

Internal Marketing Policy of Cocoa in Ghana: Farmers' Incentives and Challenges

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ABSTRACT: The study was conducted to analyze farmers' incentives and challenges in the internal marketing policy of cocoa in Ghana by using two administrative districts (Nkawie and Dunkwa) of the Ghana COCOBOD. A random sample of 171 respondents was drawn from across the two cocoa producing districts and the data analyzed using frequency tables and the Kendall's coefficient of concordance. Most cocoa Farmers were found to be land secured because they either owned their lands (73%) or practiced the abunu (21.1%) system of land tenure. Farmers mean age and farming experience were estimated as 52 and 17 years respectively; an indication of an ageing farming population and highly experienced cocoa farmers. Most farmers (87%) believed that the internal marketing policy of cocoa has provided non-pricing incentives for them to increase their cocoa production in Ghana. Prompt payment was found by 79% of farmers to be the most important incentive derived from the policy. This was followed by easy access to credit, and employments at the communities as the Licensed Buying Companies (LBCs) compete among themselves at the farm-gate. However, farmers were mostly challenged by the way the LBCs adjust weighing scales at the farm gate to the disadvantage of farmers. It is therefore recommended that, the competition in the internal marketing should stay as the Ghana Standards Board strengthens their monitoring role of ensuring that weighing scales are not adjusted to the detriment of farmers.

KEYWORDS: Internal Marketing, Cocoa, Policy, Farmer incentives, competitiveness.

1 BACKGROUND

Cocoa is the main export crop in Ghana; accounting for over 80% of all incomes earned from the Agricultural sector as foreign exchange [1]. It is the second foreign exchange earner after gold since 1994 [2]. Currently, Ghana is second to Cote d'Ivoire in the world's cocoa production and produces the best quality.

In 1993, government finally yielded to the World Bank's recommendation of introducing the participation of other privately Licensed Buying Companies (LBCs) into the internal marketing of cocoa to compete with the Produce Buying Company (PBC) which used to be the only buyer of cocoa at the farm-gate since 1977 [3]. Initially four companies were admitted and licensed in 1992/93 cropping season; this has risen to 26 in 2010/11cropping season [4]. The growing number of companies in the purchasing of cocoa at the farm-gate is a major aspect of the current internal marketing policy of cocoa.

In service marketing, the concept of internal marketing refers to the promotion of a firm's products to its employees [5]. Employees and jobs are considered as customers and internal products respectively; therefore, the firm must endeavor to design these products to meet the needs of the customers [6], [7], [5]. This is because by satisfying the needs of the internal customers, organizations should be in a better position to deliver the quality desired to satisfy the external customer. By this concept, employees are seen as the most important customers of any organization as they link the firm to its external customers. Also, external customers may not distinguish between the employees and the firm. However, the Internal marketing of cocoa all over the world, offers a paradigm shift to this concept.

The Internal marketing of cocoa in cocoa-producing countries involves: local purchasing of cocoa beans from producers' farm gates, grading, sealing, and evacuation to the depots in the country or to warehouses at the ports awaiting sales to

overseas buyers, or to fulfill forward committed sales or the requirement of a local processing plant [8]. The internal marketing policy of a producing country depends on factors such as the manner of cultivation, governments' attitude to free enterprise, the relative share of cocoa earnings in the economy, and the colonial business practices before independence.

The case of Ghana's internal marketing of cocoa is the totality of all those activities involving licensed buyers, that ensures that cocoa beans from the farm-gate reaches the state monopsony and the sole exporter of cocoa (COCOBOD). This process involves various actors including purchasing clerks, agents, and traders who deal with the Licensed Buying Companies (LBCs) [9].

The current system of marketing cocoa internally in Ghana has introduced fierce competition among the 26 Licensed Buying Companies at the farm gate level (LBCs) [4], [10]. The negative effect of such a competition on the quality and output of cocoa beans has been recorded in countries such as Cote d'Ivoire, Cameroun and Nigeria [11]; however, in Ghana, apart from some minimal level of deterioration in the area of quality of dry cocoa beans [9], the current internal marketing policy, seems to be influencing farmers to increase their cocoa output. The question then is what incentives do farmers derive from this internal marketing competition which influences them to increase cocoa output? The introduction of any policy comes with incentives as well as new challenges to the target beneficiary. What challenges are faced by these farmers in selling their cocoa at the farm-gate? This study therefore seeks to evaluate farmers' incentives and challenges in the internal marketing of cocoa in Ghana.

2 MATERIALS AND METHODS

The study was conducted in two selected cocoa producing districts (Dunkwa and Nkawie) in Ghana. An initial reconnaissance study using interviews was qualitatively conducted with some key informants in the two districts with the help of the Agricultural extension agents. The results aided in the development of a well structured questionnaire which was pre-tested on ten cocoa farmers outside the study area; after which changes were made in the questionnaire.

Two cocoa districts (Dunkwa and Nkawie) were purposively selected after which fifteen cocoa villages were selected across the districts in the ratio of 2:1 respectively. At the village level, twelve farmers were selected for interview to constitute a total sample of 180 cocoa farmers.

Enumerators were trained to conduct the survey after which the data was entered using the statistical package for the social scientist software (SPSS). The analysis was done following data cleaning, where nine respondents were excluded from the analysis due to high non-response rate. The analysis on the cocoa farmers was therefore based on the sample size of 171 comprising of 57 from Nkawie and 114 from Dunkwa.

2.1 THE STUDY AREA

Ghana COCOBOD has its own cocoa administrative districts which are different from the political regions and districts in Ghana. The study therefore covered two cocoa districts (Nkawie and Dunkwa) in two cocoa regions; with Nkawie representing Ashanti and Dunkwa representing Western South regions respectively. There are 15 and 12 cocoa districts in Ashanti and Western South regions respectively. Each of the two cocoa districts is made up of three political districts. Nkawie cocoa district comprises: Atwima Nwabiagya, Atwima Mponua and Ahafo-Ano South districts of Ghana's political Administration. Dunkwa cocoa district is made up of Upper Denkyira East, Upper Denkyira West and Twifo Lower Hemang Denkyira districts of the political administration of Ghana.

Nkawie Cocoa district lies between latitudes $6^{\circ} 22''$ and $6^{\circ} 50''$ North and; Longitudes $1^{\circ} 40''$ and $2^{\circ} 27''$ West. Similarly, the Dunkwa cocoa district is situated between latitudes $5^{\circ} 30''$ and $6^{\circ} 15''$ N and longitudes $2^{\circ} 10''$ and $2^{\circ} 30''$ W.

The Nkawie district is bordered in the north by Tepa and Offinso cocoa districts; in the east by Antoakrom district; in the south by Duako district and in the west by Sankore cocoa district. Similarly, the Dunkwa district is bordered in the north by Antoakrom, Obuasi and Bekwai cocoa districts respectively. In the east, it is bordered by, Sefwi Bekwai, Wasa Akropong, and Tarkwa districts, respectively. In the South east, it is bordered by Fumso and Foso cocoa district. The two study areas are indicated in the map of Sothern Ghana with the administrative cocoa regions of COCOBOD in Figure 1.

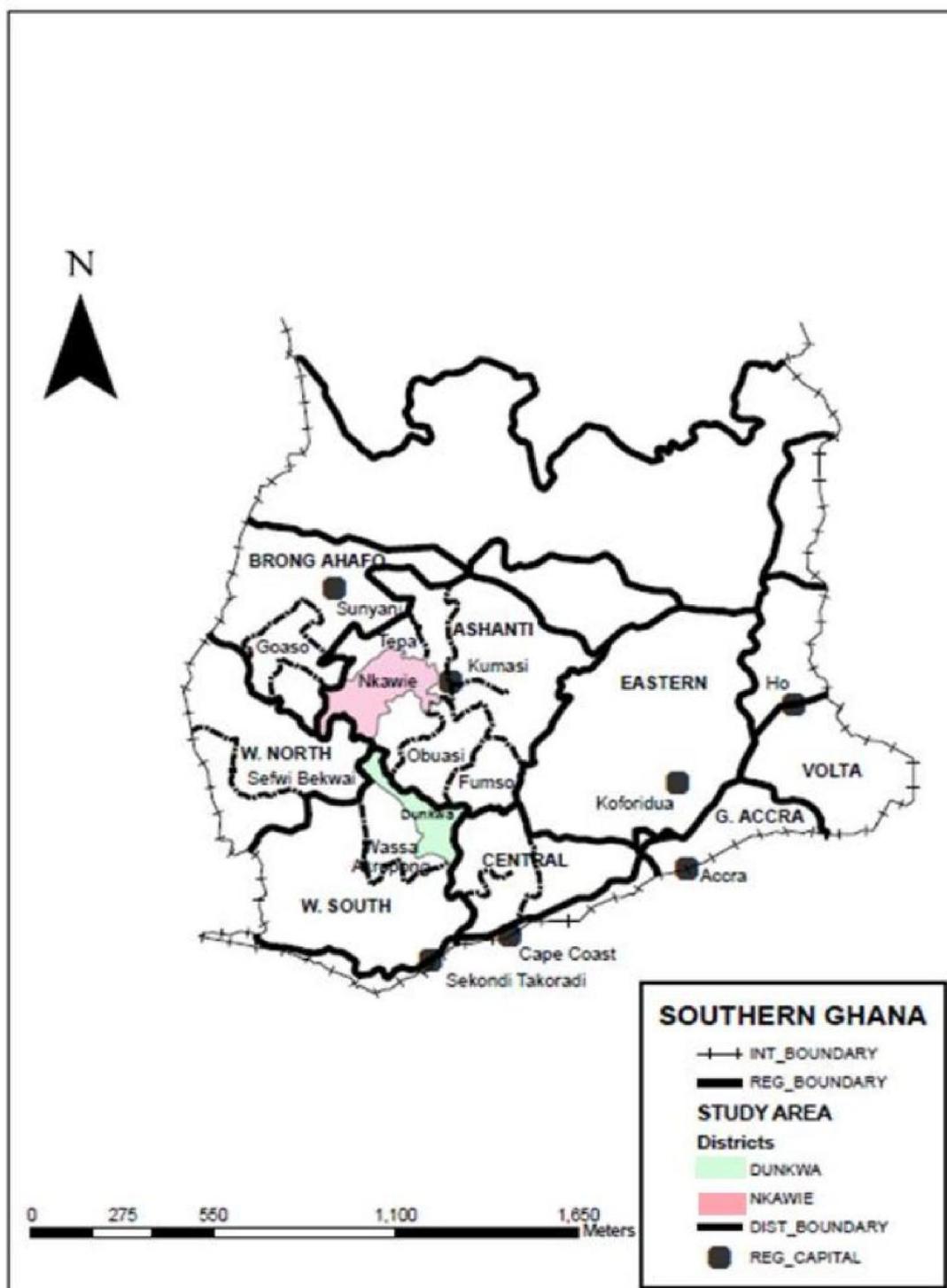


Fig. 1. Map of Southern Ghana indicating Cocoa regions and the Study Area

2.2 ANALYTICAL FRAMEWORK

Marketing challenges facing farmers were first identified with key informants and then presented to respondents for ranking in order of importance in an ascending order. The mean rankings were then taken. The Kendall's coefficient of concordance (W) was used to test for the level of agreements in the rankings giving by the respondents.

The formula for the Kendall's Coefficient of Concordance (W) is given as:

$$W = \frac{12S}{p^2(n^3 - n) - pT} \tag{1}$$

Where:

W= Kendall’s coefficient concordance; n= the number of respondents;

P= the number of constraints; S= sum of squares statistic; and

T= correlation factor for tied ranks.

$$S = \sum_{i=1}^n (R_i - R)^2 \tag{2}$$

Where:

R_i= row sums of ranks; R = the mean of R_i.

The correlation factor for tied ranks (T) is

$$T = \sum_{k=1}^m (t_k^3 - t_k) \tag{3}$$

Where: t_k= the number of ranks in each k of m groups of ties.

Hypothesis and Significant test for W

The null (H₀) and the alternative (H₁) hypotheses are stated as follows:

H₀: there is no agreement among the rankings of challenges, versus

H₁: there is agreement among the rankings of challenges.

The Kendall’s coefficient of Concordance (W) may be tested for significance using Chi-square statistic (X²) computed as:

$$X^2 = p(n-1)W \tag{4}$$

Where:

N= sample size; p= number of constraints; and W = Kendall’s coefficient of concordance.

The decision rule is if chi-square calculated > chi-square critical, then the null hypothesis is rejected in favour of the alternate hypothesis [12], [13], [14], [15].

3 RESULTS AND DISCUSSION

3.1 SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

The results indicated that cocoa production is not the preserve of any particular gender but for both sexes.

Table 1. Socio-economic Characteristics of Respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	110	64.3
Female	61	35.7
Land Ownership		
Owners	124	72.5
Abunu	36	21.1
Abusa	8	4.7
Both owner and Abunu	3	1.8
Marital Status		
Married	162	94.7
Single	3	1.8
Divorced	1	0.6
Widowed	5	2.9

The study showed that males constituted over 60% of cocoa farmers sampled from the two districts. This is an indication of a male domination, probably due to the labour intensive nature of the cocoa sector (Table 1). Most farmers (over 70%) owned their cocoa farms; about 20% practiced the abunu system of sharecropping with less than 5% going for abusa system of sharecropping. However, 1.8% owned their farms and practiced abunu simultaneously; probably, to ensure the benefit of diversification. In the abunu system, 50% of the produce goes to the landlord with the farmer retaining the rest. This is because the farmer mostly clears a virgin forest taking charge of the crop till it starts bearing fruit. Prior to maturity, the farmer uses the other food intercrops like plantains to maintain the farm. The abunu farmers may eventually become land owners. Contrarily, this cannot be said of the abusa farmers; since they are mostly brought on board after the establishment of the cocoa farm therefore, they can be hired and fired at anytime. Abusa tenancy may arise after tenants are made to use the land for their food crops and in return plant cocoa for the landlord. In this case, the farmer shares the produce with the landlord in the ratio of 1:2. On the whole, majority of the farmers sampled are land secured, because they owned land or practiced abunu which makes them potential landlords. This is very important due to the long-term nature of cocoa production. Majority (94.7%) of the respondents were married; an indication of socially responsible farmers.

Table 2. Farmers' Age, Years in Farming, and Household size of respondents

	Min	Max	Mean	Standard dev
Age	20	95	52.2	13.8
Years in farming	5	60	17.1	11.3
Yrs in education	0	25	7.7	4.4
Household size	1	20	7.1	3.7

Farmers' age ranged from 20 to 95 with a mean age of 52.2 years (Table 2). This gives an indication of an ageing farming population and poses a threat to sustainability of cocoa production. It confirms the observations of other researchers [16], [17], [3] that cocoa production was more appealing to the aged than the youth. On the other hand the 17.1 mean years of farming cocoa implies that, farmers had adequate experience in cocoa production. This corroborated well with study conducted on plantain [17] where they had the average experience to be about 14 years. The mean year of formal education was 7.7; ranging from 0 to 25 with a standard deviation of 4.4. Again, the mean years of formal education of the cocoa farmers agrees with that of plantain farmers [17]. The respondents had a mean household size of about 7; an indication of a larger family size in a predominantly rural community.

3.2 FARMERS PERSPECTIVE

Table 3. Farmers' perspective of the Internal Marketing Competition and their Communities

Farmers response to internal Competition	Frequency	Percentage (%)
Increased production	149	87.1
Decreased production	4	2.3
Same production	18	10.5
Total	171	100

Source: Field Survey, February, 2011

Most farmers (about 87%) were of the opinion that the competition generated by the Licensed Buying Companies (LBC's) in the internal marketing of cocoa, has encouraged them to increase cocoa production in their communities (Table 3). Only 2.3% believed that the LBC have discouraged them in their cocoa production.

Table 4. Farmers Incentives in the Internal competition

Incentives	Frequency	Percentage (%)
prompt payment	123	79.9
Credit	27	17.5
Employment	4	2.6
Total	154	100

Source: Field Survey, February, 2011

Describing how they have been encouraged by the LBC's to increase their production; over 79% of the farmers said they can now be sure of prompt payment for their produce while, 17.5% said getting credit for production was now easier; about 2.5% believed it was a way of solving the unemployment problem in the communities (Table 4). This is because some community members were offered jobs as Purchasing Clerks by the LBC which has a multiplier effect on the entire community. It also means that the competition in the internal marketing of Cocoa provides non-price incentives to farmers as the Licensed Buying Companies compete among themselves.

The issue of prompt payment seems to be the most important farmers' incentive of the current policy. When the Produce Buying Company was the sole buyer of cocoa, farmers alleged that monies meant for cocoa purchases, were sometimes channeled into other businesses by District Managers and purchasing clerks of the societies. However, with the opening up of the system for competition, the issue no longer existed. It was observed that LBCs who delay payments unduly or refuses credit do so at the expense of their market share.

3.3 CHALLENGES

Table 5. Marketing challenges of farmers in the sale of cocoa

Challenges	Mean rank	Rank
Adjusted scales	1.13	1
Inadequate credit	2.81	2
Delayed payment	2.89	3
Break in season	3.16	4
N	94	
Kendall's W ^a	0.731	
Chi-square	206.04****	

*** = significant at 1% Chi-Square tabulated = 11.35 at 1%

Source: Field data, February, 2011.

Four main challenges were generally identified by the cocoa farmers across the districts (Table 5). Scale adjustment by the Purchasing Clerks obtained the least mean rank and was therefore the most challenging constraint to the farmers; this observation was made during the field survey. Also, some farmers complained that the normal farm-gate weight of 64kg was not being strictly adhered to as some Purchasing Clerks go beyond the stipulated weight.

The second most limiting challenge was inadequate credit given by the Purchasing Clerks. Usually, credits are given to farmers when they are about to harvest the cocoa. This is to help them meet the costs they incur during harvesting; making it a short-term loan which farmers take an average of five weeks to re-pay. Credit is not given to cover the whole production process.

Delay in the payment of the cocoa purchased was the third most important problem confronting the farmers. Although farmers confirmed that the situation has improved with the competition in the internal marketing. The farmers believed that there could be improvement as farmers would always prefer prompt payment for their produce.

The fourth challenging problem was the annual seasonal break in the cocoa cropping season, since it received the highest mean ranking. This enables the other players in the cocoa sector to take stock and account for their stewardship. Unfortunately, it was seen by farmers as a set back since Purchasing Clerks take advantage of them and sometimes pay them a little lower than the official price. This is because, the new varieties of cocoa bear fruit all year round; secondly the seasonal breaks usually coincides with the beginning of the educational calendar where farmers incur a lot of expenses in the

education of their wards. It was clear that cocoa prices are normally reviewed upwards; farmers who sell their cocoa to the private agents during the seasonal break seem to be on the losing side.

Kendall's coefficient of concordance showed significant level of agreement ($W = 0.731$; $P \leq 0.001$) among the rankings of the challenges by farmers on the internal marketing of cocoa (Table 5). This finding suggests that there was 73% agreement among the rankings of the farmers.

4 CONCLUSION

The study confirmed that the current internal marketing policy of cocoa in Ghana provides non-pricing incentives such as prompt payment, credit and employment to the cocoa farmers as the LBCs compete among themselves at the farm-gate. The most important constraint by farmers at the farm-gate was the adjustment of weighing scales by the agents of the LBCs. There is the need for the Ghana standards Board to monitor the weighing scales of the LBCs. Also, the competition should be maintained at the farm gate.

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