. Since the F-tabulated value is 2.92 is less than the F-calculated, the test is significant at 5% level. Thus, we reject the null hypothesis (Ho) and accept the alternative ($H_1$). That is, rural women informal economic activities vary significantly among local government areas (LGAs) in Imo State, Nigeria. Hence, the indication is that the nature and intensity of rural women informal economic activities in the different study LGAs are not similar. The likely reasons for these variances are: Unequal distribution of natural resources. Oguta LGA for instance, has Oguta Lake as well as River Orashi which yields lots of fishes, thus the dominance of fish smoking and drying activity there. In contrast some other LGAs have neither

Figure 4. Map showing the spatial distribution of artisan/handicraft by rural women in the study area.
Table 3. Analysis of variance of the rural women informal economic activities in the eighteen communities.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Degree of freedom (DF)</th>
<th>Sum of squares (SS)</th>
<th>Mean squares (MS)</th>
<th>F-ratio</th>
<th>F-tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>3</td>
<td>20894.4444</td>
<td>6964.8148</td>
<td>19.37</td>
<td>2.76</td>
</tr>
<tr>
<td>Error</td>
<td>68</td>
<td>24455.5555</td>
<td>359.64052</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Corrected total</td>
<td>71</td>
<td>45350.0000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Result of computer analysis.

Table 4. Analysis of variance of the rural women informal economic activities in the nine local government areas.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Degree of freedom (DF)</th>
<th>Sum of squares (SS)</th>
<th>Mean squares (MS)</th>
<th>F-ratio</th>
<th>F-tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>3</td>
<td>41788.8888</td>
<td>13929.6296</td>
<td>12.48</td>
<td>2.92</td>
</tr>
<tr>
<td>Error</td>
<td>32</td>
<td>35711.1111</td>
<td>1115.9722</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Corrected total</td>
<td>35</td>
<td>77500.0000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Result of computer analysis.

lakes nor major rivers. Mbaitoli LGA with dense farming and petty trading activity lies within the coastal plain ecological and geomorphological zones. Whereas, Oguta LGA (aforementioned) with dense food (that is, fish) processing activity and moderate artisan/crafts activity partially lies within the Niger River low terrace ecological zone and the deltaic plain deposit/sandy coastal plain geomorphological zone. There is pronounced association between ecology, geomorphology and some of the rural women informal economic activities, thus influencing the pattern of spatial distribution of each major activity.

Other factors could be changing gender roles, patriarchal gender relations, the number of people, awareness level of the rural women in the different L.G.As, level of development per LGA. These aforementioned causal factors are reasons likely to be responsible for the observed variation. The study villages and LGAs are observed areas of high patriarchy, with women’s roles evolving such that rural women in Oguta, Abob Mbaise and Owerri West L.G.As are those that rank highest as food processors, while Mbaitoli LGA has dense farming activity by rural women. Livelihood strategies are embedded in a set of patriarchal institutions. The rural area has a traditional social pattern that most times governs space. The rural lifestyle is, especially in contrast to metropolitan areas, associated with patriarchal gender relations (Little, 1991; Teather, 1994). There are also changing gender roles (Whatmore, 1991). While farm women for instance have played diverse roles, the farm men’s role has changed little.

Women and men’s work vary spatially. The spatial variation stems from the type of crops or the type of farm. For instance cash crop farms occupy definite space and are exclusive to men, a fact corroborated by Moser (1993). Cassava, plantains and household vegetable farms exclusive to women also have definite space. Regional differences mean not only that women and men participate in their national economies differently from each other; these differences are not uniform across the world. In the opinion of Hapke and Ayyankeril (2004), gender ideologies differentially inform men and women’s life courses. They illustrated how gender creates different patterns of paid work for men and women through out their life courses and analysed how men and women formulated livelihood strategies differently as a result. Some researches suggest that there are a range of household types associated with distinct ‘regional patriarchies’. These have particular patterns of inheritance, marital practices, and economic activity and welfare outcomes. In sub-Saharan Africa, there is the wide prevalence of highly complex, lineage-based communities with considerable gender segmentation. Women and men from the same communities often work in separate groups, in different economic crops or on separate fields, and spouses may maintain individual accounting units. Much of Nigeria is patrilineral and patriarchal structures predominate. Women obligations to the family include food provisioning and caring for their children. In South-east Nigeria (Imo State inclusive) female seclusion is uncommon, because most of the communities are Christian Ibos. Ibo women have considerable economic autonomy, which makes them exercise some economic agency in the family structure and are not entirely dependent on their husbands. However, along with these similarities are slight differences in gendered relations and the natural environment in which they exist.

The least significant difference (LSD) test was again used to determine those rural women informal economic activities that actually vary from one LGA to another. Our results reveal significant difference between petty trading and food processing, petty trading and artisan/handicraft, farming and artisan/handicraft, food processing and artisan/handicraft. No significant difference was
discovered between petty trading and farming, farming and food processing in the nine Local government areas.

In the context of the above discussion, studies by Fleischer and Applebaum (1992) and Kottis (1990) have attempted to provide an explanation for spatial variation in women’s work. Fleisher and Applebaum (1992) in their comparative study of two regions observed that there are spatial differences in the participation rate in the labour force of women attributable to different socio-economic characteristics and job opportunities off the farm or farm types. They employed the theory of gender relations because of power relations within which ideologies of appropriate gender roles are shaped and re-shaped in every day work practice. Kottis (1990) in her study attempted to explain the decline and the inter-area variation in women’s activity rates in Greece during the process of its economic development. Results of the study revealed that there was a considerable discouraging effect on labour force participation of unemployment and the negative impact of education, and that women’s hidden unemployment was found to be two to three times larger than reported unemployment.

There is an influence on the gender division of labour between production and reproduction in different parts of the world that give rise to distinctive regional patterns in labour force participation and economic activity by women and men in the economy. The result is that, even when men and women participate in the wider economy, their participation is partly structured by relations in the household. The way institutions are set up varies by level of economic development, structure of economy and extent of commodification. Consequently, there are likely to be differences across the world in the extent of formal markets and state regulation and of subsistence production.

**CONCLUSION / RECOMMENDATIONS**

This paper has critically looked into the issue of rural women informal economic activities in rural development. The Feminist theoretical framework used in the study offers a credible explanation and should provide the stimulus for continued empirical research. The role of rural women in rural informal sector is worthy of note and has to be emphasized, beginning with the global perspective and concluding with the local experience. Mbaitoli LGA with dense farming and petty trading activity lies within the coastal plain ecological and geomorphologic zones. While Oguta LGA with dense food/fish processing activity and moderate artisan/handicrafts activity partially lies with the Niger River low terrace ecological zone and the deltaic plain deposit/sandy coastal plain geomorphologic zone. There is pronounced association between ecology/geomorphology, gender roles and relations and some of the rural women informal economic activities, thus, influencing the pattern of spatial distribution of each major activity. From the hypotheses tested, we therefore conclude that rural women informal economic activities vary significantly among communities in Imo State, Nigeria. We also conclude that rural women informal economic activities vary significantly among local government areas. This variance is caused by several factors, among them are: Number of people in the area, ecology of the area, geomorphology of the area, changing gender roles, patriarchal gender relations, awareness level of the rural women in the different areas and level of development per area.

Gender ideologies of both men and women are at the centre of the gate-keeping institutions that determine the cause of enterprise development. Women in Nigeria usually form the majority of the economically active adult rural population because of the continuing tradition of male out-migration. By not enhancing women’s entrepreneurial activities, these gender ideologies undermine growth, employment creation and the vertical and horizontal integration of entire local rural economies. Gender bias is at the root of female entrepreneurs’ inability to expand their enterprises and consolidate them where they are rather than move them to other locations which may be perceived as ‘better locations’. They can be countered by anti-discriminatory laws in employment. The question of gender bias must be addressed in any policy intervention to determine the scope and trajectory of the rural women informal economic activities, with a view to supporting those enterprises that have growth potential along the lines of ecological zones to which they exist/ or are located. Rural women informal economic activities can be enhanced with the planning and implementation of the right policies. The following are being recommended for an enhanced informal sector for the rural women:

1. The government should consider the unique resource endowments of every locality and note their peculiarities in gender relations (as exemplified by the findings of this study) in formulating policies to enhance rural women informal economic activities and in implementing programmes for these rural women. The rural people particularly the rural women should be carried along and made to understand why some of their planned programmes are unique to them and their geographical area before they are executed.
2. Vocational skills should be generated for the women in rural informal sector. Both government and donor agencies to promote rural women artisan/handicraft activities should establish more craft centers.
3. Due to the rising cost of materials, tools, new machinery and equipment, prerequisite resources/materials or equipments for these activities should be provided or the cost for their procurement subsidized where absent. They should be taught the use of new equipment and technology relevant to the sub-type of informal sector activities engaged in, to further enhance
their activities.
4. The formation of clusters of economic activities should be stimulated. Organization of rural women in informal sector should be encouraged and these organizations when formed should be supported by NGOs/government and they should act as interlocutor for negotiations with the government.
5. Promotion of changes in attitude towards women through public debates and enlightenment programmes should be pursued. Public enlightenment programmes should be established to make the RIS women more informed and aware of opportunities that are available for meeting their crucial needs and priorities. Thus improved information flows, particularly for women farmers and entrepreneurs, and
6. If the implementation of the policies must be through the Local Government Councils, they should be allowed to have more autonomy in the planning and management of their assignments and not with the state government encroaching in their exclusive preserves. Informal sector policies should not centre more on projects but on planning or building up appropriate institutions, bringing in policy reform that will entail a dismantling of gender bias.

REFERENCES


