Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development
Vol. 21, Issue 3, 2021
PRINT ISSN 2284-7995, E-ISSN 2285-3952

CHALLENGES TO TEA PRODUCTION AND TEA MARKETING IN TARABA STATE OF NIGERIA

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Abstract

Tea Camellia Sinensis (L) Kuntze is from the family of Theaceae. Tea plant encompasses some 200 woody plants species in the warmer regions of Asia and South America. Tea in its natural habitat develops to a small plant producing flower at six years or less or more based on type of variety and means of propagation. Total area of land under tea cultivation in the world is about 2,600,000 hectares with 86% in Asia, 85% in Africa and the remainder across South America, Russia and Oceania. The highest producer of tea in the world is Asia (60%), followed by Africa(12%). The countries in Africa which are large tea producers are Kenya, Malawi, Burundi and Cameroon. Nigeria still produces tea in small quantities as compared to Kenya. This study therefore examined the challenges to tea production and tea marketing in Taraba State of Nigeria. When these challenges are met tea production will be boosted and probably exported to improve the country's economy. The study was carried out in Taraba state in Nigeria. Data was collected through the administration of well-structured questionnaire among tea producers and marketers (272). Proportion to size sampling technique was used. In Taraba state, three communities were selected namely Mayo-Kusuku, Kakara and Kasalasah. Based on the population of tea farmers 90, 90, 92 were selected respectively from the communities. The result revealed that, thirty six percent of tea producers were between 17-30 years old, 50% of the producers were between 31-60years while 15% were above 60years. Majority of the producers are male(92.7%) while 7.3% were female. Twenty four percent of the producers have no formal education while seventy six percent have either primary, secondary or tertiary education. The challenges faced include poor soil fertility, low yield, pest infestation, labour shortage, lack of finance and lack of fertilizer/pesticide. Eighty six percent of tea producers lacked finance while 83.8% lacked fertilizer/pesticide. The problems faced by tea marketers in Taraba State are low market demand, low price, lack of access to market and high cost of transportation. Seventy five percent of tea marketers faced the problem of low market demand. Tea producers and marketers in Taraba State have great potential for development. Tea business can bring about economic development in Taraba State and Nigeria as a whole if government at various levels can put in place intervention programmes to overcome these challenges.

Key words**:** *challenges, tea marketers, tea producers, Taraba State, Nigeria*

INTRODUCTION

Nigeria's agriculture development is deeply conditioned by a large range of factors such as: geography, farm size and profile, labour force education, technical endowment, basic inputs, genetic engineering, and climate change [10].

Agricultural development in Nigeria is characterized by abundant land, a heterogeneous distribution of rural population, which creates a localized land pressure experienced by many farmers.

For avoiding the risk of failure, many farmers have adopted mixed cropping as a viable strategy [4].

The expansion of land area for cropping and the improvement of yield per ha are the basic tools for increasing agricultural production to meet population demand [12].

Among the main crops cultivated Nigeria there are: sesame, beans, nuts, cashew, beans, groundnut, cassava, cocoa, gum Arabic, millet, melon, rice, palm kernels, rubber sorghum, banana, plantain, beans and yams. However, tea is another important crop plant whose production is influenced and restrained by soil and climate conditions in Nigeria.

Since its introduction in Nigeria in 1952 and its commercial planting in 1982, and tea crop has been improved grace to the efforts and

research results of the Cocoa Research Institute of Nigeria [8].

Tea *Camellia Sinensis* (L) Kuntze is from the family of *Theaceae*. Tea plant encompasses some 200 woody plants species in the warmer regions of Asia and South America. Camellia genus has about eighty-two species and tea plant is the most important economically. There are also two main types, China and Assam teas. China teas are slow growing dwarf trees which has a good tolerance of cold weather and other tough conditions. On the other hand Assam teas are fast growing and adapted to warmer conditions [3].

There are two main ecological factors to be considered in the production of tea: climate and soil characteristics. Production of tea plant is restricted to subtropical regions and mountainous areas of the tropics, where altitudes are in the range of 1,200m to 1,800m above sea level with temperature regimes of 10^oC to 27^oC without frost. This is major reason why tea grows in few locations in West Africa [3]. For instance it grows only on the Mabilla Plateau in Taraba State in Nigeria because of the high altitude (coldness) in the region. The accepted optimum annual temperature is around 3,000mm while some tea-growing areas have 4,000mm and above. On the average 130-150mm is the best for optimal production. Tea requires a uniform mild temperature of between 18^oC- 20^oC. Sunshine is also very important to tea growth. An average of five hours of sunshine per day is required for optimal production [11].

Tea in its natural habitat develops to a small plant producing flower at six years or less or more based on type of variety and means of propagation. Total area of land under tea cultivation in the world is about 2,600,000 hectares with 86% in Asia, 85% in Africa and the remainder across South America, Russia and Oceania. China has approximately one million hectares compared with 400,000 in Indonesia and 85,000 hectares in Kenya. The highest producer of tea in the world is Asia(60%), followed by Africa(12%). The main producing countries are India (670,000 metric tonnes, China (500,000 metric tonnes), Sri Lanka (210,000 metric tonnes) and Kenya (150,000 metric tonnes).

The countries in Africa which are large tea producers are Kenya, Malawi, Burundi and Cameroon. Nigeria still produces tea in small quantities as compared to Kenya.

This study therefore examined the challenges to tea production and tea marketing in Taraba State of Nigeria. When these challenges are met tea production will be boosted and probably exported to improve the country's economy.

[6] carried out a study on the factors influencing tea marketing channel choice and sales intensity among smallholder farmers in Kenya. Information was obtained using questionnaires from smallholder tea farmers. one hundred and fifty five respondents were interviewed. The analytical techniques used were descriptive statistics and Heckman two stage model. In the study years of education, years of farming, age, gender, second payments had effect on the participation in marketing channel. The intensity of participation was significantly affected by tea production, age, farming years and second payment. This study therefore provided an insight to policy makers on the need to advance farmer-market linkages thus enhance farmers' incomes from their activities.

[1] examined processing of green tea in Nigeria. This study attempted to process green tea locally using Chinese method. Fresh tea leaves were plucked, fixed, rolled and dried under the sun. Physical and Chemical analysis were done using standardized methods. Investment Decision model comprising Net Present Value (NPV), Benefit-Cost Ratio (BCR) and internal Rate of Return (IRR) were used for economic analysis of green tea . In the study green tea produced conformed to international Organisation for Standardization (ISO) model for high-quality green tea. The scope of crude fibre (4.37-20%), water extracts (21.7-43.6%) moisture content was 4.11-7.00% and the caffeine in the range of 1.00 - 1.29%. The NPV, IRR, and BCR values were N13,928,856.02, 27.19% and 2.25% respectively. The authors recommended that diversification into green tea processing will create new opportunities for tea farmers who have depended on expensive black tea processing with less gains.

[5] examined the problems confronting sustainable tea production along the value chain in Nigeria. Eighty six tea farmers were selected. Structured questionnaires were used to collect information from tea farmers. Seventy one percent of the farmers conformed to standard two leaves + bud harvest at two-week harvesting interval. About fifty two percent of the farmers used herbicide while twelve percent of the farmers weeded manually. The authors reported that about 87.0% of the farmers used fertilizers of which seventy nine percent were organic-based. Seventy seven percent of the farmers implemented unsystematic chemical control. The authors recommended that treatment of old tea farms, standard practices and implementation of frequent soil testing should be done as a lead for fertilizer application for sustainable tea production.

In this context, the purpose of the paper is to examine the challenges to tea production and tea marketing in Taraba State of Nigeria.

MATERIALS AND METHODS

The study was carried out in Taraba state in Nigeria. It is a state in the North East geopolitical zone (Fig. 1).

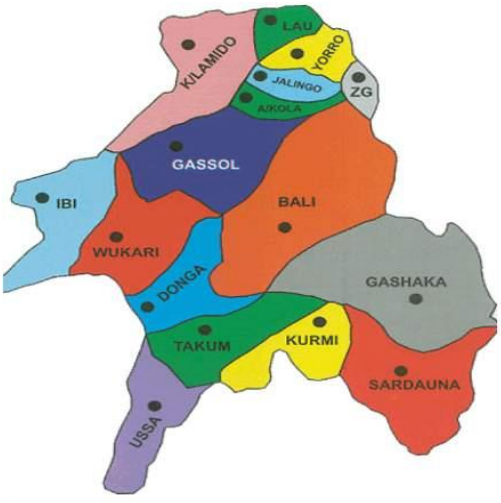

Fig. 1. Map of Taraba State
Source: Nigeria Galleria maps, www.nigeriagalleria.com, Accessed on April 10th, 2021 [7].

Taraba State is known majorly as tea state because it is the only state where tea is produced in substantial quantity in the country (Oluyole *et al*.2017) [9].

Data Collection

Data was collected through the administration of well-structured questionnaire among tea producers and marketers (272). Proportion to size sampling technique was used.

In Taraba state, three communities were selected namely Mayo-Kusuku, Kakara and Kasalasah. Based on the population of tea farmers 90, 90, 92 were selected respectively from the communities. A total of two hundred and seventy two tea producers and marketers were interviewed in Taraba State.

$$\text{Proportion to size} = \frac{\text{No Re x T No Te Fa}}{\text{No In Re}}$$

where:
No Re = Number of Respondents
T No Te Fa = Total Number of Tea producers and marketers in the area
No In Re = Number of Interviewed Respondents.

The data have been processed using descriptive statistics such as frequency, percentages, the construction of simple frequency distribution, and the measure of central tendency such as mean**.**

RESULTS AND DISCUSSIONS

Table 1 presented the socio-economic characteristics of tea producers in Taraba State, Nigeria. Tea producers examined were from Mayo-Kusuku, Kakara and Kasalasah towns. Thirty six percent of tea producers were between 17-30 years old, 50% of the producers were between 31-60years while 15% were above 60years.

This revealed that one out of five of the tea producers are middle aged. Majority of the producers are male (92.7%) while 7.3% were female. Crop producers in Nigeria are majorly male dominated [2].

Twenty four percent of the producers have no formal education while seventy six percent have either primary, secondary or tertiary education. Education would help to play a key role in their producer business.

Sixteen percent were single and 0.7% were widowed. Majority of the producers are married (83%) and since they are mostly male.

Table 1. Socioeconomic characteristics of Tea Producers

Variable	Frequency	Percentage
Town/village		
Mayo-kusuku	70	25.7
Kakara	38	14.0
Kasalasah	164	60.3
Age (years)		
≤30	94	34.6
31-60	136	50.0
≥61	42	15.4
Mean age	40	
Sex of farmers		
Male	252	92.7
Female	20	7.3
Educational Status		
No formal education	66	24.2
Primary education	68	25.0
Secondary education	88	32.4
Tertiary education	50	18.4
Marital status		
Single	44	16.2
Married	226	83.1
Widowed	2	0.7
Occupation		
Farming	244	89.7
Trading	6	2.2
Technical	4	1.5
Craftmanship	18	6.6
Member of cooperative society		
Yes	224	82.4
No	48	17.7
Farm size(acres)		
1-12.5	192	70.6
≥ 12.6	80	29.4
Mean	12.2	
Age of the farm (years)		
1-10	50	18.4
11-20	84	30.9
21-30	64	23.5
31-40	64	23.5
41-50	10	3.7
Mean	24	
Nature of land ownership		
Inheritance	88	32.4
Self established	166	61.0
Purchased	18	6.6
N=272		

Source: Field survey, 2019.

Marriage could be a plus for men as they are not burdened with taking care of children and older family members.

As the head of the family their wives and children could support them in their business. Ninety percent of the producers are farmers this means that majority of them sell what they plant. Other occupations that tea producers were involved in are trading, craftsmanship and technical.

Majority (82.4%) of the tea producers in Taraba State belong to a cooperative society. Being members of a cooperative society could help the producers in their business as they have access to information needed for their business. Seventy one percent of tea producers have a farm size of between 1and 12.5 acres. The mean farm size is 12.2 acres. Thirty one percent of tea producers have farmland aged 11-20years, forty seven percent have farmland aged 21-40 years. Having this aged farm could limit the production of tea in these farmlands.

Farmers need fertilizers to boost the nutrient of the soil.

Most of the farmland used are self established (61%).

Table 2 presented the challenges faced by tea producers and marketers in Taraba State. The challenges faced include poor soil fertility, low yield, pest infestation, labour shortage, lack of finance and lack of fertilizer/pesticide. Thirty five percent of tea producers and marketers in Taraba State reported that they faced the challenge of poor soil fertility.

Table 2. Challenges in Tea Production

Variable	Frequency	Percentage
Poor soil fertility	96	35.3
Low yield	54	19.9
Pest Infestation	42	15.4
Labour shortage	112	41.2
Lack of Finance	234	86.0
Lack of fertilizer/pesticide	228	83.8
N=272		

Source: Field survey, 2019.

Twenty percent faced the challenge of low yield, 15% reported pest infestation as a challenge. Also, 41.2% of tea producers and marketers in Taraba State faced the challenge of labour shortage meaning that on the

average four out of 10 tea producers and marketers in Taraba State lack labour for their production. Eighty six percent lacked finance while 83.8% lacked fertilizer/pesticide. In Taraba State the two main challenges faced by tea producers and marketers are finance and fertilizer/pesticide.

The problems associated with marketing of Tea are as presented in Table 3.

Table 3. Problems Associated with marketing of Tea

Variable	Frequency	Percentage
Low market demand	150	55.1
Low price	44	16.2
Lack of access to market	150	55.1
High cost of transportation	50	18.4
N=272		

Source: Field survey, 2019.

The problems faced by tea marketers in Taraba State are low market demand, low price, lack of access to market and high cost of transportation. Fifty five percent of tea marketers faced the problem of low market demand. Sixteen percent faced the problem of low price, 55.1% faced the problem of lack of access to market while 18.4% faced the problem of high cost of transportation. The two problems that recorded the highest percentage are low market demand and lack of access to market. These two problems are huge and could discourage tea producers and marketers. When tea producers produce tea and consumers don't demand for what is produced, they are discouraged from producing. Also for tea marketers when they don't have access to market probably because the roads are bad and the markets are far from the farms. They may not want to buy tea from producers again thus producers may have tea but no one to buy from them.

CONCLUSIONS

In this study, thirty six percent of tea producers were between 17-30 years old, 50% of the producers were between 31-60years while 15% were above 60years. Majority of the producers are male (92.7%) while 7.3% were female.

Twenty four percent of the producers have no formal education while seventy six percent have either primary, secondary or tertiary education.

Seventy one percent of tea producers have a farm size of between 1 and 12.5 acres. The mean farm size is 12.2 acres. Thirty one percent of tea producers have farmland aged 11-20years, forty seven percent have farmland aged 21-40 years.

The challenges faced include poor soil fertility, low yield, pest infestation, labour shortage, lack of finance and lack of fertilizer/pesticide. I

n Taraba State the two main challenges faced by tea producers and marketers are finance and fertilizer/pesticide. The problems faced by tea marketers in Taraba State are low market demand, low price, lack of access to market and high cost of transportation. The two problems that recorded the highest percentage are lack of access to market and low market demand. Tea producers and marketers in Taraba State have great potential for development. Tea business can bring about economic development in Taraba State and Nigeria as a whole if government at various levels can put in place intervention programmes to overcome these challenges.

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