ASSESSMENT OF PROBLEMS AFFECTING THE STRUCTURE, CONDUCT AND PERFORMANCE OF COWPEA MARKETING IN YOLA NORTH AND YOLA SOUTH LOCAL GOVERNMENT AREAS IN ADAMAWA STATE, NIGERIA.

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ABSTRACT: The study assesses the socio-economic and problems affecting the structure, conduct and performance of cowpea marketing in Yola South and Yola North Local Government Area of Adamawa State, Nigeria. The data used for the study was mainly from primary source. These were obtained through the administration of structured questionnaire to a sample of 75 cowpea marketers in the two local government areas. The data generated was from marketers in 2011/2012 marketing season. Descriptive statistics were employed for the study to examine the socio-economic characteristics of marketers and the constraint faced in their marketing activities. The study concludes that, several problems were associated with cowpea marketing in the study area namely; inadequate capital, pest infestation, and low profit, high cost of transportation, bad road network, storage, high taxes, inadequate market information and lack of standard measure are some of the problem militating against cowpea marketing in the study area. Amongst all the problems inadequate capital, pest infestation and low profit ranks the first three most serious problems. The study therefore recommends that, Government and the private sector should facilitate the marketers in accessing a timely and affordable credit facility so as to sustain and expand their marketing activities. Government should open up and rehabilitate the road network in the hinterland to facilitate easy evacuation of agricultural inputs and commodities in and out of the market.

KEYWORDS*: Assessment, Problems, Structure, Conduct, Performance, Cowpea and Marketing.*

INTRODUCTION

Agriculture is recognized as one of the most challenging and risky enterprises. Hence, maximizing long-term profitability of farms is of utmost importance to farmers' wellbeing and competitiveness as well as the related people who engaged in this business to a larger extent, Behjat *et al*, (2013). Apart from contributing the largest share of Gross Domestic Product (GDP), agriculture is the largest non-oil foreign exchange earner, the largest employer of labour and a key contributor to wealth creation and poverty alleviation in Nigeria, Adamu *et al*, (2013). Yet several problems associate the various activities that are involve in the production activities in this great enterprise. The sound management and conservation of this resource is one of the

priority issues of the global strategy for sustainable development, *Kolosov, et al, 2013*. Therefore, many agricultural and economic researchers have tried to analysis the profitability of wide variety of agricultural enterprises and determine the most important associated factors on it, Behjat *et al*, (2013). From the 1970's Nigeria has witnessed a considerable decline in food production and a widening gap in the supply demand for food, brought about by a high population growth of about 3.5% per annum relative to food production growth of about 15% per annum. This problem is attributed to rapid urbanization, low per capital income, poor storage, inadequate transportation and marketing facilities as well as non- challent attitude to agriculture, Modu, *et al*, (2010). Several food crops are ground in Nigeria for food and income generation this include, beans, groundnut, rice, sorghum, maize cowpea among others. This study would concentrate on cowpea (*Vigna unguiculata* L. Walp.) and the problems associated to its structure, conduct and performance as a food and an income generating crop. Thus, Bakoji *et al*, (2013) observed that, several constraints including high cost of transportation, lack of credit facilities, in sufficient funds, price fluctuation and lack of good storage facilities among others affect the profit margin of marketers and other marketing activities in Nigeria.

Cowpea (*Vigna unguiculata* L. Walp.), is one of the most ancient crops known to man. Its origin and subsequent domestication is associated with pearl millet and sorghum in Africa. It is now a broadly adapted and highly valued crop, cultivated around the world primarily for seed, but also as a vegetable (for leafy greens, green pods, fresh shelled green peas, and shelled dried peas), a cover crop and for fodder. Cowpea is considered more tolerant to drought than soybeans and better adapted to sandy soils. Many cowpea cultivars have a vining growth habit, but modern plant breeding has also led to more upright, bush-type Cultivars, Abah *et al*, (2012). It is indigenous to Africa but also widely grown in other continents of the world. In Nigeria, cowpea is grown widely in the North West and North Central geo-political zones while substantial quantities are also grown in the other four geo-political zones of the country, Davis et al, (1991). Cowpea is an important source of plant protein in the developing world and most especially in West Africa; it is the most important economically and nutritionally indigenous African legume crops, especially in West and Central Africa (WCA). Cowpea is rich in protein and constitutes a staple food for people in rural and urban areas, Baributsa, *et al* (2010). It can be consumed alone when cooked or mix with other foods such as rice, maize, millet, plantain, yam, gari, etc. Large quantity of cowpea is also consumed as deep oil fried product called "akara" and a steamed product called "moin-moin' in most parts of Nigeria.

Increased cowpea production from intensified cropping system can play a key role in income generation in West Africa because of the multiple uses of cowpea grain and fodder in human and animal diets. Economically, cowpea has a great value in the internals trade in country because it promotes trade between the production area and non-producing area. It also serves as a source of income for middlemen who embark on transportation from one place: to another, *Ibid*.
The returns from cowpea marketing like any other business firm ensures sustainability of the system through enhance revenue generation to both marketers and producers. However, the challenge that marketers face is to satisfy consumer's wants at a reasonable profit level and in a socially acceptable manner Kotler, (1990).

The need for the marketing system of cowpea to be well structured and efficiently organized cannot be over emphasized. It enhances the pace of economic development by encouraging specialization, generation of foreign exchange earnings, development of an exchange economy, provision of income and employment opportunities for marketing agents, (Olukosi *et al.,* 2005). In performing the role of marketing, products pass through various marketing agents or intermediaries called market channels. These market intermediaries are the wholesalers and retailers and both play an important role in the marketing system.

Market structure relates especially to the degree of competition in a market. It tends to consider whether the number of firms producing products is large or whether the firms are of equal sizes or dominated by small group. It is concerned with whether entry for new firms is easy or not. Structure also relate to the degree of market knowledge which is available to these firms, Olukosi *et at.,* (2005). While Market performance on the other hand, is the assessment of how well the process of marketing is carried out and how successfully its aims are accomplished, Giroh, *et al*, (2013).

However, in marketing system, the structure, conduct and performance of a market is one of the most important approaches to analysis of market. This encourages the participation of a large number of individuals at various types of markets and exchange points where the marketing services of assembling, storage, processing, transportation and break-of-bulk are performed. An important variable in market structure analysis is concentration, which shows a situation in which a few large firms have the largest share of business. The effects of market structure, conduct and performance can go a long way in affecting the supply response of agricultural products, especially in cowpea processing and marketing. Cowpea marketers face a number of problems; notable among them are insect pest infestation, inadequate storage facilities, high cost of transportation, poor credit facilities, inadequate market infrastructure, and lack of uniform measure and long chain of distributors. Other constraints according to Ajetomobi, (2010) include drought, flooding, salt stress and extreme temperatures, all of which are expected to worsen with climate change which could subsequently reduce crop productivity and marketing activities. As such, the study was designed to provide answers to the following research questions:
What are the socio-economic characteristics of cowpea marketers?
What constraints affect cowpea marketers?

METHODOLOGY

Study Area
The study was conducted in Yola North and Yola south Local Government areas of Adamawa State. The study area has an estimated population of about 392,754 people (NPC, 2006) and land mass of about 1,2l3 square kilometers. It has an altitude of 1.5 meters above sea level and located approximately between latitude 9° 14'N and 12° 28'E with relative humidity ranging between 20-30%. The area lies within the guinea savannah climatic zone of Nigeria with distinct dry and rainy seasons Adebayo, (1999). The study area is generally suitable for agriculture due to the type of climate, landforms, and soil types it exhibits. The soil type around is generally loamy with alluvial deposits the river valleys suitable for cowpea production, marketing of agricultural produce. Large number cowpea marketers abound in both the two local government areas.

Sources of Data
The study made use of primary. The data was collected by administering structured questionnaire to a sample of 75 cowpea marketers in the two local government areas. Data collected from marketers was 2011/2012 marketing season.

Sampling Techniques
The markets in Yola North (Jimeta main market and Kasuwar Gwari) and one major market in Yola South (Yola main market) were purposely selected due to the high number of cowpea marketers in the markets. Marketers were sampled using the simple random sampling approach in proportion to the sizes of the markets such that 35 were selected from Jimeta main market, 15 from Kasuwar Gwari and 25 from Yola main market. These give a total sample size of 75 respondents. The sampling frame of the selected market formed the basis for the selection in such a way that, about 40 percent of the marketers were sampled.

Table 1.1: Distribution of marketer's category in the selected markets

Marketer Category and Market	Total Number of Marketers	Number of Sampled Marketers	Percentage
Wholesalers			
Jimeta main market	35	15	19.74
Kasuwar Gwari	13	06	7.890
Y ola main market	28	10	13.16
Total	**76**	**31**	**40.79**
Retailers			
Jimeta main market	50	21	18.42
Kasuwar Gwari	24	10	8.770
Y ola main market	40	13	11.40
Total	**114**	**44**	**38.59**
Gross Total	**190**	**75**	

Source: Field Survey, 2012

Where: n = Number of marketers sampled
        N= Total number of marketers (sapling frame).

METHODS OF DATA ANALYSIS

The analytical technique adopted in this study was frequency and percentages for the socio-economic and ranking in determining the severity of the identified problems.

RESULTS AND DISCUSSION

Socio-economic characteristics of cowpea marketers
Table 1.2 below discussed the socio-economic characteristics of the respondents used in the study. Majority of the respondents which accounted for about 76 percent were males constituting 57 respondents while, 24 percent numbering 18 respondents were found to be female. This

shows that, cowpea marketing in the study area is mostly undertaken by men and could be attributed to the high cultural believe attached to restriction on women. Also, majority of the respondents attracting 76 percent numbering 57 were married while divorced, single and widow(er) were about 12, 5 and 7 percent consisting of 9, 4 and 5 respondents respectively. Similarly, household size in the study area was dominated by a range of between 6 and 10 with about 41.3 percent constituting 31 respondents, while between 1 and 5 was about 37.4 percent numbering 28 respondents, with the range limits of 11 and 15, 16 and 20 and greater than 20 were about 13.3, 5.3 and 2.7 percent accounting for 10, 4 and 2 respondents respectively. However, the mean household size in the study area was 7. 32 while the minimum and maximum household ranges were 2 and 26.

Similarly, majority of the respondents which accounted for about 83 percent numbering 62 falls within the age limit of 20 and 49 years. This implies that, they are young and at their productive age with possibly high potentials of adopting new and improved marketing strategies and techniques effectively and efficiently. Those within the age bracket of 50 and 59 and 60 and above were about 30 and 4 percent accounting for 10 and 3 respondents respectively. Consequently, the results on educational level from table 1.2 shows that, about 32 percent of the cowpea marketers had secondary education; about 31 percent had primary education, while about 12 percent had attained tertiary education with, about 25 percent had non-formal education. This indicates that, majority of the respondents about 75 percent numbering 56 have one form of formal education or the other, hence are expected to have the required basic knowledge and skills to enhance their marketing performance and other related activities. Though the ability to trade in agricultural produce is not necessarily a function of one's level of education, it however helps in the efficient performance of all the marketing functions like loan application, effective communication, record keeping and devising strategies on how to enhance efficient marketing activities and survive during different period by either diversifying or evolving new approach that ensure keeping him in business without necessary encountering discomfort losses.

Table 1.2 Socio-Economic Characteristics of Respondents

Variable	No. of Respondents	Percentage
Gender		
Male	57	76
Female	18	24
Total	**75**	**100**
Marital Status		
Married	57	76
Single	9	12
Divorced	4	5.0
Widow/(er)	5	7.0
Total	**75**	**100**

Household Size		
1 – 5	28	37.4
6 – 10	31	41.3
11 – 15	10	13.3
16 – 20	4	5.30
Above 20	2	2.70
Total	**75**	**100**
Mean	7.32	
Minimum	2	
Maximum	26	
Age		
20 – 29	9	12
30 – 39	30	40
40 – 49	23	31
50 – 59	10	30
60 – above	3	4.0
Total	**75**	**100**
Mean 39 yrs		
Minimum 29yrs		
Maximum 69yrs		
Education Level		
Non Formal	19	25
Primary	23	31
Secondary	24	32
Tertiary	9	12
Total	**75**	**100**

Source: Field Survey, 2012.

Trading Category of Respondents

The result in Table 1.3 reveals that, majority about 58.7 percent numbering 44 respondents were retailers, while wholesalers were about 41.3 percent constituting 31 respondents. This depicts that, cowpea marketing in the study area is mostly in the form of retail. This may be as a result of weak and inadequate capital base of the respondents.

Table 1.3 Distribution of respondent by their trading category

Category of Trading	No of Respondent	Percentage
Wholesalers	31	41.3
Retailers	44	58.7
Total	75	100

Source: Field Survey, 2012

Sources of Capital of Respondents

The information in Table 1.4 below demonstrated that, majority about 54.7 percent numbering

41 respondents sourced their capital from personal savings, while about 30.7 percent constituting 23 respondents obtained their capital from friends and family members. However, the remaining, which forms about 8 and 6.6 percent resulting to 6 and 5 respondents respectively received their capital from cooperatives and banks. Therefore, the table further suggested that, majority of the marketers attracting about 54.7 percent employed personal savings to finance their cowpea marketing business. This may have the tendency to restrict their marketing activities and retard the expansion of the enterprise since capital is the main incentive by which marketers expand their marketing business.

Table 1.4 Distribution of respondent on sources of capital

Sources of Capital	No of Respondent	Percentage
Personal savings	41	54.7
Friends/family	23	30.7
Cooperatives	6	8.00
Bank	5	6.60
Total	75	100

Source: Field Survey, 2012

Respondent Membership of a given Association

Table 1.5 reveals the results on the respondent membership of a given association. From the result of the analysis, majority of the respondent which formed about 81 percent numbering 61 belongs to one form of association or the other, while the remaining which formed 19 percent accounting for 14 respondents do not belong to any association. Thus, membership in associations helps marketers to enhance their marketing activities through easy access to credit facilities that may likely come to the group rather than to an individual, getting good prices for commodities through collective bargaining and tax concessions due to their large number and bargaining power and influence.

Table 1.5 Distribution of respondents on the basis of membership of association

Membership	No. of Respondents	Percentages
Yes	61	81
No	14	19
Total	75	100

Source: Field Survey, 2012

Marketing Experience of Respondents

Table 1.6 as obtained from the study expressed that, about 44 percent numbering 33 respondents have marketing experience of between 1 and 10 years while, about 32 percent accounting for 24 respondents have marketing experience of 11 and 20 years. Similarly, about 15 and 9 percent of the respondents constituting 11 and 7 had experiences of between 21 and 30 and 31 and 40 years respectively. The ability to succeed in cowpea marketing is not necessarily a function of experience in the marketing system, but experience provides marketers with skills and helps in making rational decisions that enhances efficiency and effectiveness of the industry.

Table 1.6 Distribution of respondent based on marketing experience

Marketing Experience	No of Respondent	Percentage
1 – 10	33	44
11 – 20	24	32
21 – 30	11	15
31 – 40	7	9
Total	75	100
Mean 14.8		
Minimum 1 year		
Maximum 40 years		

Source: Field Survey, 2012

As contain in table 1.6 below which indicated the problems associated with cowpea marketing in the study area, it reveals that, inadequate capital, pest infestation, low profit, high cost of transportation, bad road network, inadequate and poor storage facilities, high taxes, inadequate market information and lack of standard measure were some of the problem identified as militating against cowpea marketing in the study area. Amongst all, the problems inadequate capital, pest infestation and low profit ranks the first three major problems. The combine effect of these problems on the marketing system could bring about a distortion in the structure, conduct and performance of the marketing process. Hence, this could lead to the reduction in profit margin of the marketers and consequently, discourage the present and prospective marketers of the commodity in participating in the enterprise in the study area.

Table 1.6 Problems Associated with Cowpea Marketing in the Study Area

Identified Problems	No. of Respondents	Percentage	Ranking *
Inadequate capital	73	21.86	1
Pest infestation	60	17.96	2
Low profit	59	17.65	3
High cost of transportation	54	16.17	4
Bad road network	24	7.78	5
Storage	23	6.89	6
High taxes	17	5.10	7
Inadequate Market information	16	4.79	8
Lack of standard measure	6	1.80	9
Total	334**		

Source: Field Survey, 2012
*Ranking: **
*Multivariate responses: ***

CONCLUSION

The study concludes that, several problems were associated with cowpea marketing in the study area namely, inadequate capital, pest infestation, low profit, high cost of transportation, bad road network, storage, high taxes, inadequate market information and lack of standard measure are some of the problem militating against cowpea marketing in the study area. Amongst all, the problems of inadequate capital, pest infestation and low profit ranks the first three most pressing constraint. The combine effect of these problems on the marketing system could bring about a distortion in the structure, conduct and performance of the marketing process. The study therefore recommends that, Government and the private sector should make easily accessible, affordable and timely credit facilities for the marketers so as to expand their marketing activities. Government should open up and rehabilitate road in the hinterland to ease the movement of goods to urban markets at shortest possible time. Modem storage facilities encourage the application of marketer's indigenous knowledge systems to reduce the problem of pest infestations. Existing association of cowpea markets should be strengthen whereas formation of new one be encouraged.

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