



ABSTRACT

Kaura Namoda town growth was due to the arrival of railway from Zaria in 1929, it was the north western terminus of railway from Lagos to Port Harcourt and a major collecting point for peanuts and cotton. Besides these export crops, local traders primarily engaged in sorghum, cowpea, rice, sugarcane, and tobacco production. It has a population of 281,267 (2006)

MEAURES FOR IMPROVING THE INCOME OF COTTON FARMERS IN KAURA NAMODA LOCAL GOVERNMENT AREA ZAMFARA STATE.

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Introduction

Cotton [*Gossypium species*] is the most important fiber crops which belongs to the plant family Malvaceae. It is a perennial shrub but it is grown as an annual to check pest carry-over in the field, it grows to a height of 1-2 meters (Adeniji, 2002). It has woody stem when mature and tap root system which penetrates deep into the soil. Cotton originated from the United States of America, India, East and South Africa, Sudan, Egypt and Nigeria. It is mainly grown in the northern part of Nigeria which generates a lot of income to the farmers. It is said to be a tracker crop unlike some other traditional crops and requires greater attention (Alam et al., 2013). It is labor intensive and the farmer must have the necessary equipments and supplies for its production. Considering the expenditure incurred in the process of cotton seed, pesticides,



population censuses and has an area of 868km² the study was conducted to I. Encourage farmers in cotton production so as to increase their income, II Assist on the proper way of disposing their products i.e.to acquaint farmers with vital information in marketing of cotton, III. Help farmer to market their product directly to the textile industries and not through agent (Middle men). IV Identify the problem in cotton farming in the study area and suggest solutions to the problems. V.A Total sample size of seventy (70) was selected for the study divided in three villages. Primary data was collected from cotton farmers in the study area through a structured interview schedule administered on respondent. Data was analyzed using arithmetic mean. Percentages and descriptive statistics. The major conclusions drawn from this study were data presented regarding number of hectares cultivated shows that 23(33%) of the respondent cultivated between 10 –15 ha of land. A total of 25 (36%) cultivated between 7- 10 ha. Similarly, 15(21%) each cultivated between 3-6 ha and less than 2 ha of land respectively. Marketing of cotton produce in the study area shows that 19(27.19) of the respondent sale their product directly to consumers. Why majority of the respondent 34(48.6%) sale through middle men and 17(24.3%) sell to textile industries. Estimated profit after Marketing revealed that 21(31%) had no profit. While 25(35.7%) realized higher profit. On the basis of the above conclusions the following recommendations are made. Government should encourage cotton production by providing subsidies on input and incentives for cotton lint's and a seed, suitable government policy is necessary that will boost cotton cultivation, trade and ensure that cotton farmers are making profit. There is need for cotton farmers to increase their acreage so as to create job opportunities for the youth. Farmers should regularly contact extension workers in the area so as to obtain better advice on how to improve cotton production in the area. Capacity building is necessary and empowered of all cotton processing and packing of bales by ginneries that is acceptable to local & Global Market.

Keywords: cotton, middle men, marketing, respondent, farmers



fertilizers, land preparation, employment of labor, harvest and transportation, the work is laborious. Despite the work involved in its production, the farmers are not linked directly to the buyers (consumers) i.e textiles and other related industries or ultimate users, they will be adequately compensated. For income of farmers to be increased on cotton production, the growers should be opportune to sell their products directly to the industries or through organized cotton farmers society as this will put an end to the continuous markets exploration by the middlemen which will adversely improve the income of the farmers (Anka, 2016).

The problem of farmer's exploitation by the middlemen has increased greatly that they hardly recover their cost of production not to talk of profit in the course of production while the middlemen are making high profit from the cotton business and the farmers are getting discouraged daily due to poor returns from the sales of their produce (Ogunlele, 2004). Since cotton is the most important fiber crop cultivated in Nigeria, its cultivation is not restricted to the northern part of the country alone but also but also southern part, cotton production in Nigeria cannot be overemphasized in the sense that, the number of cotton farmers may eventually be less, of which small number of cotton farmers may affect textile industries. The purpose of this research is to find out ways and means of how exploitation of cotton farmers will be reduced so as to increase the farmer's income, thus encourage production to meet the local industries requirement and to have surplus for export to earn foreign exchange (Hadiza, 1998).

The objectives of this research is to know the problem facing the movement of cotton from the immediate point of production and also to ascertain whether the farmers have the opportunity to sell their products directly to the users; textile industries or the products are hijack by the middlemen because of their selfish interest.

Materials and Methods

In order to ascertain the measures for improving the income of cotton farmers, the researcher did not make use of the entire population of Kaura Namoda, rather, the representative sample were chosen. There are many villages in Kaura Namoda but the researcher selected only



three (3) villages. The instrument used in carrying out this research work is purely questionnaire. Seventy (70) questionnaires were randomly distributed among the selected villages.

Method of data Collection

The researcher made use of questionnaire in collecting data to ascertain the measures for improving the income of cotton farmers.

Questionnaires

A questionnaire was designed to investigate measures for improving the income of cotton farmers. There was a total of fourteen (14) questions. Due to the scope of the area of study the total number of (70) copies of the questionnaire were produced and distributed randomly.

Population Sampling

The main population target of the researcher is Kaura Namoda Local government area three (3) villages were selected and the result used to represent other villages of the local government in the state the villages are

- i. Kaura Namoda
- ii. Maguru
- iii. Kasuwar Daji

Method of Data Analysis

Data analysis focuses on the easy undertaking of the information gathered; the researcher used simple percentage to see how respondents react to each particular statement.

This has been done by adding up the total number of respondent for a particular item on the questionnaire in order to see how many respondents agree with the statement on the questionnaires. The question with the lowest percentage indicate negative and thus the researcher draws up conclusion of availability the formula use in analysis of this data is as follows

Number of respondents

Total number of questionnaire X Percentage



Instrumentation

The questionnaire its self designed by the researcher with the assistance of the project supervisor and also given to experts in agricultural science department and measurement and evaluation to make it valid and reliable for the research.

Result and Discussions

The data collection in relation to different respondent's opinion is thereby analyzed and presented in the tables below.

Table 1. Socio- Economic Characteristics of Cotton Framers

Age	Frequency	Percentage
21-30	14	20
31-40	20	28.5
41-50	16	22.8
51-60	10	14.2
61 and above	10	14.2
Total	70	100

Age data presented in the Table 1 revealed that 14 (20%) of the respondent are in the age group of 21-30. A total of (28.5%), belong to 30-40 age group, about 16 (22.8%) are in the age group 41-50 similarly 10(14.2%) each belong to 51-60 and 60 and above age a group respectively. The above findings are in concurrence with (Sadiq, 2012) who reported about 45%, 35% and 15% of the respondents fall within the age range of 41-50, 31-40 and 21-30 years respectively. Their mean age of 40 years shows that most of the respondents are relatively middle aged.

Table 2. Gender of farmers

Gender	Frequency	Percentage
Male	65	92.8
Female	5	7.1
Total	70	100



According to information presented in the table 4.1.2 the result shows that 65(92.8%) respondent is male while 5(7.1%) were female cotton farmers shows that majority of the sample respondent in the study are made of male.

Table 3. Years of farming Experience

Years of farming experience	Frequency	Percentage
1-10	8	11.4
11-20	24	34.2
21- 30	30	42.8
31-40	6	8.5
Above 40	2	2.8
Total	70	100

Perception of respondent regarding years of farming experience is presented in table 3. The result revealed that 8(11.4%) respondent had between 1-10 years farming experience. About 24(34.2%) respondent possessed 21-30 years. The result further shows that 6(8.5%) and 2(2.8%) had 31-40 years of experiences and above 40 years respectively.

Table 4. Educational Qualification of the farmers

Level of education	Frequency	Percentage
Adult education	16	22.8
Primary	14	20
Secondary	30	42.8
Tertiary	10	14.2
Total	70	100

Source: Survey Result 2017

Opinion regarding level of Education of respondents is presented in table 4. The results show that 16(22.8%) are adult educated. While 14(20%) and 30(42.8%) are educated up to primary and secondary levels respectively. Only 10(14.2%) are educated up to tertiary level.

The above findings are in the line with Anka and Lohana (2016) who reported that 16 (22.8%) Hadeja and Kazaure are adult educated. This



means that they can read and write. About 14 (20%) are primary school graduate a total of 30 (42.2%) are secondary school graduates. The lowest number of respondents (14.2%) in both Hadeja and Kazaure are university graduates respectively.

Table 5. Size of Farmland

Farm size	Frequency	Percentage
1-5 ha	30	42.8
6-10 ha	40	57.1
Total	70	100

Perception of respondents regarding size of farm land is presented in table 5 the result shows that 30(42.8%) of the respondent cultivate 1-5 ha land while majority of the respondent 40(57.1%) cultivates 6-10 ha land.

Table 6. Number of Social Organization Belong

No of Social organization belong	Frequency	Percentage
1-2	24	34.2
2-4	10	14.2
3-4	32	45.7
Above 4	4	5.7
Total	70	100

Source: Survey Result 2017

According to information presented in Table 6 the results revealed that 24(34.4%) of the respondent belong to 1-2 social organization, 10(14.2%) belong to 2-4 social organization and finally above 4 respondents are members of social organization.

Table 7. Annual Income Level of the Farmers

Annual income level	Frequency	Percentage
Below N500,000	28	40
N500,000- N100,000	25	35.7
Above N100,000	17	24.2
Total	70	100



Data presented in table 7 on Annual Income level of farmers increase the it shows that 28(48%) of the respondent had below N500, 000. While 25(35.7%) of the respondent possess between N500, 000- N100, 000. Also 17(24.2%) of the respondent have above N100, 000 since majority of the respondent's annual is below N500, 000 there is need for government to support these farmers to move from subsistence to commercial farming.

Table 8. Land Tenure System

Land tenure system	Frequency	Percentage
Inherited	32	45.7
Purchased	7	10
Leased	6	8.5
Hired	22	31.4
Family/ community	3	4.2
Total	70	100

Survey results presented in Table 8 in respect of land tenure practiced in the area. The above findings show the various way each farmer possess a farmland 32(45.7%) of the respondent inherited the land. 7(10%) purchased the farmland. While 6(8.5%) of the respondent leased the land and 3(4.2%) of the respondents obtain the land and 3(4.2%) of the respondents obtain the land through family/ community.

Table 9. Interest of Cotton farmers

Interest of Cotton farmers	Frequency	Percentage
Yes	64	91.4
No	16	8.6
Total	70	100

According to information presented in table 9. regarding the status of cotton farmers in the study area. The result shows 64(91.4%) of respondent are involved in cotton farming while 16(8.6%) of the respondent reported lack of interest in cotton farming. There is need to sanitize farmers to go into cotton farming as it has proved to be portable in the study area.



Table 10. Source of Obtaining Cotton Seeds

Source of obtaining	Frequency	Percentage
Through ginners	21	30.0
Through A D P	20	28.6
From market	29	41.4
Total	70	100

Perception of respondents regarding source of obtaining planting material (seed) is presented in table 10. The result revealed that 21(30%) of the respondents reported obtaining seed through ginners. A total of 20(28.6%) obtained their seed through the A D P and finally majority of the respondent 29(41.4%) purchased their seeds from the open market.

Table 11. Problem in Cotton Production in Zamfara

Problem in cotton production	Frequency	Percentage
Lack of improved seeds	60	85.7
Low price of the produce	2	2.86
Inadequate fund	8	11.43
Total	70	100

Survey results regarding problems in cotton production revealed that 60(85.7%) of the respondents reported lack of improved seed. While 2(2.86%) agreed on low prices and 8(11.43%) reported lack of inadequate funds. The above finding are supported by Hadiza (1998) and Alam *et al* (2013) who reported that 60(85.70%) of the farmers encountered a lot of problems during cotton production 8(11.43%) complained of inadequate funds which hinders farmers in expanding the cotton farming business. Similarly, 2(2.86%) of the respondent revealed that low price of produce is one of the major constraint.

Table 12. Mixed farming

Mixed farming	Frequency	Percentage
As a risk aversion strategy	-	-
In case of crop	-	-
Lack of market	-	-
All of the above	70	100
Total	70	100



Perception of respondents regarding mixed cropping is presented in the table 12 above. The result revealed that 70% of the respondents believe that mixed cropping serves as risk aversion strategy, crop failure and lack market.

Table 13. Effect of pest and disease on Cotton

Effect of pest and disease	Frequency	Percentage
It causes discoloration	7	10
Reduction in yield	22	31.43
Reduction in unit	15	21.43
All of the above	26	37.00
Total	70	100

Opinion regarding effect of pest and disease in the study area is presented in table 13. The result shows that 7(10%) reported that pest and disease caused leaf dislocation, 22(31.43%) said it causes reduction in yield while 15(21.43%) revealed that it leads to reduction of lint and 26(37%) reported all of the problem mentioned.

Table 14. Addressing problems of Pest and Disease of Cotton

Combating the problem of pest and disease	Frequency	Percentage
By spraying with chemical	67	95.7
By hand picking	3	4.3
None of the above	-	-
Total	70	100

Data presented in table 14 regarding addressing the problems of pest and disease of cotton in the study area the result shows 67(95.7%) of the respondent uses chemical while 3(4.3%) of the respondent reported that they used hand picking method.

Table 15. Selling of Cotton Produce in Zamfara Market

Selling of Cotton produce	Frequency	Percentage
Direct to consumer	19	27.1
Through middlemen	34	48.6
To textile industries	17	24.3
Total	70	100



Perception of respondents regarding selling of Cotton produce is presented in Table 15 the result shows that 19(27.19%) of the respondents sell their product directly to the consumers, while majority of the respondent 34(48.6%) sells through the middlemen (agents) and 17(24.3%) of the respondent sells to textile industries.

Conclusion

Date presented regarding number of hectares cultivated shows that 23 (33 %) of the respondents cultivated between 10-15 hectares of land. A total number of 25(36 %) cultivated between 7-10 hectares. Similarly, 15 (21 %) each cultivated between 3-6 hectares than 2 hectares of land. Marketing of cotton produce in the study area shows that 19 (27.19%) of the respondents sell their product directly to consumers, while majority of the respondents 34 (48.6 %) sell through middle men and 17 (24.3%) sell to textile industries. However, for cotton farmers to increase their income, there should be an opportunity for them to sell their product directly or through organized cotton society and industries as these will reduce continuous market exploitation by the middle men. Finally, from the forgoing, there is no way the gain so far made in cotton marketing can be consolidated until there is a planned program for sustainable production and marketing in Zamfara State. This implies that government action is very essential inform of regulating the deregulated system.

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