

PRACTICES OF FARMERS IN PRODUCTION AND MARKETING OF TOMATO IN NSUKKA LOCAL GOVERNMENT AREA OF ENUGU STATE, NIGERIA

PRACTICAS DE GRANJEROS EN PRODUCCIÓN Y MERCADO DEL TOMATE EN NSUKKA, GOBIERNO LOCAL DEL ÁREA DEL ESTADO DE ENEGU, NIGERIA.

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ABSTRACT

The study described socio-economic characteristics, production, consumption and marketing patterns of tomato farmers as well as constraints they encounter in tomato production in Nsukka Local Government Area of Enugu State, Nigeria. One hundred and twenty tomato farmers randomly selected from twelve villages in the area constituted sample for the study. Data were collected with interview schedule and questionnaire and were presented with frequency, percentage and mean scores. Findings show that the respondents were mainly married (71%) women (72.5%) who were literate with mean age and mean farming experience of 42.22 years and 17.21 years respectively. Greater proportion of the respondents grew tomatoes on communal land (31.7%) with personal savings (42.5%) and hired labour (45%). They grew tomatoes during rainy season (54.1%) using personal reserved seeds (53.3%). Lack/poor storage facility ($M=2.00$) and fluctuation in price of tomato ($M = 2.13$) were some of the serious

constraints to production and marketing of tomatoes respectively in the area. The study recommends that government, non-governmental organisations, self help development organisations/agencies as well as philanthropists should assist in provision of storage facilities for tomatoes so as to reduce losses and ensure preservation and availability of the product all year round at reasonable and stable price.

Key words: tomatoes production, consumption, marketing constraints.

RESUMEN

El estudio describió las características socioeconómicas, la producción, el consumo y los patrones de comercialización de los productores de tomate, así como las limitaciones que encuentran en la producción de tomate en el área del gobierno local de Nsukka en el estado de Enugu, Nigeria. Ciento veinte productores de tomate seleccionados al azar forman doce aldeas en el área constituida como muestra para el estudio. Los datos se recolectaron con el cronograma y el cuestionario de la entrevista y se presentaron los puntajes de frecuencia, porcentaje y promedio. Los resultados muestran que los encuestados eran principalmente mujeres casadas (71%) (72.5%) que sabían leer y escribir con una edad promedio y una experiencia agrícola promedio de 42.22 años y 17.21 años respectivamente. Una mayor proporción de encuestados cultivó tomates en tierras comunales (31,7%) con ahorros personales (42,5%) y mano de obra contratada (45%). Cultivaron tomates durante la temporada de lluvias (54.1%) usando semillas reservadas personales (53.3%). La falta o mal almacenamiento ($M = 2.00$) y la fluctuación en el precio del tomate ($M = 2.13$) fueron algunas de las limitaciones graves para la producción y comercialización de tomates, respectivamente, en el área. El estudio recomienda que el gobierno, las organizaciones no gubernamentales, las organizaciones / agencias de desarrollo de autoayuda y los filántropos ayuden a proporcionar instalaciones de almacenamiento para los tomates a fin de reducir las pérdidas y garantizar la preservación y disponibilidad del producto durante todo el año a un precio razonable y estable precio.

Palabras clave: producción de tomate, consumo, restricciones de comercialización.

INTRODUCTION

Tomato (*Lycopersicon esculentum*) is a vegetable crop that belongs to large family of plant called the *Solanaceae*. It is a short lived herbaceous annual with weak trailing much- branched stems covered with hair at the juvenile stage of development (Uguru,1996). It is mostly used as vegetable crop and one of the mostly grown vegetable

in the world (Hanson *et al.*, 2001). Tomato, both for processing and fresh market has become one of the most important crops in agriculture for smallholder farmers (Anang, *et al.*, 2013) and most important product in the fruit and vegetable processing sector (Engingdeniz, 2007).

Tomatoes are consumed on daily basis in many households. The popularity of tomatoes among consumers has made it an important source of vitamin A and C (Hanson *et al.*, 2001). According to Uguru (1996) about 91% of tomato fruit is water. Other constituents include soluble sugar, citric and malic acids, mineral salt, and vitamin A, B, and C. Tomatoes are loaded with many, many health benefits. In fact, they are incredibly versatile and can be prepared in a seemingly endless number of dishes, as well as being great to eat alone. (The Florida Tomato Committee, 2016). The author further enumerated that tomatoes are good for skin, heart, kidneys, hair, eyes, skin, bones and teeth. They also help to prevent several types of cancer, help maintain strong bones, repair damage caused by smoking, provide essential antioxidants and are packed full of the valuable mineral known as chromium that works effectively to help diabetics keep their blood sugar levels under better control (The Florida Tomato Committee, 2016).

Tomatoes are used in making salad, tomato soups and sauces, while processed tomatoes can be used to make juice, tomato paste and other products. Smallholder tomato production has been identified as being important in poverty reduction mainly because it can offer employment and thus income to members of households that would otherwise not work (Anang *et al.*, 2013).

However, demands for agricultural produce had for a long time out-strip supply especially in developing countries like Nigeria. Similarly, Tomato yields in smallholder cropping systems in Africa have generally been found to be far below potential (Maliwichi & Pfumayaramba and Katlego 2014). Thus, it may be said that domestic production of tomato does not meet its high demand especially in developing countries probably because tomato is not sustainably produced throughout the year, as it is regularly demanded in the area. According to International Food Policy Research Institute (IFPRI) (2007), the seasonality of tomato production creates a period of abundance and scarcity, which dramatically affects the market price. In the period of abundance, the crop is very cheap while in the period of scarcity it is very costly thus leading to an unstable supply of the commodity in the market. Increase in tomato production without a sufficient marketing system facilitates the disposal of this perishable commodity at a very cheap

price to the consumers since the commodity is perishable and smallholder farmers/farmers in developing countries lack storage facilities.

Engindeniz (2007) noted that tomato production is subject to weather variation. Production and marketing risks both affect the profitability and economic viability of tomato enterprise. Thereby necessitating the need for farmers to gather all the economic data about the production and marketing conditions before making production decision.

To ensure that smallholder farmers are consistent along the production and marketing chain, several issues need to be analysed and addressed. These include access to land and credit, on farm and off farm infrastructure, management capacity, financial support, research and technology adoption (Maliwichi¹ & Pfumayaramba and Katlego 2014). Aidoo *et al.*, (2014) in Bortey and Osuman, 2016 Farida & Fariya (2014) in Bortey & Osuman, 2016 reported lack of storage facilities, high cost of production and limited access to credit as critical constraints faced by tomato farmers. Action must be taken to help small scale farmers in identifying and overcoming constraints that reduce the production of tomato (Tijani, et al., 2010). A study of this nature that identifies/ascertains activities and challenges that tomato farmers face in their enterprise especially in production and marketing can serve as one of those actions. Since it may expose problems/ gaps/lapses in what they do and point at appropriate strategies for overcoming them so that the enterprise will be lucrative and contribute to sustainable agricultural growth and development of the entire economy. In view of these, the present study has a first objective to describe the socio- economic characteristics of tomato farmers in the study area; a second objective was to ascertain importance/uses, production and marketing activities of the farmers; and as third objective determine constraining factors to production and marketing of the crop in the area.

MATERIAL AND METHODS

The study was carried out in Nsukka local government area which is one of the 17 local government areas in Enugu State. It shares common boundaries with Igbo Eze Local Government Area in the North, Igboetiti Local Government Area in the South. Uzo-Uwani Local Government Area in the west and Udenu Local Government Area in the East (Nigeria postal code directory, 2003). It is made up of fifteen (15) autonomous communities. The inhabitants of this area are mostly farmers and traders. The major

crops grown in this area include cassava, cocoyam, Okra, tomato, pepper, etc. and the animals reared include sheep, goat, cattle, snail, fish and others.

Four towns, which are Edem, Okutu, Okpuje and Ibagwa-ani, were purposively selected from the study area due to their engagement in tomato production and marketing. Three villages were purposively selected from each of the towns giving a total of 12 villages. Ten farmers that produced and marketed tomatoes were purposively selected from each of the villages giving total of 120 respondents for the study.

Data for the study were collected from the respondents through interview schedule.

The instrument for data collection was divided into sections according to the objectives of the study. Relevant questions were asked on age, sex, marital status, academic qualification, occupation, household size, respondents' year of experience in tomato production, total farm size, source of farmland and estimated monthly income in order to collect information on the socio-economic characteristics of the respondents. Data were also collected on importance/ uses of tomato and respondents' production and marketing patterns of tomato. Information on constraining factors to production and marketing of tomatoes were gathered in three point Likert type scale with response options of "very serious", 'serious', and "not serious", with values 3, 2 and 1 assigned to them in their respective order. These values were added and divided by 3 to get a mean of 2. Variable with a mean score higher or equal to 2.0 was regarded as serious constraint while variable with a mean score of less than 2.0 was regarded otherwise.

Data were presented with frequency distribution, percentage and mean score.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

Age: data in Table 1 show that greater proportion (35.0%) of the respondents were within the age of 30-39 years. While 26.6% and 16.7% of the respondents were within 40-49 years and 30 years and below respectively. About 10.8%, 8.4% and 2.5% were within 60-69 years, 50-59 years and 70 years and above respectively. The implication of this finding is that greater proportion of people involved in tomato production and marketing were at their productive age.

Sex: entries in Table 1 shows that majority (72.5%) of the respondents were females while remaining 27.5% were males. This implies that females dominated in production and marketing of tomatoes in the area.

Marital status: data in Table 1 reveals that greater proportions (71%) of respondents were married. While 29% were single. This implies that larger number peoples engaged in production and marketing of tomatoes in the area were married.

Educational level: entries in Table 1 reveal that larger proportion (27.5%) of the respondents attempted secondary education. This is followed by 23.3% and 17.5% of the respondents completed their primary and secondary education respectively. About 15.0% and 13% of the respondents attempted primary education and attended tertiary education respectively. The remaining 4.2% of the respondents did not attend formal education. This implies that tomato production and marketing in this area was dominated by illiterates. Hence, the low level of education attainment among the tomato producer and marketers accounted for their inability to adopt and maximize modern tomato production and marketing technology such as use of improved tomato varieties, use of insecticides, herbicides and creation of utility (form, place, time, and possession utilities).

Secondary occupation: entries in Table 1 show that larger proportion (45.8%) of the respondents engaged in trading as their secondary occupation while 23.3% and 21.7% were farmers and civil servant respectively. About 7.0% of the respondents were artisan. This implies that in addition to income generated from farm activities, they also generate income from non-farm activities.

Household size: data in Table 1 also show that majority (82.5%) of the respondents had a household size of 1-10 persons while 15.8% and 1.7% of the respondents had a household of 10 – 20 persons and 21 and above persons respectively. The implication of this finding is that they will be enough labour force for production and marketing of tomatoes in the area.

Farming experience: entries in Table 1 reveals that majority (74. 2%) of the respondents had 20 years and above experience in the production and marketing of tomatoes. while 24.1% of the respondents had 10-19 years of experience. About 2.0% of the respondents had 1-9 years of experience in tomato production and marketing. This implies that people that was engaged in production and marketing of tomatoes in the area was dominated by people that were experienced.

Table 1: Frequency distribution of respondents according to socio-economic characteristics

Variables	Frequency	Percentage	Mean
Age (in years)			
Below 30	20	16.7	
30-39	42	35.0	
40-49	32	26.6	42.22
50-59	10	8.4	
60-69	13	10.8	
70 and above	3	2.5	
Sex			
Male	33	27.5	
Female	87	72.5	
Marital status			
Single	35	29.0	
Married	56	71.0	
Educational level			
No formal education	5	4.2	
Primary education attempted	18	15.0	
Primary education completed	28	23.3	
Secondary education attempted	33	27.5	
Secondary education completed	21	17.5	
Tertiary education	15	12.5	

Table 1 continuation.

Variables	Frequency	Percentage	Mean
Secondary occupation			
Trading	55	45.8	
Farming	29	24.2	
Civil servant	28	23.3	
Artisan	8	6.7	
Household size			
1-10	99	82.5	
10-20	19	15.8	
21 and above	2	1.7	
Farming experience (in years)			
1 – 9	2	1.7	
10 -19	29	24.1	17.21
20 and above	89	74.2	

Uses and importance of tomatoes: data in Table 2 shows that in terms of forms in which tomatoes was consumed, majority (50.9%) of the respondents used tomato for making stew while 12.5%, 9.2%, 8.3%, 7.4% and 11.7% of the respondents used tomatoes in making salad, paste, juice, soap ate it fresh respectively. This implies that greater proportion of the respondents are likely to make stew often if good quality tomatoes are available at affordable price. This will help them to improve on their nutritional value.

In terms of frequency of usage of tomatoes in a week, entries in table 2 indicated that greater proportion (39.2%) of the respondents used tomato 3 to 4 times in a week. This is followed by 28.3%, 20%, and 12.5% of the respondents who used tomatoes 1 to 2 times, 5 to 6 times and everyday respectively. The implication of this finding is that

there is high consumption of tomatoes in the area. This shows that tomato production and marketing in this area should be encouraged since there is market for it.

Entries in Table 2 also revealed that greater proportion (38.4%) of the respondents indicated that one of the reasons while they grow tomatoes is to combat food insecurity. 37.4%, 20.0% and 4.2% of the respondents indicated that reasons for growing tomatoes is because of the following: source of income, source of Vitamin A and C and for beautifying environment. The implication of this finding is that they are likely to experience food security, increased income and also improve on their Vitamin A and C intake.

Production activities of tomato producers

Source of farmland: entries in Table 3 revealed that greater proportion (31.7%) of the respondents acquired their land through communal system of ownership. About 29.0% of the respondents acquired their land through from family while 23.3% and 15.8% of the respondents acquire their lands through leasing from relations/friends and school laid dumpsite respectively. This implies that since communal land is their major means of acquiring land, they are likely to have small parcel of land for farming when the population of the community escalate. This will lead to decline in tomato production and marketing in the area.

Source of labour: Data in Table 3 shows that higher proportion (45%) of the respondents used hired labour in their farm operations. This is followed by 26.7%, 15.8%, 9.2%, and 3.3% used family labour, exchange labour, friends, and labour from in-laws in their farming operations. The implication of this finding is that their cost of production will tend to be high which will make them have little or nothing left after production. Hence this will discourage people that could have go into tomato production and marketing in the area.

Source of capital: entries in Table 3 shows that greater proportion (42.5%) of the respondents sourced their capital through personal savings while 23.3%, 13.3%, 8.3%, 6.6% and 5.8% sourced their capital by borrowing from friends, banks, co-operatives, money lenders and grant from government/NGOs. The implication of this finding is that sourcing for capital is easy but if their savings is low they may experience problem in embarking on a large scale production which is capital intensive.

Table 2: Frequency distribution of respondents according to usage and importance of tomatoes

Forms consumed	Frequency	Percentages (%)
Eaten fresh	14	11.7
Making stew	35	50.9
Making salad	15	12.5
Making soap	9	7.4
Making juice	10	8.3
Making tomato paste	11	9.2
Frequency of consumption of tomatoes(in a week)		
1 to 2 times	34	28.3
3 to 4 times	47	39.2
5 to 6 times	24	20.0
Every day	15	12.5
Reasons for growing tomatoes		
Source of Vitamin A and C	24	20.0
Source of income	45	37.4
Beautify environment	5	4.2
Food source/food security	46	38.4

Table 3: Distribution of respondents based on production activities of tomato

Production activities	Frequency	Percentage (%)	Mean
Sources of farmland			
Family land	35	29.2	
Communal land	38	31.7	
Borrowed from relations/friends	28	23.3	
School land/ dumpsite	19	15.8	
Labour			
Hire labour	54	45.0	
Family labour	32	26.7	
Exchange labour	19	15.8	
Friends	11	9.2	
Labour from in- laws	4	3.3	
Source of capital			
Personal saving	61	42.5	
Borrowed from friends	28	23.3	
Borrowed from banks	16	13.3	
Borrowed from co-operatives	10	8.3	
Borrowed from money lenders	8	6.6	
Grant from government/NGOs	7	5.8	

Agronomic practices of tomato producer

Source of planting materials: data in Table 4 show that majority (53.3%) of the respondents used their own preserved seeds. This is followed by 25.8%, 8.3%, 7.5% and 5.0% of the respondents who bought from market, research centers, private farms and collect from relatives respectively. This implies that they will experience low cost of production. This will help them to have more profit at the end of the production activities.

Method of land clearing: data in Table 4 show that majority (55.8%) of the respondents used herbicide in clearing their land while 32.5% and 11.7% of the respondents used mechanized equipment and hand tools in clearing their land. The implication of this finding is that tomato producers in this area have to be educated on how to procure the best herbicide and how to apply them in their land.

Type of manure used: entries in Table 4 show that greater proportion (45.8%) of the respondents used both organic and inorganic manure while 34.2% and 20% of the respondents use organic manure. The implication of this finding is that the fertility of the soil is ensured which lead to high yield of the crop.

Methods of weed control: entries in table 4 reveals that (39.2%) of respondents used chemicals to control weeds while 34.2% and 26.6% of the respondents used hand tools like cutlass, hoe etc. to weed their farmland and hand picking of weed as a means of weed control respectively. This implies that they should be educated on how to use chemicals in controlling weeds to avoid wastage and damage to the land.

Method of planting: entries in Table 4 also reveals that greater proportion (64.2%) of the respondents used nursery as a medium of raising tomato seedlings before transferring it to the field while 35.8% of the respondents sowed directly into the field. The implication of this finding is that using nursery medium at the initial stage will help them to select most healthy seedlings for the field and the farmers should be educated well on nursery management of tomatoes.

Farm size: data in Table 4 shows that majority (79.2%) of the respondents had farm size that is less than one hectare. About 11.0% and 8.0% of the respondents had farm size of 1-3.9hectares and 4-6.9 hectares respectively while 1.7% of the respondents had farm size 7 hectares and above with mean farm size of 1.80 hectares. This implies that majority of the producers and marketer did not use up to 2 hectares of land for the production of tomatoes in the area. This is really affecting tomato production in the area. Hence, this could be as a result of insufficient capital to buy land for tomato

production and also land tenure system can be a barrier to the farmer owning a large area of land for tomato production

Time of planting: entries in Table 4 reveals that majority (54.2%) of the respondents produce during rainy season while 39.2% of the respondents produced both in rainy and dry season and 6.7% of the respondents produced during the dry season. This indicates that majority of respondents (54.2%) in the study area practiced rain fed agriculture.

Table 4: Distribution of respondents based on agronomic practices of tomato

Agronomic practices	Frequency	Percentage (%)	Mean
Source of planting materials			
Own preserved seeds	64	53.3	
Bought from market	31	25.8	
Bought from school	10	8.3	
Collected from relatives	6	5.0	
Bought from private farm	9	7.5	
Method of land clearing			
Herbicides	67	55.8	
Mechanized equipment	14	11.7	
Hand tools	39	32.5	
Type of manure used			
Organic	24	20.0	
In organic	41	34.2	
Both organic and inorganic	55	45.8	

Table 4. Continuation.

Agronomic practices	Frequency	Percentage (%)	Mean
Method of weed control			
Herbicides	47	39.2	
Hand tools	41	34.2	
Hand picking	32	26.6	
Method of planting			
Direct sowing	43	35.8	
Nursery	77	64.2	
Farm size (in hectares)			
< 1	96	79.2	
1 - 3.9	12	10.8	1.80
4 – 6.9	10	8.3	
7 and above	2	1.7	
Time of planting			
Rainy season	64	54.1	
Dry season	8	6.7	
Both rainy and dry season	48	39.2	

Marketing pattern of tomato farmers: entries in Table 5 reveal that greater proportion (37.5%) of the respondents sold their tomatoes at village market. This is followed by 31.7% and 14.2% of the respondents sold their tomatoes at the urban market and residential areas while 11.7% and 5.0% of the respondents sold their tomatoes at farm gate and stores respectively.

Data in table 5 show that greater proportion (40.0%) of the respondents used basket as their unit of measurement. This is followed by 29.2% and 18.3% of the respondents used bags and tins as their unit of measurement while 12.5% of the respondents used small container as their unit of measurement.

In Table 5 entries reveals that greater proportion (40.0%) of the respondents sold their tomatoes to wholesalers, followed by 30.0% and 17.5% of the respondents who sold theirs to consumers and retailers respectively while 12.5% of the respondents sold to industrialist. The implication of this finding is that he may not make much profit since he sells mainly to middlemen who then sell to retailers and the consumers.

Table 5: Distribution of respondents based on marketing pattern of tomato

Variable	Frequency	Percentage (%)
Marketing site		
Urban market	38	31.7
Village market	45	37.5
Residential house	17	14.2
Farm gate	14	11.7
Stores	6	5.0
Unit of measurement		
Bags	35	29.2
Tins	22	18.3
Basket	48	40.0
Small container	15	12.5
Marketing structure		
Retailers	21	17.5
Wholesalers	48	40.0
Consumers	36	30.0
Industrialist	15	12.5

Entries in Table 6 show the following, as the constraining factors to tomato production and marketing: seasonality of crops (M=2.17) Lack/ poor storage facilities (M=2.00), change in demand of crop (M = 2.05), Poor storage facility for products (M = 2.05), fluctuation in price (M = 2.13), long distance between production and marketing sites (M = 2.03), and High rice (M=2.00), summed up as very serious and serious constraints to tomato production and marketing. Lack of capital (M = 1.29), scarcity of farm land for planting (M= 1.58), low soil fertility (M=1.64), scarcity of inputs (M =1.77), lack of technical knowledge in the management of crops (M = 1.85), lack of improved varieties (M = 1.75), poor access road for transportation of the produce to market (M = 1.65), weed problem (M = 1.86), lack of storage facility (M = 1.83), perish ability of the crop (M = 1.52), seasonality of the crops (M = 69), High incidence of pest an diseases infestation (M = 1.89), High cost of fertilizer (M = 1.92), High cost of agrochemical (M = 1.76), poor extension services (M = 1.85), climate change (M = 1.81), Bad location or site of market (M =1.88), poor marketing information about the crop (M = 1.88), variability in consumer's/preference (M = 1.98), poor grading and standardization of the products were perceived as not serious constraints to tomato production and marketing.

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Table 6: Mean score of constraints to production of tomatoes

Constraint	Mean Score	Standard deviation
Lack of capital	1.29	0.53
Scarcity of farm land for planting	1.58	0.06
Low soil fertility	1.64	0.06
Scarcity of inputs	1.77	0.06
Lack of technical knowledge	1.86	0.73
Management of the crops	1.85	0.74
Lack of improved varieties	1.76	0.76
High cost of improved varieties	1.75	0.07
Weed problem	1.86	0.07
Perish ability of the crop	1.52	0.06
Seasonality of the crop	1.69	0.06
High incidence of pest and disease infestation	1.80	0.07
High cost of fertilizer	1.92	0.07
Poor extension services	1.85	1.07
Lack/poor storage facilities	2.00	0.07
Climate change	1.81	0.07

The overall objective of the study was to identify factors affecting tomato production and marketing in Enugu North agriculture zone. Specifically, the objectives of the study were: to describe the socio-economic characteristics of tomato farmer;

importance/uses of tomatoes; ascertain production pattern of tomato employed by the farmers; ascertain their marketing pattern; ascertain whether there is significance difference in the income from rainy and dry season; and to identify constraints factors in tomato production and marketing as perceived by farmers and marketers.

A total of 120 respondents made up of 60 purposely selected farmers and 60 marketers from Enugu North Agricultural Zone constituted the sample size for the study. Structured questionnaire was used to collect data for the study. Percentages, t-test, and mean scores were the statistical tools used to analyze the data collected.

The findings show that (35%) of the respondents age lie within the range of 30-39 year. Majority (72.5%) of the interviewed respondents were female. (46.7%) of the respondents were married. (46.8%) had tertiary education. Majority of the sampled respondents (45.8%) were farmers. (82.5%) of the respondents had household size of less than 10 persons.

Results, also show that (74.2%) of the interviewed respondents were not new in the business 20 year and above. Majority (79.2%) of the respondents had a farm size of less than one hectare (31.7%) of the respondents use communal land of tomato production. (94.5%) of the interviewed respondents used hired labour for production and marketing of tomato. (38.3%) of the respondents use their personal savings as a start up capital. (53.3%) of the farmers acquire their planting material through their own preserved seeds. (55.8%) applied herbicide, majority (45.8) of the respondents use both organic and inorganic manure.

Many factors constrained the production and marketing of tomato, some of them include; lack/poor storage facilities; change in demand of crop; poor storage facilities for products; fluctuation in price; long distance between producing and marketing sites; and high cost of other supplementary products like rice, were, some of the factor constraining the production and marketing of tomato in the study area.

As conclusion, based on the results of the findings, the following conclusions were made: The majority of the respondents were female and were within the age bracket of 30-39, which means they were in the active production age; Majority of the respondents had large family size which was an added advantage;

The constraints to tomato production marketing include; Lack/ poor storage facilities; fluctuation in prices; long distance between production and marketing sites. These

problems cannot enhance large-scale tomato production and marketing expected to boast agricultural development in the state and Nigeria at large.

It suggests that based on the findings and conclusions, the following recommendations were made: Government, non-governmental organisations, self. help development organizations, agencies/communities as well as philanthropists should assist in provision of storage facilities for tomatoes so as to reduce losses and ensure preservation and availability of the product all year round at reasonable stable price. First, agro-chemicals of effective quality should be provided for traders use in the treatment of pests and diseases. As second, it suggests that price control, restrictions and regulation should be enforced in the tomato marketing system. Third, this would curb exploitative tendencies of certain traders in setting up arbitrary exorbitant prices. Fourth, the producers and traders should be encouraged to form co-operatives societies. This could enable them tomobilize individual savings and obtain loans easily from a financial institution through the co-operatives. This is to enable them to embark on bulk production, purchasing and marketing. Fifth, it is necessary more extension personnel should be employed and deployed in order to improve the area of coverage by extension service and reduce the high ratio of extension personnel to farmers worked with. This would enable extension service delivery to reach more farmers in remote areas. Sixth early distribution and procurement of inputs such as fertilizer, improved seeds, and herbicide would go away and this could be at an affordable price. Tractor hiring services should be made available and at a cost that farmers would afford.

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