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THE SUPPLY POSITION OF COPRA TO

ESIAMA COPRA OIL MILL (1961-69)

by

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SUMMARY

The Esiamia Copra Oil mill continues to face inadequate supplies of copra for processing. The presence of large stretches of coconut plantations in the area has always led those concerned with the problem to assume a vast capacity for copra, and therefore attribute this deficiency to other causes without much evidence.

With existing crushing capacity of 9,600 tons and a potential capacity of about 15,000 tons per year, the minimum mature acreage required is about 30,000 to 35,000, assuming that the total expected output will be realized. This acreage is just about the estimated existing acreage for commercially mature coconuts. But this potential is not fully realizable because the physical collection of the nuts is severely limited by the quick regeneration of high bush on the farms. Bad husbandry is conducive to the growth of bush, and poor husbandry is encouraged by the widespread practice of leasing the farms for long periods to non-farmers for the collection of nuts, thus - the existing state of affairs is such that there is insufficient acreage to keep the mill operating at full capacity, a situation made worse by under developed facilities for collection and assembly.

In a single crop economy, the coconut has a special place in the existence of the society, and therefore carries with it economic as well as political attributes. In the past, the

latter were given preference in the organisation of the factory and in obtaining supplies from the producer. This to some extent undermined the farmers confidence and hence reduced supplies to the factory even further.

At the present high level of producer prices, it appears that supplies are no longer price elastic and therefore any further increases in price would not elicit the required increases in supplies. In any case it would swell the factory's costs without any assurance of increased supplies.

It is very doubtful if the traditional oil producers have any significant effect on the supplies that could reach the factory. However, this fact must first be ascertained before any firm conclusions can be drawn, but from past figures of oil produced in the area they do not appear to be very important.

Even though the factory is the biggest purchaser of the output of copra it has never been given the opportunity to develop the market power which will ensure purchasing on rational lines.

THE SUPPLY POSITION OF COPRA TO THE
NZIMA COPRA OIL MILL (1961 - 1969)

1. THE PROBLEM AND ITS SETTING

The Esiamia Copra Oil Mill was officially opened in February, 1961,¹ with an input capacity of 4,800 tons of copra. In 1963 utilization of this capacity rose to 83.0% (Appendix 1); but in 1964 it began to decline and reached a level of 60.4% in 1966. In 1967, in the face of continued decline in supplies of copra, the processing capacity of the mill was doubled to 9,600 tons. This accentuated the decline in capacity utilization, which fell to 21.4% that year, and dropped further to a low of 6.6% in 1968.

The mill, except in 1963, has faced a situation of under-supplies of raw materials without any signs of rapid improvement. Further to the additional capacity installed in 1967, there is another 5,000 tons of expeller capacity standing by, which brings the potential capacity to about 14,600 tons.

The decision of the management to increase the capacity of the mill, despite the decline in supplies to the factory, stems from the persistent belief that the area possesses a prodigious capacity to produce copra far beyond the projected maximum intake capacity of the factory. This obviously derives from the strong impression obtained from observing miles of continuous stretches of plantations in this area, which has been assumed to be a reliable index of real supplies.

1. This and the rest of the figures under this head were obtained from factory records.

Experience so far has proved that a wide discrepancy exists between the expected supplies and what the factory actually obtains. Speculation in the past put the blame on low producer prices, poor purchasing organisation and the activities of local copra oil processors. Past attempts at improving supplies based on these impressions have had very limited success if any at all.

The current producer prices have been continuously revised upward without producing the desired effect. Police action was used in 1965 to curb the activities of local oil producers and prevent export of copra from the area. This had to be abolished shortly afterwards since it turned out to be disincentive to producers. The statutory purchasing of copra has gone through a series of reorganisations and the right organisation for the factory is yet to be established to achieve the factory's objectives.

With such a background, it appears that the factory's problem does not stem from a single source, and any solution might require a broader front. To avoid being superficial, the specific relevant questions have to be identified to provide the right perspective for evaluating the relative importance of the various limiting factors.

2. METHOD OF STUDY

Facilities for a field enumeration survey, which would have been most reliable, were not available for this study. Therefore, resort had to be made to all available records on the subject. Out of the assembled data, a few indicators have been derived and used to arrive at some estimates and conclusions.

The factory was established on the assumption that there was a large surplus of copra over and above the local requirements. This assumption was based on a guesstimate of the acreage only without reference to the factory's raw material capacity, because the former was further assumed to be too vast to think about the latter. However, the two must be matched for a better definition of the problem.

This study therefore began with a re-examination of the total effective acreage to establish a more reliable estimate of the potential capacity. Since the problem concerns inadequate supplies, the estimates were as much as possible, kept at the optimistic levels to prove the contrary if these optimistic levels still proved to be unsatisfactory for the purpose of the study.

In real terms, conventional standards were applied to this acreage to provide a measure of expected output. After this, the various limiting field factors were discussed in relation to their influence on reducing output and eventual supplies.

3. BRIEF HISTORY OF PLANTATIONS

The establishment of coconut plantations in the Nzima area dates back to the 1920's. After a period of scepticism on the part of local farmers, the planting of seedlings gathered momentum, and about 5,600 acres were planted by 1938/39. These farmers became so impressed with the economic prospects of the coconut palm that they called it 'Sikadua'² (tree of gold).

Before the coconut palm gained acceptance in the Western Region, the Keta-Ada districts represented the major sources of supply of coconut products for export and domestic use. In 1931-32 it was reported that the Keta district commanded an expanse of about 9,800 acres and there was no more suitable land for expansion. Soon after this point in history, the predominance of this source of supply was markedly reduced by the ravages of Cape St. Paul wilt, which steadily decimated the plantations from the Denu area to Ada across Keta.

Meantime, rapid expansion of plantations in the Western Region continued, and the Western Region quickly emerged in the middle of the 1940's as the leading coconut producing area. It took over the function of the East in the export of copra and nuts, and in the production of a large share of local oil. The dense concentration of coconut plantations in the West with good natural conditions for rapid expansion, induced the establishment of the Nzima Copra Oil Mill.

2. K. B. Dickson, Development of the Copra Industry in Ghana. Journ. of Trop. Geog. Vol. 19, Dec. 1964. p.32.

4. ACREAGE OF COCONUT PLANTATION

The economics and Statistics Division of the Ministry of Agriculture estimated the total acreage of coconut plantations in the Western Region at 73,000 for 1966, and 70,000 for 1967 and 1968 respectively. This, presumably, includes both the immature plantations and those that are marginal because of distance from the factory or are not exploited for commercial copra production. This figure can serve as the maximum possible acreage.

Other statistics available on acreages have been estimated from the supply of seedlings to farmers which are fairly reliable since planting distance is presumed to be fairly standard because of the recommendations of extension services. (There is the greater likelihood of reduced spacing than wider spacing, which adversely affects yields). The seedling distribution stations from which data was obtained were the Princess, Ayinase and the Atuabo Stations.

The history of the development of the coconut plantation indicates a concentration along the littoral from which further extensions were made into the hinterland. Considering the location of the distribution stations, it would be reasonable to assume that a very large proportion of the supplies initially went to this area of concentration in which the factory obtains its supplies of copra. This falls within the periphery of the New town - Ankobra shore line, further inland up to Half-Assini - Kikam Road and its immediate hinterland. This is the area of greatest concentration and historically, the focus of the coconut industry; and it is this acreage which is effective to the factory's supplies.

Information on seedlings supplied from these stations is not systematically provided beyond 1960. Moreover, there is the impression that supplies from private farms had then been on the increase. Therefore 1960 is used as the time limit for the estimation of the current effective acreage. This will serve the purpose well since it takes about 10 years for the palms to reach commercial maturity.

The earliest available statistics on coconut acreage in this region was that provided by W.C. Fishlock.³ He estimated in 1930 that between New Twon and Ankobra, a distance of about 60 miles, an area of about 15,000 acres was suitable for coconuts. Further inland, he estimated an additional acreage of about 20,000 acres to be suitable.

On actual acreages planted, K.B. Dickson (1) and A.K. Asem (2)⁴ provided the following estimates independently :

TABLE 1
Estimated Acreage Planted (1923 - 1958)

(1)	<u>1923</u>	<u>1929</u>	<u>1933</u>	<u>1938</u>	<u>1939</u>	<u>1952</u>	<u>1957/8</u>
Acreage	300		920		5600		10,000
Acreage per year (inclusive)			62		780		244
<hr/>							
(2)							
Acreage		1066		5655		7945	19,028
Acreage per year (inclusive)				500		164	2,516

Sources: Footnotes 2 and 4 on pp 2 and 6 respectively.

3: W. C. Fishlock. Development in the coconut industry in Nzima
G.C. Dept. of Agric. Bull. No. 23 (1930). pp.151-156.

4. A.K. Asem (1963). Copra supply to the Nzima Oil Mills. A report,
Min. of Agric. File A/A 6 iii.

The two estimates, at the various points in time, differ, except around 1938/39 when there is a difference of only 55 acres. It can therefore be assumed that there were about 6,000 acres of coconuts round about 1940.

The yearly supply of seedlings to farmers from 1946-1960 with their estimated acreages is shown in App. 2. Assuming that all these seedlings went to this area and assuming that there was very little loss during cultivation, this series shows an average of about 730 acres planted a year. Using this figure to estimate acreage planted from 1941 to 1945, gives an area of 3650 acres, which makes a total of about 9650 acres by 1945. The total acreage estimated from seedlings supplied from 1946 to 1960 using the same assumptions amount to about 10,900 acres which when added to the 1945 acreage gives a total of about 20,500 acres in 1960. This figure is close to A.K. Asen's estimate for 1957/58.

In 1957 the Department of Agriculture estimated that about 400 acres of planting materials were produced from farmers farms, which was about half the estimated acreage planted with seedlings supplied to farmers that year from official sources. Using this as the best available indicator of private effort in private seedling production, the estimated acreage for 1960 of 20,500 acres should be increased by half as much. This would then amount to about 31,000 acres.

In his report on the "Coconut Belt of Ghana", 1968, Y. Fremond⁵ estimated the total acreage of coconuts in the Nzima

5. Y. Fremond. Report on the Coconut Belt of Ghana (1968).
Ministry of Agric. File A/A 6 iii.

area to be 40,000 acres in 1968. By deducting the estimate of the annual increase in acreage (730) from this figure, the acreage which existed in 1960 would have been approximately 35,000 acres.

In 1952, a survey⁶ of the New town - Ankobra coconut area, which is the area relevant to the factory, was estimated to carry not more than 13,000 acres of both mature and immature coconuts. Adding the average extension of 730 acres a year gives about 18,100 acres in 1960 and including seedlings from private sources will give about 27,000 acres.

Thus the maximum mature acreage must be about 30,000 acres at present.

6. S. La Anyane, Coconut Survey: New Town - Ankobra area.
Ministry of Agric. Reports (1952 - 53).

5. COPRA OUTPUT

(i) Capacity of Plantations

The current impression of a vast capacity for copra production will have to be reviewed in terms of copra output, which is the raw material in question.

At Atuabo station, under controlled conditions, a yield of 3,738 nuts per acre per annum ⁷ has been recorded. This works out to be about 60 nuts per tree per year (close to La Anyane's average of 51 fresh nuts per tree from actual count - ref. foot note 6) p.10. In the same experiment, at Atuabo, about 6,000 nuts (5,955 precisely) were required to produce a ton of copra. This is the same as the factory's standard of 300 nuts to 1 cwt. of copra. Therefore, under normal farming conditions in the area, it would require about 2 acres of 120 trees to produce 1 ton of copra a year.

On the basis of a maximum area of about 30,000 acres the expected yield cannot exceed 15,000 tons a year which just matches the potential crushing capacity of the mill, hence taking into account the effect of the various limiting factors on supplies to the mill, it is doubtful if the real output would even suffice for the existing crushing capacity of 9,600 tons. It means that the popular assumption about the capacity of the plantations is merely impressionistic and is at present of doubtful accuracy.

7. Gold Coast Dept. of Agric. Bulletin No. 23 Yearbook 1930 p.147.

6. COPRA SUPPLIES TO FACTORY

(i) Copra Supplies to the Factory

Copra supplies to the factory are considered in this context as a surplus to local requirements within the set of limitations prevailing at the time. Data have been collected from 1950 onwards and include information on exports in order to give a better idea of the trend in supplies. The period covered is still short relative to the long gestation period of coconut trees.

In fig. 1, supplies from the Nzima area show an increasing positive trend up to 1956. Purchases really started in this area from 1949 and therefore with improved purchasing conditions and communications there was bound to be increased supplies from the area. However, after 1956, wide fluctuations become evident which increased in amplitude when the factory was established.

With this movement in the supplies over the period, it is very difficult to derive any meaningful trend. However, this has been attempted by a method of optimistic estimation in which the peaks in supplies are taken as being indicative of the trend, even though such points represent the most favourable combination of events. Assuming that these conditions existed all the time, an imaginary line through 1956, 1958/59, 1963 and 1967 shows increasing supplies at a decreasing rate which approaches a slope of zero round about 1967. This trend indicates that the capacity, of the existing system, to draw more supplies is becoming exhausted or else the supply conditions

have so changed as to require a change in the system of collection.

In support of this statement, supplies as a proportion of the expected output for this same period show a decreasing trend as depicted in the following table :-

TABLE 1
Supplies of Copra - Actual and Expected at
the Peak Periods (1956 - 1967)

1 Peak Year	2 Estimated* Acreage	3 Expected** Copra Output	4 Purchases Ex Nzima	5 $\frac{3}{2}$ %
1956	13,000	6,500	3,994	48
1958/59	14,000	7,000	3,446	49
1963	18,000	9,000	4,037	45
1967	20,000	10,000	4,332	43

Note: Figs. derived from appendices 2, 3, and 4

The actual purchases in all cases fell below 50% of expected output. The remaining 50% must be accounted for by the various limiting factors which will be examined below. What is more disturbing is that the factory may be reaching its limit of supplies in absolute terms.

ii. Limiting Factors

The wet climate which is necessary for the successful cultivation of coconuts can adversely affect the output of copra. During the rainy season, sun drying of copra is impossible and therefore collection is reduced. If the rains continue, as they did in 1968, collection is minimised and, if prolonged, results in the germination of some of the fallen nuts. Wet weather

* Derived from acreage 10 years back

** This has been kept at a conservative level to avoid under estimating Col. 5.

therefore puts the local oil processors, who use fresh copra, at an advantage over the factory, which is enhanced by their proximity to the plantations.

The wet weather in the area also induces quick growth of bush which necessitates regular under brushing about three times a year. The more brushing is neglected the more expensive it is to clear later. Therefore, any situation which gives rise to indifference to the development of the bush, leaves the farm to revert to rank bush, and makes it difficult to recover all the fallen nuts. If small collections result the local oil processor becomes a more attractive proposition. Because she is nearer, buys in small quantities and offers almost the same price as the factory.

Copra production in the Nzima area is in the hands of women who normally do not own farms. These women lease the farms from the men for periods of one year or more during which time collection of nuts goes on till the lease expires. During this period responsibility for the trees becomes divided and there is the tendency to ignore normal husbandry and care for the reasons stated above, and thus reducing the recovery rate. Farms in this poor condition are a common sight, and more so, in the hinterland.

The factory has embarked on a programme of improving these degenerate farms through acceptable arrangements with the owners. The early indications, however, are that the direct costs alone of producing copra from these integrated farms tend to exceed the present producer price of N/67.50 per bag (1 cwt), but a lot more data are required for a firm judgement.

This last point emphasises the question of the cost of different methods of producing copra and needs closer investigation. The factory must initiate investigations to control the undergrowth at a low cost. Since the majority of farms are on small scale with a small turn over the slightest increase in costs cannot easily be absorbed and therefore becomes a deterrent.

iii. Producer Price and Supplies

Another factor which has been frequently alleged to influence supplies of copra is the producer price. As shown in Fig. 1, this opinion has been based on current prices, but real prices do not show the effect purported. When current prices were fairly stable between 1954 and 1962, the volume of supplies fluctuated moderately and when these prices began to rise the fluctuations became more pronounced.

It has been difficult to present the price trend in real terms since the consumer price index was only published for the first time in 1967. The closest approximation that could be obtained was to deflate the current prices by the index of locally produced foodstuffs in Sekondi/Takoradi,⁸ the nearest town to the Nzima area on which such statistics are available over the period. Even though this index is not true to local conditions it at least affords a comparison with food production for the Sekondi/Takoradi market.

8. (i) Central Bureau of Statistics. Index of Market Prices of locally produced foodstuffs. Statistical year book; 1961, 1965-66.

(ii) Economic Survey Report. Central Bureau of Statistics, Accra.

This deflated price indices indicate a downward trend since 1960. Between 1962 to 1965 there appears to be a positive relationship between the deflated price and the quantity of copra purchased, but this is afterwards thrown out of any discernible relationship, due to the increasing influence of other factors which will be examined later.

The general decline in the trend of deflated prices indicates that copra has become less attractive than locally produced foodstuffs, sold on the Takoradi/Sekondi market since 1960. It is difficult to say that this has contributed to the neglect of coconut palms, especially the established ones, in favour of food production.

This point again supports the very urgent need to find ways and means of reducing the cost of producing the copra. At the moment the producer price has been fixed competitively with the price offered by the local oil producers but the latter's costs of production are much lower than that of the mill.

iii. Traditional Oil Producers

The competitive importance of the traditional oil processors is not very clear because there are no records of their volume of business. The best that can be said about them is that they have some competitive advantage as a result of their scale of operation, in which large volumes of raw materials are not required, their low costs, and their proximity to the farms. Therefore, the lower the rate of recovery of the copra the higher the competition between the factory and these processors. In terms of the existing capacity of the plantations it is unlikely that these processors command any sizeable

proportion, since they use fresh instead of dried copra, their needs are served first quite apart from their proximity to the farms. (Fresh copra is used for reasons of profit because it has been shown "..... that 100 fresh nuts yield 16 lbs of oil when hand processed. This number of nuts will produce 38 lbs of copra which afterwards produce 10 lbs of oil when hand processed, but mechanically will yield 22 lbs"⁹. This test however shows how wasteful the hand process is, with a loss of about 360 lbs. of oil for every ton of copra hand processed).

As to the volume of intake by the traditional processors, any opinion is more speculative than factual. However, some incomplete data⁹ available serves as a rough indicator. Data on local oil production in the Nzima area for the stated period are shown in Table 3.

TABLE 3

Small Scale Coconut Oil Production by Volume (1951-54)

	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>
Gals. of Oil	17246	21365	26518	31154
Copra Equiv. ¹⁰ (tons)	164	204	253	297
Copra Exported (tons)	1189	4889	1959	3606
<u>Copra Equiv.</u> % Export	14	4.2	13	8.2

Source: G. C. Dept. of Agric. (1948). The Coconut Industry of the Western Province.

9. Gold Coast Dept. of Agric. (1948). The Coconut Industry of the Western Province.

10. Reginald Child (1964). Coconuts; Trop. Ag. Series, Longmans: 9 lbs. of oil = 1 gal. 16 lbs. of oil = 38 lbs of copra.

The data on the table shows that between 1951 to 1954 the diversion of copra into traditional processing did not exceed 15% of the quantity exported. Furthermore the rate of growth in volume compared with increase in capacity for copra was less.

iv. Purchasing Organisation

The administration and organisation of purchasing copra with its attendant effects on price policy have had a great deal of influence on the movement of supplies especially after the factory was established.

The marketing of copra has been under statutory control at least since 1943 and the responsible authority was completely dependent on the world market price to determine the local producer price. The establishment of the factory created a new market situation with a regional bias and a strong welfare flavour, being a state enterprise. With the price fixing authority far removed from the producer in terms of information and geography, very little rapport was developed between the two bodies. Price fixing was not matched with effective purchasing organisation and therefore there was no firm link between the factory and the producers.

The factory was opened in 1961, preceded by a lot of campaigning to obtain supplies of copra from the producers. Even though the price was lower than that on local markets, the farmers were stimulated to support the factory and supplies shot up in 1962. Supplies at this time were purchased on the open market,

on a cash or credit basis. Problems arose with the credit system and therefore it was directed by the government that the new management appointed in 1962 had to obtain its supplies from the State Cocoa Marketing Board, because it was already in the field of purchasing agriculture produce.

The Board introduced a complicated purchasing system the effects of which are discernable in Fig. 1. The arrangement of the Cocoa Marketing Board was to appoint the Agricultural Produce Marketing Board, which had previously been purchasing copra for direct export, as its representative; the United Ghana Farmers Council Co-operative, already operating in the area as farmers representatives, were in turn made the sole local buying agents of copra, and therefore perforce, for the factory as well.

The UGFCC on receipt of the copra in their stores, would supply the factory and advise their head office in Accra on certification of receipt by the factory. The head office would in turn advise the APMB to release funds to pay the producers, meanwhile, the farmer had to wait for his money. This was responsible for the decline in supplies in 1964, coupled with the fall in deflated prices. (Fig.1).

On the whole the business reputation and integrity of the UGFCC was questionable, and in August, 1964 the factory was authorised to do its own purchasing. However, before it could organise itself for this function the SCMB was made solely responsible for copra by L.I. 433. In the course of reorganising the purchasing of copra, a politically powerful organisation - the Nzima Co-operative Marketing Union - mushroomed and manouvered to become the sole purchasing agent of the SCMB.

Meantime supplies continued to fall and the disaster that followed culminated in the lowest purchase ever made by the SCMB in 1965 when only 586 tons were purchased, and even the factory's input dropped from 3570.50 tons to 2372.50, in a situation which could have been worse had it not been saved by the previous short lease given to the factory to purchase its own supplies.

The Union attributed this unprecedented failure to the low producer price of N\$4.80 per bag, and representation was made to the government to increase the price to N\$8.00 per bag; this request carried with it a high political flavour. The situation was thrown into confusion when the African Development and Export Co. was authorised to purchase copra for export, and offered N\$6.00 per bag. The Company was dismissed from the area shortly afterwards, but this precedent and the forceful argument of this privileged Union won a revision upward in price to N\$7.50 per bag. But the decline in supplies which had begun in 1963 continued to 1966 despite the increase in the real price. A government inquiry in 1965 found the Union incompetent, but this rather strengthened their position. The situation therefore exploded into a feud between the factory and the Union executive and naturally the farmers became very confused.

The coup in 1966 with its aftermath of indecision about the fate of the factory made the situation even worse. Active purchasing was resumed in 1967 by the SCMB, while the factory continued to grind to a halt. Finally in March 1968 the factory was empowered to purchase its copra direct from producers, but

from this position of weakness, it required time to organise itself. Worse still, the SCMB refused to releale its stock of copra to the factory unless the factory liquidated its previous debts. The factory's input consequently fell drastically to 630.10 tons in 1968. The political climate of the time also affected SCMB's purchases adversely, since they dropped from 4332 tons in 1967 to 1,326 tons in 1968.

These events have been treated in some detail to highlight the importance of the organisation of purchases to the factory. The history of purchasing is characterised by recurring changes in the control of the organisation with no permanent system being sustained. These frequent changes with no visible progress naturally reduced the confidence of the producers. In a single crop economy where the factory is the biggest purchaser, a special relationship for the mutual benefit of both parties is of vital importance. This rapport was completely lacking because the factory did not possess the market power that compared with its volume of business. Even though it is the largest purchaser and is in close physical proximity to the producers, it has never been influential in the price fixing decisions. This function has rather been entrusted to a body which had little or no link with the local copra activities.

Consequently, the factory naturally did not feel impelled to get involved in the chain of activities preceding processing, neither was there the need to establish a liason between the producer and the factory. Even though the factory has been in existence for comparatively short time it is very obvious that it has not made any significant impact on the coconut industry in the Nzima area.

CONCLUSION

The Nzima area, especially along the littoral and the immediate hinterland, undoubtedly supports a vast expanse of coconut plantations which is impressive and reassuring to the casual observer. But in physical terms related to the capacity of the mill, it is the final supply of copra that is crucial. With a potential crushing capacity for 15,000 tons of copra a year, out of which 9,600 tons of it is in operation, it is very doubtful that the estimated 25,000 - 30,000 acres can produce enough copra to support the factory at full capacity, even if all supplies were used in this way.

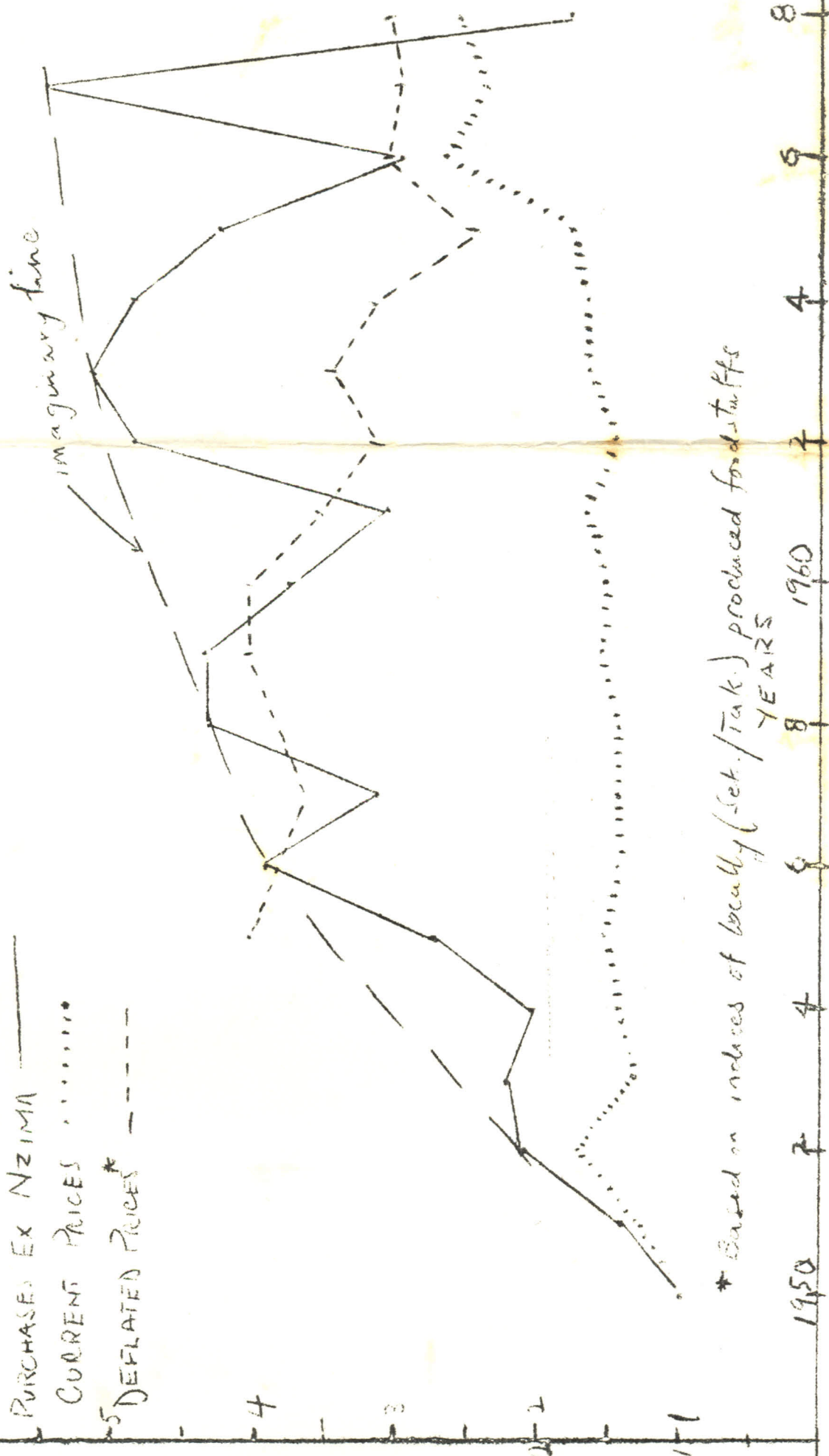
There are a number of factors which tend to reduce the potential production of copra. Prices are undoubtedly important but in the situation that existed they were completely masked by other factors over the short period under consideration. The weather predisposes the farms to excessive vegetative growth and therefore improper control restricts the collection of the fallen nuts. The system of collection particularly by non-farmers contributes to this degeneration of farms.

The most significant factor so far has been the control and administration of purchases. The absence of a permanent and effective organisation resulted in a lot of uncertainty which failed to inspire confidence in the objectives of the factory. Since the factory's role in the producer-buyer relationship has been subdued, it has failed to make the desired impact on the industry as a whole.

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FIG 1

INDICES OF CURRENT, & DEFLATED PRODUCER PRICES, AND VOLUME PURCHASES EX NZIMIA
(1950-1968)



* Based on indices of locally (Set./Tak.) produced foodstuffs

1950 7 4 9 8 1960 7 4 9 8

APPENDIX I

ANNUAL COPRA PURCHASES,
SALES & PRICE (SCMB) AND
FACTORY THROUGHPUT(1960-1968)

PARTICULARS	1961	1962	1963	1964	1965	1966	1967	1968
1. Mill Capacity (tons)	4,290	4,800	4,800	4,800	4,800	4,800	9,600	9,600
2. Factory Throughput (tons)	-	2765.35	3982.35	3570.25	3372.50	2900.05	2052.35	630.10
3. Capacity Utilised (%)		57.6	83.0	74.4	70.3	60.4	21.4	6.6
4. Producer price (N¢ per ton)		86.0	95.5	97.5	104.25	158.0	136.0	152.33
5. SCMB Purchases (tons)	2,419	3,840	4,037	3,822	586	2,300	2,300	1,326
6. SCMB Sales (tons)	549	2,441	3,681	3,683	926	3,255	3,140	1,126
7. SCMB Exports	1,647	468	2,977	-	-	-	1,800	-

Sources : 1. Factory Records
2. SCMB Annual Reports

APPENDIX 2

COCONUT SEEDLINGS ISSUED TO FARMERS IN THE
WESTERN REGION AND ESTIMATED ACREAGES

<u>Calendar Year</u>	<u>No. of Seedlings</u>	<u>Estimated Acreage *</u>	<u>Cumulative Acreage</u>
1946	42297	704	10704
1947	54018	900	11604
1948	60141	1002	12606
1949	33897	564	13170
1950	25995	433	13603
1951	29859	499	14102
1952	43457	724	14826
1953	43829	730	15556
1954	33906	565	16121
1955	40799	695	16816
1956	55862	931	17747
1957	48466	809	18556
1958	75092	1251	19807
1959	13919	232	20039
1960	53034	884	20923
	Total	10923 acres	
	Average	728 acres	

Source : Report on Department of Agriculture (ACCRA): 1944-45
1948-49, 1950-57, 1961-62.

*Based on 60 palms per acre.

APPENDIX 3

EXPORTS, PURCHASES OF COPRA & PRODUCER PRICE (1943-1968)

1	2	3	4	5	6	7	
Year	Exports (tons)	Current Producer Price(N¢)	Deflated Producer Price(N¢)	Ex Nzima Purchases (tons)	Total Purchases (tons)	Indices of Col.5 1950=1.0	Indices of Col.5 1950=1.0
1943	1023	20.00	...	...	
1944	957	23.50	...	...	
1945	759	...	...	...
1946	397	...	...	...
1947	309	35.00	...	...	
1948	350	48.00	...	...	
1950	800	60.00	...	776	776	1.0	1.0
1951	1189	80.00	...	1156	1156	1.4	1.4
1952	4889	100.00	...	1596	4882	2.1	6.1
1953	1959	80.00	...	1794	2309	2.2	3.1
1954	3606	88.00	...	1599	2910	2.0	3.8
1955	3028	90.00	112.50	2119	3330	2.7	4.2
1956	4722	88.00	106.80	3094	4627	3.9	5.8
1957	3168	88.00	100.00	2507	4476	3.1	5.6
1958	3069	84.00	106.10	3446	3489	4.3	4.4
1959	3713	89.50	110.80	3399	3459	4.3	4.3
1960	3156	88.67	112.00	2949	2898	3.7	3.6
1961	2144	94.00	97.10	2419	2419	3.0	3.0
1962	468	86.00	87.40	3840	3840	4.8	4.8
1963	2977	95.50	95.40	4037	4037	5.1	5.1
1964	-	97.50	87.23	3822	3822	4.8	4.8
1965	-	104.25	66.70	3372	586	4.2	0.7
1966	-	158.00	85.45	2300	2300	2.9	2.9
1967	1800	136.00	81.90	4332	4332	5.4	5.4
1968	-	152.33	84.90	1326	1326	1.7	1.7

APPENDIX 4

PURCHASES OF COPRA BY THE GHANA AGRICULTURAL DEVELOPMENT CORPORATION FROM NZIMA AREA
AND THE REST OF THE COUNTRY (tons)

Source: Dept. of Agric. (1961-62) Miscellaneous Information

Centre	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
New Town						117	265	522	492	548	170
Half Assini	324	658	1239	1391	868	775	885	592	733	898	873
Bonyere	200	111	16	9	1	-	9	-	-	746	544
Benyin	7	7	5	6	-	-	274	42	342	412	769
Atuabo	179	252	267	289	311	315	494	255	419	298	449
Esiama	64	128	69	54	44	19	-	-	-	-	-
Kikan	-	-	-	-	-	114	203	24	111	127	144
Eikwa	-	-	-	-	-	-	-	-	-	7	-
Axin	-	-	-	-	-	3	-	5	7	-	-
Awiebo	-	-	-	-	-	-	-	-	-	1	-
Manjia	-	-	-	45	375	776	964	1067	1342	362	-
Total for Nzima Area	774	1156	1596	1794	1599	2119	3094	2507	3446	3399	2949
Princes								2			
Sekondi	2	1		50		20	-	10	14		
Aflao						14	190	46	-	-	-
Denu			3286	110	241	326	294	139	-	55	51
Anloga								72	1	-	-
Keta/Vui				101	247	51	80	160			
Keta				134	140	6	403	148	28		
Agbosome				120	683	442	364	340	28		
Tajamu						51	199	48			
Cape Coast							3				
Total Rest of Country	2	1	3826	576	1311	910	1533	965	71	55	51

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