USE OF INFORMATION AND COMMUNICATION TECHNOLOGY ON POVERTY STATUS OF RURAL ENTREPRENEURS IN SOUTHWEST NIGERIA

Extended Abstract

KeyWords: ICT, Poverty Status, Rural Enterpreneurs

1. Introduction

Micro and small-scale enterprises (MSEs) play a dynamic role in the achievement of development goals. Poor economy, unemployment and widespread poverty are among the multivariate socioeconomic problems that MSEs help to combat (RIA, 2006; Sokoto & Abdullahi, 2013). According to SARD (2007) these informal businesses secure the livelihoods of nearly half the economically active population in Africa. Their dominance in the economy of developing nations points to them as crucial in achieving enhanced welfare for most of its populations. IFAD (2012) asserted that rural enterprises are the main drivers of sustainable rural development and rural poverty reduction in Africa. This is corroborated by SARD (2007) which stated that there is a close link between the share of MSEs, to which rural enterprises belong, and per capita GDP- the higher the number of rural enterprises, the higher the GDP. Their activities also enable them to serve the formal economy in terms of provision of inputs (Deen-Swarray, Moyo, & Stork, 2012). Through their activities, rural enterprises generate income, innovation, capacity, technology transfer and consequently, alleviate the impecunious conditions of their operators and encourage rural development (SARD, 2007).

According to RIA (2006) stressed that the MSE sector is where most of the world He poor v posited that people in the informal economy are often poor; have lower incomes adjusted for human capital; experience lower rates of productivity and growth for their enterprises. According to Sokoto and Abdullahi (2013), the employment-generation and economic-growth potentials of rural enterprises in Nigeria are frustrated by inadequate capital and low managerial and technical skills mainly caused by poverty. Stork and

Esselaar (2006) posited that access to capital is a major challenge to these businesses (Comninos et, al; 2008). Also, rural enterprises have limited access to timely and accurate information on market and transport which hinder them from greater economic participation and contribution (SARD, 2007).

Rural enterprises acc

quality products; product promotion; networking and lower transaction costs, among others, can be facilitated by Information and Communication Technology (ICT). Information and Communication Technologies (ICTs) are crucial inputs in MSEs that contribute significantly to income and employment generation as well as improved efficiency and productivity. However, despite the pivotal role ICT plays in facilitating economic growth and rural development through its application in this sub-sector, its potentials are not fully exploited.

In light of the foregoing, the study seeks to investigate the following hypotheses:

1) There is no significant relationship between the level of use of ICTs and respondents enterprise
2) There is no significant relationship between the level of use of ICTs and respondents income.
3) There is no significant relationship between respondents enterprises and their
4) There is no significant relationship between severity of constraints encountered by the respondents and the level of use of ICTs.
5) There is no significant relationship between selected socioeconomic characteristics of respondents and their level of use of ICTs

2.0 Methodology

Sampling Technique

The study is based on a survey of rural entrepreneurs in Southwest Nigeria. Primary data was collected using structured and validated questionnaire. Multi-stage sampling procedure was employed in the selection of 240 respondents for the study.

Adopted poverty measurement concept

The study adopted the relative measure of poverty which categorises people as core-poor, moderately poor or non-poor (NBS, 2005). It is based on the measure of the mean per capita income (MPCI). The poverty line is defined as ⅔ of the MPCI. Respondents who earned a monthly income that is ⅓ of the MPCI or below are categorised as "Core poor"; those who earned a monthly income that is between ⅓ and ⅔ of the MPCI are described as "Moderately poor" while respondents with monthly income equal to or above ⅔ of the MPCI are categorised as "Nonpoor".

Variables of the study

The dependent variable of the study is the poverty status of rural entrepreneurs in the study area. This was determined using their income captured daily, weekly, monthly or annually. The independent variables include the rural dwellers socio-economic characteristics, available ICTs, uses for which ICTs are deployed, extent of ICT use, benefits from ICT use and the constraints to use etc.

Data analysis

Data collected was subjected to both descriptive and inferential methods of data analysis. The descriptive part relied on frequencies obtained from the application of Statistical Package for Social Sciences (SPSS) to present the profile of the sampled rural entrepreneurs. The hypotheses were tested using , Chi square, t-test, Pearson s Product Moment Corre

3.0 RESULTS AND DISCUSSION

Socioeconomic characteristics of the respondents

Result shows that, females constituted 45 percent while males were 55 percent. Majority (48.75%) of the respondents fall within the age category of 36-51 years. Only10.83 percent fell within range 20-35 years and the mean age was 48 years. This indicates a middle-aged population. Most (55.90%) of the respondents had fairly large families, 1-7. Respondents with 0-9 years of formal education constituted 54 percent, the average number of years spent in formal education was 8 years. The entrepreneurs can, therefore, be regarded as poorly literate. Majority (42.5%) had farming as their primary occupation while trading was the secondary occupation of about 26.7 percent of them. This is corroborated by NOUN (2010) and IFAD (2012) that a large percentage of the population in rural areas is dependent on agriculture and most MSEs are agriculture-based. Of all the respondents, only 20.8 percent had no secondary occupation this implies an increasing trend of livelihood diversification among entrepreneurs in rural areas. They diversify livelihoods in order to increase income flow, survive and improve their standards of living (Rahman et al; 2007). Moreover, income flow is essential to ICT access and utilization (Gillwald, et al., 2010). Majority (82.9%) were members of social organisations. Only a meager 2.90 percent of the respondents earned ₦44,246.60 ($221.23) and above and this was the highest income category. Most of them (49.20%) earned between ₦11,279.6($56.40) and ₦ 22,268.50($111.34). The mean income was ₦ 19,348.62($96.74).

Available ICTs in the community:

The mostly available ICT was radio as indicated by all the respondents. It is followed closely by mobile phone indicated by 99.2 percent of the respondents and television which was claimed to be available by 98.3 percent of the respondents. It can be deduced from the table that most of the ICTs are not available in the area.

Uses to which ICTs are deployed

Majority of the respondents (95.8%) always use mobile phone. This is followed closely by 95.4 percent of respondents who always use radio. Respondents who always use television constituted 53.3 percent. None

of them used cinema. . Moreover, PIWA (2008) asserted that radio remains the most appropriate communication medium for social and development communication in Africa. About 59.2 percent used the mobile phone to access financial services albeit from the social organizations to which they belong and not through mobile money service. Usually, the use of the mobile phone to facilitate financial services from the social organisation to which they belong is to support face-to face interaction, which is normally used. According to Deen-Swarray *et al* (2012), a large percentage of informal businesses in Nigeria do not have access to formal bank services. However, mobile money which can help to address this financial gap has low penetration.

Extent of use of ICTs:

Majority of the respondents (95.8%) always use mobile phone. This is followed closely by 95.4 percent of respondents who always use radio. Respondents who always use television constituted 53.3 percent. None of them used cinema.

The extent of use of ICTs by the respondents was summarised into the high and low categories. The extent of ICT use by the respondents can be regarded as low. This is supported by Oyesola and Oladeji (2009) that there is low level of use of ICTs by the rural population and this will invariably prevent them from harnessing ICT potentials for reducing poverty level.

Benefits accrued from the use of ICTs

Majority of the respondents (74.2%) claimed that ICTs do not generate employment for them. However, benefits such as saving of time, network facilitation, improved awareness of goods and services, income and reduction in transaction costs were realised to a large extent by the respondents. Thus, based on the responses, benefits accrued from the use of ICTs by the respondents have been categorised into high and low

levels. The extent of benefits realised from the ICTs by majority of the respondents (51.7%) was low when compared to the 48.3 percent who confirmed that the benefits of the use of ICTs was high. This may be due to factors such as inadequate finance, lack of skill, remoteness of location among others as constraints to optimal use of ICTs for the profitability of enterprises among respondents.

Constraints to ICT access and utilisation

The respondents identified inadequate funds, low literacy level, complexity of technology, lack of skill, the remoteness of their location as a severe constraint to ICT access and utilisation for their enterprise. These data have been summarised into high and low levels of constraints to ICT access and utilisation based on the above criterion. Most of the respondents (55%) confirmed that they encountered a high level of constraints while about 45 percent encountered low level of constraints in accessing and utilising the available ICTs for their enterprises.

Perception of respondents to use of ICTs

The responses to the perception have been summarised into two categories, favourable and unfavourable. Most (54.6%) of the respondents have a favourable perception of ICT use and this is supported by Oyesola and Oladeji (2009). This implies that most respondents view the use of ICTs in their enterprises as capable of yielding benefits that can boost their businesses and improve their welfare.

Poverty profile of the respondents

The study adopted the relative measure of poverty which categorises people as core-poor, moderately poor or non-poor (NBS, 2005). It is based on the measure of the mean per capita income (MPCI). The MPCI derived for the study was ₦19,348.62 ($). The poverty line is defined as ⅔ of the MPCI which gives

₦12,899.08 ($). Respondents who earned ⅓ of the MPCI ₦6,449.54 ($) and below are categorised as core poor; those who earned between ⅓ and ⅔ are described as moderately poor while respondents with income equal to or above ⅔ of the MPCI are categorised as non-poor. 6.3 percent of the respondents are in the core-poor category, 21.3 percent can be regarded as moderately poor while majority (72.5%) belong to the non-poor category.

Test of hypotheses

***Hypothesis 1*:** This hypothesis tested if there is a significant relationship between respondents ent their level of ICT use. The Chi Squ enterprises and their level of use of ICTs ($X^2 = 44.472$, $p \leq 0.05$). This may be due to the extent of use of ICTs like the mobile phone and radio to access information on market (87.9%), transport (84.2%) etc. This is in agreement with the findings which reported that a large number of respondents are receiving market information from radio broadcasts (Mwakaje, 2010).

***Hypothesis 2*:** This hypothesis tested if there is a significant relationship between respondents lev ICTs and their income. The Chi Squ respondents ($X^2 = 8.47$, $p \leq 0.05$). According to NITA (2006), ICTs are important inputs which contribute significantly to income generation in informal businesses.

Hypothesis 3: This hypothesis tested if there is a significant relationship between respondents' enterprises and their income. The Chi –Square analysis revealed the presence of a significant relationship between respondents' enterprises and their income ($X^2 = 35.131$, $p \leq 0.05$).

Hypothesis 4: This hypothesis tested if there is a significant relationship between the level of ICT use and the severity of constraints encountered by respondents and their level of ICT use. Pearson s Pr Correlation (PPMC) at 0.05 level of significance revealed that there is no significant relationship between the

constraints encountered by the respondents and the level of use of ICT (p= 0.915). This implies that despite constraints encountered in the use of ICTs, rural entrepreneurs make extra effort to access and utilise them for the profitability of their business which will make income available for the improvement of their welfare conditions. This is supported by Gillwald *et al* (2010) that people, having realised the importance of communication, often devise multiple strategies to achieve their aim of improvement in socioeconomic conditions.

***Hypothesis 5*:** This hypothesis states that there is no significant relationship between selected socioeconomic characteristics of respondents and their level of use of ICTs. It was tested using Binomial Logit Regression Model at 0.05 level of significance. Result shows that, sex (p = 0.582), age (p= 0.898), household size(p= 0.815) and membership of social organization (p= 0.679) are not significantly related to the respondents leve of ICT use. However, there is a significant association between years spent in formal education (p= 0.000) and their level of use of ICT. This implies that the higher the number of years of formal education of the respondents, the more they are favourably disposed to exploring and utilising ICTs for the efficiency and profitability of their businesses. Education enables them to comprehend and appreciate ICT better. This is supported by Fong (2009) which highlighted the importance of improved literacy as well as computer literacy in the application of ICTs by people in developing countries

4.0 RECOMMENDATIONS AND CONCLUSION

The effectiveness of ICT in facilitating useful information necessary for enhancing rural enterprise efficiency and profitability consequently, poverty reduction is dependent on a favourable political economy. It can, therefore, be recommended that:

- There should be adequate regulation of the telecommunications market due to the increasing popularity of ICTs such as the mobile phone. This will help to breed healthy competition among investors and consequently, reduced prices. This will help to address the high cost of access and utilisation of ICTs.
- Skill acquisition as regards relevant technologies should be incorporated into the programme. Effective use of ICTs such as mobile phone and text messaging are useful in enhancing the profitability and viability of livelihoods. Such training can help rural dwellers in record keeping and encourage financial transactions with banks.

The study concluded that Information and Communication Technology has beneficial effects on rural enterprises, especially in terms of income and acquisition of e-skills despite constraints encountered in the access and use by the respondents. Moreover, the respondents are not poor. The study also established that respondents have a favourable perception of ICTs.

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