

The socioeconomic effects of small-scale women businesses in broom production and marketing industry

Broom production and marketing

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A panacea for sustainable development

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Abstract

Purpose – Broom production and marketing is a local business industry operated by women in Nigeria. This activity serves not only as a source of livelihood to women but also has created job opportunities for the teeming unemployed persons in the rural areas. This paper aims to examine socioeconomic effects of small-scale women businesses in broom production and marketing industry in Nigeria with a view to analyze small-scale women businesses in Igbo Eze North District of Nigeria.

Design/methodology/approach – New economic theory was used to guide the study. The study adopted a quantitative research design comprising of semi-structured interviews, field observations, reference to relevant literature and a questionnaire survey of 340 female households engaged in broom production and marketing from fifteen villages. This sample size was selected using purposive sampling technique and Yamane formula. Frequencies and Spearman rank correlation were used to analyze the data.

Findings – The study found that broom production and marketing have an effect on the socioeconomic development of the people. The study found a positive relationship between broom production and marketing and income generated, education and occupation in the study area. This study concluded by suggesting that broom production in the study area should be mechanized to improve the quality and quantity of broom produced in the area.

Practical implications – This study has shown that Nigerian women have good potentials for entrepreneurship. Both the society and the government authorities should work together in supporting female ventures in Nigeria.

Originality/value – The paper empirically has shown the socioeconomic effects of small-scale women businesses in broom production and marketing on local household of Igbo Eze North District of Nigeria. This study stands as the first in Nigeria to consider the effects of broom production and marketing and how women in this part of Nigeria have used it to create job opportunities and opportunities of income for themselves and their families.

Keywords Gender, Marketing, Women, SDGs, Broom production, Small scale businesses

Paper type Case study



1. Introduction

The palm tree is a versatile tree that meets man's needs in every part of the world where it grows. There is no tree which in itself has so many uses like the palm tree. While its fluid is processed and used as local wine, its body parts are utilized as timber, brooms, palm oil (red cooking oil), palm kernel oil and baskets (Ezike, 1998).

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Broom production, which is the focus of this paper, is an assembled and woven palm front (which may or may not be tied to a handle) used for the collection and disposal of dust, trash and debris in places of business, homes and public spaces (John, 2008). The broom industry has been in existence for centuries producing tool used for basic floor cleaning (Shackleton, 2004). In addition to cleaning, brooms also have religious, ornamental and political applications.

In Nigeria, brooms are made from natural materials such as palm front, which are in abundant supply in most rural parts of the country, as shown in Plate 1.

The use of naturally produced brooms can be attributed to its advantages over other cleaning devices and the ever increasing population of the country accompanied with an increasing need for a cleaning device (*Independent* newspaper, 2018). The brooms produced in Nigeria are long and strong as shown in Plate 2 and are essential item in most of the tradition and culture of the people.

The traditional processing of broom is simple, but tedious. This activity which is largely associated with women involves the cutting of palm fronds from the palm trees, removal of its petioles from the fronds, stacking it into a pile and then stripped with a knife or razor. Broom production is environmentally sustainable. This is because they are made from a natural source (forest materials such as palm font) which can be classified as a renewable resource that has no threat of extinction. The advantages of the brooms made from natural materials include being environmentally sustainable, bio degradable, renewable etc. This, however, is not obtainable with other cleaning devices, especially those made from synthetic materials such as plastic and rubber brooms. These cleaning devices are non-degradable, pollutes the environment and possess components that could add to the further depletion of the ozone layer.

Considering the alarming rate of population growth around the world and the difficulty of large families to provide basic necessities of life for their children, small-scale women businesses have created job opportunities and income for women to cater for these necessities in various part of the world (Akella and Eid, 2018; Zainol and Mamun, 2018). Small-scale female businesses in broom production and marketing industry are economic activities engaged in the processing and converting of palm front from palm trees into brooms using handcraft tools such as razors and table knives. The production of broom, in addition to being an alternative source of livelihood to people, has provided job opportunities and source of measurable income to women. This is evident in the large number of women engaged in it in the tropical regions of the world (KC *et al.*, 2016).



Plate 1.
Palm front used as
raw material broom
production



Plate 2.
Brooms made from
palm fronts

It has a huge demand because of its numerous uses and this provides an all-year-round market for it. Broom production while providing opportunities of small business enterprise for women, its organization, has also provided opportunity for intensive skill development training for both men and women in the rural areas. Women engaged in broom production make between 50,000 and 100,000 naira every month, which is equivalent to \$137.36 and \$274.72 every month, respectively (Onoyima, 2018). This activity has empowered the women to contribute to the economic welfare of their families and the livelihood of the rural poor. This makes it strategic in achieving the targets of SDGs “5”. Thus, this paper therefore is aimed at assessing the socioeconomic effects of broom production and marketing in Igbo Eze North District of Enugu State, Nigeria, by pursuing to:

- ascertain the income generated from broom production and marketing small-scale female business households in the study area; and
- analyze the effects of broom production and marketing on the socioeconomic development of women and their households in the study area.

Socioeconomic development in this paper was defined using three variables. These variables are income, occupation and education. Socioeconomic development is an economic and sociological measure of a family’s economic and social position in relation to others, based on income, education and occupation. In analyzing socioeconomic development, household’s income earners’ education and occupation are examined (Adler *et al.*, 1994). These variables are used to ascertain the economic differences in a society. This paper examines the influence of broom production and marketing on these variables in the study area. Income in this paper includes all earnings from broom making production and marketing. While

occupation includes providing women the opportunity to work and earn a living, education includes all the expenditure on education-related activities.

2. Literature review

The Sustainable Development Goals (SDGs) is a collection of 17 global goals set by the United Nations to be achieved both in the developed and developing world in 2030. These goals, which were targeted at driving, stimulating and propelling economic, human and environmental wellbeing of humanity, were meant to be mainstreamed into the developmental policies of signatory nations. SDGs though interrelated, each has its own targets which are generally geared toward addressing socioeconomic and development issues such as poverty, hunger, economic growth, employment, etc. ([Sustainable Development Solutions Network, 2017](#)).

Goal “5,” which was set to achieve gender equality and empowerment of all women and girls, was targeted at achieving a number of issues top of which included “target 7” – initiating reforms that will give women equal right to economic resources including having ownership and control of land, access to financial services, inheritance and natural resources. Achieving this task, more especially in the empowerment of women in Africa, has remained a huge challenge for a number of countries ([Mwiti and Goulding, 2018](#)). This is because of stereotyping, cultures, norms and constituted authorities which have projected women as a weak vessel that must work in the shadow of men. For instance, it was noted by [Tripathi and Singh \(2018\)](#) that female entrepreneurship in India faces many problems including negative attitude of authorities and society toward women. The study found that the society and authorities have no format or model for Indian women to move forward in the entrepreneurship sector. This also is the case in Africa and Nigeria, where the society and authorities appear to frustrate women’s efforts to be productive and earn a living. Similarly, the work of [Palalic et al. \(2017\)](#) also showed that there is unequal distribution of employment activities between men and women, although men are more willing to undertake any business activities compared to women.

Despite these challenges, women have been able to empower themselves by recreating and utilizing available local resources in their environment. Women in developing countries make a living from working in the agriculture sector ([Djurfeldt et al., 2018](#)) and the utilization of traditionally collected resources in indigenous societies which they use in a communal and sustainable manner without endangering the ability of the future generations to make use of such resources ([Ratten and Dana, 2017](#)).

They are engaged in cultivation, livestock rearing and other sub agricultural activities such as broom making and marketing. These activities, in addition to empowering them, provide them job opportunities, daily income and support for their families in both urban and rural areas ([Dzisi, 2008](#); [KC et al., 2016](#)). Similarly, studies has shown that women have strong entrepreneurial skills and can be strategic for business opportunities at any given level ([Ramadani et al., 2015a](#); [Ramadani et al., 2015b](#); [Hipango and Dana, 2012](#)). For instance, while the work of [Palalic et al. \(2017\)](#) found that women significantly affect entrepreneurial activities in firms in areas such as innovativeness, pro-activeness, [Ramadani et al. \(2013\)](#) found that women are motivated to undertake entrepreneurial career due to the existing possibility to realize substantial profit, desire to work exclusively for themselves and the desire and need to realize significant achievements throughout the career.

Women engaged in broom production and marketing in Africa are generally not trained but have received substantial returns through their trade. This highlights the need for the potential of women in Africa and other parts of the world to be fully recognized. Broom production in Nigeria, as in most part of Africa, is dominated by women. Women’s

involvement in this type of economic activity can be attributed to lack of employment opportunities, widespread retrenchment, HIV/AIDS and rising costs of living (Shackleton *et al.*, 2008; Barr *et al.*, 2018). According to Shackleton and Campbell (2007), entry into the broom business was mainly a coping strategy in response to crisis and long-term absence of alternatives to livelihood. The study found that broom trade was dominated by women, and they make an average net annual income of 2,000-1,000 South African Rand. The study also found that broom trade has assisted poor female households to overcome adversity, meet several basic needs and educate their children.

Similarly, Shackleton *et al.* (2008) found that the majority of female producers in broom production are engaged in the activity to withstand detrimental issues such as the death of a breadwinner, illness or retrenchment of breadwinners, usually the husband, within the household and hunger and unemployment. The study also found that broom production also provided women with their own independent source of income, which enables them to take up household responsibilities such as paying of school fees. This investment contributes to poverty reduction, livelihood diversification and risk reduction (Cocks and Dold, 2004; Shackleton and Shackleton, 2004).

Brooms serve as an important economic resource in all parts of the world. They are made and used by different communities and are made from a wide range of materials such as grass, bamboo, date palm leaves and reeds coconuts. Some of the communities prominent in broom making around the world include the Banjaras, who are known for grass brooms production, Harrijans, who use bamboos, and the Philipinos, who are associated with Tiger grass (Arsenio and Emmanuel, 2010).

Given its socioeconomic importance, broom production has received an increasing attention in the academia in the recent times. For instance, the work of Cocks (2004) examined the traditional grass broom production and marketing in Mxhalanga village in the former Ciskei homeland of the Eastern Cape Province. The village of just over 400 households is typical of many peri-urban villages in the former homelands being characterized by poor infrastructure, high population densities and high poverty levels. To them, traditional grass broom keeps certain cultural practices alive in urban areas and provides rural people with a means to earn an income. The demand for brooms in urban areas provides an opportunity for people, most especially women, living in disadvantaged areas such as the rural areas to generate an income.

In Nigeria, Ebunilo *et al.* (2015) emphasized the need to design a mechanized system for broom production. This mechanized process according to the study involves the development of machines which stripe palm frond petioles for the production of local broom in Nigeria as Nigerians have shown increasing preference for the brooms made locally from palm frond petioles. Hence, the demand for traditionally made brooms is huge and not readily met. On the other hand, Nwankwojike *et al.* (2014) noted in their study that to reduce drudgery and risk involved in this manual peeling process, a fabricated machine was designed to speed up the striping and peeling of palm fronds for the production of brooms.

Adeoye and Bhadmus (2015) in their work on the socioeconomic contributions of cottage industries to rural livelihood in Nigeria stated that rural economy is not based solely on agriculture but rather on a diverse array of activities and enterprises such as production from available natural resources which broom production and marketing is a typical example. From the fore going, it is evident that none of the papers analyzed above have examined the socioeconomic effects of small-scale women business in broom production and marketing in Nigeria. The main thrust of this study is to analyze the socioeconomic effects (income, occupation and education) of small-scale women businesses in broom production and marketing in Nigeria and its influence in achieving SDGs "5" in Nigeria.

2.1 Theoretical framework

2.1.1 *New economic growth theories (endogenous growth)*. Endogenous growth models, developed by Rommer (1986), placed greater emphasis on the concept of human capital. How workers with greater knowledge, education and training can help to increase rates of technological advancement. The work stressed that technological advancement leads to the creation of new ideas, which differs from standard inputs to production. In view of this, people's ambition to create better and more efficient brooms has brought rich experience of used plants and brooms leaves. This theory is relevant to the present study because there is a great importance on the need for institutions such as broom cottage industries to actively encourage technological innovation. The model places emphasis on increasing both capital and labor productivity and states that increasing labor productivity does not have diminishing returns, but may have increasing returns which would affect or rob off positively on the lives of the people. This theory therefore was used to ascertain the effect of broom production and marketing in Nigeria.

3. Methodology

This study is a case study that seeks to examine the socioeconomic effects of small-scale women businesses in broom production and marketing industry in Igbo Eze North District of Enugu State. Considering that broom production and marketing is a culture-bound activity (Shackleton *et al.*, 2008), its usefulness lies in understanding the activity in the environment in which it is taking place. This is in line with the views of Dana and Dana (2005), who posit that case studies are useful in entrepreneurship research studies because they allow important aspect of the environment to be analyzed and understood. This study therefore brings to the academic domain the usefulness of broom production and marketing in a particular environment in Nigeria. The study adopted a number of methods comprising field observations, reference to relevant literature, structured interviews and questionnaire survey of 340 broom producing households. The data for this study were collected from primary and secondary sources. Primary data were collected through the use of questionnaire and field observations, while documentary materials formed the secondary sources. The questionnaire contained both open- and close-ended questions. The questionnaire was not only administered through direct delivery techniques but also complemented by interviews. This was to address the limitations in the use of questionnaires, such as low response rate, as was identified by Dana and Dana (2005), and to reduce its ambiguity, bring it nearer to the respondents and increase its response rate.

3.1 Sample size

Igbo Eze North District is made up of 34 villages. However, for the purpose of this study, 15 villages were purposefully selected for this study. These selected villages were found to be prominent in broom production. A preliminary survey of the study area showed that 70 per cent of the families in the sampled area were engaged in broom production and marketing. This, however, was not found in the other villages, hence the decision to select these 15 villages. The 15 sampled villages, according to the 2006 population census figure of Nigeria, had 259,431 people, with 138,006 men and 121,425 women, though projected to be 353,008 persons in 2018. Using Yamanne formula, a sample size of 400 was calculated from 353,008 persons. This sample size was, however, extended to 405, with 27 broom producing households sampled from each village. This is to ensure that sufficient information needed for the study was gathered as shown in Table I. In view of this, the study administered 405 questionnaires to the sampled population. The questionnaire, which was administered

S/N	Sampled villages	Sample size
1	Amufie	27
2	Olido	27
3	Ekposhi	27
4	Umuagama	27
5	Amachala	27
6	Ikpuiga	27
7	Onicha-Enugu	27
8	Imufu	27
9	Umuogboagu	27
10	Okpo	27
11	Okatu	27
12	Aguibegbe	27
13	Umuopu	27
14	Ikpamode	27
15	Aji	27
	Total	405

Table I.
Sampled villages and
size

Source: Author's Computation 2018

through direct delivery technique, was targeted at broom making households in the sampled areas.

3.2 Data analysis

A number of statistical methods were used in this research. Spearman's correlation was used to determine the significant relationship between income generated from broom production and marketing and the socioeconomic development of the people of the study area. While inferential tools such as percentages and tables were used to present the results and findings of the paper, Spearman correlation was used to analyze the relationship/effects of income from broom production and marketing on the socioeconomic variables used in the paper. This study adopted quantitative technique for this research not only to analyze the data but also to highlight and show in measurable terms the relationships among the study variables. This is in line with [Dana and Dumez \(2015, p. 156\)](#), who stated that "quantified measurement in research helps to highlight discrepancies between perceptions of subjects and actual practice." All analyses were carried out using SPSS (Statistical Package for social sciences).

4. Result

4.1 Analysis of respondents

Out of the 405 administered questionnaires, 340 questionnaires, which represented 85 per cent, were considered valid, with no missing data. The 85 per cent response rate from our observation was due to the willingness of the households engaged in broom production and marketing to partake in this research. The paper, as a result of this, sampled a population of 340 female households engaged in broom production and marketing in the study area. The study targeted female household respondents between 20 and 50 years of age. About 92.5 per cent of the household respondents engaged in broom production and marketing were women as shown in [Plates 3 and 4](#). This was due to tediousness of the activity and the need to have alternative source of income to support their family needs. Preliminary finding showed that broom production is labor-intensive and made use of crude implements such as,

peeling metals, stripping razor and knives The preliminary findings showed that 60.4 per cent of the household respondents had attained secondary level of education, while 33.6 per cent had attained skills-related training through apprenticeship and learning on the job, while 6 per cent had attained tertiary level of education. Among those with tertiary level education 84.7 per cent were found to have attained an ordinary diploma, while 15.3 per cent have high diploma, degree or a higher degree qualification. This partly accounts for the use of crude and traditional skills in producing brooms in the area. Exposure to higher level of education may have exposed those engaged in this activity to modern skills and techniques in broom making which would increase their product demand and income base.

4.2 Income generated from broom production and sales in the study area

This study found that there are two groups engaged in the broom production and marketing. These are those engaged in broom making and marketing and those engaged in broom marketing only. While former produce and market their brooms, the later buy from the producers and resale in the market. In other words, those engaged in broom marketing depend on the producers for their supplies. An analysis of the income shows that those engaged in broom making and marketing make a weekly income of N 5,000 (13.75 dollars)-N10,000 (27.50 dollars) naira, while those engaged in broom marketing make an income of N11,000 (30.25 dollars) and above 16,000 naira (44.00 dollars), as shown in [Table II](#).



Plate 3.
Broom making by a woman in the study area



Plate 4.
Broom marketing by a woman in the study area

The result also showed that there were variations in the income earned by the various groups. This could be explained by the differences in the amount of capital used in the business as a marketer, as shown in Table III, and whether the households are engaged in marketing of brooms only or producing and marketing at the same time. Households engaged in the production and marketing of brooms earns lesser income to those engaged in broom marketing only, as shown in Table II. This is because those engaged in the marketing of brooms have opportunities to buy from many broom makers, while this is not obtainable with those engaged in producing and marketing.

The result showed that households engaged in broom production and marketing make substantial income from this business that can support and sustain their family needs. For instance, one of the broom makers in an interview attested that she makes in excess of N 20,000 naira every week in the marketing of brooms in the study area. According to the respondent, she has a number of markets outside the study area where she supplies her brooms for sales, and this has gone a long way in sustaining her business.

4.3 Broom production and marketing as a major and supplementary source of income

This research found that broom production and marketing serves as major a source of income to the majority of the sampled households in the study area. However, to some respondents, it serves as a supplementary source of income as it is used to supplement other sources of income. In view of this, 67.1 per cent of the respondents were found to be engaged in broom production and marketing as their major source of income, while 32.9 per cent use it as a supplementary source of income for other jobs, as shown in Table IV.

Those engaged in broom production and marketing as a supplementary source of income were attracted by the viability of the business in the study area, while those engaged in it as a major source of income found it lucrative and rewarding. The two groups were equally attracted and sustained in the business due to the availability of raw material, which were acquired at little or no cost to the producers.

4.4 The socioeconomic effects of broom production and marketing in the study area

Socioeconomic effect of broom production and marketing was analyzed in this paper using three variables. These variables were income, education and occupation. The socioeconomic effect of

S/N	% of respondents	Group	Range of income weekly
1	50.6	Broom making and Marketing	N5000-10,000 (\$13.75-\$27.50)
2	30	Broom Marketing	N11,000-15,000 (\$30.25-\$41.25)
3	19.4	Broom Marketing	N16,000 (\$44.00 and above)

Source: Author's computation 2018

Table II.
Range of earnings on
weekly basis

Capital	Income (Naira)	Frequency	(%)
2,000-4,000	N6000-7000 (\$16.50-19.25)	52	15.3
4,100-6,000	N8,000-10,000 (\$22.00-27.50)	74	21.8
6,100-8,000	N15,000 (\$41.25 and above)	42	12.4
Total		168	49.5

Source: Author's computation 2018

Table III.
Capital and Incomes
variations from
broom sales

broom production and marketing was therefore measured through the quantitative changes in the variables – income, education and occupation – of the sampled households. Using a Spearman's rank correlation, the result showed that there is a relationship between income generated from broom production and marketing and education. It showed that there is a positive correlation of 0.604 between the income generated and the use for education and 0.705 (70.5 per cent) expenditure on education. This implies that there was a 70 per cent change in education due to income from broom production and marketing. This also shows that incomes from broom production and marketing enabled the women engaged in this economic activity to enroll their households in school through the payment of their school fees and other educational related activities such as payment of accommodation fees and buying of texts.

Similarly, the result also showed that there is a positive correlation of 0.607 between income and occupation 0.551 (55.1 per cent) expenditure. This result indicates that broom production and marketing has provided not only occupation and job opportunities for the sampled households but have also provided women with opportunities to earn income and expend them on their daily needs. Occupation here includes providing women with opportunities to work and earn a livelihood. Furthermore, there is a positive correlation between income from marketing of broom and income from broom production, which has a correlation of 0.535 (53.5 per cent) and 0.670 (67 per cent), respectively, as shown in [Table V](#).

Table IV.
Broom production and marketing as a major and supplementary source of income

Variables	Frequency	(%)	Valid (%)	Cumulative (%)
Major source of income	228	67.1	67.1	67.1
Supplementary source of income	112	32.9	32.9	32.9
Total	340	100.0	100.0	100.0

Source: Author's computation, 2018

Table V.
Correlation analysis of socioeconomic impact of broom production and marketing

Spearman's rho	Education	Occupation	Income	Expenditure
<i>For education</i>				
Correlation coefficient	0.000	0.587**	0.604	0.705*
Significance (one-tailed)	0.000	0.000	0.054	0.010
N	340	340	340	340
<i>Occupation</i>				
Correlation coefficient	0.587**	1.000	0.607**	0.551*
Significance (one-tailed)	0.000	.	0.004	0.432
N	340	340	340	340
<i>Income from broom production and marketing</i>				
Correlation coefficient	0.535*	-0.104*	0.670*	1.000**
Significance (one-tailed)	0.010	0.054	0.000	0.000
N	340	340	340	340
<i>Expenditure</i>				
Correlation coefficient	0.535*	0.601*	1.000	1.000
Significance (one-tailed)	0.010	0.032	.	.
N	340	340	340	340

Notes: **Correlation is significant at the 0.01 level (one-tailed); *correlation is significant at the 0.05 level (one-tailed)

This finding showed that all the groups engaged in broom production and marketing made significant income from the activity. This corroborates the work of Shackleton and Campbell (2007), who found that broom business provides women with income with which they earn a livelihood.

5. Recommendation

This paper, having established that broom production and market in the study area, has contributed to the socioeconomic development of households, most especially the womenfolk, in the area of education, occupation and income, and there is the need to make the activity more sustainable. This differs with the findings of Lemaire, [Maalaoui and Dana \(2017\)](#), who found that unlike senior entrepreneurs who enter social enterprises with a conscious willingness to help the society, female entrepreneurs are less focused on social implication of entrepreneurship. However, to achieve the sustainability of broom production and marketing, the following suggestions are made:

- The use of crude implements in the production of broom, such as, peeling by hand and stripping with razor and knives, can be replaced with modern harvesting and processing implements such as striping machine, which can add or increase the women's output. This, in addition to reducing the stress and stigmas suffered by those engaged in this activity, will also increase their income level, making money available for them to take care of their daily needs.
- Establishment of cottage industries should be encouraged in the study area. These industries, in addition to harnessing and upgrading the skills of the women broom producers, will equally contribute enormously to the rural livelihood of the people. Consequently, the paper suggests that the government should introduce policies that will enable the establishment of cottage industries that will empower and better utilize skills and capacities of the women in the study area. The state policymakers should also encourage more women to participate in this economic activity by providing affordable finance mechanism to stimulate more small-scale women businesses that will drive the economy of their communities.

6. Conclusion

This paper has shown that women in Nigeria and the continent of Africa through broom production and marketing have economic productivity and can contribute to the development of their households. The paper indicated that women having dominated in this economic activity have been able to generate income, create job opportunities to and earn a livelihood for themselves and others and provide education opportunities for their wards. Although broom production and marketing is not the sole panacea for poverty alleviation, and improvement in the living standard of people, it has the potentials to reduce unemployment and creates a means for sustainable livelihood for women in the urban and rural communities which are central in achieving the SDGs "5" in Africa.

Policy wise, the modernization of this industry through technology and mechanization would empower the women, reduce rural-urban migration, discourage rural dwellers from deserting their traditional means of livelihood and make the rural areas more productive for the country.

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