Assessment of Family Sizes and Poverty Levels in Mangu LGA, Plateau State

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Abstract

The size of the family is a matter of great importance not only for the country as a whole but also for the welfare, health of the individual, the family and the community. Many efforts have been made to strike a balance between family size and standard of living at prevalent rate of the scourged of poverty level. This research examines the relationship between family size and poverty levels in Mangu LGA. The initial idea was to look at the extent of poverty among family sizes. Stratified sampling technique was used to select communities from the eleven districts in the LGA, while systematic sampling was applied to select families of married couples i.e interval of ten houses from which structured questionnaire were administered. Twenty (20) respondents of either male or female per head from each district, two hundred and eight (208) were retrieved for analysis. Simple descriptive data analysis were presented with respect to socio-demographic information, family size and determinant factors of poverty and both multivariate and ANOVA for the statistical test. The result witnessed a high educational attainment and monogamous marriage practice, total dependence of farming as source of income. An average of six (6) children per head, twice meal intake on a daily bases without protein content, few numbers of children in school, dilapidated structure of houses of most of respondents, and access to medical care were at shops (chemist). There is a high prevalence of poverty in Mangu LGA at 92% in terms of dollar rating of poverty. Statistical test revealed that income affect family size of six and above (6>) at 0.05 confidence level, with no effect on family size less than four (4<) while strong relationship established between family size and determinant of poverty levels at 0.05. Concise policies and programme were suggested to integrate into the communities to prevent multiplier effects on the society.

Keyword: Family size, Poverty level, Determinants of poverty.

Introduction

Family size is the number of household members including children, the head irrespective of wherever they live. The size of the family is important for the welfare and health of the individual, the family the community as well as to the country at large. Pessimism has been expressed about the trend of family sizes and its tendency for a probable world population explosion which could plunge poor developing countries into further poverty and helpless wretchedness (Jones, 2005).

Family size in Africa is about the highest in the world, thus confirming the extreme increase of population in Africa. Nigeria is the sixth most populous country in the world, and the largest in Sub-Saharan Africa. Nigeria has one of the fastest population growth rates in the world. The Nigerian population has more than double since she attained nationhood in 1960. (NPC, 2012) With the data obtained from the past censuses, the Nigerian population increased sharply from 54 million in 1963 to 88 million in 1991. Presently Nigerian population is estimated to be about 167 million (NPC, 2012). This has a significant impact on the economy and the society in general. Despite the deliberate effort made by United Nation Children Fund (UNICEF), World Population Bureau and Family Health Survey to control population growth, the growth rate still remains high (Theresa and Odunayo, 2010).

The decision to have large family size and the timing is a critical issue which may involve a trade-off of the family scarce resources against a large family size. Economic difficulties in maintaining large families as a result of the economic crisis forcing people to change traditional beliefs in large family sizes and the traditional system of African extended family that had hitherto led to high fertility rates. At the same time, the desire for child bearing is still strong in Nigeria particularly in the rural areas. This has given rise to the strong view that the level of fertility and use of contraception are not likely to change until there is a drop in desired family size and increase in the awareness of reproductive choice is widely accepted (Economic Communities of Africa. ECA, 2001). Hence, it will be difficult for such an extended family size to avoid the trend of poverty that is clinching into Nigerian communities at a high rate.

This trend of family sizes is drastically increasing, especially in the Northern Nigeria even with the awareness of family planning and policies of precise number of children a household should have, still children continue to increase. The Economic Communities of Africa (ECA), 2001 report, has that, Nigeria has an average size of five (5) children per woman, whereas, the National Population Commission (NPC) suggests Four (4) children to a woman (ECA, 2001; NPC, 2008) This could be as a result of women traditional perception of their role in the society is to give birth and take care of their children. However, it is difficult for families to meet the basic standard of living such as food, shelter, education, health and among others and could plunge family into poverty.

To come up with a scientific viable fact about the extent of poverty among small and large family sizes in the study area, one hypothesis was stated:

Hypotheses

There is no relationship between family sizes and poverty levels.
There is no significant relationship between family sizes and determinants of poverty in mangu LGA.

Literature Review

The relationship between income and demand for children is not necessarily linear; and an increase in income may not necessarily lead to an increase in demand for children because individuals may choose to invest in the quality of surviving children (Zick and Xiang, 1994). Most families based their family size on their economic status especially the well to do. For instance, the opulent (wealthy people) men, irrespective of their residence, married wives and even deviate from tameable family size because of their level of opulence. But most highly rich families have the lowest family size. Meanwhile, the lowest wealth quintile has high family mean according to National Development Health Survey, (NDHS, 2003).

Household size influences household welfare. The larger the size the larger the resources required to meet basic needs of food and other necessities. It is, therefore, often hypothesized that the larger the household size the higher the likelihood of falling among the poor. Household size-squared is also included, because the relationship between PCE and household size appears non-linear (Aigbokhan, 2008).

An umbrella project spearheaded by the National Anti-Poverty Commission (NAPC) with funding support from the United Nations Development Programme (UNDP), shows that estimates of mean vulnerability level and vulnerability incidence increase as family size increases, large families tend to be poorer, and some effort has gone into explaining why this might be so, and what implications it has for policy. However, the basis for this stylized fact is questionable. Widely cited evidence of a strong negative correlation between size and consumption per person is unconvincing, given that even poor households face economies of size. For instance, in 1997, about three out of five families with size greater than ten were considered vulnerable to poverty, about double the rate among smaller sized-families, i.e. those with size no more than five (Lanjouw et al,1994, Romulo et al, 2007).

Kpakpor, (2005) alleged that, people with large family size were the illiterates. He further explained that, a family of about twenty members would likely have a poverty rate of 90 percent. There is an indication of an increase in poverty prevalence as family size increase is determined by number of children.

Empirical statements about the relationship between poverty and household size should be interpreted with considerable caution. The empirical relationship is quite fragile, being particularly sensitive to differences in the assumed size elasticity. Furthermore, the different welfare measures examined here suggest sufficiently different elasticises to be consistent with either the conventional view that larger households tend to be poorer, or that household size and poverty are roughly orthogonal or even negatively correlated.

The differences do appear to bear some relationship to the weight one attaches to child versus adult welfare; at the two extremes considered here, the Rothbarth method based on non-food spending as a measure of adult welfare suggests that small households tend to be poorer while the anthropometric indicator of severe child stunting implies that it is larger households who tend to be poorer (Lanjouw and Ravallion., 1995).

The Study Area

Mangu Local Government Area lies between latitudes 8^0 55^I 28^{II} and 9^0 45^I 05^{II} North of the Equator and Longitude 9^0 0^I 29^{II} and 9^0 17^I 38^{II} East of the Greenwich meridian. It shares boundaries with Bauchi state in the North East and comprises of eleven districts and has a total land area of about 3619km2. (Ministry of land and Survey, Jos, 2011) Mangu Local Government Area has a total human population of 294 931, with about 145 763 male and 149 168 female (National Population Commission (NPC), 2006 census).The local government is predominantly populated by four ethnic groups; namely Mwaghavul, Mupung, Pyem and Fursum. About 70% of the human population is dominated by the Mwaghavul ethnic group. The spoken languages are almost similar in linguistic characteristic amongst the indigenous groups. The inhabitants live mostly in nucleated pattern of settlements in most of Districts. There are also scattered villages around the main towns of the districts. Mangu is the largest settlement in term of population and an Administrative Headquarters of the Local Government. Agriculture is the main stay of the economy of Mangu people with over 75% of the whole population directly engaged in the practice.

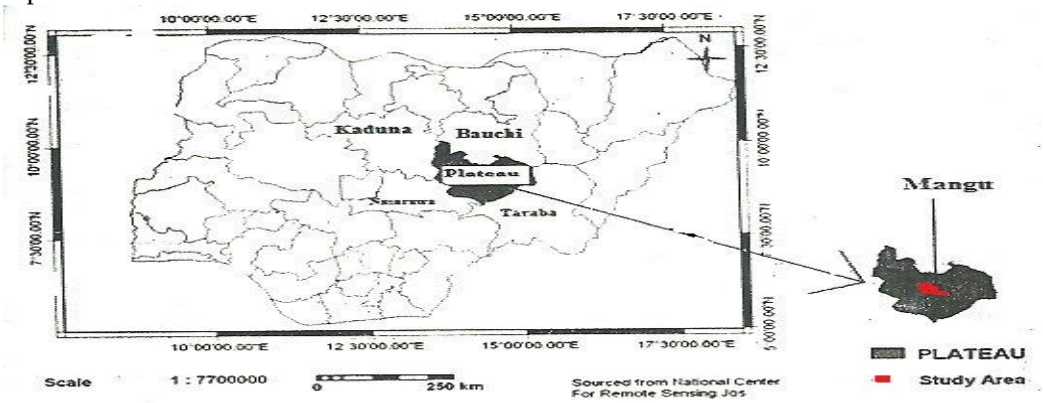

Figure 1 : Location Map Of Study Area

Materials and Methods

The present study was conducted in Mangu L.G.A of Plateau State, North central of Nigeria. The sources of data were basically observation, primary and secondary data. Primary data were generated from the fieldwork within the eleven districts from the sampled population of married respondents in the area. The secondary data were retrieved from books, journals, National Population Commission (NPC), National Bureau of Statistics, (NBS) as well as reports on NDHS 2003, 2008.

A stratified sampling technique was used to select communities, while systemic sampling was used for the selection of families/households at interval of ten houses from which structured questionnaire were administered. Twenty (20) respondents of either male or female were selected per district. Based on the above, 220 respondents were selected and a questionnaire was administered to them. However, 208 questionnaires were retrieved back fully completed.

In the first part of the analysis, simple descriptive data are presented with respect to questions on socio-demographic information, family Sizes and determinant factors of poverty. While, the second part of the analysis utilizes Multivariate Statistical test and ANOVA (SPSS) to obtain the relationship between family sizes and poverty levels as well as family sizes and determinants of poverty.

Results and Discussion

The socio-demographic data of the respondents on table I show that male accounted for 59.1%, leaving 40.9% for female and active labour force were found in the study area was dominantly between the ages of 25-34. This formed 36.4% of the sampled population, out of the three major religious practices, Christianity was more pronounced with 74%.

The proportion of the population with respect to the forms of marriage shows that monogamous marriage were more significantly observed with 65.4% while only 34.6% practices polygamous marriage. About 40.4% depends on farming/herding as their major occupation. From the findings: the population depend on farm produce as their source of income.

Table I: Respondents Socio-demographic Information

Socio-Demographic Data	Frequency	Percentage %
Sex of Respondents		
Male	123	59.1
Female	85	40.9
Age of Respondents		
15-24	24	11.6
25-34	76	36.6
35-44	56	27.6
45 &above	52	24.9
Religion		
Christianity	154	74
Islam	44	21.2
Others	10	4.8
Forms of Marriage		
Monogamy	136	65.4
Polygamy	72	43.6
Numbers of Wives		
One	141	67.8
Two	34	16.3
Three	20	9.6
Four & above	13	6.3
Occupation		
Farmers/Herders	88	40.4
Business/Trade	44	21.2
Civil servant	44	21.2
Artisan	13	6.3
Retired/Pensioner	15	7.0
Unemployed	8	3.9

Source: Researcher's field work, 2013

Note: Analysis can be made beyond the Table above, because not all Socio-demographic Information were captured.

Studies in Africa have shown that, most couples desire to have more Children as a source of honour, wealth and prestige (Thompson, 2001). And also preference of male child has been a determinant factor to the number of children a family should have. Table II: revealed that 48.6% have a family size of 4-6, an average of five (5) children per head. 22.1% have a family size of 7-9 an average of eight (8) per head while 17.3% had a family size of 1-3 and 12% with 10 & above family size. By implication, family sizes still remind as was reported by Economic Communities of Africa (ECA), 2003. There is still high fertility rate and desire to have children even with the economic difficulties in maintaining large families and also, family sizes falls within the same range group that could be as a result of either level of educational attainment of the respondents' or the practice of monogamous marriage which is predominantly in practice.

Table II: Distribution of Respondents' Family Sizes

Family Sizes	Frequency	Percentage %
(1-3)	36	17.3
(4-6)	101	48.6
(7-9)	46	22.1
(10>)	25	12.0
Total	208	100.0

Source: Researcher's field work, 2013

Note: Analysis can be made beyond the Table above, because not all Family Sizes data were captured in the community.

The research found that about 60.1% could afford two meals on daily bases and 36.5% could afford three square meals, all without any form of protein as shown on table III. Meat and fish are eaten on occasional bases. The numbers of children in school base family size indicated that 52.4% for family size 1-3 and 4-6 had all their children in school and 36.1% for all family sizes had some of their children in school while 11.5% for(10>) family size had none of their children in school. The survey also reveals that about 37% of respondents lives in their personal houses, mostly built with mud blocks while 32.7% lives their in family houses. There are problems in the nature of the houses in the study area that were not conducive and comfortable for living.

Table III: Family Sizes and Determinant of Poverty level

Percentage of Daily Meal Affordability				
Family Size	**Once**	**Twice**	**Thrice**	
1-3	-	7.7	9.6	
4-6	-	32.2	16.3	
7-6	-	15.4	6.7	
10>	3.4	4.8	3.8	
Percentages of Numbers of Children in School				
Family Size	**All**	**Some**	**None**	
1-3	14.9	2.4	-	
4-6	37.5	11.1	-	
7-9	-	22.1	-	
10 & above	-	0.5	11.5	
Percentages of Types of Accommodations				
Family Size	**Rent House**	**Personal House**	**Family House**	**Others**
1-3	2.4	8.2	4.8	1.9
4-6	9.6	20.2	12	6.7
7-9	3.8	7.2	8.7	2.4
10 & above	2.4	1.4	7.2	1
Percentages of Health Giver Accessibility				
Family Sizes	**Traditional**	**Hospital**	**Family Doctor**	**Chemist**
1-3	-	12	1.9	3.4
4-6	2.9	18.3	-	27.4
7-9	2.9	8.7	-	10.6
10 & above	2.9	4.3	-	4.8
Percentages of Levels of Income in 100,000s				
Family Size	**>100,000**	**≥200,000**	**≥300,000**	**≥400,000**
1-3	3.8	5.8	-	2.9
4-6	8.7	31.3	-	-
7-9	4.8	7.2	1.9	1
10 & above	1.9	8.7	14	-

Source: Researcher's field work, 2013.

Note: Analysis can be made beyond the Table above, because not all Family Sizes and Determinant of Poverty level data were captured in the community.

In times of health care accessibility, about 46% for all family sizes received health care services from chemist and 43.3% in hospital while 8.7% access health care from traditionalists. There is poor health quality and accessibility to medical attention, even with the availability of Primary Health Centre in all the eleven districts of Mangu LGA. About 3.9% of all family sizes could earn N400, 000 and above as annual total income i.e. ≥ N33, 000 per month, this compared with N54, 401.16 per dollar rating of poverty line on monthly bases shows that high level of poverty among the Mangu people.

The multivariate analysis revealed that income affects families with sizes above six (6>) (at F<0.05) but does not affect the family sizes below four (4<) since none of them had significance below 0.05. This was observed by Kpakpor, (2005) and Lanjouw et al, (1995) "an increase in poverty prevalence as family size determined by number of children increases" as well as "larger households have the tendency to become poorer". The NULL-Hypothesis (I) is rejected and embraces alternative hypothesis. Whereas, the relationship between family sizes and determinants of poverty level has shown a greater significant at (F> 0.05) in all the variables tested i.e Income, school, daily meal intake, accommodation and accessing medical care.

Hypothesis (II) Null is rejected while alternative hypothesis accepted. Family sizes contribute to a great extent to poverty level, since the demand for children means higher responsibility and demand for more social amenities.

Conclusion

This paper sets out to highlight the dominancy in male population and active labour force with a high practice of monogamous form of marriage which signifies a belief of more children from one wife. Respondents have high educational attainment and predominantly farming as their major source of income. It is also evident that family size is on an average of six (6) children per woman without only an intake of twice a day of meal, some children could not afford to go to school because of financial constraint, majority of the people lives in their personal houses built with mud sand, congested and poor ventilation. Generally, the determinants of poverty has revealed influence on family welfare and responsibilities, thus scourge of poverty in Mangu LGA is at 92 percent base on dollar rating. Families should be encouraged to diversify their source of income to enhance welfare rather than depending on farming alone that is vulnerable to disaster, most especially, with recent global warming effect on climate. Incentives such as relief from taxes and free education to families that adapt the policy of stipulated number of children promulgated by government. Families should be educated on the importance of family planning and must be integrated into the system to prevent multiplier effects on the society.

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