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Access to Intervention Inputs in Cassava Enterprise and Enterpreneurs' Socio-Economic Status in South Eastern, Nigeria

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ABSTRACT

Cassava is a very important staple crop around which revolves several other enterprises such as production, processing and marketing enterprises. Given that it has enjoyed resounding patronage and intervention in Nigeria over the years, it is important therefore to ascertain the socio-economic status (SES) of the entrepreneurs in relationship with the interventions. The study examined access to intervention inputs in cassava enterprise (CE) and entrepreneurs' SES in South-Eastern, Nigeria. Systematic sampling technique was used to select a total of 308 entrepreneurs and information on the respondents' socio-economic and enterprise characteristics, access to intervention and socio-economic status was collected using interview schedule. Inferential and descriptive statistics were used for data analysis. Annual income, age and years of experience in CE were ₦24965.1±75.59, 55.69±6.792 and 36.78±9.942, respectively. Most respondents were females (77.9%), married (95.8%) and had formal education (67.2%). Access to intervention inputs by producers (60%), marketers (87.4%) and processors (67.4%) was high while SES for marketers (162.8±3.1), producers (161.0±7.2) and processors (159.7±8.8) were essentially moderate. Access to intervention inputs by producers' (r = 0.075 p = 0.386), processors' (r = 0.188 p = 0.084) and marketers' (r = 0.238 p = 0.451) did not significantly increase entrepreneurs' SES. It is concluded that entrepreneurs' level of access to intervention inputs did not influence their SES.

Key words: Cassava Enterprises, Producers, Processors, Marketers, Socio-Economic Status, Access to Intervention.

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INTRODUCTION

Cassava has played and continues to play a remarkable role on the agricultural stage of Nigeria. Since its debut in the late 1600s on Portuguese trade ships from Brazil into Nigeria, it has gone from minor crop to a major crop that accounts for between 40 to 50% of all calories consumed in Southern and Central Nigeria (FAO, 2010). FAO further stated that Nigeria's production was estimated in 2009 to be 36.8 million metric tons with total area harvest of 3.13 million ha. It is produced predominantly (99%) by small-scale farmers with 1 to 5 ha of land intercropped with yams, maize, or legumes in the rainforest and savannah agro-ecologies of Southern, Central, and lately Northern Nigeria (FAO, 2010).

Systematic interventions in cassava began in the early

1980s with the introduction of high yielding, early bulking varieties resistant to the cassava mosaic disease (CMD) and cassava bacterial blight (CBB), produced at the International Institute for Tropical Agriculture (IITA) in the 70s', and the establishment of small-scale processing facilities (Nweke et al., 2002). The second wave of transformation began with the Presidential Initiative in 2003.

The initiative sought to position cassava as a commodity crop and foreign exchange earner, beyond its traditional role as a food crop. A number of projects were reportedly embarked upon and these include: building flour and sweetener processing factories in the country, production and dissemination of over 100 million bundles of certified stock of improved cassava varieties over a period of three years, training of local fabricators by the National Centre for Agricultural Mechanization (NCAM), building and sale of thousands of grating, dewatering, and drying machines, farm-gate primary processing centers for training extension and farmers in production of cassava flour, chips and pellets (UNIDO/FGN, 2006). The same source stated that the initiatives were streamlined to strengthen human and institutional capacity of producers, processors, marketers and their scale of operation, benefit and socio-economic status. The report further revealed that two projects financed by the USAID and Netherlands' Directorate General for International Cooperation (DGIS) have sought to build cassava value-added chains for starch, sweeteners, and high quality cassava flour (HQCF). The USAID funded project, Maximizing Agricultural Revenue and Key Enterprises in Targeted Sites (MARKETS) was started in 2005 to partner credible cassava processors with smallholder farmers to develop efficient value added chains for starch and sweeteners in Nigeria.

The project also introduced best farming practices to lower production costs. In Ondo state, MARKETS is partnering with MATNA Nigeria Limited, one of the two large starch mills in the country, while in Ogun State, MARKETS is working with EKHA Agro, the only cassava-based sweetener processing plant in Nigeria to build robust supply chains. Also a computer-based system called the Cassava Supply Management System (CSMS) was designed to coordinate production, harvesting, and collection of cassava from a network of approximately 400 farms per processing plant, enabling these plants to reach 60 to 80% of processing capacity in five years. The second project, Cassava +, was launched by the International Fertilizer Development Center (IFDC) and Dutch Agricultural and Trading Company (DATCO) with funding by the Netherlands' Directorate General for International Cooperation (DGIS) (http//www.Unaab.ed.ng/-/). The three year project has as mission to shift cassava from a subsistence crop to a cash crop by increasing the productivity of farm families. The cassava transformation under the Agricultural Transformation Program was further targeted at building upon the gains in all the aforementioned efforts.

The move was expected to drive development in the cassava sector through value-addition to realize opportunities that exist in the industrial and export sectors for cassava. Those efforts demonstrate government understanding that cassava is important in improving income and food security status of most Nigeria families as well as playing a remarkable role in traditional and industrial raw materials provisions. It also implies a realization that with appropriate initiative cassava will not only be positioned as a commodity crop but also as a foreign exchange earner. Nweke et al. (2002) noted that with these interventions, cassava would be a reliable and convenient source of food for tens of millions of rural and urban dwellers in Nigeria. FAOSTAT, (2007) noted that the interventions were supposed to drive development in cassava sector through value-addition and building support around farmers, marketers and processors by tackling existing technical and policy challenges yet the sub-sector has remained predominantly (99%) at subsistence level. Also Lucas (2007) observed that most farmers are subsistence farmers farming usually 1 to 2 hectares of land which are usually scattered over a wide area, employing a system of long-term rotation called shifting cultivation. FAOSTAT further noted that Nigeria is the world's largest producer of cassava with estimated 36.8 million metric tons on a total harvested area of 3.13 million ha in 2009 but unfortunately, most Nigeria's population is chronically hungry and economically back-ward (Iheke, 2008).

A change in the living standard or socio-economic status of people was expected given the various interventions. On the contrary, the research finding of Simonyan et al. (2010) further buttressed that most Nigerians are poor and hungry signifying as Lucas (2007) observed low living standard of living with no access to pipe-borne water, good roads, hospitals and other essentials of living. This should not be the case. There should supposedly be a correlation between level of interventions and scale of operation, and socio-economic status of those involved in cassava enterprise. Perhaps the unequal level of access to resources as observed by (COSCA, 1999) may be a viable factor for both the scale of operation and socio-economic status of those involved. The dearth of information on what the situation is with respect to entrepreneurs' level of access to cassava intervention inputs and their socio-economic status in South-eastern Nigeria has necessitated the study.

OBJECTIVES OF THE STUDY

The general objective of the study is to determine access to intervention inputs in cassava enterprise and

entrepreneurs' socio-economic status in South-eastern, Nigeria. Specifically, the study examined the socio-economic characteristics of entrepreneurs in cassava enterprise, entrepreneur's extent of access to intervention inputs in cassava enterprise and the socio-economic status of entrepreneurs.

HYPOTHESES OF THE STUDY

There is significant relationship between entrepreneurs' socio-economic characteristics and their level of access to intervention inputs and there is significant relationship between entrepreneurs' access to intervention inputs in cassava enterprise and their SES.

METHODOLOGY

The study was conducted in South-eastern zone of Nigeria. Currently, the major ethnic group is the Igbo who are mainly Christians and they are surrounded on all sides by other tribes (the Bini, Ijaw, Ogoni, Igala, Tiv, Yakurr and Ibibio). The zone lies within the highest vegetation belt and is characterized by two climate seasons; the rainy and dry seasons. An average annual temperature above 20°C (68.0°F) creates an annual relative humidity of 75% and reaches 90% in the rainy season (Iloeje, 2004). This explains reasons why the zone is primarily agricultural, producing mainly cassava, yam, cocoyam, leafy vegetables, maize, melon, okro, palm fruits and banana. The population of the study was entrepreneurs in cassava enterprise in South-eastern Nigeria which included farmers (producers), processors and marketers. Multi-stage sampling procedure was used in selecting the respondents. Two states namely; Imo and Anambra were purposively selected out of the five states in South-eastern zone because of their prominence in cassava enterprise (PCU, 2003; IITA, 2004). Imo State has 27 Local Government Areas (LGAs). At the first stage, 33 % (9) of the 27 LGAs was selected using simple random sampling technique. The second stage involved using simple random sampling technique to select 3 communities from each of the 9 LGAs to give 27 communities. The third stage involved using systematic sampling technique to select 81 producers and 50 processors from the list of Cassava Growers' Association and Processors' Association in the sampled communities. Snowball technique was used to identify a cassava marketer who helped to identify other marketers from which list 51 marketers were selected using simple random sampling technique. This gave 182 respondents representing 81 producers, 50 processors, and 51 marketers from Imo State.

A similar sampling procedure as in Imo state was repeated in Anambra state that has 21 LGAs. At the first stage, 30% (6) of the 21 LGAs was selected using simple random sampling technique. The second stage involved using simple random sampling technique to select 3 communities from each of the 6 LGAs to give 18 communities. The third stage involved using systematic sampling technique to select 54 producers and 36 processors from the list of Cassava Growers' Association and Processors Association in the selected communities. Snowball technique was further used to identify a cassava marketer who in turn helped in identifying other 36 marketers. In other word 126 respondents representing 54 producers, 36 processors, and 36 marketers were sampled from Anambra State. This gave a total sample size of 308 that was used in the study. Primary data on respondents' socio-economic characteristics, enterprise characteristics, access to intervention inputs and socio-economic status were collected using a well-structured interview schedule. Access to intervention inputs was measured using 3-point scale of always (2), occasionally (1) and not at all (0). Respondents' mean scores were obtained, and used to categorize entrepreneurs into having low (< mean access scores) and high (≥ mean access scores).

The socio-economic status of the entrepreneurs was measured as number of items possessed 0, 1, 2-4, and above 4 (for continuous items) while the 'yes' and 'no' responses were for categorical items. The mean and standard deviation of the respondents' scores were obtained for each entrepreneur and used to categorize them into having low (< mean ± 1SD), moderate (within mean ± 1SD) and high (> mean ± 1SD) socio-economic status. Face validity and reliability tests were carried out to ascertain the appropriateness of research instrument. Reliability coefficient of 0.7 was obtained using split half method. The analysis of data collected was carried out using frequency, percentages, Chi-square and PPMC.

RESULTS AND DISCUSSION

The result of analysis as presented in Table 1 reveals that the modal age range was between 56 to 65 years (54.2%) with a mean age of 56 years. Across entrepreneurs' categories, results revealed that most producers (54.8%) and marketers (71.3%) were within the same age range of 56 to 65 years while processors (71.3%) were in the age range of 45 to 55 years. This implies that cassava enterprise was not carried out by active and energetic people indicating that the enterprise may not be sustained if allowed to remain in the hands of aged entrepreneurs. The need to encourage youth to be involved may therefore not be over-stressed. This is expected given the rate at which young and energetic working population is migrating out of the study area to the cities in search of white collar jobs. The result is in line with Eze (1993) who reported that the mean age of

Table 1. Distribution of entrepreneurs based on socio-economic characteristics.

Variable description	Producers		Marketers		Processors		Total	
	F	%	F	%	F	%	F	%
Age (Years)								
30 – 45	8	5.9	10	11.5	8	9.3	26	8.4
46 – 55	48	35.6	12	13.8	46	53.5	106	34.5
56 – 65	74	54.8	62	71.3	31	36.0	167	54.2
> 65	5	3.7	3	3.4	1	1.2	9	2.9
	Mean = 56.24		Mean = 57.15		Mean = 53.33		Mean = 55.69	
	SD = ± 6.685		SD = ± 6.588		SD = ±6.627		SD = ± 6.792	
Sex								
Female	101	74.8	62	71.3	77	89.5	240	77.9
Male	34	25.2	25	28.7	9	10.5	68	22.1
Marital Status								
Married	124	91.9	87	100.0	84	97.7	295	95.8
Single	0	0	0	0.0	1	1.2	1	0.3
Widow	11	8.1	0	0.0	1	1.2	12	3.9
Household size								
< 5	0	0.0	0	0.0	1	1.2	1	0.3
5 – 8	3	2.2	1	1.1	2	2.3	6	1.9
>8	132	97.8	86	98.9	83	96.5	305	97.7
	Mean = 7.07		Mean = 7.28		Mean = 6.99		Mean = 7.11	
	SD = 1.368		SD = ±1.318		SD = 1.427		SD = ± 1.371	
Education								
Primary	5	3.7	9	10.3	11	12.8	25	8.1
Secondary and above	100	96.3	78	86.6	75	89.6	207	67.2
Experience								
< 25 years	10	7.4	2	2.3	8	9.3	12	3.9
25 – 50	109	80.7	66	75.9	73	84.9	166	54.0
51 – 75	16	11.9	19	21.8	5	5.8	130	42.1
	Mean = 39.87		Mean = 42.53		Mean = 36.87		Mean = 39.78	
	SD = ±9.766		SD = ± 9.281		SD = ± 10.160		SD = ± 9.942	

Source: Field Survey, 2014.

rural farm households across the various states of south eastern Nigeria was 53 years an indication that young ones were no more showing much interest in agriculture (Ladele and Edgal, 2005). Majority (77.9%) were females. Also, across entrepreneurs' categories, most producers (78.8%), marketers (71.3%) and processors (89.5%) were mainly females. This indicates that though cassava enterprise is not gender exclusive, it is mostly carried out by female entrepreneurs as producers, marketers and processors. This means that cassava enterprise may not easily grow beyond its subsistent level in the area as women in the area do not have absolute control over land, not to talk of expanding their scale of operation or using same for collateral.

The result concurs with the finding of Asunmugha and Nwosu (2006) Ajieh and Uzokwe (2007) that women play a leading role in cassava enterprises, contributing about 67% of the total labor in the south-east, 58% in south-west and 88% in North-central zones, with involvement in virtually all activities namely hoeing, planting, weeding, harvesting, transporting, storing, processing, marketing and domestic chores. Findings on marital status revealed that most entrepreneurs (95.8%) were married. Across entrepreneurs' categories, most producers (91.9%), marketers (100%) and processors (97.7%) were married. The results support the common knowledge that married people have more responsibilities hence their increased need for coping strategies to meet their financial and food security obligations within the households. The result confirms the finding of Imo (2002) that most food crop farmers, cassava processing and marketing households in the south-east were married. The household size distribution of the respondents indicates that most entrepreneurs (97.7%) had household size of above 8. The result also revealed that across entrepreneurs' categories, most producers (97.8%), marketers ((98.9%) and processors (96.5%) had same household size of above 8.

The result is an indication that most entrepreneurs are likely to source some cheap labor within the households even though there is a likelihood of household food security reduction, decrease in benefits, income and socio-economic status. Ironkwe et al. (2009) had earlier reported that most farm families in Nigeria have large

household size of between 6 to 10 persons. Majority (67.2%) had formal education up to secondary school level. Result across entrepreneurs' categories further showed that high percentages of producers (71.9%), marketers (65.5%) and processors (61.6%) completed secondary school education. The result implies that most cassava entrepreneurs have formal knowledge of cassava enterprise and can use it to understand and evaluate information on new entrepreneurial techniques. The result confirms that of Uchechi and Ebelenna (2009) that most entrepreneurs in cassava enterprise in Abia State could read and write. Years of experience of most entrepreneurs (54.0%) were between 25 to 50 years. Across entrepreneurs' categories, most producers (80.7%), marketers (75.9 %) and processors (84.9%) were within the same 25 to 50 years of experience. This is an indication that cassava enterprise is not just an occupation but a way of life of the people. The finding is in line with that of Ironkwe et al. (2009) that most people in south eastern Nigeria are highly experienced in farm enterprise.

ENTREPRENEURS' ENTERPRISE CHARACTERISTICS

The results as presented in Table 2 shows that mean annual income for cassava entrepreneurs was ₦249, 65.1 ±75.59. Across entrepreneurs' categories, mean income for producers, marketers and processors were ₦239, 351 ±39.56, ₦225395 ± 32.59 and ₦275771.7± 03.17, respectively. The result also reveals that most producers (36.8%), processors (46.5%) and marketers (57.5%) earned between ₦200, 001to ₦ 300,000 per annum. This means that the entrepreneurs are generally low-income earners. This implies that the entrepreneurs will not have enough capital to procure modern productive technologies that can ease their activities, enhance their output, benefits and socio-economic status. The result supports the finding of Odoemenem and Otanwa (2011) that respondents in cassava enterprise earn less than #300 per month in Benue state, Nigeria. Most entrepreneurs (96.8%) market their produce through middle men. Across entrepreneurs' categories, most producers (97.7%), marketers (97.7%) and processors (94.7%) also used middle men as marketing channel.

This means that the involvement of middlemen in cassava distribution system is paramount and preferably used by the entrepreneurs. Nweke et al. (2002) and FIIRO (2006) also found out that cassava products distribution in Nigeria is mainly through the middlemen. It is also evident in Table 4 that the mean farm size of most producers (74.8%) was between 1.5 to 2 hectares. This means that cassava production is at subsistence level. The result is consistent with the finding of Doss and Moris (2010) that most farmers in Nigeria operate on farm holdings of less than 2 ha. The result further revealed that entrepreneurs' source of land/shop acquisition was mainly from the families (82.8%). The same was revealed for most producers (88.1%), marketers (87.4%) and processors (69.8%). This has implication for sustainability of the enterprise. The fragmentation of family land among members will someday pose a constraint of no land to share, thus; limiting possible expansion and investment. The result is consistent with Nandi et al. (2011) who listed family as a major source of land/shop acquisition for agribusiness in Nigeria.

The entrepreneurs' sources of labor were paid/hired labor (94.5%), self-labor (93.5 %) and family labor (86.0%). Across entrepreneurs' categories, producers used paid/hired labor (97.0%), self-labor (93.5%) and family labor (86.0%). Similarly, most marketers used paid/hired labor (98.9%), self-labor (97.7%) and family labor (89.7%), while processors' major sources of labor included: self-labor (97.7%), family labor (96.5%) and paid/hired labor (86.0%). The result is line with a priori expectation in view of the predominance of aged entrepreneurs who cannot cope with the drudgery associated with cassava enterprise. Obibuaku (1999) had earlier reported preference for paid/hired labor, self-labor and family labor sources in south eastern, Nigeria. Majority (92.2%) of entrepreneurs sourced their finance from personal savings while across entrepreneurs' categories, most producers (92.2%) marketers (87.4%) and processors (100.0%) also got their finance through personal savings. This implies that entrepreneurs cannot venture into large scale cassava enterprise as a result of little savings; though they are likely to be more committed having invested their hard earned savings.

The finding is consistent with Gwary et al. (2008) who reported that personal savings was a major source of finance for most agro entrepreneurs in Askira/Uba Local Government of Borno State, Nigeria. Most (97.4%) of producers planted both local and improved cassava varieties. This implies that the location of National Root Crop Research Institute (NRCRI) has not appreciably influenced availability and outright adoption of improved cassava varieties. The result is in tandem with the finding of Ezebuiro (2004) who stated that cultivation of improved varieties alongside with the local variety are still in practice in South-eastern Nigeria. Various means of transportation were identified to be in use by the respondents and they include mainly motorcycle (96.8%), bicycle (91.6%), pick-up van (88.6%) and hand drawn trucks/wheel barrows (84.4%). However, results across categories of entrepreneurs revealed that producers' means of transportation included: motorcycle, (96.3%) bicycle (94.8%) pick up van (80.0%) and hand drawn trucks/wheel barrow (80.0%). Motorcycle (96.6%) bicycle (95.4%), pick-up van (93.1%), and truck/wheel barrow (90.8%) were also used by marketers while same

Table 2. Distribution of entrepreneurs based on enterprise characteristics.

Variable description	Producers (n=135)		Marketers (n=87)		Processors (n=86)		Total (n=308)	
	F	%	F	%	F	%	F	%
Income:								
<100,000	23	17.0	8	20.9	7	8.0	48	15.6
100,001-200,000	30	36.3	17	19.8	6	6.9	53	17.2
200,001-300,000	50	36.8	40	46.5	15	57.5	140	45.5
300,001-400,000	19	14.1	16	7.0	20	29.9	45	14.6
<400,000	13	9.6	5	5.8	41	4.6	22	7.1
	239351.01± 39.56		225395.01 ± 32.59		275771.7± 03.17		249651.1±75.59	
Marketing outlets:								
Farm gate	3	2.2	2	2.3	5	5.3	10	3.2
Middlemen	132	97.8	85	97.7	85	94.2	298	96.8
Farm Size:								
≤ 0.5ha	6	4.0	0	0.0	0	0.0	6	4.0
0.6 to 1ha	9	6.6	0	0.0	0	0.0	9	6.6
1 to 1.5ha	19	14.1	0	0.0	0	0.0	19	14.1
1.5ha to 2ha	101	74.8	0	0.0	0	0.0	101	74.8
	1.68± 0.95							
Source of land/shop:								
Rented/lease	81	60.0	51	58.6	39	45.3	171	55.5
Family	119	88.1	76	87.4	60	69.8	255	82.8
Communal	23	17.0	2	2.3	26	30.2	51	16.6
Outright Purchase	73	54.1	68	78.2	48	55.8	189	61.4
Government	3	2.2	1	1.1	22	25.6	26	8.4
Source of labor:								
Family	104	77.0	78	89.7	83	96.5	265	86.0
Paid labor	131	97.0	86	98.9	74	86.0	291	94.5
Friends	17	12.6	7	8.0	28	32.6	52	16.9
Self	119	88.1	85	97.7	84	97.7	288	93.5
Source of fund:								
Personal savings	122	90.4	76	87.4	86	100.0	284	92.2
Credits from banks	38	28.1	32	36.8	13	15.1	83	23.9
Inheritance	11	8.1	1	1.1	20	23.3	32	10.4
Gifts/donations	7	5.2	4	4.6	3	3.5	14	4.5
Transportation:								
Trailer	1	0.7	0	0.0	0	0	1	0.3
Truck	108	80.0	79	90.8	73	84.9	260	84.4
Motorcycle	128	94.8	84	96.6	86	100.0	298	96.8
Head porterage	25	18.5	15	17.2	10	11.6	50	16.2
Pick up van	109	80.0	81	93.1	84	97.7	273	88.6
Bicycle	130	96.3	83	95.4	69	80.2	282	91.6
Boat	40	29.6	20	23.0	44	51.2	104	33.8
Cassava varieties planted:								
Both variety	132	97.8	0	0	0	0	132	97.8
Local variety	2	2.2	0	0	0	0	2	2.2

Source: Field Survey, 2014.

motorcycle (100.0%), pick-up van (97.7%), hand drawn truck/wheel barrow (84.9%), bicycle (80.2%) and boat (51.2%) were also used by most processors.

The result depicts availability, accessibility, affordability and usability of these means of transportation as well as their sustainability among entrepreneurs. The use of boat is also an indication of palpable inadequate or poor, rugged and narrow feeder roads for better vehicular movement especially in the riverine areas. The result is consistent with the report of Dipeolu et al. (2001) that due to long distances between scattered farms and points of processing and final destination markets, means of transport has considerably changed; motorcycle, bicycle, panel and pick-up vans, and trucks are the most commonly used means of transportation in Nigeria.

ENTREPRENEURS' ACCESS TO INTERVENTION INPUTS IN CASSAVA ENTERPRISE

Table 3 presents the analysis of entrepreneurs' access to

Table 3. Distribution of entrepreneurs based on access to intervention.

Variable description	Always		Occasionally		Not at all		Weighted	
	F	%	F	%	F	%	Score	Rank
Producer								
Marketing outlets	0	0.0	80	59.3	55	40.7	59.3	**7th**
Improved cassava cuttings	5	3.7	111	82.2	19	14.1	89.6	3rd
Agro-chemical	2	1.5	130	96.3	3	2.2	99.3	1st
Land	22	16.3	46	34.1	67	49.6	66.7	5th
Capital	0	0.0	80	59.3	55	40.7	59.3	7th
Labor	0	0.0	84	62.2	51	31.8	62.2	6th
Machinery	0	0.0	46	34.1	89	65.9	34.1	8th
Extension Services	0	0.0	114	84.4	21	15.6	84.4	4th
Provision of market	0	0.0	32	23.3	103	76.3	23.3	10th
Training/workshop	0	0.0	21	15.6	114	84.4	15.6	11th
Planting materials	1	0.7	124	91.9	10	7.4	93.3	2nd
Const. of access road	0	0.0	43	31.9	92	68.1	31.9	9th
		Marketers						
Marketing outlet	0	0.0	81	93.1	6	6.9	93.1	1st
Land/shop	0	0.0	44	50.5	42	49.4	50.5	4th
Capital	0	0.0	57	65.5	30	34.5	65.5	3rd
Extension Services	0	0.0	79	87.4	11	12.6	87.4	2nd
Provision of market	0	0.0	18	20.7	69	79.3	20.7	6th
Training/workshop	0	0.0	18	20.7	69	79.3	20.7	6th
Access road	1	1.1	38	43.7	48	55.2	43.7	5th
		Processors						
Land/shop	4	4.7	34	39.5	48	55.8	48.9	5th
Capital	0	0.0	51	59.3	35	40.7	59.3	3th
Extension Services	0	0.0	75	87.2	11	12.8	87.2	2nd
Provision of market	1	1.2	15	17.4	70	81.4	19.8	7th
Processing equipment	0	0.0	16	18.6	70	81.4	18.6	8th
Training workshop	0	0.0	76	88.4	10	11.6	88.4	1st
Pilot processing centres	1	1.2	46	53.5	39	45.3	55.9	4th
Land/shop	4	4.7	10	11.6	72	83.7	21.0	6th
Overall								
Marketing outlet	0	0.0	161	52.3	147	47.7	52.3	8th
Improved cassava cuttings	9	2.9	273	88.6	26	8.4	94.4	2nd
Agro-chemical	2	0.6	294	95.5	12	3.9	95.5	1st
Land	53	17.2	97	31.5	158	51.3	65.9	6th
Capital	0	0.0	88	61.0	120	39.0	61.0	7th
Labor	0	0.0	207	67.2	101	32.0	67.2	6th
Extension Services	0	0.0	265	86.0	43	14.0	86.0	3rd
Provision of market	1	0.3	65	21.1	242	78.6	21.1	11th
Training/workshop	0	0.0	264	85.7	44	14.3	85.7	4th
Processing equipment	0	0.0	55	17.9	253	82.1	17.9	12th
Processing centers	3	1.0	205	66.6	100	32.5	68.6	5th
Const. of road	5	1.6	91	29.5	212	68.8	32.7	10th

Source: Field survey, 2014.

intervention inputs in cassava enterprise. The results based on the weighted scores show that agro-chemical (95.5%) ranked first as the most accessed incentive by entrepreneurs while across entrepreneurs' categories (producers, marketers and processors) agro-chemicals (96.3%), marketing outlets (93.1%) and training/workshop

Table 4. Level of access to cassava enterprise intervention.

Level	Producer			Marketers			Processors			Overall		
	Scores	F	%	Scores	F	%	Scores	F	%	Score	F	%
Low	0-7	54	40.0	0-8	11	12.6	5-7	28	32.6	0-7	102	30.2
High	8-13	81	60.0	9-12	76	87.4	8-11	58	67.4	8-13	206	69.8
Mean	8.15 ± 2.37			8.94 ± 2.16			7.92 ± 1.42			8.31 ± 2.12		

Table 5. Distribution of entrepreneurs on SES in cassava enterprise.

Socio-economic status	Scores range	F	%	Mean	s.d*
Producers					
Low	110.0-153.80	10	7.4	160.99	7.18
Moderate	153.81-168.17	125	92.6		
High	168.18-176.0	0	0.00		
Marketers					
Low SES	110.0 -158.87	7	8.0	162.75	3.95
Moderate	158.88-166.7	80	92.0		
High	166.8-167.0	0	0.00		
Processors					
Low	110.0-150.88	7	8.1	159.69	8.80
Moderate	150.89-168.49	79	91.9		
High	168.50-170	0	0.00		
Overall					
Low	110.0-154.07	30	9.7	161.12	7.04
Moderate	154.08-168.16	278	90.3		
High	168.17-169.0	0	0.00		

Source: Field Survey, 2014. s.d – standard deviation*

(88.4%), respectively ranked first as the most accessed incentive in their respective enterprises. Also results on level of access to intervention as shown in Table 4 revealed that majority (69.8%) of the entrepreneurs highly accessed intervention inputs from various agencies. The results further revealed that across entrepreneurs' category, majority of producers (60.0%), marketers (87.4%) and processors (67.4%) enjoyed high level of access to various intervention inputs. The result signified that both entrepreneurs enjoyed high level specific support services which unfortunately did not reflect on their scale of operation. The results corroborate the finding of Asiabaka et al. (2001) that there are productive variations in Nigeria's cassava enterprise arising principally from improved access to intervention inputs.

SOCIO-ECONOMIC STATUS OF ENTREPRENEURS IN CASSAVA ENTERPRISE

From the findings as shown in Table 5 majority (90.3%) of entrepreneurs in cassava enterprise had moderate SES. The result also showed that the SES of entrepreneur categories; producers (92.6%), marketers (92.0%) and processors (91.9%) was moderate SES. The result implies that both entrepreneurs enjoyed equal support services that were capable of improving their production, benefits and SES on equal scale. The result is consistent with FAO (2003) who reported the living standard of over 80% of agricultural population in Africa to be on the average.

HYPOTHESIS 1

There is no significant relationship between selected socio-economic characteristics of the entrepreneurs and their Socio-economic status in cassava enterprise. The result of chi-square analysis as shown in Table 6 reveals that age (χ^2 = 15.123, p = 0.019), marital status (χ^2 = 24.590, p = 0.029), household size (χ^2 = 10.492, p = 0.005), and experience (χ^2 = 10.644, p = 0.0031) had significant and positive relationship with cassava producers' socio-economic status. The result that age had significant relationship with producers' access to intervention inputs was in consonance with that of (Kebede, 2001). The results on marital status and household size imply that both are factors that can enhance the rate at which respondents can go in accessing intervention inputs that may improve their production and enhance their SES. Also,the finding that years of experience was significant in its relationship with

Table 6. Chi-square analysis between selected socio-economic characteristics and socio-economic status of entrepreneurs in cassava enterprise.

Variables	Producers			Marketers			Processors		
	Df	χ^2-value	P	Df	χ^2	P	Df	χ^2	P
Age	6	15.123	0.019*	2	1.087	0.581	6	17.657	0.007**
Sex	2	7.011	0.118	2	1.945	0.378	2	1.434	0.488
Marital status	2	24.590	0.029*	--	--	--	4	15.562	0.004**
Household size	2	10.492	0.005*	2	0.102	0.950	4	8.632	0.071
Education	4	6.937	0.139	4	5.384	0.250	4	43.137	0.000**
Experience	4	10.644	0.031*	4	21.366	0.000*	4	17.058	0.013*

*Sig at 0.05 ** at 0.01.

Table 7. Relationship between entrepreneurs' access to intervention programmes in cassava enterprise and their socio-economic status.

Entrepreneurs' access to intervention	r- value	p- value	Decision
Producers	0.075	0.386	ns*
Marketers	0.238	0.451	ns*
Processors	0.188	0.084	ns*

*ns = not significant.

cassava producers' SES explains the fact that the more reasonable number of years of experience the more efficient the producers may be in their decision making processes and the less averse they become in taking up intervention inputs to improve their productivity and SES.

The study further establishes a significant relationship between marketing experience (χ^2 = 21.366, p = 0.000) and cassava marketers' SES. The result is expected since as the number of years in business increases, so also the understanding of intervention benefits and methods of access that could improve their socio-economic status. Age (χ^2 = 17.657, p = 0.007), marital status (χ^2 = 15.562, p = 0.004), education (χ^2 = 43.137, p = 0.000), and experience (χ^2 = 17.058, p = 0.013) significantly and positively influence the cassava processors' SES. The result implies that age is a factor that may determine the willingness and extent the processors could go in search of intervention that can reduce the drudgery associated with cassava processing, improve its profitability and entrepreneurs' SES.

The result on marital status implies a status symbol and additional responsibility that could act as a push on married processing entrepreneurs in accessing intervention inputs that can reduce labor cost, increase their revenue base and consequently the SES. The result on education was expected and it is an indication that educated processors are more likely to have easy access to innovations and improved tools that could enhance their productivity and SES. The finding on experience also implies that the more experienced a processor is, the more efficient he could be in redesigning strategies in access interventions that are capable of bringing turn-around in his enterprise and socio-economic status. The result is in conformity with Okoye et al. (2008) who reported that the more experienced an entrepreneur is, the more efficient his decision making processes and willingness to take risks that can transcend into improved productivity.

HYPOTHESIS 2

There is significant relationship between entrepreneurs' access to intervention programmes in cassava enterprise and their socio-economic status. The result of PPMC analysis on Table 7 shows that there was no significant correlation between producers' (r = 0.075 p = 0.386), processors' (r = 0.188 p = 0.084) and marketers' (r = 0.238 p = 0.451) access to intervention programmes and their SES. This was not expected as access to intervention packages should have improved their productivity and benefits which could as well necessitate improved socio-economic status of the entrepreneurs. The result implies that producers, processors and marketers may have relied on other unofficial options to sustain and thrive successfully in their respective enterprises. The result is in line with Adebayo and Salawu (2007) who found out that cassava producer, processors and marketers were aware of the presidential initiative on cassava but indifferent about its effects on their activities.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, it could be concluded

that level of access to intervention inputs in cassava enterprise did not have direct relationship with the socio-economic status of the entrepreneurs. The socio-economic status of the entrepreneurs (moderate) may have been brought about by other variables other than access to intervention inputs. The study established that cassava enterprise is dominated by the female gender even though the enterprise is not gender exclusive.

Consequently, it is recommended that: (1) Female entrepreneurs in cassava enterprise need to be focused in designing future intervention packages as they are more involved in the sub-sector (2) Male entrepreneurs should be encouraged into the enterprise through special incentive given their current low involvement in cassava enterprise and (3) Cassava enterprise should be considered in government programmes for poverty mitigation in the rural areas.

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