ASSESSMENT OF INFORMATION SOURCES USED BY CASSAVA PROCESSORS IN NASSARAWA STATE, NIGERIA

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Abstract

This study examined the sources of information used by cassava processors in Nasarawa State, Nigeria. The study specifically examined enterprise characteristics of cassava processors, examine the awareness of cassava products among processors and determine the sources of information among cassava processors in the study area. Both purposive and simple random sampling procedures were used to select a total of 120 respondents for interview. The results of the descriptive statistics used for the study revealed that 59.2% of the cassava processors used family labour, (52.5%) sells as a retailer, cassava processors resources needs was mainly capital with (98.3%), and only (0.8%) identified labour as resources needs. Only few (20.0%) were aware that cassava flour can be used for baking while all the processors were aware of garri and cassava flour for lafun. The result of the likert rating scale indicates that the sources of information for cassava processing in Nasarawa state were mainly through neighbors/friends. There is need for extension agents and research institute to provide improved information needs for the cassava processors in the study area. Processors should organize cooperative societies to improve their resource needs in terms of capital.

Key words: Gari, Neighbors/friends, extension agent, processors' association, agricultural show

1.0 Introduction

Cassava remains a major staple food in Sub-Saharan African countries (SSA) which include Nigeria. However, poor and unhygienic handling of the crop often lead to food borne diseases and in many cases death, especially in the rural areas where there is no access to food safety information. The common food processing practice in the rural areas is unwholesome. For instance, cassava flour (*laafun*) are usually spread beside the major roads for sun drying in such a way that vehicular dusts, droppings from birds, rodents and insects are deposited on the product leading to food borne diseases. Diseases arising from food consumption have become serious public health problem globally (Zeru and Kumie, 2007; WHO, 2004). In developing countries, up to an estimated 70% of cases of diarrhoea disease are associated with consumption of unwholesome food (Zeru and Kumie, 2007; Mukhopadhyay *et al*., 2012; Annor and Baiden, 2011). Cassava processed products are important food in almost all parts of Nigeria. They are cheap source of carbohydrate to rural and urban dwellers with demand for the commodity increasing with increases in population and industrial users. Cassava processed products does not only serve as food, it is a major source of income and employment for rural households in Nigeria (Ogundari et al., 2006). As a food item cassava processed products has some inherent characteristics which make it attractive especially to the small holder farmers in Nigeria. Firstly, it is rich in carbohydrates, especially starch, and consequently has multiplicity of end uses. Secondly, it is available all the year round, relatively cheaper and thus more preferred to other food (CBN, 2011, FAOSTAT, 2012). Cassava tubers are mostly processed into cassava flour, gari, and fufu in Nigeria. It can be roasted, cooked, pounded or consumed in its raw form, in the case of sweet and cyanide free sweet varieties. Cassava has become a regular item in household diets in Nigeria (Ogundari et al., 2006). The crop has achieved an export status because of the increasing demand for it as industrial raw material. To meet both export and domestic demand, Nigeria needs to produce about 150 metric tons of cassava per annum. This has prompted the Federal Government of Nigeria to come out with a policy on cassava production with a view to developing strategies that will stimulate domestic production (CBN, 2011). Cassava has longed played an important role in ensuring food security, particularly among the poor. In sub-Saharan Africa, where food security is a concern for many, about 95 percent of the cassava produced is used for human consumption (Nweke, 2009). The WHO (2014) estimates that more than 200,000 people die of food poisoning annually in Nigeria which is caused by contaminated foods through improper food processing, preservation, storage and food preparation.

WHO (2015) estimated up to 1.5 billion episodes of diarrhoea and more than 3 million deaths occur in children every year as a result of food contamination. The people who are mostly affected are children, the poor and the rural dwellers. The Guardian Newspaper of 29th Jan., 2016 gave the statistics of the number of Lassa fever infection in West Africa each year as between 100,000 to 300,000 with about 5,000 deaths. Everyone in the food and agro-processing

sector including consumer needs information on food safety practices to preventi food borne diseases and death. So, information need could be view as a mean to an end and not an end in itself. The knowledge of food handlers about the food borne infections and their safety practices is an important issue in the outbreaks of food borne infection (Fowora, 2012). It is therefore important for cassava processors to be well equipped with information on food safety practices (FSP) so that they can perform at optimal capacity and provide safe food for public consumption which could help prevent food borne diseases and save many lives (Tologbonse, Fashola and Obadiah, 2008). It is against this background that this research work is design to assess the information needs of cassava processors in Nassarawa state, Nigeria. The specific objectives are: (i) to ascertain the enterprise characteristics of cassava processors in the study area, (ii) to examine the awareness of cassava products among processors in the study area, and (iii) to determine the sources of information among cassava processors in the study area.

2.0 Methodology

The study was carried out in Nasarawa State, Nigeria. Nasarawa state is located centrally in the middle belt region of the country and lies between latitude 7º45´ and 9º25N´ of the equator and between longitude 7º and 9º37´E of the Greenwich meridian (Adeyemi, Oloyede and Oladiji, 2007). The state covers a total land area of 27,290km^2. It has a population of over two million people (2006 National Census). It is predominantly rural with agriculture as its main economic base. Its proximity to Nigeria's Capital Territory and City of Abuja has a lot of impact on its people and landscape. The population of the study comprised all cassava processors in Nasarawa State. A three stage sampling procedure was adopted to select 120 respondents from the list of contact cassava processors retrieved from Nasarawa State Agricultural Development Programme (ADP). First stage was a purposive selection of two Local Government areas from the state based on their prominence in cassava processing. Secondly, 2 communities were randomly selected from each of the selected LGAs. The third stage involves a random selection of 30 cassava processors from each community making a total sample size of 120 respondents. Primary data were obtained with the use of structured questionnaire. Respondents were provided with the list of ten (10) possible sources of information for cassava processing to indicate on scale of: Never (1), Rarely (2), Sometimes (3) Often (4), Always (5). Responses were furthers ranked from 1 to 10 based on mean value to indicate highest to the lowest sources of information. Data was collected through structured interview schedule and analysed using descriptive statistics such as frequency counts, percentages, and means.

3.0 Results and Discussions

3.1 Enterprise Characteristics of Cassava Processors

The results in Table 1 shows the enterprise characteristics of cassava processors in Nassarawa state is as presented in table 1. Results presented in the table shows the sources of labour of processors in study areas. (30.8%) used hired labour while 59.2% used family labour, and remaining 10.0% of the respondents use communal labour. (39.2%) of the processors sell their product through the wholesaler and retailer, while majority (52.5%) sells as a retailer and (8.3%) sell their product through wholesaler. This finding is in line with Salau, Bello and Alanji (2013) who found that agro-processors in Nassarawa state mostly sell their products directly in retails to customers in open market. 73.3% of the processors sell their product in congo, bags and bowl, while 1.7% measures in congo and bowl, only 25.0% sell their products only in bags. Sources of training on hygiene information as revealed shows those processors in study area indicated extension agent (63.3%), sanitary inspector (7.5%) and no hygiene training at all (10.8%) and other sources not mentioned (4.0%). It was revealed that the processors major resource need is capital as (98.3%) indicated this, while only (0.8%) identified land as resources need the remaining (0.8%) identified labour as resources need. This is in line with Adegeye (1999) who found that access to land is not generally a problem in Nigeria as more hectares of land are under fallow than under cultivation.

Table 1: Enterprise Characteristic of Cassava Processors in Nassarawa State

Variables	Frequency	Percentage
Source of labour		
Hired	37	30.8
Family Labour	71	59.2
Communal	12	10.0
Channel of Sale		
Wholesaler & Retailer	47	39.2
Wholesaler	10	8.3
Retailer	63	52.5
Measure of Product Sale		
Congo, bags, bowl	88	73.3
Congo, bowl	2	1.7
Bags	30	25.0
Kilogram	0	0.0
Resources needed		
Capital	118	98.3
Land	1	0.8
Labour	1	0.8
Source of training on hygiene		
Extension agent	76	63.3
Sanitary inspector	9	7.5
No hygiene training at all	13	10.8
Others	22	4.0

Source: Field survey, 2017

3.2 Awareness of respondents on cassava products in Nassarawa State

The results of the processors awareness status of various cassava products is as presented in table 2. All (100%) the processors were aware of garri and cassava flour for lafun, majority were aware of tapioca (95.8%), fufu (84.2%), and starch (75.8%). Only few (20.0%) were aware that cassava flour is used for baking. This finding implies that cassava processors in both states were all aware of gari and cassava flour for lafun products, meaning these two products are most processed products by processors in the two states. Furthermore, higher percentage of processors' knowledge about fufu, tapioca, and starch could also be attributed to their popular consumption in the North central zone of Nigeria (Kormawa and Akoroda, 2003). This study corroborates the findings of Ogunniyi (2011) who found the expenditure elasticity of gari and fufu to be the highest of cassava products, adding that its demand grows faster than other products as the economy develop and income of buyer increase

Table 2: Awareness of cassava products among processors in the study areas

Products	Aware Frequency (%)	Not aware Frequency (%)
Gari	120 (100.0)	0 (0.0)
Edible starch	91 (75.8)	29 (24.2)
Tapioca	115 (95.8)	5 (4.2)
Fufu	101 (84.2)	19 (15.8)
Cassava Flour (Lafun)	120 (100.0)	0 (0.0)
Cassava Flour (Baking)	24 (20.0)	96 (80.0)

Source: Field survey, 2017

3.3 Cassava Processors Sources of Information

The result of the likert rating scale used in evaluating the various sources of information available to the cassava processors in the study area is as presented in table 3. Responses of processors indicated that neighbors/friends (mean=3.49), cassava processors' association (mean=3.24), and extension agent (mean=3.21) were rated first, second and third sources of information. This finding is consistent with Salau, Bello and Alanji (2013) who found that agro-processors in Nassarawa state had high level of information sources through agricultural extension service and processing association. The insignificant contribution of journal articles of researchers to actors in the agricultural value chain most especially producer and processor is evidence in the response indicated by cassava processor in Nassarawa state. Also, newspaper, radio, television have not been very helpful in dissemination information necessary cassava processors in the study areas.

Table 3: Access to sources of information on cassava processing in Nassarawa state

Sources	Never Freq. (%)	Rarely Freq. (%)	Sometimes Freq. (%)	Often Freq. (%)	Always Freq. (%)	Mean (Std. Dev.)	Mean rank
Newspaper	93 (77.5)	3 (2.5)	6 (5.0)	10 (8.3)	8 (6.7)	**1.64** (1.282)	8
Journal	120 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	**1.00** (0.00)	10
Radio	53 (44.2)	19 (15.8)	2 (17.5)	11 (9.2)	16 (13.3)	**1.60** (.771)	9
Television	64 (53.3)	17 (14.2)	9 (7.5)	24 (20.0)	6 (5.0)	**2.09** (1.366)	7
Agric show	17 (17.0)	18 (15.0)	64 (53.3)	8 (6.7)	13 (10.8)	**2.85** (1.097)	5
Meeting	9 (7.5)	25 (20.8)	55 (45.8)	21 (17.5)	10 (8.4)	**2.98** (1.012)	4
Extension agent	4 (3.3)	11 (9.2)	72 (60.0)	22 (18.3)	11 (9.2)	**3.21** (.859)	3
Neighbors/ friends	6 (5.0)	8 (6.7)	43 (35.8)	47 (39.2)	16 (13.3)	**3.49** (.979)	1
Government agencies	30 (25.0)	30 (25.0)	35 (29.2)	24 (20.0)	1 (0.8)	**2.47** (1.100)	6
Cassava processor Ass.	13 (10.8)	17 (14.2)	28 (23.3)	52 (43.3)	10 (8.3)	**3.24** (1.138)	2

Source: Field survey, 2017

Conclusions and recommendations

The findings of the study revealed that family labour is the major source of available to cassava processors in Nasarawa state and the processed products were majorly sold to the retailers. Most of the processors were also aware of the common cassava products such as fufu, tapioca, and starch. The major sources of information for cassava processing are in Nasarawa state were through neighbors/friends, cassava processors' association and agricultural extension agent. Since there is less awareness of cassava for cassava baking flour and edible starch thus extension package for cassava processing values addition programme is recommended to focus training and marketing strategies on this areas to cassava processors. There is need for extension agents and research institutes to provide improved information needs for the cassava processors in the study area. Processors should come together to form cooperative societies to improve their resource needs in terms of capital.

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