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ASSESSMENT OF WOMEN'S INVOLVEMENT IN BLACK SOAP ENTERPRISE IN OSUN STATE, NIGERIA

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ABSTRACT

Black soap production is an indigenous income generating enterprise that confers self-sufficiency on producing household and capable of reducing poverty among rural women. The study therefore, assessed women's involvement in black soap production in Osun State, Nigeria. It specifically described the demographic characteristics, determined the profitability of the enterprise and its contribution to their livelihood, community attitude, and identified constraints limiting women involvement in the enterprise. Snowball sampling technique was used to select 120 respondents for the study. Interview schedule was used to collect primary data from the respondents while descriptive and correlation statistical tools were used for the data analysis. Findings revealed that majority (90 %) of the respondents were married with mean age of 48.9 years. Majority (79.2%) acquired black soap processing skills from their parents. The results of gross margin analysis also revealed that TR, TVC and GM were ₦12,617.50, ₦10,695.80, and ₦1,921.70, respectively. The results also indicated that black soap contributed mostly to feeding (64.2 %), clothing (58.8 %) and housing (41.2 %). Above half (52.2 %) of the respondents were highly involved in black soap production activities while 81.7 % indicated favourable community attitude towards the enterprise. Also, scarcity of water during dry season (mean=2.78) and inadequate finance (mean=2.28) were the major constraints limiting women involvement in the enterprise. In conclusion, Ministry of women affairs, Nigeria should give considerable attention to address the identified constraints in order to enhance the development of the enterprise.

Key Words: Black soap, Enterprise, Women, Community attitude, Profitability

INTRODUCTION

Nigerian women had been described as the backbone of rural development and are actively involved in several entrepreneurial activities as well as societal roles of rural road cleaning, regular visitation to the market, arbitrators in family, and household responsibilities of childbearing, water collection, food processing and preparation (Abdullahi, *et al.*, 2015). Also, as a category of people with relatively low average income rate, despite their excess workload, due to the fact that the bulk of what constitutes this heavy work load are not associated with economic values as their products do not pass through the market (Ijere, 1991).

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Ogungbile *et al* (1991) reported that about 90% of women are engaged in different forms of income earning activities including food processing, trading, weaving, and other micro cottage production. Adebowale (2014) also revealed that the economic contribution of rural women to the community development through handcrafts such as the traditional pot making cannot be over emphasized. According to Iwena (2002), generally, in Nigeria, small scale agricultural processors constitute about 90 % of the farming households' means of survival in many rural areas and that about 85% of rural dwellers are engaging in small scale black soap production.

African black soap originated from the Yoruba people in Nigeria and it is locally

known as *"Osedudu"*, but receives more widespread production and use among the people of Ghana. The Yoruba word *Ose* means soap and *dudu* means black; both were translated together to form black soap. It is also called *"anagosamina"* by the Ghanaians which mean the pepper sellers soap (Bella, 2011). African black soap comes from plantain peel originally. Plantain (A popular food in Africa and other parts of the world) is a rich source of vitamins A, E, and Iron. It looks much like a banana but bigger and longer. The peel of the plantain is dried to specific moisture content and roasted in order to achieve a particular colour, texture, and smell. The basic ingredients used in black soap are; shea butter, red palm oil, coconut oil, roasted plantain skins, and roasted cocoa pods while other additives like scents and other oils are optional. The darker soaps tend to have more of the roasted plantain skin in the ingredients as the oxidation from the plantains makes the soap bar darker (Treehugger, 2008).

Nigerians, especially the Yoruba tribe and Ghanaians have used black soap for centuries for bathing and for reducing body odour. It was popular in the past and still in relevant till today, as the first soap in bathing new born baby by mixing the soap with cam wood powder to bath new born babies and its purity makes it gentle and non-drying for babies' sensitive skin. It is one of the soaps mostly used in Western part of Nigeria. It is also used as hair shampoo, not only to cleanse, but also to alleviate scalp itchiness and irritation and as treatment for oily skin and certain skin conditions, such as acne and eczema (Treehugger, 2008).

Black soap industry has failed over the years to receive the much desired attention it requires for its growth and general acceptance because some people see it as not too appealing while a few reported that it causes skin irritation because of the use of unrefined materials which are believed to contain a high degree of impurities in the production process of the soap (Armstrong, 2000). Also, the selling prices of the product do not commensurate with the effort the producers put in during the course of production which in return discourages many people from venturing into the business.

According to Raji *et al.* (2013), black-soap enterprise was an industry that is exclusively meant for the women folk, and has contributed meaningfully to the livelihood of the women in the rural areas of Nigeria. It is an enterprise that can be started with small capital. It is an essential commodity used on daily basis by many people. Other economic importance of black soap ranged from its medicinal ability to domestic use of washing hair, skin among others and job creation for rural women (Oyekanmi *et al*., 2014), Besides, reports of Alo *et al.* (2012) and Oluyole and Adeogun (2005) which established that black soap production was a profitable enterprise among rural dwellers, yet, there is dearth of information on the level of women involvement in this enterprise, hence, the need for the study. The study assessed women involvement in black soap enterprise in Ejigbo LGA, Osun state, Nigeria. It also, described the demographic characteristics of the respondents, determined the profitability of the enterprise and it's contribution to their livelihood, determined respondents' level of involvement in black soap enterprise, examine the community attitude towards black soap enterprise and identify constraints limiting women involvement in the enterprise in the study area.

MATERIALS AND METHODS

This study was carried out in Ejigbo Local Government Area (LGAs) of Osun State, Nigeria. Ejigbo LGA was purposively selected because it is one of the major locations in Nigeria with high concentration of black soap production activities. The area lies on latitude $7^0$50'N and longitude $4^0$8'E, and the main language is Yoruba. Multistage procedure was to select the respondents. In the first stage, Ife-Odan was purposively selected from Ejigbo LGAs because of its predominance in black soap production. In the second stage, snowball technique was used to select 120 female respon-

dents who were engaged in black soap enterprise. Primary data were collected from the respondents using well-structured, validated, and pre-tested interview schedule which was used to elicit relevant quantitative information from respondents while descriptive statistical tools like frequency counts, percentages, means and standard deviation, and correlation inferential tool were used to analyze the data collected. The data were collected between March and June, 2017.

The dependent variable for this study was involvement in black soap activities such as production of ash, sourcing for raw materials, heating of base oil, scooping of soap, and marketing. The respondents were asked to indicate their responses to a 4-Likert scale ranging from always involved (3 points), occasionally involved (2 points), rarely involved (1 point) and never involved (0 point). The total involvement score was arrived at by adding all the respondents' responses together. The maximum score was 39 while the minimum was zero. The mean score and standard deviation were calculated from the total participation score obtained and were used to categorize the respondents' participation into three levels (low, moderate, and high). Respondents with participation scores within the mean score plus one standard deviation and above were ranked high, those with scores within mean score minus one standard deviation and below were ranked low, while those with score between the high and the low levels were ranked moderate. The independents variables for this study include socio-economic characteristics (such as age, marital status, and income), profitability of the enterprise, contribution to livelihood, community attitude, and constraints hindering women's involvement in black soap production. Contribution to livelihood was measured by asking the respondents to indicate livelihood indicators they spend the proceeds from enterprise on. Community attitude were measured by asking the respondents to indicate their responses to declarative statements which were rated on a five point Likert scale and were scored 5points for Strongly Agree (SA), 4 points for Agree (A), 3 point for Neutral (N), 2 point for Disagree (D) and 1 point for Strongly Disagree Agree (SD); while the constraints militating against their involvement in black soap production were determined using a four point Likert types scale of not a constraint (NC) [0 point], less serious constraints (LSC) [1 point], serious constraints (SC) [2 point] and very serious constraint (VSC) [3 points]. Profitability of black soap production was determined by the use of gross margin analysis.

RESULTS AND DISCUSSION

Demographic characteristics of the respondents

Results in Table 1 show that the mean age of the respondents was 48.9 years and more than one-third (35.8 %) of the respondents were between ages 41 and 50 years. The implication of the finding was that most of the black soap producers were still in their middle age and still productive. This is in line with finding of Alo *et al*. (2012) who reported that majority of women involved in black soap production in Ekiti State were between 40 and 60 years. Majority (90 %) of them were married and only few (10 %) were widowed. This implies that most of the respondents had partners who could support them in taking up a new challenge. This is similar to findings of Sani and Dankwanka (2011) and Alo *et al.* (2012). The mean household size was 6 persons implying that rural households were no longer as large as they used to be traditionally, when large household sizes were needed for farm labour. This observation might be due to the fact that majority of parents in the rural areas now send their children to schools instead of using them as cheap source of labour as reported by Alabi (2005). Furthermore, education in whatever form is often considered as a backbone and a strong weapon to technology adoption and development that will lead to improve productivity (Riddle and Song, 2012). Above half (54.2 %) had secondary

school education and about one-third (31.7 %) had primary school education. This result is similar to the finding of Sani and Dawanka (2011) who reported majority of women involved in soap making agribusiness had formal education, but contrary to the submission of Alo *et al*. (2012) which reported that majority of women involved in black soap production did not have formal education. The years of experience and native wisdom may make up for their deficiency in education. Generally, experience is known to have positive effect on managerial capacity, technical know-how, and adoption of extension policies. Majority of the respondents had between 11 to 30 years of experience in soap production activities with the mean years of experience of 23.8 years. This implies that majority of the respondents were not new in the business, and this finding gives credence to the submission of Alo *et al.* (2012) who reported that majority of women involved in black soap production in Ekiti State had long years of experience. Further results show that majority (79.2 %) of the respondents acquired skill in black soap production activities through inheritance from their parents or family members. This implies that black soap production is an indigenous enterprise that can be inherited and can be passed from one generation to another. The findings support the report of Olatokun and Ayanbode (2009) who asserted that skill acquisition in indigenous enterprise seems to be generational, that is, passed down from one generation to the next and, sometimes, lineage specific.

Table 1: Distribution of the respondents by their demographic characteristics (n = 120).

Variable	Frequency	Percentage (%)
Age		
≤ 30	5	4.2
31-40	23	19.2
41-50	43	35.8
51-60	35	29.2
61 above	14	11.6
Mean = 48.95		
Marital status		
Married	108	90.0
Widowed	12	10.0
Household size		
1-5	65	54.2
6-10	54	45.0
11-15	1	0.8
Mean = 5.51		
Level of education		
No formal education	4	3.3
Primary education	38	31.7
Secondary education	65	54.2
Tertiary education	13	10.8
Years of experience		
≤ 10 years	21	17.5
11-30 years	72	60
≥30 years	27	22.5
Mean = 23.75		
Means of skill acquisition		
Through parents/family	95	79.2
Friend	22	18.3
Apprenticeship	3	2.5

Source: Field survey, 2017

Involvement in Black soap production activities

Results in Table 2 show that sourcing for firewood (mean=2.93) took the lead among black soap production activities involved in by the women, followed by marketing of black soap (mean=2.91), packaging of finished product (mean=2.88), soaking of ash (mean=2.84) and dilution of ash (mean=2.83), sieving of ash solution and boiling (mean=2.73), sourcing for raw materials (mean=2.63) while addition of value to the products (mean= 1.17) ranked last. Comparing grand mean score of involvement of 2.29 with individual mean scores, it shows that the respondents were highly involved in the activities above the grand mean score namely; sourcing for firewood, marketing of black soap, packaging of finished product, soaking of ash, dilution of ash, sieving of ash solution and boiling, sourcing for raw materials, heating of base oil, and addition of cocoa ash. The implication of this observation is that most of these activities need thorough supervision and cannot be easily delegated whereas, the remaining activities in which

they were less involved like scooping of black soap into containers and stirring of black soap can be easily delegated. It also implies that processors in the study area are ignorant of importance of value addition to their products.

Profitability Analysis of Black Soap Production

According to Adegeye and Dittoh (1985), the profitability of any business can be deduced from the relationship between the cost incurred in running the farm business and the returns. The costs and returns associated with black soap production in the study area on the average value per production cycle (25 L of base oil) were shown in Table 3. The total revenue on the average of black soap production was ₦12,617.50 at rate $1US dollar per ₦320 and total variable cost on average per production was ₦10,695.80. However, the average gross margin per production was ₦1,921.70. The net profit per production cycle was ₦1,726.70. The result shows that black soap production was a profitable venture. Benefit Cost Ratio (BCR) was ₦1.20. This implies that for every one naira (₦1) invested on black soap production, ₦1.20 was realized as profit. The results showed that the enterprise is a profitable venture in the study area, the annual profit from black soap is ₦606,241.44. This corroborate the findings of Alo *et al.* (2012) and Oluyole and Adeogun (2005) which established that black soap production was a profitable enterprise among rural dwellers.

Table 2: Distribution of respondents by involvement in black soap production activities (n=120)

Production activities	Mean	SD	Ranking
Production of production ash	1.01	0.91	13th
Sourcing for raw materials	2.63	0.52	7th
Drying of cocoa pods and plantain bunch	1.02	0.13	12th
Sourcing for firewood	2.93	0.28	1st
Soaking of ash	2.84	0.39	4th
Dilution of ash	2.83	0.40	5th
Sieving of ash solution and boiling	2.73	0.47	6th
Heating of base oil and addition of cocoa ash	2.35	0.49	8th
Stirring of black soap	2.18	0.40	10th
Scooping of black soap into containers	2.25	0.45	9th
Marketing of black soap	2.91	0.29	2nd
Packaging of finished product	2.88	0.32	3rd
Addition value to the products, *etc.*	1.17	0.55	11th

Source: Field survey, 2017
Grand mean=2.29

Contribution of Black Soap Production on Respondents' Livelihood

The results from Table 4 reveal that respondents indicated proceeds from black soap production enterprise contributed mostly to feeding (64.2 %), clothing (58.8 %), housing (41.2 %), and farm inputs (40 %) while medical bill (10 %) took the least bill. This implies that black soap enterprise has been contributing sufficiently to the basic needs of rural dwellers in terms of feeding, clothing, and housing among others. This suggests that black soap production has contributed significantly to the livelihood of the women in the study area. This conforms to the finding of Umar *et al.* (2015).

Level of women involvement in black soap production processes

The results in Fig. 1 show that few (14.1%) of the respondents had low level of involvement, nearly one-third (39.3 %) were moderately involved, while more than half (52.2 %) were highly involved in black soap production activities. This implies that majority of the women in the study area were involved in black soap production activities which could be as a result of high profitability of the venture which contribute significantly to their livelihood.

Community attitude towards black soap production

The results in Table 3 show that the community members delight in using black soap always ranked highest (mean= 4.78), followed by community members see black soap production as the major driving force of the community's economy (mean=4.17), people in the community see black soap producers as contributing to the community development (mean=4.12), people in this community see black soap production as a profitable business (mean=3.92) in that order. Comparing grand attitudinal score of 3.13 with individual attitudinal mean scores, the result show that community members in the study area had favourable attitude towards the above mentioned attitudinal statements with means scores above the grand mean score.

Table 3: Profitability analysis of black soap production per cycle (n=120)

Item	Average value(₦)	Scale
Total Revenue(TR)	12,617.50	
Variable Cost(VC)		% of TVC
Coco ash	2,330.83	21.80
Palm kernel oil	6,597.08	61.70
Transportation	535.83	5.01
Labour	458.72	4.30
Firewood	586.71	5.50
Basket	186.67	1.70
Total Variable Cost(TVC)	10,695.80	100
Gross profit Margin (TR-TVC)	1,921.70	
Depreciation cost(pot, double boiler)	195.00	
Net profit	1,726.70	
Annual net profit	606,241.44	
BCR	1.20	

Source: Field survey, 2017

Level of Community Attitude

Furthermore, results in Fig. 2 show that when the mean score of 56.30 was employed to categorize responses into favourable and unfavourable attitude towards black soap productions among the community members, it revealed that majority (81.7 %) of the respondents indicated that community had favourable attitude towards black soap enterprise while 18.7 % indicated unfavourable disposition. The fact that the majority of the respondents indicated favourable community attitude implies that there is the potential for development of black soap enterprise provided that the government at the grassroots could pro-

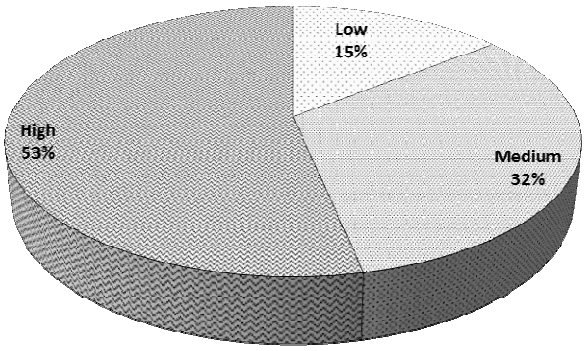

Figure 1: Distribution of respondents by level of involvement in black soap production (n=120)

Source: Field survey, 2017

Table 4: Distribution of respondents by contribution of black soap to the livelihood

Livelihood indicators	Frequency	Percentage
Feeding	77	64.2
Social ceremony	27	22.5
Clothing	70	58.8
Education	45	37.5
Medical bill	12	10
Farm inputs	48	40
Housing rent	50	41.2
Mobility	40	33.3

Source: Field survey, 2017

vide opportunities for capacity building and institutional supports for them.

Constraints in black soap enterprise

The results in Table 6 show that the constraints affecting women involvement in black soap enterprise in the study area with scarcity of water during dry season (mean =2.78) ranked highest, followed by inadequate finance (mean =2.28), lack of extension services on black soap production (mean=1.28), high cost of labour (mean=1.13), and inadequate access to raw materials (mean=1.10).This finding is in line with the submissions of Oluwalana *et al.* (2016), Sani and Dakanwa (2011), and Alo *et al.* (2012) who reported that inadequate capital, lack of extension service, and water were the major constraints faced by women involved in black soap production in their study areas. The implication of the finding is that absence of these critical enabling inputs would limit women involvement in this enterprise and consequently impair its development. Hence, the relevant rural development agencies could give priority focus to minimizing these problems, thereby stimulating sustainable interest of both the present and potential entrepreneurs along black soap enterprise value chain development.

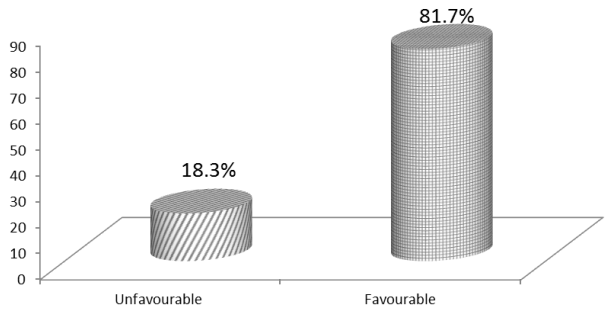

Figure 2: Distribution of respondents based on attitudinal level respondents (n=120)
Source: Field survey, 2017

Table 6: Constraints militating against women involvement in black soap enterprise (n=120)

Constraints	Mean	S.D	Ranking
Scarcity of water during dry season	2.78	0.67	1st
Inadequate finance	2.28	0.51	2nd
Lack of extension service	1.28	0.37	3rd
High cost of labour	1.13	0.52	4th
Inadequate access to raw materials	0.10	0.31	5th

Table 5: Distribution of respondents by community attitude towards black soap production (n=120)

Attitudinal statements	Mean	S.D	Ranking
Community members delight in using black soap always	4.78	0.41	1st
People in this community see black soap production as the major driving force of the community's economy	4.17	0.37	2nd
People in this community see black soap producers as contributing to the community development	4.12	0.32	3rd
People in this community see black soap production as a profitable business	3.92	0.26	4th
People in this community see black soap production as a profession that can only be used to augment family source of income	1.74	0.44	5th
People in this community see black soap producers as inferior to other people in the community	1.67	0.47	6th
People in this community see black soap as a fetish material	1.48	0.50	7th

Grand mean score: 3.13
Source: Field survey, 2017

CONCLUSION

Based on the findings of this survey, it concludes that majority of the women were highly involved in black soap production activities because it is a highly profitable enterprise and its proceeds mostly contributed to feeding, clothing and housing rent. Also, majority indicated favourable community attitude towards the enterprise. However, inadequate finance, scarcity of water during dry season and lack of extension service were the major constraints to the growth and development of this enterprise in the study area.

It is therefore, recommended that,

1. Micro finance institutions should make loan readily available and affordable with low interest rate for rural cottage enterprise owners in the rural areas.
2. Both Local and the State government should provide adequate social amenities and infrastructures such as deep wells, bore holes, rural electrification, and roads among others.
3. The State government should employ adequate number of extension agents for the Osun State Agricultural Development Programme to enhance effective dissemination of appropriate technologies to the entrepreneurs at the grass root, and
4. Capacity building training workshop on value addition technologies should be organized for rural enterprise owners including black soap business, in order to make their products more acceptable to wider range of customers.

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