

# IMPACT OF COTTON PRODUCTION ON FOOD SECURITY- A CASE STUDY FROM SAVELUGU-NANTON DISTRICT OF NORTHERN GHANA

BY

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## 5 Summary and conclusion

# 5.1 Summary

A comparative analysis of cotton and non-cotton growing families was carried out in four communities, namely: Nanton Tampion, Zieng and Nyamandu in the Savelugu-Nanton district of Northern Ghana to find out the extent to which cotton production affects households.

It was shown that that the most common social organization in the study area is the compounds system. In this system, extended families live in circular compounds in which individual members have their own huts.

There was no significant difference in the labour capacity of the two types of farming systems therefore labour availability is not a key determinant in cotton cultivation.

Age of household heads is significantly higher for cotton farmers than non-cotton farmers. It can be inferred that either cotton farmers are more experienced in farming and for that matter choose cotton production or they have more resources, which allows them to go in the production of cotton.

Household heads in the study area on the average have more than one wife. This is because both culture and the predominant religion (Islam) encourage polygamy.

Illiteracy is high in the sampled communities as compared to the Ghanaian national illiteracy rate hence educational levels did not have any influence on the involvement of cotton production among respondents.

Crops mostly cultivated by the farmers are groundnuts, maize, cotton, millet, sorghum, yam, bambara beans and soya beans.

Land allocation to groundnut production is significantly higher for non-cotton farmers than cotton farmers. It can be that inferred that specialization in the cash economy by farmers in the sampled communities is done either through cotton or groundnut production.

Over 90% of all farmers are involved in maize production since it is the main staple food in the area.

Farmer grow cotton in order to make use of the residual fertilizer the following season therefore follow cotton with maize in their crop rotation system. This is the main reason why most farmers in the area go into cotton production.

Gross margin estimation for an acre of maize is significantly higher for cotton farmer than non-cotton farmers at the same time, total variable cost per acre of land is significantly lower for cotton farmers than non-cotton farmers. This indicates that cotton production enhances the efficiency of maize production.

Cotton production itself is the least profitable of major crops grown. This is due to diversion of inputs to food crop fields. Cotton production therefore is a strategy used by farmers to enhance food crop especially maize production.

Cotton production affects off-farm income generating activities especially for women.

Activities such as shea nut collection and processing and working as farm labourers are hampered because of the excessive demand especially female labour in cotton production. Women spend on the average more time on cotton farms affecting their off-farm income generating activities hence their contribution to food purchases.

Income from groundnut and cotton sales contributes most to cash availability for non-cotton and cotton farmers respectively among the various crops grown. Off-farm income contributes most to cash availability in both cotton and non-cotton growing families.

Credit facilities are scarce in the study area except for "linked credit" which is part of the contract farming process.

There are no significant differences in the indices of household copping strategy and dietary diversity of cotton and non-cotton growing families implying that cotton production does not significantly affect food security according to the measures used in the research.

### 5.2 Conclusion.

There are significant differences in age of household heads of cotton and non-cotton growing households. Non-cotton growing households grow more groundnuts to meet their cash requirements. The structure and capacities of both households are not significantly different.

There are no significant differences in dietary diversity and indices of household coping strategies between both farming systems. This implies that food security for cotton growing households is not higher than that of non-cotton growing households.

The main driving force behind the involvement of farmers in cotton production in the sampled communities is credit and input market failure. Farmers therefore use cotton production as a strategy to acquire inputs, which helps to increase the efficiency of food crop production.

The efficiency of maize production in higher for cotton farmers as compared to noncotton farmers but there are no significant differences in family income for both types of farming systems.

## 5.3 Recommendations

- More detailed estimation of food security measures should be included in further research to investigate the impact of cotton production on food security in those communities.
- Inputs credits given by the Ghana Cotton Company should not only be for used on cotton farms but also for food crop farms to discourage farmers from diverting inputs.

• Further research should be carried out to find out the mechanisms by which cotton production enhances the efficiency of maize production.