

The ICT Capacities of Women and Girls Waste Scavengers in Ibadan, Nigeria.

By

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Abstract

Waste scavenging (Wsng) is a means of survival among marginalised or poverty stricken groups of people. Women in these categories participate to contribute to the financial upkeep of their families. Some of these women in most cases are the breadwinners of their families. The work they do contributes to a cleaner environment that leads to the removal and reduction of waste from the environment. This study was designed to explore the ICT capacities of women scavengers (WS) in Ibadan, southwest Nigeria. The eleven local government areas in Ibadan were divided into urban and semi-urban areas. Sixteen samples were randomly selected from the urban areas while fifteen were selected from the semi-urban areas giving a total of 31 samples. Primary data were collected through the use of questionnaires administered via face-to-face interview. The results showed that the mean age of the women was 52.14 ± 13.79 years. 40% of women who are less or equal to 30 years old do not have mobile phones while 16.7% of them use smartphones. Furthermore, 60% of the women who had basic phones made/received phone calls about their business the previous day while about 70% of those who had mobile phones earned less than ₦1000 (2.18USD) per day. The use of ICTs is low among women scavengers in Ibadan and they should be encouraged to adopt its use to enhance their businesses.

1.0 Introduction

Inefficient waste management practices have continued to be a source of concern to relevant policy makers, especially with increased volume of waste being generated daily around the world. In a developing country like Nigeria, there is rapid, unplanned urbanisation of towns and cities without corresponding provision of employment opportunities and basic infrastructural facilities including efficient waste management systems for most of the inhabitants. One of the means of survival for some of the unemployed is waste scavenging (WSng).

Waste scavenging is the process of searching through refuse for recyclable or useful materials. It is an important aspect of the informal recycling sector which involves the collection, transportation, recovery, recycling, and sale of recycled materials to interested buyers within and outside the country (Akanle and Shittu, 2018). Waste scavengers (WS) are mostly from marginalised social groups, with no stable means of livelihood. They contribute to a cleaner environment through their work that leads to the removal and reduction of waste from households, markets, streets, parks, gardens and dumpsites. They also recover recyclable

material and reintroduce them into value chains for the benefit of the society (Dias, 2011; Salau et al., 2017).

The role of women in the WSng business cannot be underestimated. According to Cointreau (2006), women constituted a larger percentage of WS around the world. Nyathi et al., 2018 also reported that males and females were actively involved in WSng at a major dumpsite in South Africa. In a study conducted on informal sector scavenging activities in Lagos, Nigeria, Salau et al., 2017 reported that 14% of the sampled population were females. To ensure seamless business operations, women and girls WS need to be financially independent. They should also have access to current information that will help them connect directly with their clients. An important way to achieve these and more is through increased access to information and communication technology (ICT). Access to mobile phones is the starting point. According to Klapper (2016), women are 14% less likely than men to own a mobile phone globally. Therefore, this study is designed to identify ICT capacities of women and girls WS in Ibadan, Southwestern Nigeria.

2.0 Methodology

Study Area

Ibadan, the capital of Oyo State, Nigeria is located on longitude 3⁰53'E of the Greenwich Meridian and latitude 7⁰34'N of the equator (Kayode and Omole, 2011). It comprises 11 local government areas (LGAs) and an estimated population of 3,658,500 and 1,851,190 (50.6%) for the female population. The city is predominantly inhabited by the Yoruba, one of the major ethnic groups in Nigeria but people from other ethnic extractions also live there (citypopulation.de (2022), Otekunrin et al., 2022). The map of Nigeria is shown in Figure 1.

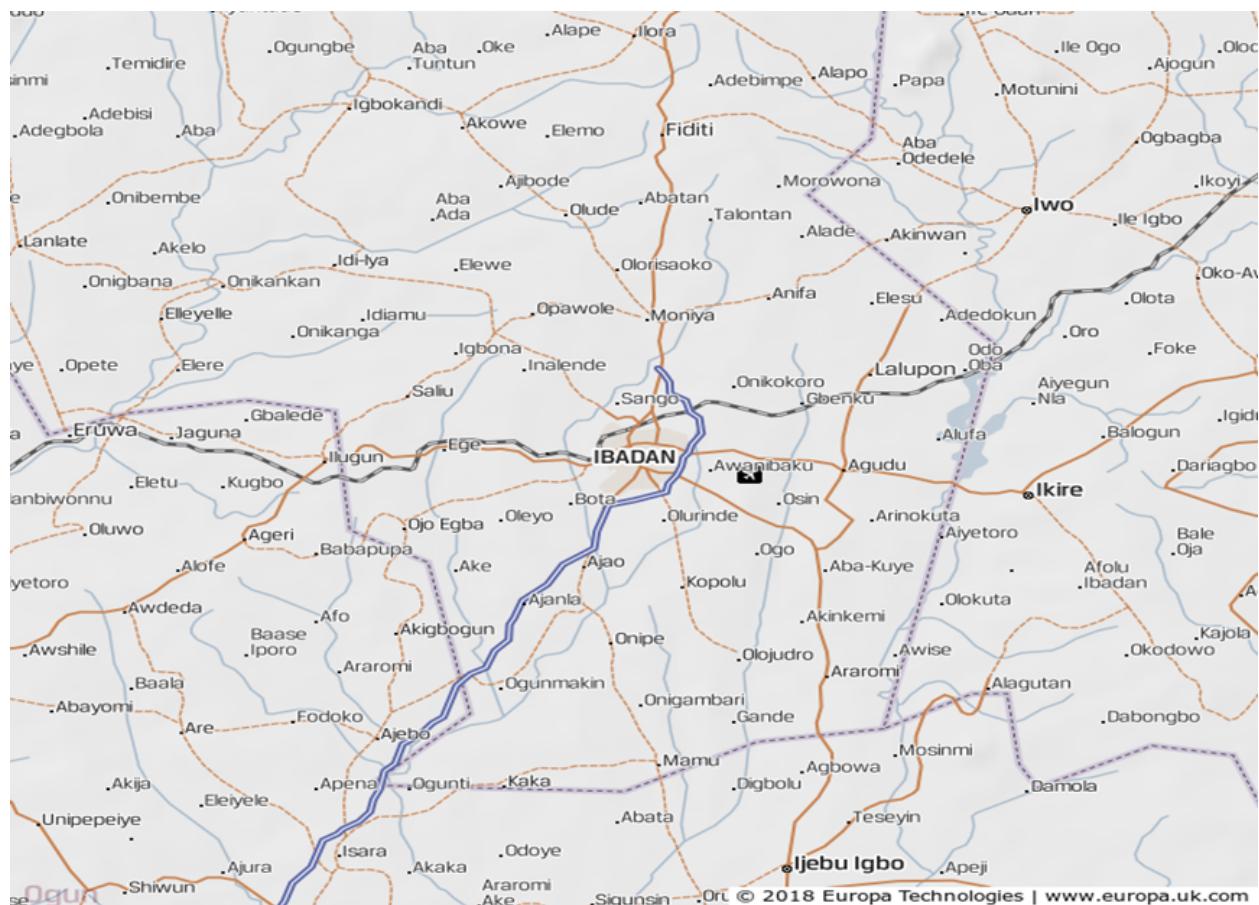


Figure 1. Map of Ibadan (Source: Global 1000 Atlas. “Map of Ibadan”; Otekunrin et al., 2022)

2.1 Sampling and Questionnaire Administration

The 11 LGAs in Ibadan was divided into urban (Ibadan North, Ibadan Northwest, Ibadan Northeast, Ibadan Southeast, and Ibadan Southwest) and semi-urban LGAs (Ido, Oluyole, Ona-ara, Akinyele, Lagelu, and Egbeda (Jazat et al., 2023). Sixteen samples were randomly selected from the urban LGAs while 15 were selected from the semi-urban LGAs giving a total of 31 samples. Primary data were used for this study. They were collected through the use of questionnaires administered via face-to-face interview.

3.0 Results and Discussion

A total of 31 women from two local government areas (LGA) namely, Ibadan North and Ido participated in the study, with a mean age of 52.14 ± 13.79 years. The minimum and maximum ages were 32 and 75 years respectively. About one third of the women (32.3%) are less or equal

to 30 years. Fifty percent of the women are currently married. Out of those that are currently married, 80% have between three and five children. About 43% of the women have no education while 50% have primary/secondary education. 88.9% of those without education do not have registered bank accounts. 64.5% of the women earn less than ₦1000 (\$2.18). 40% of women who are less or equal to 30 years old do not have mobile phones while 16.7% of them use smartphones. 64.5% of WS have mobile phones. Majority (70%) of those who have mobile phones earn less than ₦1000 (\$2.18) a day while 36.4% of those without mobile phones earn above ₦5000 (\$10.86) per day. Also, 60% of the women who had basic phones made/received phone calls about their business the previous day (Tables 1, 2, 3, 4, 5 and 6).

Table 1: Distribution of socio-economic characteristics of the respondents

Socio-economic characteristics	Frequency (%)
Age	
Less or equal to 30	10 (32.3)
31-40	6 (19.4)
41-50	5 (16.1)
51 and above	10 (32.3)
Marital Status	
Currently Married	15 (50)
Formerly Married	14 (46.7)
Single	1 (3.3)
Daily income (in Naira)	

less than 1000	20 (64.5)
between 1000 and 5000	6 (19.4)
Above 5000	5 (16.1)
Number of children	
between 0 and 2	6 (19.4)
between 3 and 5	22 (71.0)
6 and above	3 (9.7)
Highest educational qualification	
No education	12 (42.9)
Primary/Secondary education	14 (50)
Tertiary education	2 (7.1)
Religion	
Christianity	14 (46.7)
Islam	16 (53.3)

Table 2: Distribution of educational qualification based on possession of bank account

	Possession of Registered Bank Account		Total
	No	Yes	
Highest educational qualification			
No education	8	1	9
Primary/Secondary education	5	8	13
Tertiary education	1	1	2
Total	14	10	24

Table 3: Distribution of age category based on possession of a mobile phone

	Possession of a mobile phone		Total
	No	Yes	
Age category			
Less or equal to 30	4	6	10
31-40	0	6	6
41-50	1	4	5
51 and above	6	4	10
Total	11	20	31

Table 4: Distribution of age category based on type of mobile phone

	Type of mobile phone		
Age category	Basic (%)	Smart (%)	Total (%)
Less or equal to 30	5 (83.3)	1 (16.7)	6 (100.0)
31-40	4 (66.7)	2 (33.3)	6 (100.0)
41-50	4 (100.0)	0 (0.0)	4 (100.0)
51 and above	4 (100.0)	0 (0.0)	4 (100.0)
Total	17	3	20

Table 5: Distribution of women with mobile phones based on their daily income

	Daily Income			
Possession of a mobile phone	Less than ₦1000	Between ₦1000 and ₦5000	Above ₦5000	Total
No	6 (54.6)	1 (9.1)	4 (36.4)	10 (100.0)
Yes	14 (70.0)	5 (25.0)	1 (5.0)	20 (100.0)

Table 6: Distribution of women with mobile phones based on calls made/received about their business

	Calls made/received about their business			
Type of phone	In the past 30 days	In the past 7 days	Yesterday	Totl
Basic	1 (10.0)	3 (30.0)	6 (60.0)	10 (100.0)
Smart	0 (0.0)	2 (100.0)	0 (0.0)	2 (100.0)

Majority of the waste (82.1%) collected were plastics while 57.1% of the plastics collected were from the dumpsites. Furthermore, 90% of the plastics were collected daily. 96.6% of the women sell the picked waste to middlemen while 51.9% of waste sold to middlemen were picked from dumpsites. The distributions of type of waste collected and mode of sale of waste based on their sources, respectively are presented in Tables 7, 8 and 9.

Table 7: Distribution of type of waste collected based on their sources

	Source of waste					
Type of waste collected	University campus	Construction sites	Dumpsites	Households	Industries	Total
Cement bags	0	1	0	0	0	1
Glass	0	0	0	0	1	1
Metals	0	0	2	1	0	3

Plastics	4	0	12	2	3	21
Total	4	1	14	3	4	26

Table 8: Distribution of mode of sale of waste based on the source of waste collected

	Source of waste					
Mode of sale of waste	University campus	Construction sites	Dumpsites	Households	Industries	Total
Directly to companies	0	0	1	0	0	1
To middlemen	4	1	14	3	5	27

Table 9: Distribution of frequency of collection based on the type of waste collected

	Type of waste collected				
Frequency of collection	Cement bags	Glass	Metals	Plastics	Total
Once daily	0	0	2	18	20
Thrice weekly	0	0	0	3	3
Twice daily	1	1	1	1	4

Total	1	1	3	22	27
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4.0 Conclusion

Women waste scavengers contribute to a cleaner environment through the removal of waste from the environment. They also contribute to the financial upkeep of their families. Thus, the use of ICTs should be encouraged among them to enhance their businesses.

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