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Income Diversification and Wellbeing among Staff of Kaduna State University.

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Abstract

Income diversification plays a very significant role on the socio-economic wellbeing of any individual or group of individuals especially at their microeconomic level. The issue of inadequate feeding, improper education for children, insufficient fund for rent, and lack of improved health care for family are regarded as barriers bedeviling the survival and well-being of any society. Studies on income diversification and wellbeing have been conducted under different perspectives to include occupational diversification, livelihood strategies, determinants of diversification among rural inhabitants etc. This paper examined the relationship between income diversification and wellbeing among the staff of Kaduna State University. The survey method was employed through administration of 180 questionnaires and statistically analyzed 108 returned responses with the use of frequency tables as well as regression model. The study revealed that consultancy service, trading, handcrafting and transportation service were considered as additional sources of income by the staff of Kaduna State University. The regression results indicated that consultancy service and trading have significant relationship with the staff wellbeing in the study area. The study recommended that, the management of Kaduna state university should encourage their staff about the importance of income diversification through organizing entrepreneurship workshops and vocational training that would make their socio-economic well- being highly attainable.

Keywords: Income diversification, wellbeing, consultancy service, trading

Introduction

The survival and development of any individual or group of individuals depends basically on the level of their well-being, where basic amenities such as food, clothes, education, health etc are affordable and available at a price within the income scope of an individual. And when the income source of an individual or household dwindles, it has an instant multiplier effect on the basic services. Sequentially, a household or an individual experiencing such dwindling difficulties should diversify his income source as distress-push strategy or demand- pull strategy to avoid risk and uncertainty situation during the economic slack or shock period. Income diversification refers to an increase in the number of sources of income or the balance among the different sources (Ibrahim and Rahman, 2009) Thus, a household with two sources of income would be more diversified than a household with just one source, and a household with two income sources, each contributing half of the total, would be more diversified than a household with a single source (Joshi, et al, 2003).

Diversification at the individual or household level (livelihoods diversification) simply means adding new economic activities. These could include agricultural or non-agricultural work, work for one's self or for an employer, home based work or work at other places (Adebayo, 2012). but despite the fact that income diversification among households in Nigeria has been meant to improve the well being and reduce the level of abject poverty bedeviling them and their family in both rural and urban areas but study conducted by World Bank (2009), showed that 52% of Nigerians live on less than a dollar per day. As such various studies were conducted in some regions, states and areas in this country on income diversification and well being among the households in Nigeria. Ibrahim and Rahman (2009) for instance analyzed the impact of income and crop diversification among farming households in a rural area of north central Nigeria. The study concluded that the determinants of income diversification as availability of electricity in the household and distance from local market led to well-being.

Raphael and Matin (2009) also analysed the patterns of income diversification in rural area Nigeria with special reference to Kwara State where they found out that decrease of market failure and infrastructural development were the determinants of income diversification affecting the level of livelihood in the said area. Isaac (2009) provided an in-depth study on poverty and income diversification among households in Rural Nigeria, while Adebayo, Akogwu and Yisa (2012) identified the determinants of income diversification among farm households in Kaduna state using Tobit Regression Model. The study identified educational level, farm size, membership of cooperatives and non-farm income as the strategies of income diversification improving the level of well- being.

Awoniyi and Salman (2013) adopted the logit regression tools for analysis and analyzed the non-farm income diversification and welfare status of rural households in South West Zone of Nigeria. Similar method was also used by Adepoju and Obayelu (2013) to examined the effect of livelihood diversification on the welfare of rural households in Ondo State. Their study indicated that household size and household income influencing the level of welfare positively.

Msoo and Goodness (2014) using regression model examined the effect of socioeconomic characteristics that influence the decision to diversify and also the welfare effect of diversification on farm households in Makurdi, Benue state. Madaki and Adefila (2014) employed t-test to examine the contributions of non-farm activities to the employment generation and total income of rural households in Lere Local Government area of Kaduna State, Nigeria. They concluded that non-farm economic activities and accessibility to financial resources were the dimensions of income diversification enhancing livelihood in the study area.

However, none of these studies were found to analyse how four different dimensions of income diversification (namely: consultancy service, trading, handcrafting and transportation service) affect the level of well-being among civil servants in Kaduna State. In addition, most of analytical tools used for the previous studies were based on parametric tool of analysis. This has created a gap in literature in respect of income diversification and well being among the civil servants in area of Kaduna state; hence, to bridge this gap in knowledge, the present study intends to examine the relationship between income diversification and well being among the civil servants of Kaduna State University.

Based on the foregoing, the main goal of this paper is to examine the relationship between income diversification and well being among the civil servants (staff) of Kaduna State University. The study therefore proposes the hypothesis in a null form, that there is no any significant relationship between income diversification and well being among the civil servants in Kaduna State University. Specifically, this study examines whether consultancy service, trading, handcrafting service and transportation service have significant relationship with well being enhancement of staff in Kaduna State University.

The rest of this paper is organized as follows: section two is the literature review and theoretical framework; section three shows the methodology employed for this study and section four presents the results, discussions and analysis while finally section five provides conclusion and recommendations.

Literature Review and Theoretical Frame Work

Empirical Literature Review

Studies have been carried out by various researchers on income diversification under many perspectives as well as its effect/impact on well being among households. For instance, Edward, Spencer and John (2010) investigated income diversification as a potential way out of poverty. The study analyzed the determinants of income diversification decisions among the fishing communities, with a focus on those living on the Kenyan shores of Lake Victoria. The results showed that education level, access to credit and membership in associations are the key factors that explain income diversification behavior among fish workers.

Saba, Abdul-Majeed and Muhammad (2014) supported the work of Edward, Spencer and John (2010) by conducting study on Determinants of Income Diversification among Rural Households of Pakistan using cross sectional data of Pakistan Social and Living Standards Measurement (PSLM) for 2010-2011. The variables used for measuring income diversification are demographic indicators, poverty status, and income of households. The results showed that non-poor and female headed household with higher family size diversify more as compared to poor, male headed household with small size of family members. The place of residence (province used as proxy) also played important role for income diversification. It is recommended to improve the ways of income diversification among rural household to reduce poverty.

Similar to the work of Saba, Abdul-Majeed, and Muhammad (2014) is Raju, Wen-Chi and Rudra (2015) who also examined the factors affecting nonfarm income diversification among rural farm households in Central Nepal, using cross-sectional data and a probit model as their research methodology. The study revealed that household characteristics such as age, gender and education of the household head, and family size play a significant role in nonfarm work decisions. The study suggested that government policy should pay more attention on education, gender and infrastructures such as road and markets, to reduce the entry barriers and facilitate easier access to nonfarm activities.

There is also a considerable amount of research trying to identify the impact of income diversification on household, this string of research can be dated back to the remarkable contribution of Ibrahim and Rahman (2009) whose study focused on examining the income diversification on rural household and also on identifying the determinants of rural income diversification in Nasarawa Eggon area, North Central, Nigeria. Data were collected on socio-economic variables, income and income sources as well as types of crops grown over a period of one month, they employed Simpson Index of Diversity and Multiple Regression tool for analysis. The result revealed that diversification into a number of income sources and crops grown were very high. And the study also showed that the determinants of income diversification were number of children less than 12 years old, number of adults above 60 years old, availability of electricity in the household and distance from local market.

Furthermore, Mukaila and Muflau (2009) examined the impact of income diversification on well- being in Ilorin Metropolis, he applied same analytical tools with Ibrahim and Rahman (2009) i.e. Simpson index of diversity and multiple regression. The result indicated that income diversification has no significant impact on household well-being in Ilorin Metropolis. The study suggested that the people in the metropolis should engage in other minor income generation activities that would augment their main income sources.

Raphael and Matin (2009) examined the driving forces of income diversification in rural Nigeria with special reference to Kwara State. Data were collected from household and regression model was used in making inferences. the study revealed that diversification was not only considered As a risk management strategy but also means to increase overall income and the study suggested that reducing market failures through infrastructure improvements could enhance poor household situation.

Adebayo, et al (2012) identified the determinants of income diversification among farm households in Ikara, Makarfi and Giwa Local Government Areas of Kaduna State. Analytical tools used were descriptive statistics and Tobit regression model. The Tobit model was used to capture determinants of income diversifications (agricultural and non-agricultural enterprises) among farm households. The study revealed that the significant variables that increase income diversification strategies of farm households were educational level, farm size, membership of cooperatives and non-farm income while farm size decreases the income diversification of households with the highest elasticity of 0.41. This study suggested that there was need for provision of basic infrastructure in the farming communities to increase their non-farm activities.

Adepoju and Obayelu (2013) examined the effect of livelihood diversification on the welfare of rural households in Ondo State. Primary data was also used and multinomial logit and the logit regression models were employed for analysis. The study found out that household size, total household income and primary education of the household head were the dominant factors influencing the choice of livelihood strategies adopted, economic analysis also showed that income from non-farm activities, as well as income from a combination of non-farm and farming activities, impacted welfare positively relative to income from farming activities. The study recommended that the promotion of non-farm employment as a good strategy for supplementing the income of farmers as well as sustaining equitable rural growth.

Msoo and Goodness (2014) examined the socioeconomic characteristics that influence the decision to diversify and the welfare effect of diversification on farm households in Makurdi, Benue State. The results showed that a male-headed household, education and credit increase the probability of diversification while farming experience and market access decrease the probability. The OLS result also showed that diversification, age, education and credit have a positive and significant effect on household welfare while household size has a negative effect.

Similarly Madaki and Adefila (2014), examined the contributions of non-farm activities to the employment generation and total income of rural households in Lere Local Government area of Kaduna State, Nigeria. The study recommended that government should give more recognition to non-farm economic activities in rural areas by designing policies that will equip poor households with better skills, increased investment in infrastructure, and accessibility to financial resources.

Theoretical Framework

The theoretical framework used in this study is that of demand-pull/distress-push approach. Reardon *et al* (1998) suggest that when relative returns are higher in rural non-farm employments than in farming, and returns to farming are relatively more risky, pull factors are at work. Demand pull also includes any increase in the demand for products and services resulting from increase in income for lower and middle-income households and increased demand from different areas (Islam, 1997).

Conversely, distress-push diversification occurs in an environment of risk, market imperfections and open and /or hidden agricultural unemployment. Thus, when rural populations engaged in economic activities that are less productive than agricultural production and are motivated by the need to avoid further income decreases, push factors are at work. One implication of this approach is that the distribution of diversification over households would follow a bimodal distribution over households' incomes in the presence of both demand-pull and distress push diversification (Rajan, 2008). These two diversification typologies will serves as theoretical framework for this study, consequently, the study will examine the essence of income diversification as either means of accumulation of wealth(demand- pull factor) or survival of livelihood (distress-push factor).

Methodology

This study adopted survey research method to ascertain whether additional income sources improve the well being of university staff. Academic staff as well as Senior Administrative Staff of Kaduna State served as study population. Stratified random sampling was adopted to arrive at the needed sample size because the population consists of two distinct sub groups- Academic staff and Senior Admin staff. The study selected 124 out of 372(KASU Annual report, 2014/2015) for Academic Staff members and 56 out of 169(KASU Annual report, 2014/2015) for Senor Admin members. In essence, One- Third (1/3) of the total population constituted the sample size (see Ewododhe, 2011). A structured questionnaire was used for data collection. It was distributed personally by the researcher with the help of three (3) research assistants. A total of 180 staff were interviewed. Out of 180 questionnaires administered and 108 completed accurately and were used for this study. Data from survey were analyzed using frequency table and percentages.

Results and Discussion

Additional source of income among respondents

Table 1 indicated that, 31.5% and 38% of respondents strongly agreed and agreed respectively that consultancy service was their main additional source of income apart from their salaries, while 5.6% of respondents were undecided, then 17.6% disagreed with the proposition, and the remaining 7.4% strongly disagreed with the assertion.

In terms of trading as additional source of their income, 25% and 47.2% of respondents strongly agreed and agreed respectively that trading was their additional source of their income, while 11.1% were undecided. In addition, 6.5% and 10.2% of respondents disagreed and strongly disagreed respectively with the assertion that trading served as their additional source of income.

About 8.3% and 11.1% of respondents strongly agreed and agreed that handcrafting was the additional source of their income, 7.4% of respondents were undecided, while 45.4% and 27.8% of respondents disagreed and strongly disagreed with the assertion too.

More so, the table revealed that 16.7% and 21.3% of respondents from Kaduna State University strongly agreed and agreed respectively that transportation services were additional source of income apart from their salaries.

Perception of well- being among Respondents

The study also sought to find out the view of respondents concerning their wellbeing. Four variables were examined (adequate feeding, house rent, proper education for children and improved health care for family). Figure 2 showed that, 25.9% and 30.5% of respondents strongly agreed and agreed respectively that adequate feeding was an indicator for their wellbeing. Another 32.4% and 26.9% of respondents also strongly agreed and agreed respectively that paying house rent was also an indicator for their well being. Another 25.9% and 50% of respondents in the study area strongly agreed and agreed respectively that proper education for their children was more so regarded as sign of their wellbeing. Majority of the respondents consisting of 28.7% and 42.6% strongly agreed and agreed respectively that improved health care for their family as a good sign of their wellbeing.

Table 1 Additional Source of Income for Staff of Kaduna State University.

Option	Consultancy Services		Trading		Handcrafting		Transportation Services	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Strongly Agreed	34	31.5	27	25	9	8.3	18	16.7
Agreed	41	38	51	47.2	12	11.1	23	21.3
Undecided	6	5.6	12	11.1	8	7.4	15	13.9
Disagreed	19	17.6	7	6.5	49	45.4	45	41.7
Strongly Disagreed	8	7.4	11	10.2	30	27.8	7	6.5
Total	108	100	108	100	108	100	108	100

Source: Researcher's Survey, 2015.

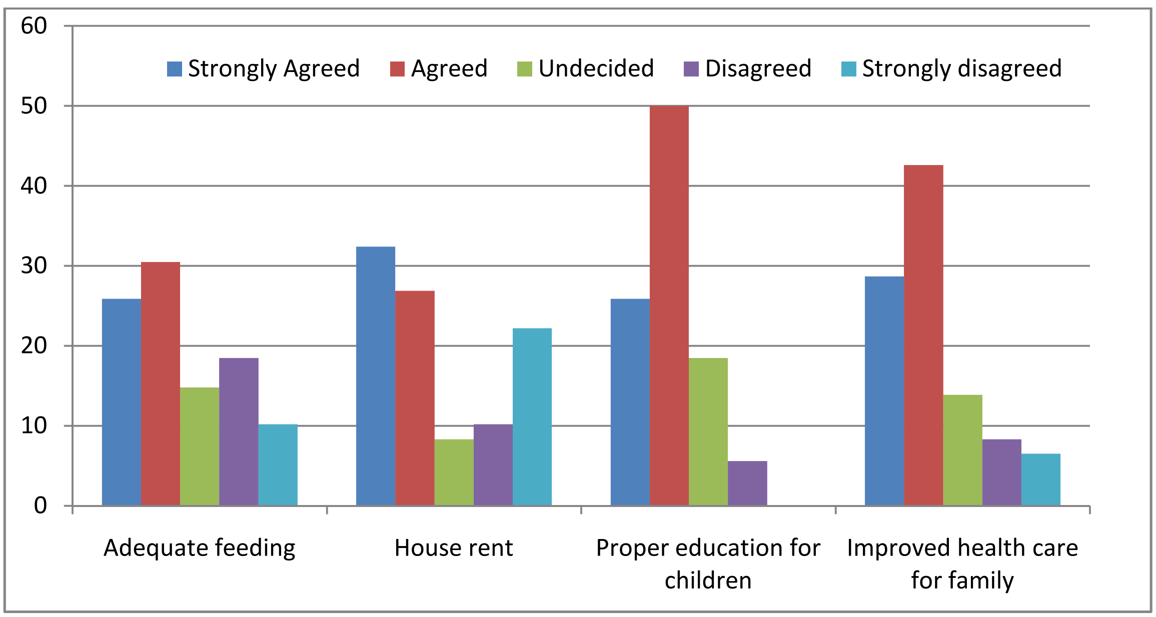

Figure 1. Perceived Well- being among respondents

Respondents Level of wellbeing

The respondents were asked to rate their satisfaction with their wellbeing. Table 2 showed that 23.1% and 51.9% of respondents were highly satisfied and satisfied respectively with the level of their wellbeing, About 9.3% of respondents were dissatisfied with their wellbeing and only few representing 2.7% of respondents were highly dissatisfied with the level of their wellbeing.

Table 2: The Extent of Well-Being among the Staff of Kaduna State University

Option	**Frequency**	**Percentages**
Highly satisfied	25	23.1
Satisfied	56	51.9
Undecided	14	12.9
Dissatisfied	10	9.3
Highly dissatisfied	3	2.7
Total	**108**	**100**

Source: Researchers' survey, 2015

Regression Analysis

A regression model was performed to examine the relationship between additional income sources of the respondents and their well-being. The table 3 indicated that R- Square of the estimated regression is 0.662. This means that 66.2% variation in the dependent variable known as regressand (wellbeing) is explained by independent variables known as regressor (income diversification) while the error term takes care of remaining 33.8% variations. The в coefficient tells how many units of wellbeing increases for a single increase in each predictor. The results showed that a unit increase in income from consultancy service corresponds to 0.68 units increase on their wellbeing, while for a unit increase of income from trading activities leads to 0.78 units increase on their wellbeing. Also an increase from income from handcrafting also leads to 0.36 increase on their wellbeing, and a unit increase on the transportation service corresponds to 0.48 increase on well being.

The table 3also showed that consultancy service and trading have significant relationship with the well-being having 0.002 and 0.011 as P-Value respectively at 5% level of significance, this suggests that the higher the level of consultancy service and trading among the KASU staff , the higher the level of their wellbeing. While handcrafting with 0.10 and transportation with 0.12 as their P-value were not significant to the wellbeing of KASU Staff at 5% level of significance, this showed that staff of Kaduna State University did not embarked more on handcrafting and transportation services which were normally used to supplement the income of many staff geared towards their subjective and objective well being.

Therefore, the results of this study empirically support the work of Mukaila and Muflau (2009) as well as Gafar (2009) which stated that there was a significant relationship between income diversification and livelihood (wellbeing) among the household in Ilorin, Kwara State.

Table 3: Regression results: Income diversification on Well-being.

Variables	Coefficients	Standard error	t-ratio	P-Value
Constant	0.82	119.764	2.101	0.989
Consultancy service	0.68	11.353	0.796	0.002
Trading	0.78	11.006	0.683	0.011
Handcrafting	0.36	7.728	1.794	0.10
Transportation service	0.48	2.805	0.428	0.12

R-Square = 0.662, Adjusted R- Square = 0.601, F-ratio = 1.936, P-value = 0.71

Conclusion and Recommendations

Income diversification plays a very essential role on the improvement of any individual or group of individuals wellbeing be it subjective or objective, especially at their microeconomic level. The issue of inadequate feeding, improper education for children, insufficient fund for rent, and lack of improved health care for family are regarded as barriers bedeviling the survival and well-being of any society. Studies on income diversification and well-being have been conducted under different perspectives to include occupational diversification, livelihood strategies, determinants of diversification among rural inhabitants etc. the paper examined the relationship between income diversification and well-being among the civil servants of Kaduna State University. The study revealed that consultancy service, trading, handcrafting and transportation service were considered as additional sources of income for the staff of Kaduna State University. The regression results indicated that consultancy service, and trading have significant relationship with the staff well being in the study area, while the transportation service and handcrafting was insignificant.

Therefore, the paper recommends that, the management of Kaduna state university should encourage their staff about the importance of income diversification through organizing entrepreneurship workshops and vocational training that would make their socio-economic well- being highly attainable. And there should be provision of soft loans, with only administrative charges, to strengthen staffs' capital bases.

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