



GOLD COAST COLONY.

DESPATCH

RELATING TO THE

Oil Palm Industry

WITH PARTICULAR REFERENCE TO A

Subsidy Scheme for Palm Oil  
Mills.



---

*Ordered by His Excellency the Governor to be Printed.*

---

GOLD COAST :

*Printed by the Government Printer at the Government Printing Office, Accra.  
To be purchased from the Government Printing Office (Publications Branch),  
Accra, Gold Coast Colony, and from the Crown Agents for the Colonies,  
4, Millbank, London, S.W. 1.*

1930.

## I.

*From the Governor to the Secretary of State.*

GOVERNMENT HOUSE,

ACCRA,

6th September, 1929.

No. 665.

MY LORD,

I have the honour to address Your Lordship on the subject of the Oil Palm industry in this Colony and to seek your approval of a scheme whereunder the United Africa Company propose, with the help of a Government subsidy, to make an experiment in developing that industry on modern lines.

2. The indigenous oil palm occurs plentifully throughout the whole area of country lying between the cacao or forest zone proper and the dry coastal belt. I enclose a map for reference, to which additions have been made showing the location of the various places mentioned in this despatch. The exports of palm kernels and palm oil have always fluctuated considerably, but there has been a marked decline in the trade during the last quarter of a century owing to the success of the more remunerative cacao industry. The potentialities of the trade are nevertheless considerable and are indicated by the following figures:—

Enclosure I  
(See map  
facing page 8)

Periods.	Exports per year.		Value per year of exports.		
	Tons of kernels.	Tons of palm oil.	Kernels. £	Palm oil. £	Kernels and palm oil. £
1904-1908 (average)	9,762	8,079	85,137	118,224	203,361
1909-1913 (average)	12,681	6,374	167,573	114,364	281,937
1914-1918 (average)	5,851	1,718	90,583	42,035	132,618
1919-1923 (average)	5,224	1,764	122,055	63,949	186,004
1924-1928 (average)	6,716	1,223	112,486	35,081	147,567
1927 (actual) ..	6,545	1,090	107,079	30,227	137,306
1928 (actual) ..	6,214	502	103,906	13,515	117,421

3. In my address to the Legislative Council in March last, I made the following reference to the subject:—

“ During the past year much consideration has been given to the question of devising some means of stimulating the declining oil-palm industry of the Colony. This decline is, of course, primarily due to the increase of the cultivated area of the more profitable cacao crop; the supply of labour will not generally admit of the co-existence of two great local industries. There are, however, certain areas, e.g. in the Krobo plantations and in the oil palm belt north of Appam, where the energies of the population are not entirely absorbed by cacao farming, and I believe that attention can profitably be given, either by private enterprise or by Government, to developing the oil palm industry at those places.”

“ In these days of competition from the East no development of this industry would be worth undertaking which did not include the provision of power mills for the extraction of the oil. There is no intention, however, of considering the erection of large factories, as it appears in the highest degree improbable that a highly capitalised factory could be supported entirely on fruit purchased from farmers and there are obvious objections to establishing in the Gold Coast plantations on the eastern model. The Niger Company have, however, devised a small type of unit factory and there is some reason to believe that one or more units of this kind might well prove profitable in the areas I have mentioned. The Niger Company have asked that the Government should assist them in making an experiment by granting a small subsidy in the early years of the enterprise, and this request is receiving careful consideration. You are no doubt aware that the Nigerian Government offers such subsidies.”

4. An oil palm factory controlled by the Niger Company was established at Butre in the Western Province some 18 years ago, but it was not until 1928 that the enterprise was able to show any profits. Though it was proved that a man could earn from £6 to £9 a month by cutting fruit for the factory as against £2 a month by making oil himself (*vide* page 53 of Sir Gordon Guggisberg's final address to the Legislative Council) the factory until 1928 was never able to secure the minimum quantity of fruit necessary to meet the expenses of the factory's upkeep. Writing as late as September, 1927, Mr. F. M. Dyke (Technical Officer of the Niger Company) recorded that “even now more than 80 per cent of the fruit delivered to the mill is cropped by the company's employees working on the company's leased palm areas.” These difficulties have been gradually overcome, partly in consequence of active propaganda work on the part of Government Officers, and it is hoped that an adequate supply of fruit to the factory is now ensured. I have been informed by the Manager that in 1928 the mill dealt with 4,350 tons of fruit and made a profit of £1,000. I understand that about a third of the oil produced is sold locally for food purposes in the Colony and Ashanti.

5. The request of the Niger Company to which I referred in my address to the Legislative Council is the outcome of considerable correspondence that I had with Mr. Hyslop Bell in 1927-28. At my suggestion Mr. Dyke made an inspection of the Krobo oil palm areas in April, 1928. (It is calculated that there are in that neighbourhood about 75 square miles of palm-bearing country, and that in many parts of it groves of pure oil palms exist and reach to a considerable extent). Mr. Dyke's report on that inspection led to an interview between Mr. Bell, Mr. Dyke, Sir Edgar Sanders and myself at Lever House on October 9th, 1928. I enclose a copy of a letter which Mr. Bell addressed to me after the interview, making formal application for sites to be granted to the Niger Company for two oil mills, and stating that, provided satisfactory arrangements could be made with the Government with regard to the matters discussed at the interview, including a fair subsidy, the Niger Company would proceed to erect the mills accordingly.

6. In West Africa, where the cultivation of the oil palm is in the hands of the native farmers and where the factors governing the ownership of land form serious obstacles to the introduction of the plantation system which was proved so successful in the East Indies and the Belgian Congo, the main difficulty facing an oil mill is the securing, in the early years of the enterprise, of adequate supplies of fruit from the native grower at reasonable prices. Your Lordship will be aware that a scheme was drawn up by the Nigerian Government in 1928 with the object of encouraging the economic development of the palm oil industry, and that the basis of this scheme was a subsidy payable by the Government to offset any loss sustained by a factory owing to the falling short of fruit supplies. I enclose a copy of the Nigerian scheme for purposes of reference.

Enclosure II  
(See page 9)

Enclosure III  
(See page 9)

7. On behalf of the Niger Company Mr. Dyke examined both the Nigerian subsidy scheme and the possibilities of a subsidy scheme to assist the establishment of palm oil factories in the Gold Coast. He criticised the Nigerian scheme on the grounds (i) that the capacity of the factory stipulated for by the Nigerian Government is larger than that found by the company's experience to be the most suitable, (ii) that the maximum benefit of the subsidy, which would be of most value to a pioneer company in the early days when the organisation was being built up and fruit supplies would probably be low, is only obtainable when the mill has achieved at least 50 per cent of its rated output, and (iii) that the subsidy varies according to the monthly price of the products, a procedure which he considered unnecessarily complicated if not inequitable. I annex a copy of Mr. Dyke's criticism. The principles of the Nigerian scheme are otherwise accepted by the Niger Company, and it has served as a basis for their proposals for the subsidising of two factories in the Krobo area.

Enclosure IV  
(See page 12)

8. The original proposals of the company were carefully examined by the Director of Agriculture, Mr. Auchinleck, and his criticisms and suggestions were considered by Mr. Snelling, the Vice-Chairman of the company, who paid a visit to the Gold Coast in February last. I then held a conference with Mr. Snelling, the Director of Agriculture, and the Commissioner of the Eastern Province, when further written proposals by the company were considered in the light of Mr. Auchinleck's suggestions. The conclusions at which I arrived after taking the final advice of the Director of Agriculture were referred to the Executive Council and the result was the acceptance by this Government, subject to your Lordship's approval, of the General Scheme set out in Enclosure VIII, and more fully explained in the following paragraphs. I also enclose particulars of the general approved scheme as applied to the two factories which it is proposed by the Niger Company to erect in the Krobo area.

Enclosure V  
(See page 13)  
Enclosure VI  
(See page 17)

Enclosure VII  
(See page 22)

Enclosure VIII  
(See page 26)

Enclosure IX  
(See page 27)

I wish to make it clear that the principles in the "General Scheme" are of general application and that this Government would be prepared to consider applications for assistance thereunder from any reputable company or individual of the requisite financial standing.

9. The main principle underlying the proposed subsidy is that Government proposes to make good to the factory-owner any loss sustained on account of an insufficient supply of fruit: the subsidy is intended to recompense the factory-owner for expenses incurred in order to handle fruit which in the end was not available. The problem therefore was to assess these expenses at figures acceptable both to Government and to the factory-owner and to evaluate the appropriate subsidies for varying quantities of fruit handled.

10. Each of the factories which the Niger Company proposes to erect in the Krobo area has an annual rated "capacity" of 3,000 tons of fruit, making 6,000 tons per annum for the two factories. The annual subsidy proposed in respect of the two factories is as follows:—(i) if no fruit be received by the factory, the subsidy will be £9,000, which is the maximum subsidy payable, (ii) if 5,000 or more tons of fruit be handled, there will be no subsidy and (iii) for every ton less than 5,000 tons the factory will receive a subsidy of  $\frac{9,000}{5,000}$  or £1 16s. per ton. If therefore the factories obtain only 4,000 tons of fruit the subsidy will be £1 16s. multiplied by the amount by which 4,000 falls short of 5,000: i.e. £1 16s. multiplied by 1,000, or £1,800. Appendix B to Enclosure VI contains a table showing the subsidies payable in respect of the two factories according to the number of tons of fruit handled per annum.

(See page 21)

11. From a financial standpoint Government is obviously concerned more with the amount of the subsidy than with the reasons for employing any particular subsidy scale proposed. The bases on which the proposals rest however present features of unusual interest, and are, I submit, sound in theory and equitable in practice. Two considerations only are involved in fixing the subsidy scale.

(a) In the first place a factory requires a certain quantity of raw material to ensure an output sufficient to cover expenses. In the case of the Krobo mills the amount of fruit necessary to cover expenses is taken as 5,000 tons annually or five-sixths of the capacity of the factories. Mr. Dyke estimated that it would be slightly less than this, Mr. Auchinleck averred that it should be much less, and Mr. Snelling maintained that it would be slightly greater. The figure of 5,000 tons however was accepted for reasons given in paragraph 16 of this despatch. In this connection I may point out that under the Nigerian scheme a subsidy is payable up to the full capacity of the factory. But it is agreed that even on a conservative estimate with a supply of five-sixths of the capacity the factories should cover expenses: consequently a subsidy would not seem to be justifiable beyond that point.

(b) Secondly, the running expenses of a factory can be divided into two parts, viz., those which are dependent on the volume of fruit handled, such as price of fruit, and those which are more independent of the volume of fruit handled. The latter, i.e. the fixed or overhead charges, comprise depreciation of buildings and machinery, maintenance charges and interest on capital. In the case of the Krobo mills these "fixed" charges are calculated at £9,000 (see Schedule 'A' to Enclosure VII) and it follows that in the event of the factories receiving no fruit at all they will be faced with a loss of £9,000 which should therefore theoretically be the maximum subsidy. (It is obvious however that several of the larger items of expenditure in "Schedule 'A' to Enclosure VII" would not be incurred if in any particular year the factories had to close down on account of a total absence of fruit: in other words the payment of the maximum subsidy could never occur in actual practice.)

(See page 23)

Having fixed the two points in the subsidy scale at which (a) the factory just covers expenses and so requires no subsidy at all, and at which (b) the factory incurs the greatest loss and requires the maximum subsidy, it is clear that for intermediate points the subsidy should be in proportion. In the case of the Krobo mills a subsidy of £9,000 is payable when no fruit is supplied, but with larger and larger supplies of fruit the subsidy payable becomes progressively less until when the supplies reach 5,000 tons no subsidy is payable.

12. Your Lordship will observe that no reference has been made in the subsidy scale either to the prices of palm oil and palm kernels or to the price to be paid for fruit, both of which might be expected to have a considerable effect on profits should fluctuations occur. To allow for an increase in the prices of palm oil and palm kernels the company have agreed to the limitation that the subsidy will not exceed the amount of loss made by the factory in any year, or series of years. The price to be paid for fruit has been fixed at 45s. a ton by agreement between the Honourable Sir Emmanuel Mate Kole, the Konor of Manya Krobo (together with his sub-chiefs and people) and the company. In this connection the company suggested an additional subsidy to cover a possible rise in the produce price above 50s. per ton, a proposal to which I was unable to agree for two reasons, firstly on account of the price of 45s. per ton to which the chiefs and people had agreed and secondly on account of the generous terms of the main subsidy. I have made this point clear to Sir R. Waley Cohen (who on behalf of the United Africa Company has confirmed the negotiations with the Niger Company) and I gather from the company's local representative that the point is not likely to be pressed.

13. The company have also agreed to the inclusion of clauses in the agreement to be made between them and the Government to the effect, first, that the agreement will be for five years, renewable for a further period of five years if the company shall have made faithful compliance with the terms and conditions of the agreement, secondly,

that Government reserves the right of reconsidering the whole position and of cancelling the contract if satisfied of indolence or fraud, and thirdly, that the company will be required to keep such books of accounts or records as required by the Director of Agriculture, who will be empowered to enter the factory at all reasonable times for the purpose of inspecting the same and any books relating to the management and accounts of the factory.

14. As a result of the meeting mentioned in paragraph 8, Mr. Snelling was so far content that he instructed Mr. Taylor, of Butre factory, to make a further examination of the Krobo oil palm areas as soon as possible. I enclose copies of Mr. Taylor's interim and final reports, which give a good idea of the prospects for the Krobo mills. Various preliminary difficulties, mentioned in these reports, occasioned some delay but have since, I am glad to say, been overcome. The company has made satisfactory agreements with Sir Emmanuel Mate Kole in regard to the rents to be paid for the factory and bungalow sites and the bonus to be paid to him and his sub-chiefs. With regard to the question of transport the road construction necessary to render the mills accessible to the main roads will present little difficulty, the State Council of Manya Krobo having now agreed to construct the roads stipulated for by the company, provided that Government assists in the usual way in respect of bridges and culverts.

Enclosure X  
(See page 28)  
Enclosure XI  
(See page 30)  
Sketch plan  
(facing page 36)

15. The way therefore is now clear for the experiment to be put into operation. Your Lordship will note that Government proposes to shoulder the responsibility in regard to the supply of an adequate quantity of fruit, but the company is undertaking the risk of the capital cost of the enterprise. Sir Robert Waley Cohen is prepared to proceed immediately with arrangements for the erection of *one* factory, so that the United Africa Company may "utilise this experience before going further with the second or any subsequent mills which might be justified." The maximum liability for Government in respect of this one factory will be £4,500 annually, but I would point out that Mr. Taylor, who inspected the Krobo plantations and concluded negotiations with the chief (Sir Emmanuel Mate Kole) for the supply of fruit, is confident that this factory would receive not less than 1,500 tons of fruit in the first full year, in which case the subsidy payable by Government would be not more than £1,800 (£1 16s. multiplied by 1,000 (2,500-1,500)).

Enclosure XII  
(See page 37)

The following extracts from Mr. Taylor's report (to Mr. Snelling) dated 18th March, 1929, give an encouraging picture of the area. Referring to the first mill (to be sited at Bukunor) Mr. Taylor writes:—

"The area from which this mill would collect would be roughly an oblong 4 miles wide by 9 miles long. Of the 36 contained square miles fully 20 are good palm land and if allowing only 500 acres of palms to each square mile this gives 10,000 acres easily able to supply 5,000 tons of fruit. I feel that this estimate is very much on the conservative side and, given the requisite population, I feel that the area which can be reached would be capable of giving well over 6,000 tons of fruit."

Further on in the same report Mr. Taylor writes:—

"The area available for fruit collection for No. 2 mill is approximately an oblong 6 miles by 7 miles. The south side of the oblong would run from Dawa Mate Kole eastward to the Pawmpawm and from Apimsu northward to Kwabia. Allowing only 50 per cent of the area as good palm land and taking 500 acres per square mile allows 10,500 acres of supply land which should yield 5,200 tons of fruit. As the Akokoma area, which from the Pawmpawm covers about 6 to 9 square miles of the best land I have seen, I again think that my estimate is very conservative."

I can see no reason why Mr. Taylor should adopt an excessively optimistic attitude. He is a man of exceptional experience in these matters, enjoys the confidence of the chiefs and especially of the Konor of Manya Krobo, and is likely, I understand, to be selected as the Manager of the proposed venture. He knows that Sir Emmanuel Mate Kole is a chief who has a very unusual influence over his people, that he is an enthusiastic farmer himself and that his people are some of the best farmers in the country.

I believe therefore that there is not much danger of Government having to pay any subsidy for more than a short period.

16. The subsidy proposed is admittedly a liberal one, but it is less than that originally suggested by the company, and is not in itself very large even in the extremely unlikely event of the Government having to pay the maximum rate. As the Director of Agriculture observes, while it is improbable that a large palm oil industry can be established coincidentally with our present cacao industry, some arrangement should be made by which the Government and public may learn how to handle oil palm produce efficiently and profitably. It is within the bounds of possibility that our oil palm resources may have to be tapped in the future, and at present we have no reliable information as to the method likely to be successful under local conditions of labour and economics. Although the proposed Scheme is experimental its justification lies in the fact that the problem is one of general importance to the country, and if the conduct of the experiment is to be entrusted to private enterprise—which in my opinion is a preferable course to its conduct by Government—the assistance afforded by the Government should be reasonably generous in order to ensure a full and fair trial.

17. If Your Lordship approves of the principle of the Scheme I should be grateful if I may be informed by telegram in order that an early opportunity may be taken of laying the proposals before the Legislative Council. Sir Robert Waley Cohen is anxious to begin work early and this is also desirable from the Government point of view, lest the interest of the Manya Krobo people in the scheme should droop.

18. I would add that I have considered whether, seeing that the African and Eastern Trade Corporation and the Niger Company are now unified, it would be feasible to suggest that Mr. Batty's offer of £8,000, referred to in Mr. Ormsby-Gore's despatch of the 7th February, 1928, could be made use of in connection with the present proposals. I am afraid, however, that it could not as it referred to the establishment by the Government of palm oil *plantations*.

I have, etc.,

A. R. SLATER,

*Governor.*

THE RIGHT HONOURABLE  
LORD PASSFIELD, P.C.,  
ETC., ETC., ETC.

Enclosure 1.  
Map showing Oil Palm areas.

DEPARTMENT OF AGRICULTURE  
DISTRIBUTION OF PRINCIPAL COMMERCIAL CROPS 1928.



*Enclosure II in Gold Coast No. 665 of 6th September, 1929.*

*Copy of a letter from The Niger Company Limited to the Governor.*

*29th October, 1928.*

His Excellency

SIR A. RANSFORD SLATER, K.C.M.G., C.B.E.,  
*The Governor of the Gold Coast.*

SIR,

On behalf of the Niger Company Limited I hereby make formal application for sites to be granted to the company for two Oil mills of about one ton per hour capacity each in the Krobo country and, provided satisfactory arrangements can be made with the Government with regard to the matters discussed between yourself and the Chairman of the Company, including a fair subsidy, the Niger Company Limited, or one of its subsidiary companies, will proceed to erect the mills accordingly.

I am, etc.,

E. A. ENFIELD,  
*Secretary.*

*Enclosure III.*

*From the "Nigeria Gazette"—10th May, 1928.*

PROPOSED SCHEME FOR FINANCIAL ASSISTANCE  
ON THE PART OF THE NIGERIAN GOVERNMENT  
TO PALM OIL FACTORIES.

1. With the object of encouraging the economic development of the Palm Oil Industry, the Government of Nigeria is prepared to offer financial assistance to approved persons or firms who establish factories on approved sites for the purpose of extracting palm oil and kernels from palm fruit purchased from local producers.

2. The Government invite forthwith applications from persons or firms who wish to take advantage of this offer and to establish factories in accordance with this scheme.

3. The Government in their unfettered discretion reserve the right to select from such persons or firms making application, as in paragraph 2 hereof mentioned, those persons or firms to whom it is deemed expedient that financial assistance for the establishment of factories shall be granted. Financial assistance can only be extended to a limited total number of factories.

4. It is proposed that regulations, to be made under the Agriculture Ordinance, 1926, shall provide for the compulsory licensing of any factory subsequently established for the extraction of palm oil or kernels irrespective of the extension of financial assistance by the Government to such factory.

5. Upon the execution of such an agreement for financial assistance in accordance with this scheme, between the Government and an applicant, the Government undertakes that subsequent to such execution no licence will be granted for the establishment of a factory extracting palm oil or

palm kernels from purchased palm fruit within twenty miles from the site approved for the establishment of such applicant's factory during a period of ten years from the date on which such agreement as aforesaid is deemed to commence. It is not proposed totally to prohibit the use of machinery for the extraction of palm oil or palm kernels within twenty miles from any assisted factory, but the use of machinery in such places will only be permitted if the Government is fully satisfied that it is intended for the extraction of palm oil or palm kernels produced or collected by the owner of such machinery from his own trees. Should a licence be granted for such machinery it would be withdrawn, if the machinery were employed for the extraction of palm oil or palm kernels from other palm fruit.

6. A clause will be inserted in every agreement made in accordance with this scheme prohibiting the owner of the factory from purchasing fruit within ten miles of another factory with which a similar agreement has been concluded.

7. Before entering into an agreement granting financial assistance the Government will require from an applicant for such assistance full particulars of the plant, buildings and machinery which it is proposed to install for the extraction of palm oil and palm kernels. The Government will not enter into such agreement unless the proposals for the installation of such plant, buildings and machinery are considered to be adequate and are approved by the Director of Agriculture. Any agreement into which the Government shall enter shall only be deemed to be operative and binding if and when plant, buildings and machinery have been erected in accordance with such proposals as approved by the Director of Agriculture. In the event of unreasonable delay in the erection of such plant, buildings and machinery as aforesaid the agreement will be deemed to be cancelled.

8. It is intended that the scheme for financial assistance to a factory shall apply only in respect of factories equipped with machinery calculated to extract palm oil and palm kernels from twenty tons of fruit in ten hours, or in respect of a group of factories located in the same vicinity to the satisfaction of the Director of Agriculture, the combined machinery of which is calculated to be capable of treating twenty tons of fruit in ten hours as aforesaid.

9. An agreement will only be entered into by the Government on condition that the staff for the management and maintenance of such factory or group of factories is approved by the Director of Agriculture. An agreement entered into by the Government shall only be deemed to be in operation if and so long as such staff as approved by the Director of Agriculture is maintained. It is considered that such staff should include an Engineer, and a Manager, both of whom must be experienced and qualified for their duties, and competent reliefs for such employees when absent from their duties.

10. An agreement for financial assistance concluded by the Government with an applicant will be for a period of five years, but it is the intention of the Government to grant a renewal of such agreement on the same terms for a further period of five years if such owner shall have made faithful compliance with the terms and conditions of such agreement.

11. By the acceptance from the Government of financial assistance in pursuance of this scheme, an applicant undertakes honourably and genuinely to concentrate all his efforts on making the factory a commercial and economic success in the same manner as if the operation and working of the factory were an ordinary commercial venture and involved no financial responsibility on the part of the Government.

12. Any agreement entered into by the Government for financial assistance shall make provision for an annual payment by the Government to the owner of the factory. The amount of this payment will depend on

the rated annual capacity of the factory, the actual oil production of the factory in the year, and the average of the local price of oil on the first working day of each month in the year. The rated annual capacity of a factory shall, for the purpose of the agreement, be deemed to be 280 times the amount of oil extracted during an actual test of ten hours' working, conducted under the observation and to the satisfaction of an officer appointed by the Director of Agriculture for that purpose, expressed to the nearest 100 tons above the quantity so calculated. The amount by which the actual production of oil during a year's working falls short of the rated annual capacity is hereinafter referred to as the "deficiency". The amount of the annual payment, which is to be paid by the Government, will be calculated in the following manner:—If the factory produces a quantity of oil which is equal to or greater than one half of its annual rated capacity, the payment will consist of thirty-two per cent of the local value of the Deficiency. If the factory produces a quantity of oil which is less than one-half of its annual rated capacity, the payment will consist of twenty per cent of the local value of the quantity of oil actually produced by the factory during the year plus six per cent of the local value of the quantity of oil which constitutes the annual rated capacity of the factory.

13. For the purpose of the calculations hereinbefore contained and hereinafter mentioned the local price of palm oil will be calculated from the Liverpool price of "Lagos quality" palm oil at the beginning of each month by deducting a sum representing the cost of transport from factory to Liverpool and the usual caskage and general marketing expenses. The fixation of such local price shall be determined by the Director of Agriculture provided always that if the owner of the factory is dissatisfied with the decision of the Director of Agriculture fixing such local price the matter shall be referred to arbitration as hereunder provided.

14. Any agreement entered into by the Government for financial assistance will make provision for the payment of a bonus by the Government to the owner of the factory at the rate of  $6\frac{1}{4}$  per cent of the value of the amount by which the actual production of oil in the year exceeds the annual rated capacity of such factory at the local price of oil or £1 10s. per each ton of the excess of oil, whichever is least.

15. The owner of a factory granted financial assistance in accordance with this scheme may be required to keep such books of accounts and records as the Director of Agriculture shall from time to time direct.

16. Any agreement made in accordance with this scheme shall contain a clause permitting the Director of Agriculture or any officer duly authorised by him to enter any factory at all reasonable times for the purpose of inspecting the same and any books relating to the management and accounts of the factory.

17. Any agreement made in accordance with this scheme shall make provision for the submission to arbitration under the Arbitration Ordinance of any question arising out of or with respect to the interpretation of the agreement or any clause therein contained.

#### EXPLANATION OF PALM OIL FACTORY ASSISTANCE SCHEME.

1. The particulars of the palm oil factory assistance scheme are given above.

2. The object of this scheme is to safeguard factory owners against loss. At the same time it is believed that the scale of subsidies has been so graduated as to discourage very low production and to encourage a factory to increase its output.

3. The amount of subsidy for a factory rated at 1,000 tons annual capacity will be found (by applying the method of calculation given in paragraph 12 of the scheme) to be as follows:—

AMOUNT OF SUBSIDY.

Oil produced, Tons.	Local price of oil, £25 per ton.	Local price of oil, £22 per ton.
	£	£
1,000	—	—
900	800	720
800	1,600	1,440
700	2,400	2,160
600	3,200	2,880
500	4,000	3,600
400	3,500	3,150
300	3,000	2,700
200	2,500	2,250
100	2,000	1,800
0	1,500	1,350

*Enclosure IV.*

*Extracts from letters by Mr. F. M. Dyke to Mr. E. Hyslop Bell.*

CRITICISMS OF THE NIGERIAN SCHEME BY THE NIGER COMPANY, LIMITED.

11th October, 1928.

(1) The stipulation that the mill should have a capacity of at least 20 tons of fruit treated per 10 hours, prevents the Niger Company from receiving consideration under the scheme unless it abandons its small mill policy for developing natural palm forests. The scheme does indeed stipulate that a group of mills would be acceptable as an alternative, but the conditions in Nigeria are far more difficult even than those obtaining in the Krobo country, in that there is nowhere, so far as I have seen, the tribal organisation and loyalty to a recognised head, such as exists in the Krobo territory. Under these conditions, the Niger Company obviously would not risk the erection of two or three mills before it had proved that one would be successful.

(2) The scheme has been devised to give a carefully graded subsidy based on the output from the mill. Those responsible for the scheme have been afraid, however, that conditions might arise in which the mill owner would be satisfied with minimum effort, provided the subsidy enabled him to pay expenses, and the scheme is devised therefore so that maximum benefit is only obtained when the mill has achieved at least 50 per cent of its rated output. The Niger Company has endeavoured to point out that the subsidy would be of value chiefly in the early days, when the organisation was being built up and when fruit supplies would probably be minimum. The Niger Company feels moreover that if a subsidy scheme is introduced at all, the Government should be willing to recognise that the firms involved must be credited with the intention of doing their best to make success, if only from the fact that the Company would be the only member in the arrangements (involving farmers, mill owners and the Government), who would stand to lose permanently by a failure of the mill scheme, in that their capital expenditure would be wasted.

18th October, 1928.

(3) The amount of the subsidy depends on the local price of oil determined as described in the Scheme. The establishing of this local price is carried out each month, but it is not clear as to how these monthly figures could be utilised in deciding on a subsidy, which is to be evaluated on the yearly output of oil. The obvious method would be to determine a weighted average, taking into account the amount of oil produced in any given month, and the local value of the oil so produced in that month. This however, introduces another complication, in that the oil made in any given month would not be marketed for probably at least one or two months after manufacture, during which period the price of oil might very easily vary either up or down over a considerable range. This therefore would prejudice or favour the interests of the Company.

It would be possible to modify the Nigerian Government's Scheme to meet some of the criticisms given above, but I cannot suggest any simple alteration which would make the Scheme much less cumbersome.

*Enclosure V.*

*Extract from a letter by Mr. F. M. Dyke to Mr. E. Hyslop Bell.*

NIGER COMPANY'S ORIGINAL SUBSIDY SCHEME.

MR. DYKE'S SCHEME.

October 18th, 1928.

E. HYSLOP BELL, ESQ.,  
*Chairman of*  
*The Niger Company Ltd.,*  
*Lever House, E.C. 4.*

DEAR MR. BELL,

\* \* \*

I should like therefore to place before you a Scheme which approaches the whole question from an entirely different point of view. I have in mind as an example, the erection of two mills in the Krobo country. For these two mills one could place their maximum annual output at 6,000 tons of fruit. I estimate that to enable these mills to cover expenses, they should treat some 5,000 tons of fruit per annum. Starting then from 5,000 tons of fruit per annum as a datum line, I suggest that the subsidy should be based on the difference between 5,000 tons and the amount of fruit actually obtained in any one working year. To take an actual example: if the mills secured in, say, the first year's working, only 3,000 tons (and this is quite a probable happening at the commencement) then I would suggest that the deficit of 2,000 tons should be the quantity on which the subsidy would be paid. I would suggest also that this subsidy should amount to the price which would be paid by the Company to the fruit cutters, i.e. 45/- to 50/- per ton, so that the Government's committal would be, on this basis, £4,500 to £5,000.

This suggestion as it stands, takes no note of the fact that the financial position of the company would be markedly affected by the variations in the local price of oil, and in a favourable year, it might happen that the Government subsidy would in effect correspond to an appreciable dividend



on the company's capital, and such a happening might give room to criticism. To meet this possibility, a scheme could be devised whereby the company's net profits, after allowing the usual depreciation charges and paying interest at 6 per cent on the capital involved, would be divided according to an agreed scheme. Various possibilities suggest themselves for realising this division of profits, but broadly speaking, I suggest that a percentage of such profits could be devoted to repayment of the subsidy to the Government up to the limit of the total subsidy received, and a percentage possibly might be devoted to paying bonus to Mate Kole and his people on a sort of co-partnership basis. I think there might be many advantages in considering the latter-named possibility, as, from my knowledge of the Gold Coast people, I think they will ask to share in some way in any profits, accruing from favourable market conditions, as indicated in the local price of oil.

For reasons given above, I think it would be impracticable to follow such market variations month by month in any subsidy or bonus scheme, but I do consider it would be practical and easy to arrange a scheme based on the actual profits earned by the company in any one working year.

(See pages 15  
and 16.)

To enable you to visualise more clearly the factors involved, I attach some of the figures which I have prepared.

I should like to suggest therefore that Sir Ransford Slater's attention should be directed to the various points of view which I have endeavoured to describe as clearly as possible above. It is a very difficult subject to explain clearly, but I think the company is anxious that it should be fully realised that it does not desire so much to receive money assistance as to secure the actual produce in the shape of high grade, uniform quality palm oil and palm kernels, with which it can compete successfully against the very high class Sumatra plantation oil which is being placed in the company's markets in ever increasing quantities.

Yours, etc.,

F. M. DYKE.

*Sub-Enclosure to Enclosure V.*

## MILL SCHEME FOR KROBO COUNTRY.

## CAPITAL AND WORKING CHARGES.

<i>Capital Cost</i> —	(a)	1 Mill near Bukunor, and Workshop..	..	..	£6,500
	(b)	1 Mill near Anyaboni .. .. .	..	..	5,500
	(c)	European Houses (2) .. .. .	..	..	2,000
	(d)	Lorries (3) .. .. .	..	..	1,000
	(e)	Stores and Garages .. .. .	..	..	500
	(f)	Preparation of sites, preliminary expenses, etc. ..	..	..	1,000
	(g)	Offices, etc. .. .. .	..	..	500
					<hr/>
					£17,000
					<hr/>

## ANNUAL CAPITAL CHARGES.

<i>Depreciation</i> —	(a) and (b)	7½% on £12,000 .. .. .	..	..	£900
	(c)	5% on £2,000 .. .. .	..	..	100
	(d)	50% on £1,000 .. .. .	..	..	500
	(e)	5% on £500 .. .. .	..	..	25
	(f)	2½% on £1,000 .. .. .	..	..	25
	(g)	5% on £500 .. .. .	..	..	25
					<hr/>
					£1,575

## ANNUAL REVENUE CHARGES.

<i>Salaries</i> —	3	Europeans at £800.. .. .	..	..	£2,400
	8	African clerks and artisans at £8 per month ..	..	..	768
	100	Boys at 1s. 6d. for 300 days .. .. .	..	..	2,250
		Repairs to Plant and Buildings .. .. .	..	..	1,000
		Rent, Insurance, Office Expenses .. .. .	..	..	500
		Stores .. .. .	..	..	500
		Salt (for Kernel Recovery) .. .. .	..	..	250
		Management Expenses .. .. .	..	..	500
		Bonuses to Chiefs .. .. .	..	..	600
		Lorries—running expenses at £250 each ..	..	..	750
					<hr/>
					£9,518
					<hr/>
		Total Annual Charges .. .. .	..	..	£11,093
		say .. .. .	..	..	£11,100

## EFFECT OF VARYING OUTPUT ON MILLS' FINANCE.

The following data are based on the assumptions:—

- (1) Two mills operating in the Krobo country.
- (2) Total capital expenditure of £17,000.
- (3) Annual capital charge for depreciation of £1,575.
- (4) Annual operating charge of £9,525. (This is not strictly constant as some of the charges included must vary with varying output, e.g. running cost of lorries and consumption of stores. It is not at present desirable perhaps to complicate calculations still further by attempting to allow approximately for such variations).
- (5) Price of fruit, including bonuses, not exceeding 50s. per ton.
- (6) Oil yield 14 per cent fruit.
- (7) Kernel yield 12 per cent fruit.

TABLE " A ".

The variable factors introduced are:—

- (1) Local price of palm oil, £22 per ton.  
 (2) Local price of palm kernels, £13 per ton.

Fruit Treated.	Cost of fruit.	Total expenditure.	Oil extracted.	Kernels extracted.	Total receipts.	Profit + or loss —
Tons.	£	£	Tons.	Tons.	£	£
6,000	15,000	26,100	840	720	27,840	+ 1,740
5,000	12,500	23,600	700	600	23,200	— 400
4,000	10,000	21,100	560	480	18,560	— 2,540
3,000	7,500	18,600	420	360	13,920	— 4,680
2,000	5,000	16,100	280	240	9,280	— 6,820
1,000	2,500	13,600	140	120	4,640	— 8,960

TABLE " B ".

The variable factors introduced are:—

- (1) Local price of palm oil, £25 per ton.  
 (2) Local price of palm kernels, £15 per ton.

Fruit Treated.	Cost of fruit.	Total expenditure.	Oil extracted.	Kernels extracted.	Total receipts.	Profit + or loss—
Tons.	£	£	Tons.	Tons.	£	£
6,000	15,000	26,100	840	720	31,800	+ 5,700
5,000	12,500	23,600	700	600	26,500	+ 2,900
4,000	10,000	21,100	560	480	21,200	+ 100
3,000	7,500	18,600	420	360	15,900	— 2,700
2,000	5,000	16,100	280	240	10,600	— 5,500
1,000	2,500	13,600	140	120	5,300	— 8,300

## EFFECT OF SUGGESTED SUBSIDY SCHEME.

The following figures have been compiled to show the effect on the Company's finances (as illustrated from Tables " A " and " B " above) of a subsidy at the rate of 50s. per ton of fruit, paid on the difference between the actual fruit output, and the output of 5,000 tons per annum needed to pay expenses. The " Net " profit or loss is the final result after payment of the subsidy.

Fruit treated.	Profit + or loss —		Subsidy.	Net profit + or loss —	
	Table " A. "	Table " B. "		Table A.	Table B.
	£	£	£	£	£
6,000 tons	+ 1,740	+ 5,700	—	+ 1,740	+ 5,700
5,000 tons	— 400	+ 2,900	—	— 400	+ 2,900
4,000 tons	— 2,540	+ 100	2,500	— 40	+ 2,600
3,000 tons	— 4,680	— 2,700	5,000	+ 320	+ 2,300
2,000 tons	— 6,820	— 5,500	7,500	+ 680	+ 2,000
1,000 tons	— 8,960	— 8,300	10,000	+ 1,040	+ 1,700

If therefore the Company shewed the results in Table " B " for 4,000 tons output, the profit of £2,600 would be allocated as follows:—

Six per cent interest on £17,000 = £1,020

Residue of profit to divide between Company and Government,  
 etc., as agreed, £1,580.

Total, £2,600.

## Enclosure VI.

Copy of a memorandum by the Director of Agriculture.

REF. NO. 36/18A/1929.

ACCRA, GOLD COAST COLONY,  
21st January, 1929.

## SUBSIDISING OF PALM OIL MILLS.

Before going on to proposals for a scheme of subsidy suited to the Gold Coast I should like to deal briefly with the two projects put forward by the Government of Nigeria and Mr. Dyke.

## NIGERIAN GOVERNMENT SYSTEM.

2. The Nigerian Government does not contemplate subsidies excepting for factories of a minimum capacity of 20 tons of fruit in 10 hours (6,000 tons of fruit, or about 857 tons of oil per year of 300 working-days). This minimum is probably too high for the Gold Coast. On page 61, paragraph 171, of the Report of the Committee on Agricultural Policy and Organisation, it is shewn that for 11 consecutive years up to 1926, Butre Factory had been unable to obtain the 4,000 tons of fruit necessary to cover working-expenses. In the Eastern or Central Province, the cacao industry absorbs more of the energies of the people than in the Western, and the chances of obtaining 6,000 tons are likely to be small.

Minimum  
Capacity too  
high.

3. The subsidy-scale adopted by the Nigerian Government is based on the following:—

Nigerian basis.

- (a) No subsidy at full output.
- (b) Maximum subsidy (of £4,000) at 50 per cent output.
- (c) Subsidy at zero output, of 6 per cent of value of the rated capacity.

Between the points given in (a) and (b), the subsidy follows a straight line curve based on 32 per cent of the value of the deficiency of output below rated capacity. From the point given in (b) to that in (c) the basis is changed (in order to ensure a diminishing subsidy with lessened output), and the subsidy paid is 20 per cent of the output plus 6 per cent of the rated capacity. I give in Appendix "C" the Nigerian subsidy-curve, calculated to a rated capacity of 3,000 tons of fruit for convenient comparison with two other systems depicted.

(See graph  
facing page 20.)

4. Mr. Dyke objects to the diminution of subsidy with lessened output which characterises the Nigerian scale below 50 per cent output, and his objection seems a reasonable one, since the arrangement penalises an honest trier as well as a fraudulent or indolent contractor. The device would be legitimate only where 50 per cent of the rated capacity could be obtained with practical certainty and I do not think this is the case in the Gold Coast. Mr. Dyke's second objection is to the choice of 50 per cent of the rated capacity as the turning-point, and he would prefer to select the point at which the fruit handled just covered factory-expenses. This point he suggests is about 83.3 per cent of the rated capacity (5,000 tons out of 6,000), a figure which, as I show below, appears too high. If the point 50 per cent was arbitrarily chosen, it would be better replaced by one based on the change from loss to profit. The 50 per cent appears, however, to be nearer this point than is Mr. Dyke's figure of 83.3 per cent.

Objections.

## MR. DYKE'S PROPOSAL.

Smaller  
factories.

5. In the first place, Mr. Dyke suggests that a scheme of subsidy apply to smaller units (3,000 tons of fruit, or 1 ton per hour for 300 working-days of 10 hours each). I think that a smaller unit has a greater chance of success in the Gold Coast, and in addition the 3,000-ton unit is based on the experience of the Niger Company in the Congo. This capacity is the resultant of the two considerations, the probable supply easily obtainable under local conditions and the minimum crop handleable with profit. It seems to be a unit suitable for the experiment we wish to carry out.

Subsidy  
proposed.(See graph  
facing page 20.)

6. The subsidy-scale proposed by Mr. Dyke is shown in Appendix C. It begins at 83.3 per cent of the rated capacity of the factory and extends to zero-production. The subsidy consists of a payment by Government to the factory of the purchase price of a ton of fruit for every ton deficiency, this price ranging about 45/- to 50/- per ton. The system is not equitable since a subsidy should be based not on expenses which were not incurred but on those incurred in order to handle fruit which in the end was not available. In addition the system results in too high a subsidy, as is recognised by Mr. Dyke who proposes that a percentage of the profits be devoted to repayment of the subsidy to Government and a percentage to paying a bonus to the chief and his people on a co-partnership basis. This device appears difficult to work out and cumbrous to operate, and is not elaborated by Mr. Dyke.

## BASIS OF A LOCAL SCHEME.

Points to be  
fixed.

7. The Nigerian subsidy begins to operate at rated capacity, a procedure open to criticism since the factory should be profitable without a subsidy at some point probably considerably below the rated capacity. Mr. Dyke's profitable point of 83.3 per cent rated capacity seems too high, and in addition his proposed subsidy (payment of the full purchase-price of fruit) is hardly equitable. Of the two bases, however, I prefer Mr. Dyke's if a more exact profitable-point can be agreed upon and if the subsidy be the overhead cost to the factory of handling a ton of fruit. I propose to attempt to fix the following points and use them as bases for a local scheme:—

- (a) allowable capital cost of a unit of 3,000 tons fruit capacity,
- (b) allowable overhead and upkeep charges per ton of fruit for this unit,
- (c) the profitable point of a unit of this size.

As negotiations are in hand with the Niger Company, I shall use Mr. Dyke's figures as a basis for discussion.

Allowable  
Capital.

(See page 15.)

8. I suggest the following as allowable capital cost for a factory of 3,000 tons fruit: they are selected from Mr. Dyke's appendix to his letter of October 18th.

Cost of Mill	..	..	..	..	..	£5,500
Bungalow	..	..	..	..	..	1,000
Lorries (2)	..	..	..	..	..	600
Office, Store and Garage	..	..	..	..	..	1,000
						<u>£8,100</u>

The item "Preparation of Sites, Preliminary Experiments, etc." I do not understand, but they can be discussed further with the Niger Company. In Mr. Dyke's printed Report, page 11, the cost of the unit is given as £3,500 to £4,000, so that a sanctioned capital of £8,000 appears reasonable, and I suggest that this be the maximum on which a subsidy be paid for a unit of this size.

9. Charges (other than actual running costs) which appear reasonably chargeable are :—

Allowable  
overhead  
charges.

*Depreciation—*

Mill £5,500 at 7½ per cent .. .. .	£412 10 0
Bungalow £1,000 at 5 per cent .. .. .	50 0 0
Lorries £600 at 25 per cent .. .. .	150 0 0
Office, Store, etc. £1,000 at 5 per cent .. .. .	50 0 0
	<u>£662 10 0</u>

*Other—*

Salary, 1 European .. .. .	£800 0 0
4 Clerks and Artisans at £96 .. .. .	384 0 0
50 Boys at 1/6 for 300 days .. .. .	1,125 0 0
Lorries running costs .. .. .	500 0 0
Insurance and Office Expenses .. .. .	200 0 0
	<u>£3,009 0 0</u>

*Interest—*

£8,000 at 5 per cent .. .. .	£400 0 0
Total .. .. .	<u>£4,071 10 0</u>

I suggest that £4,000 per annum be accepted as allowable overhead expenses for handling 3,000 tons of fruit, and that this be the maximum subsidy (at zero production) for this unit.

10. The point at which a factory of 3,000 tons begins to make a profit, I calculate as follows :—

Profitable  
point.

*Gross returns—*

3,000 tons fruit at 14.3 per cent oil worth £25 per ton locally .. .. .	£10,725
Kernels at 13 per cent or 390 tons at £15 .. .. .	5,850
	<u>£16,575</u>
Returns per ton .. .. .	<u>£5 10s. 6d.</u>

*Cost per ton—*

Purchase of fruit .. .. .	£2 10 0
Bonuses .. .. .	0 2 0
Salt .. .. .	0 0 9
Stores .. .. .	0 1 6
Other .. .. .	0 1 9
	<u>£2 16s. 0d.</u>

Profit per ton (excluding interest) .. .. . £2 14s. 6d.

The point at which factory costs are covered therefore is (excluding interest)

£662 10s. plus £3,009 divided by £2 14s. 6d., or 1,347 tons, and 1,347 tons are 44.9 per cent of 3,000.

If interest be included the profitable point becomes :—

$$x : 1,347 :: 4,971.10 : (3,009 + 662.10) \\ = 1,494 \text{ tons.}$$

I suggest that the profitable point be taken as 1,500 tons, or 50 per cent rated capacity and that the subsidy begin from that point.

11. I give the curve, resulting from these points, in the graph in Appendix C and the figures at stated production-points in Appendix B. The subsidy consists of the following :—

Subsidy-curve  
(See page 20  
and 21.)

On every ton of fruit deficiency below 1,500 tons, the Government to pay £2 13s. 4d. The figure of £2 13s. 4d. is obtained by dividing allowable overhead charges (£4,000) by the number of tons

constituting the rated capacity (3,000), the result being £1 6s. 8d. When this figure is applied to figures below 50 per cent of the rated capacity, it amounts to £2 13s. 4d. per ton, as may be seen from the appended graph (Appendix C).

(See graph  
facing page 20.)  
Deterrent.

12. It is unlikely that the Government will be called upon to pay the maximum subsidy, or even a figure near to the maximum, if the site of the factory be carefully chosen and the Government exercise the right of selecting the firm who builds and operates the mill. Nevertheless, it is necessary to provide a safeguard against too easy acceptance of a subsidy as a substitute for increased exertions. I suggest that, if a subsidy is necessary for two successive years, or more than twice in a period of five successive years, the Government reserve the right of reconsidering the whole position, and of cancelling the contract if satisfied of indolence or fraud.

Fixed points.

13. I have purposely tried to devise a subsidy-scheme with as few movable points as possible. Price of oil and local purchase price of fruit I have taken at £25 and £2 10s. Variations in world's prices for fatty oils are small, and there appears to be an ample margin of profit on fruit at 50 per cent per ton from which fluctuations may be adjusted without changing the subsidy. A variation of £1 per ton of oil changes the purchase price of fruit by 2s. 3d. per ton, and shifts the profitable-point of production by 50 tons approximately. The only sliding-factor entering into the scale I give is the amount of fruit obtained.

Conclusion.

14. In conclusion, I should like to state that, while it is unlikely that a large oil palm industry can arise coincidentally with our present cacao industry, some arrangement should be made by which the Government and public may learn how to handle oil palm produce efficiently and profitably. It is within the bounds of possibility that our oil palm resources may have to be tapped in the future, and at present we have no reliable information as to the method likely to be successful under local conditions of labour and economics. The experiment is frankly a risky one, with the chances against success, but the problem is one of general importance to the country and should be tackled by Government. If it be decided to entrust the conduct of the experiment to private enterprise, I think the Government should err on the side of reasonable generosity in order to ensure a full and fair trial.

15. I suggest that the main points in this memorandum be the basis of negotiations with the Niger Company. If the scheme be found acceptable but in need of minor modifications, I could discuss it with the Niger Company during my leave in April to September.

G. AUCHINLECK,  
*Director of Agriculture.*

*Sub-Enclosure I to Enclosure VI.*

#### APPENDIX A.

DEPARTMENT OF AGRICULTURE, GOLD COAST.

#### OUTLINES OF A SCHEME OF SUBSIDISING PALM OIL FACTORIES.

1. Subsidy will be granted to factories of a capacity of 3,000 tons of fruit per year.

2. For the purpose of the scheme the determined rated capacity may vary 10 per cent (2,700 to 3,300 tons) from the projected capacity.

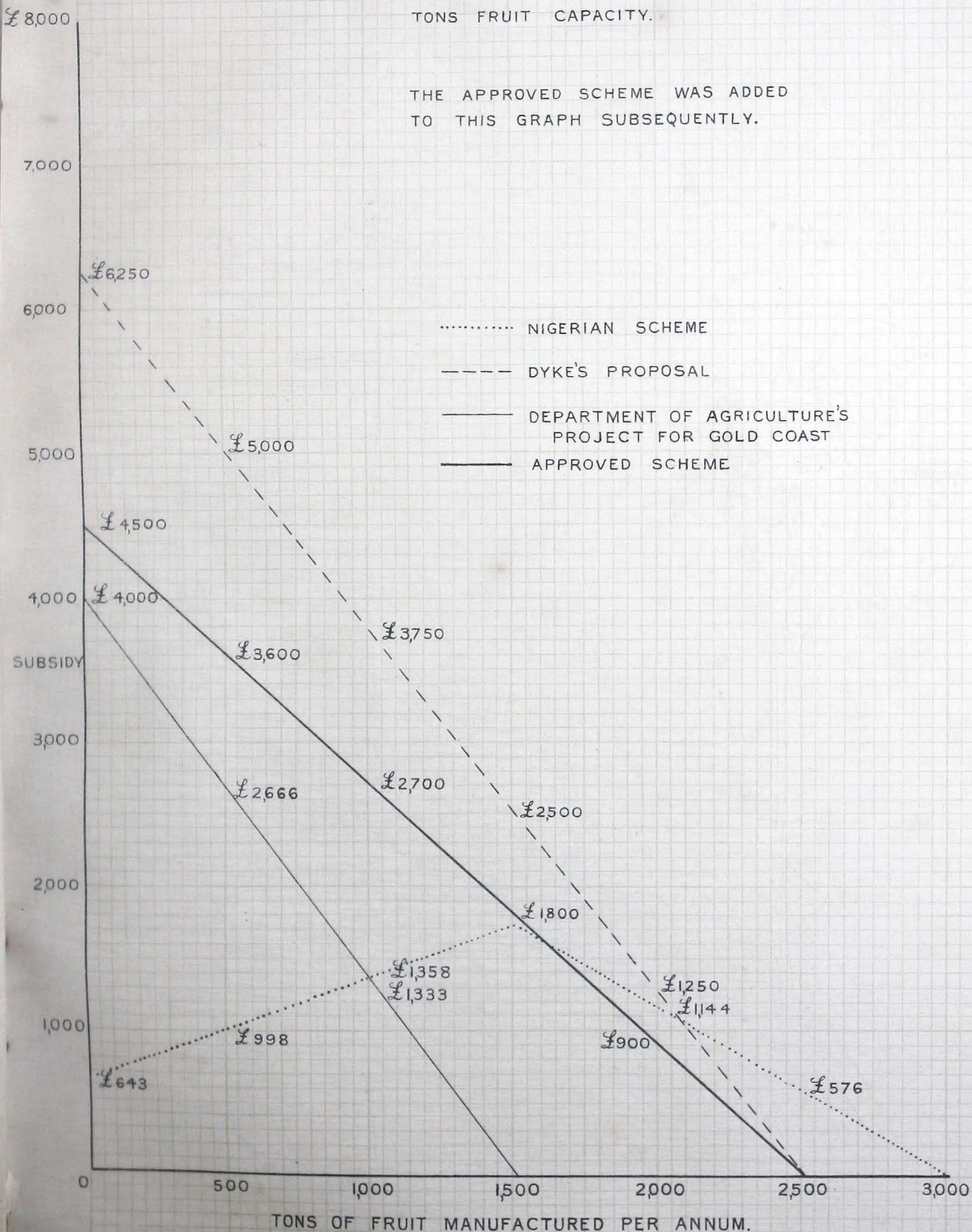
APPENDIX C.

SUBSIDIES FOR PALM OIL MILLS.

COMPARISON OF THREE PROJECTS

CALCULATED ON BASIS OF 3000  
TONS FRUIT CAPACITY.

THE APPROVED SCHEME WAS ADDED  
TO THIS GRAPH SUBSEQUENTLY.





3. Rated capacity to be determined by a trial run to full capacity, in presence of Director of Agriculture for 10 hours, the resulting figure to be multiplied by 300.

4. Subsidy to be paid on each ton of fruit below 50 per cent of the rated capacity.

5. Sanctioned capital shall be the figure accepted by the Government as a reasonable cost of erecting the factory; and shall unless otherwise permitted lie between £2 and £3 per ton rated capacity.

6. For calculating a subsidy the Government shall determine:—

(a) The acceptable rate of depreciation up to a maximum of  $7\frac{1}{2}$  per cent on sanctioned capital.

(b) The maintenance charges necessary for handling the fruit constituting the rated capacity of the factory.

(c) Interest 5 per cent on sanctioned capital.

The sum of these divided by the rated capacity shall be the basis of the subsidy payable on each ton of fruit below 50 per cent of rated capacity.

7. If a subsidy be found necessary for two consecutive years or for two years in any five consecutive years the Government shall have the right of reconsidering the subsidy-contract of the factory concerned.

*Sub-Enclosure II to Enclosure VI.*

APPENDIX B.

SUBSIDIES PAYABLE TO PALM OIL FACTORIES.

(CALCULATED ON BASIS OF 3,000 TONS FRUIT CAPACITY).

Tons of fruit per Annum.	Output of Oil Calculated. 1/7 of Fruit.	Subsidy.					
		Nigerian Scheme. Subsidy. Interest. Total. (Calculated on oil at £25 per ton).			Dyke's Proposal.	Gold Coast Project.	Approved* Scheme.
Tons.	Tons.	£	£	£	£	£	£
0	0	0	+ 643	643	6,250	4,000	4,500
250	36	180	+ 643	823	5,625	3,333	4,050
500	71	355	+ 643	998	5,000	2,666	3,600
750	107	535	+ 643	1,178	4,375	2,000	3,150
1,000	143	715	+ 643	1,358	3,750	1,333	2,700
1,250	179	895	+ 643	1,538	3,125	666	2,250
1,500	214	1,712	+ 0	1,712	2,500	0	1,800
1,750	250	1,432	+ 0	1,432	1,875	0	1,350
2,000	286	1,144	+ 0	1,144	1,250	0	900
2,250	321	864	+ 0	864	625	0	450
2,500	357	576	+ 0	576	0	0	0
2,750	393	288	+ 0	288	0	0	0
3,000	429	0	+ 0	0	0	0	0

\*The column for the Approved Scheme was not contained in the original table but was added subsequently.

## Enclosure VII.

*Copy of a letter from Mr. W. E. Snelling to the Governor.*

THE NIGER COMPANY LIMITED.

(AT KUMASI).

14th February, 1929.

His Excellency

SIR A. R. SLATER, K.C.M.G., C.B.E.,

*Government House, Accra.*

YOUR EXCELLENCY,

Confirming Mr. Hyslop Bell's telegram to you, I shall arrive at Accra on Monday next the 18th inst., and I should be obliged if you would find it possible to see me on either of the two succeeding days (Tuesday or Wednesday), as I am anxious to leave Accra for Lome on Thursday morning.

The result of our further consideration of the proposal to install a Palm Oil Mill or Mills in the Krobo District is as follows:—

We are satisfied that with an adequate supply of fruit at a reasonable price, we could successfully install and work two mills, each capable of dealing with 250 tons of fruit per month.

We feel that Government assistance might be necessary to ensure (a) an adequate supply of fruit, (b) at a reasonable price. We suggest that the proposed Government subsidy should be calculated by reference to loss sustained by failure under either of these headings. But in order to calculate a formula for the application of this principle, it is strictly speaking necessary to take into account other variable factors, i.e. (c) the rate of extraction of oils and kernels, and the market value of the oils and kernels when produced.

To take factors (c) into account in calculating the subsidy would, however, entail much complication, particularly as these factors must vary from month to month. Therefore, you might think it preferable for the subsidy to be calculated only by reference to (a) and (b), the formula for the calculation of the subsidy making reasonable assumptions as regards the factors included in (c).

I attach schedules showing the cost of the proposed mills and also working costs, based on varying assumptions. These schedules bring out clearly how much the profit or loss account of the mill is dependent on factors (a), (b) and (c). They illustrate more particularly how much the profit or loss is affected by the quantity of fruit dealt with.

The proposal for a subsidy which we wish to submit to you is as follows:—

1. A subsidy to be payable equal to the number of tons by which the fruit supplies in any year fall short of 5,000 tons, multiplied by  $\frac{1}{5,000}$  part of the overhead charges. That is to say, taking 5,000 tons of fruit as the quantity required, the subsidy would cover that portion of overhead charges which are wasted through the fruit supplies falling short of 5,000 tons, and if the mills obtain only 4,000 tons of fruit, the subsidy under this head should be 1,000 times £1 16s.

2. A subsidy also to be payable equal to the amount which (with Government consent at the time if thought advisable) the mill pays for fruit in excess of a price now to be agreed upon as reasonable. We think that the agreed price should be 50/- per ton of fruit.

We should be quite willing for general limitations to be imposed on the amount of subsidy, e.g. that the subsidy should not exceed the amount of loss made by the mill in any year, or series of years; also the subsidy for any year to be reduced by reference to any excess of fruit obtained over 5,500 tons and by reference to any fruit purchased at a price lower than 50s. a ton.

We submit these proposals, believing that they would require the Government to make payment of a subsidy only in respect of that portion of any loss made by the mills which would be due to the falling short of fruit supplies, or the necessity of paying an excessive price for the fruit.

If you were to signify your acceptance of the scheme in principle, we would at once arrange for the Krobo District to be examined by Mr. Taylor, the Manager of our Seysie Mill, with a view to the selection of suitable sites.

I have, etc.,

W. E. SNELLING,

*Vice Chairman.*

*Sub-Enclosure I to Enclosure VII.*

SCHEDULE A.

PALM OIL MILLS.

Two small Mills .. .. Capacity 3,000 tons per annum  
each (fruit)=250 tons per month.  
Reasonable assumption of fruit required to pay — 5,000 to 5,500 tons per  
annum for the two.

Cost £17,000 (see Schedule B annexed).

(See page 24.)

Fixed Charges:—

	£
Interest 6 per cent on £17,000 .. .. .	1,020
Depreciation (see Schedule B annexed) .. ..	1,575
Europeans, 3 at £800 .. .. .	2,400

*N.B.*—If only one mill were erected two Europeans would be required for it. The £800 allows for leave, passages, medical, etc.

Native, 8 African Clerks and artisans at £8 per month	768
100 boys at 1s. 6d., a day for 300 days .. ..	2,250
Management Expenses .. .. .	500
Rent, Insurance, etc. .. .. .	500

£9,013 = £1 16s. per  
ton if 5,000  
tons worked.

Variable Costs per ton:—

	s.	d.
Stores .. .. .	2	0
Transport .. .. .	2	6
Mill repairs .. .. .	5	0
Salt or substitute (for kernel recovery) .. ..	1	0
Bonuses to Chiefs .. .. .	2	0

12 6 per ton.

*Sub-Enclosure II to Enclosure VII.*

## SCHEDULE B.

## CAPITAL AND WORKING CHARGES.

*Capital Cost—*

(a) and (b) Two Mills .. .. .	£12,000
(c) European Houses (2) .. .. .	2,000
(d) Lorries (3) .. .. .	1,000
(e) Stores and Garages .. .. .	500
(f) Preparation of Sites, preliminary Expenses, etc. .. .. .	1,000
(g) Office, etc... .. .	500
	<hr/>
	£17,000

## ANNUAL DEPRECIATION CHARGES.

*Depreciation—*

(a) and (b) 7½ per cent on £12,000 .. .. .	£900
(c) 5 per cent on 2,000 .. .. .	100
(d) 50 per cent on 1,000 .. .. .	500
(e) 5 per cent on 500 .. .. .	25
(f) 2½ per cent on 1,000 .. .. .	25
(g) 5 per cent on 500 .. .. .	25
	<hr/>
	£1,575

*Sub-Enclosure III to Enclosure VII.*

## SCHEDULE C.

## 6,000 TONS FRUIT.

*Basis—*

Oil worth £24 locally .. .. .	14 per cent Extraction.
Kernels worth £12 locally .. .. .	12 per cent Extraction.

*Expenses—*

Fixed—per Schedule A .. .. .	£9,000
Working at 12s. 6d. per ton—per Schedule A .. .. .	3,750
Cost of fruit at 50s. per ton .. .. .	15,000
	<hr/>
	£27,750

*Income—*

Oil—840 tons (at 14 per cent) at £24 .. .. .	£20,160
Kernels 720 tons (12 per cent) at £12 .. .. .	8,640
	<hr/>
	£28,800
Profit .. .. .	<hr/>
	£1,050

*Sub-Enclosure IV to Enclosure VII.*

SCHEDULE D.  
5,000 TONS FRUIT.

*Basis—*

Oil worth £24 locally	..	..	..	14 per cent Extraction.
Kernels worth £12 locally	..	..	..	12 per cent Extraction.

*Expenses—*

Fixed—per Schedule A.	..	..	..	..	£9,000
Working at 12s. 6d. per ton per Schedule A	..	..	..	..	3,125
Cost of fruit at 50s. per ton	..	..	..	..	12,500
					£24,625

*Income.—*

Oil—700 tons (14 per cent) at £24	..	..	..	..	£16,800
Kernels 600 tons (12 per cent) at £12	..	..	..	..	7,200
					£24,000
Loss	..	..	..	..	£625

*Sub-Enclosure V to Enclosure VII.*

SCHEDULE E.  
4,000 TONS FRUIT.

*Basis.—*

Oil—worth £24 locally	..	..	..	14 per cent Extraction.
Kernels worth £12 locally	..	..	..	12 per cent Extraction.

*Expenses.—*

Fixed—per Schedule A.	..	..	..	..	£9,000
Working at 12s. 6d. per ton—per Schedule A.	..	..	..	..	2,500
Cost of fruit at 50s. per ton	..	..	..	..	10,000
					£21,500

*Income.—*

Oil—560 tons (at 14 per cent) at £24	..	..	..	..	£13,440
Kernels 480 tons (at 12 per cent) at £12	..	..	..	..	5,760
					£19,200
Loss	..	..	..	..	£2,300

GENERAL SCHEME FOR SUBSIDISING  
PALM OIL FACTORIES.

1. A subsidy will be granted to factories of a capacity of 3,000 tons of fruit per year.

2. For the purpose of the scheme the determined rated capacity may vary 10 per cent (2,700 to 3,300 tons) from the projected capacity.

3. Rated capacity to be determined by a trial run at full capacity, in presence of the Director of Agriculture for 10 hours, the resulting figure to be multiplied by 300.

4. Subsidy to be paid on each ton of fruit below five sixths ( $83.\bar{3}$  per cent) of the rated capacity.

5. Sanctioned capital shall be the figure accepted by the Government as a reasonable cost of erecting the factory; and shall unless otherwise permitted lie between £2 and £3 per ton rated capacity.

6. For calculating a subsidy the Government shall determine:—

(a) The acceptable rate of depreciation up to a maximum of 10 per cent of sanctioned capital.

(b) The maintenance charges necessary for handling the fruit constituting the rated capacity of the factory.

(c) Interest at 6 per cent on sanctioned capital.

The sum of these divided by  $83.\bar{3}$  per cent of rated capacity shall be the basis of the subsidy payable on each ton of fruit below  $83.\bar{3}$  per cent of rated capacity.

7. The subsidy will not exceed the amount of loss made by the mill in any year or series of years.

8. An agreement for financial assistance concluded by the Government with an applicant will be for a period of five years, but it is the intention of the Government to grant a renewal of such agreement on the same terms for a further period of five years if such owner shall have made faithful compliance with the terms and conditions of such agreement.

9. Government reserves the right of reconsidering the whole position and of cancelling the contract if satisfied of indolence or fraud.

10. Any agreement made in accordance with this scheme shall contain a clause permitting the Director of Agriculture or any officer duly authorised by him to enter any factory at all reasonable times for the purpose of inspecting the same and any books relating to the management and accounts of the factory.

## Enclosure IX.

**PARTICULAR SCHEME FOR SUBSIDISING TWO  
FACTORIES TO BE ERECTED IN THE KROBO AREA  
BY THE NIGER COMPANY.**

(This scheme to be read in conjunction with Enclosure VIII.)

(See page opposite.)

1. Capacity of factories 3,000 tons of fruit each, or 6,000 tons for both factories.

2. Yes.

3. Yes.

4. Subsidy to be paid on each ton of fruit below 5,000 tons.

5. Sanctioned capital—£17,000\*.

*i.e.*,  $\frac{£17,000}{6,000}$  per ton rated capacity,

equivalent to £2.83 per ton rated capacity,  
which is between £2 and £3.

6. Acceptable rate of depreciation ... .. £1,575\*

*i.e.*,  $\frac{1,575 \times 100}{17,000}$  per cent of sanctioned capital,

equivalent to 9.3 per cent of sanctioned capital,  
which is less than 10 per cent.

Maintenance charges ... .. £6 405\*

Interest at 6 per cent on £17,000 ... .. £1,020\*

Total ... .. £9,000

£9,000 divided by 5,000 is the basis of the subsidy payable on each ton of fruit below 5,000 tons in a year.  $\frac{£9,000}{5,000}$  is £1 16s., hence £1 16s. will be paid as a subsidy for each ton of fruit below 5,000 tons handled in a year.

7. Yes.

8. Yes.

9. Yes.

10. Yes.

11. Subsidies payable to the two factories.

<i>Tons of fruit milled in the year.</i>	<i>Subsidy.</i>
£	£
0	9,000
500	8,100
1,000	7,200
1,500	6,300
2,000	5,400
2,500	4,500
3,000	3,600
3,500	2,700
4,000	1,800
4,500	900
5,000	0
5,500	0
6,000	0

*Notes.*—For one mill the above figures will be halved.

*Enclosure X.*

*Copy of a letter from Mr. J. P. Taylor to the Colonial Secretary.*

PALM OIL ESTATES MANAGERS, LIMITED.

ADJUA AND BUTRI BRANCH.

P.O. BOX 204, SEKONDI.

*At Koforidua.*

13th March, 1929.

The Honourable  
THE COLONIAL SECRETARY,  
*Accra.*

DEAR SIR,

In accordance with arrangements made by Mr. Snelling, the Vice-Chairman of the Niger Company, when he saw His Excellency the Governor in February, I have just completed a tour through the Krobo Country to complete the examination of the question of erecting Palm Oil Mills in that area.

2. I will be obliged if you will put before His Excellency the following conclusions which I have arrived at as a result of my present tour and amplified by my previous investigations in the district.

3. I have had discussions on the subject with the Konor of Manya Krobo and the District Commissioner of Akuse and also with the Provincial Commissioner of the Eastern Province. All have been most helpful. During my tour I have paid particular attention to the people in the small villages which are so plentiful in the good palm area.

4. The stand of palms is exceedingly good over the whole area visited and there is ample fruit to keep the proposed two mills in full production providing the natives will take up the work of fruit supply seriously.

In every village visited the people say that they will welcome the industry as it will allow them to make money from the palm trees which under present conditions they are tempted to cut down for palm wine, the most reliable source of income from them now, or to make farms for other crops. They are loth to do this and I think they are in earnest when they say that they will support oil mills.

5. I am prepared to recommend my Directors to establish two mills, under the subsidy and other conditions discussed by His Excellency and Mr. Snelling, provided that the following matters can be satisfactorily arranged:—

1. That the Konor and his people will agree to supply good fresh palm fruit at one shilling and sixpence per box as shewn to the Konor and Elders at Odumase. The box will contain 74 lbs. of fruit when filled level with the sides and equals 30 measure boxes per ton.
2. That roads are made to the proposed sites of the two mills. The first mill would be erected near Bukunor, on the banks of the Pawmpawm stream at a distance of about half a mile from the village of Bukunor. This mill would require half a mile of the Old Bukunor-Apimsu road making suitable for heavy lorry traffic in order to get machinery and stores to the site and to evacuate our produce on heavy lorries in order to keep transport costs as low as possible. For this mill the road from the mill to Apimsu (the old chiefs' road) would require to be made usable for one ton load lorries. The area through which this road passes has exceptionally good palm land and many small villages and should be an important source of supply in addition to shortening the distance to the Apimsu-Kuluwa area.

The best site for the second mill would be on the Pawmpawm stream near the bridge on the Anyaboni-Adjena road. This would give a collecting area from Anyaboni to the Apimsu area to the south and west and to the Akokoma and Kwabia lands in the north. It would also make possible collection on the Adjena side of the stream. I think that this site has the greater possibilities but more roads would be required and the making of these would delay starting. A heavy motor road would be required from either Apimsu or Anyaboni to connect existing heavy roads with the site. A collection road to a point between Akokoma and Kwabia would also be required.

The Akokoma-Kwabia road would be about five miles. The Anyaboni-Pawmpawm road would be about four miles and the alternative road from Apimsu to the Pawmpawm would be about five miles.

Allow these roads would be of prime importance as fruit collection roads.

It will be absolutely essential for the success of the scheme that fruit collection must be done as near as possible to where the fruit is cut and the roads mentioned are absolutely necessary. Other roads would have to be made at intervals along these arterial roads and the making of these would be a matter of later arrangement. The making of the roads particularised would allow the full scheme to go ahead at once and I think that it is of the utmost importance that matters are pushed on rapidly whilst the people are taking particular interest.

3. Leases for the sites of the two mills will have to be arranged. We propose to take five acres for each mill to provide for sites for mill and other necessary buildings and quarters for native and European staff. In connection with bungalow sites it may be advisable to erect them at some short distance from the mill sites in which case we would like the two plots for the one site to be included on one lease, the area not to exceed five acres.
4. We would wish to have the assistance of the Government in arranging such matters as leases and price agreements and to have their general support in all reasonable matters.

6. I propose to see the Konor tomorrow about the matters that directly concern him and have written him a letter, which I will hand to him, indicating the important matters which will have to be settled before progress can be made.

7. I hope to be in Accra on Friday morning and, as I have been away from our mill at Seysie for a longer time than is convenient at this busy part of the palm oil season, I would be grateful if His Excellency can see me to discuss the matters mentioned at the earliest moment convenient to him. I will call at the Secretariat at 10 a.m. Friday and hope that, if it is not possible for His Excellency to see me then, that an appointment for later in the day can be arranged.

Yours, etc.,

J. P. TAYLOR.  
*on behalf of The Niger Company, Limited.*

*Enclosure XI.**Copy of a letter from Mr. J. P. Taylor to Mr. W. E. Snelling.*

18th March, 1929.

W. E. SNELLING, ESQUIRE,  
 Vice-Chairman,  
 Niger Company Limited,  
 London.

DEAR MR. SNELLING,

In accordance with the instructions you gave to me at Seysie and Accra I have visited the Krobo country and fully examined the situation as it affects our proposal to establish Palm Oil Mills in the area. The following report will give you the result of my enquiries.

1. *Itinerary.*—I left Seysie on the morning of March 5th by motor lorry and reached Accra the same evening. I made some preliminary arrangements, saw yourself on board the homeward bound "Accra" and proceeded to Koforidua the same afternoon. I put up at Pickering and Berthoud's bungalow with Mr. P. Hill and was able to get from him some very useful information and some maps shewing the roads of the district. The following day I went to Odumase and had a long interview with the Konor, Mate Kole, and the District Commissioner, Mr. G. P. H. Bewes. In the afternoon I again met the Konor along with his chiefs and elders and explained to them fully our methods of working, the price we pay for palm fruit, shewing them one of our Seysie measuring boxes to illustrate this and what would be our requirements in case we decided to erect mills. Further discussion was arranged for after I had examined the district. I returned to Koforidua that evening and saw the Provincial Commissioner the following day. He promised to give me all assistance and arranged to procure some maps I required. I went to Anyaboni the same afternoon and made that town my headquarters for four days whilst I examined the neighbourhood.

On March 11th I removed to Apimsu and examined the area from that town to Bukunor. I returned to Koforidua on March 13th, visited the Provincial Commissioner again and went to Odumase on March 14th arriving at Accra the same night. I had an interview with His Excellency the Governor on March 15th and motored back to Seysie on March 18th.

2. *Fruit Prospects.*—As you are aware I made a similar tour of investigation in October, 1912, and I was therefore able to arrange which districts to examine and the best means of doing so without having to make any waste of travel and time. I was also able to compare present conditions with those obtaining in 1922.

I see no reason for altering the impression I gained during my earlier visit that the palm area is fully equal in size and quality to the Seysie area. The palm trees are at present suffering from some slight "sickness" similar to that we are experiencing at Seysie. This is not affecting production much and though it is bound to have some effect on the output of fruit, either as regards quality or quantity, I do not think that it is serious. The sickness was more apparent in the southern portion of the area and north of Anyaboni the trees were very little affected.

As I was more familiar with the area centralising on Bukunor and I felt that I could sooner satisfy myself in that part I decided to first investigate the Anyaboni district as I agreed with Mr. Dyke's suggestion that a second mill would have to be somewhere in this area.

As there is only the Pawmpawm Stream as a source of water supply for mills in the district I first examined the country from Anyaboni to the Pawmpawm, going *via* Dawa along the road from Anyaboni to Adjena. I visited about twenty small native villages mostly standing at some little distance from the road. In most of these villages were a few men ranging

from two to ten but in most cases I was informed that there were other men belonging to the village who had gone to work on cacao farms in the Bisa district. In every place where I spoke with the people they expressed the hope that the mills would be built and the intention of supplying fruit if that eventuated.

The route I took covered about  $7\frac{1}{2}$  miles before I reached the river and the whole of it was through excellent palm land. In places clearings had been made for food farms and cacao farms but none of these were very large usually from one to three acres in extent.

The point where the road passes the Pawmpawm stream would be quite a good site for a mill though the place would have to have a fuller and more careful examination in order to get the best position from every point of view. I decided to leave this examination until the question of motor roads to the site was settled.

I returned through the Dawa line of similar villages and still observed the same excellence of palm stand and had the same experience when talking to the villagers. By the direct road from the stream to Anyaboni the road is about  $4\frac{1}{2}$  to 5 miles. The land is fairly flat and would present little difficulty for motor road making.

I examined the country north of Anyaboni towards Akokoma and Kwabi. The latter place is 4 miles north of Anyaboni, the first 3 miles of the road being through some of the best palm country I have yet seen. Not only are the trees strong healthy trees in full bearing but they are the only trees I saw which seemed to have had attention such as clearing round and cleaning the trees. As I used only the paths this may be that natives give the trees easily reached some cultivation and neglect those deeper in the bush but it is indicative of the farming spirit and real interest in the trees.

The villagers appeared to be even more anxious than in previous places that the industry should be established.

From Kwabia and Akomoma to the Pawmpawm, about 4 miles, the land is chiefly palm land of the same excellent quality. The fruit which I saw, chiefly ripe fruit fallen from the trees, is rich in oil and has a much thicker pericarp than that on the Seysie fruit at present.

From Anyaboni to the south and west the land is fair palm land with a good many clearings for large cacao farms. South to Apimsu is through land well worth working but not so good as the north. This also applies westward to Bisa, Dawa Mate Kole, Aflamasu, and Abettoma villages.

The whole of the area dealt with so far would be that drawn on to support No. 2 Mill and I think that there is more than enough fruit to keep it in full work and that there is sufficient male population and that the people are anxious to work on fruit production.

3. I then proceeded to examine the area which could be worked from Bukunor. After my 1922 tour I decided that the best position for a first mill would be near this village and I see no reason to change this view. Mr. Dyke suggested that the land in this district is liable to flooding but I will deal with that objection later.

From Bukunor there is an old chiefs' motor road to Apimsu, a distance of 6 miles. This road runs through good palm land averaging about  $2\frac{1}{2}$  miles of width to the eastward and from 2 to 4 miles westward. There are bigger farm and other clearings in the westward portion but the bulk of the land is under palms. I have not gone further westward (west of the Atrokwi-Bisa motor road) but this land also appears to have a fairly good stand of palms and should provide a few good collecting stations. South of Bukunor the area on each side of the Koforidua motor

road can be classed as good palm land and I think that it would be possible to collect fruit at points on this road up to five miles from Bukunor. Three miles from Bukunor towards Koforidua there is a road which goes through Chechem, Obopi and Obenyemi to Odumase. Obenyemi is about 8 miles from the Bukunor mill site and probably too far away to be economically worked but collection could be carried on for three to four miles on this road. The road passes through good palm land though where the land is hilly the palms taper off as the ground rises.

There are good palms and possibilities of collection to the west of the Koforidua motor road but I have not fully gone into that area and do not know the amount and occupation of the population. I believe that they are interested more in cacao than palms but there is every likelihood that a fair amount of fruit could be collected from them, especially after the cacao crop is harvested.

4. *Labour*.—As mentioned previously, in every village visited, the people expressed a strong desire that the industry should be developed. Many of the men have left the villages in the palm areas to make cacao farms in better cacao land afar off. The people say that these men would return if there was a chance of making an income from the palms so near to their homes. As in many cases the women are left in the villages it appears likely that only a reasonable inducement would be required for the return of the men and the women were always more eager than the men in their desire for us to establish in the district.

The people, Mate Kole and others whom I questioned, agree that the establishment of the industry would bring the men back. Though the men I saw would probably be sufficient to keep the mills supplied with fruit I think that steps should be taken to get all the labour back if possible and Mate Kole promised that he would see that this was done. With this point settled I think that the available working population will be ample to keep the proposed two mills supplied with fruit.

Mr. Dyke quoted the Konor as saying that there were 95,000 people in the Manya Krobo area, most of which area is within working reach of the proposed mill sites. I cannot either agree or dispute this estimate but I do agree that there is a considerable population. The towns themselves are small but the bulk of the Krobo people, more especially the farmers (who are the palm workers), live in the villages, which are surprisingly numerous.

5. *Mill Sites*.—I would suggest that the first mill is put at a point about 900 yards along the Bukunor-Apimsu road measuring from Bukunor town. The road is about 500 yards from the Pawmpawm stream. The point I have selected is from one quarter to half a mile below the point where the Buku stream joins the Pawmpawm and at a place where there is a bridge over the Pawmpawm leading to several villages. The site is on the west bank of the stream but the place is so thick with palm trees that a clearing would have to be made before the full possibilities of the site could be seen. At present it is on the damp side though the point I have selected is well above flood level. The dampness is partly due to drainage from higher ground and partly due to the growth of the palms preventing sun or wind exercising drying power.

Small clearings at a little distance have gravelly surface and I think that stone will be easily obtainable for concrete work. I am informed that sand can be got from the banks of the Pawmpawm but I did not see it in any quantity.

This site may not be too suitable for erecting a bungalow close to the mill. There is rising ground near but going about 400 yards further back, towards the Apimsu-Bukunor motor road, there is elevated ground that will provide a good bungalow site.

When a decision to proceed is made I would like to examine the place more carefully and make trial clearings in order to ensure having the best site available.

In order to commence erection work on this site about 900 yards of motor road, suitable for heavy lorries bringing machinery and taking away produce, would have to be made. This road would be on the old chiefs' road and could be made quickly.

6. If this work were put in hand at once work could commence on the site as soon as a decision is made and native quarters and temporary European quarters could be erected. The mill could be deputed to be on the site as soon as the road was available and erection could then proceed at the earliest moment possible. By working in this manner the mill should be ready for work in November at the latest. It is extremely important that once a decision is made that this mill should be urged forward as quickly as possible. My visit has again stimulated interest amongst the natives whom we would have to rely on for fruit supplies and once they see that something is being done they will prepare themselves for the work and arrange for the return of the men who are farming elsewhere. If the job is allowed to drag they may think that the project is going to fizzle out like previous suggested trials have done. I think that an early start, with November working of the mill, will be as good as a year's start on the job compared with what the case would be if a start were not possible until, say, January. I cannot emphasize this point too much.

If Bukunor is agreed on as a site the Apimsu road would require to be made good from the site to Apimsu, for one-ton lorries for fruit collection purposes.

The area from which this mill would collect would be roughly an oblong 4 miles wide by 9 miles long. Of the 36 contained square miles fully 20 are good palm land and if allowing only 500 acres of palms to each square mile this gives 10,000 acres easily able to supply 5,000 tons of fruit. I feel that this estimate is very much on the conservative side and, given the requisite population, I feel that the area which can be reached would be capable of giving well over 6,000 tons of fruit.

7. *Second Mill Site.*—As mentioned earlier I consider that the second mill should be put at a point near where the Anyaboni-Adjena road crosses the Pawmpawm stream. It would require a road for heavy lorries to be made either from Apimsu or from Anyaboni, both of which places are served by heavy ballasted tarmet roads. A road from Apimsu would be the more valuable for fruit collection purposes as well as giving five miles less transport distance from Koforidua. This road would be five miles long through good palm country. A road to the site from the present Anyaboni Road would need about  $4\frac{1}{4}$  miles of heavy road making but it would mean fully five miles more transport distance to and from Koforidua.

From the mill site it will also be necessary to make a road towards Akokoma and Kwabia. This road would pass through the best palm land of the whole area and would open up a lot of country that has, at present, no outlet for produce without a long distance of head transport.

With the roads mentioned both mills could make a start but it would later be necessary to push short collecting roads from the new roads mentioned and from the already existing roads. These roads would have to be carried as near to the various village collecting centres as possible.

The area available for fruit collection for No. 2 mill is approximately an oblong 6 miles by 7 miles. The south side of the oblong would run from Dawa Mate Kole eastward to the Pawmpawm and from Apimsu northward to Kwabia. Allowing only 50 per cent of the area as good palm land and taking 500 acres per square mile allows 10,500 acres of supply land which

should yield 5,200 tons of fruit. As the Akokoma area, which from the Pawmpawm covers about 6 to 9 square miles of the best land I have seen, I again think that my estimate is very conservative.

8. *Price to be paid for Fruit.*—The Konor, Mate Kole, and his chiefs and elders saw the Seysie measure box and I explained to them that we were prepared to pay 1s. 6d. per box, equal to 74 lbs. per measure or 30 boxes per ton. All seemed to be satisfied that the price was fair, but the Apimsu chief, when I discussed it with him at his village, said the box was a little large and he would like a little higher price. This was the only time at which any exception was taken to the box. On discussing this later with Mate Kole he said that he considered the box fair and would see that his people accepted it. Comparing the box with baskets I saw at the villages I think that the majority of the people will be quite satisfied with the price. I told Mate Kole, both verbally and by letter, that it would be utterly impossible for us to pay a higher price and that I personally would not be prepared to attempt the task of making the mills a success if a higher price were demanded. Mate Kole, who intended calling a mass meeting of his people during the present week, said that he thought that we need have no fears about the price not being accepted.

9. *Leases for Mill sites.*—I informed Mate Kole that once the fruit price had been definitely arranged we would require leases of land for the erection of the mills. I discussed terms and the conditions of the leases and finally offered him £2 per acre for 5 acre plots the leases to be for the term of 99 years. This he promised to put before the chiefs and people directly owning the land and he thought that it would be accepted. He also was agreeable to the 5 acre mill plots being split up into two separate portions if we found it necessary to erect bungalows at some distance from the mill sites, but one lease to cover the two portions making up the five acres required.

10. *Report to Governor.*—From Koforidua I wrote to His Excellency the Governor, Sir Ransford Slater, informing him of the completion of my tour of the district and my general conclusions. I also pointed out the various roads that would be required before we could make a definite start on the project. I also asked him to see me in order to discuss the matter more fully.

His Excellency agreed to see me on Friday morning and we had a full and interesting discussion of the whole matter. His Excellency seemed very pleased with my report on the area and the prospects for mills. I went fully into the necessity for the roads I have mentioned as being required for transport purposes to and from the site. His Excellency expressed the opinion that the Chiefs should make some of the roads. This of course is a matter between the Government and the Chiefs as, not having concessions or any title to the land, it would be out of the question for us to go to any substantial expense for road making. Small branch roads, for fruit collection purposes, I said that we would probably make as we found them necessary after the principal roads had been made.

I also emphasized the point that I considered an early start for the project, whilst the people were interested, and more important still, whilst we have the present able Konor, Mate Kole, to help the scheme on, was of the greatest importance.

His Excellency promised to push forward matters as quickly as they could be done but pointed out that the subsidy suggestions would have to be put before the Legislative Council and, if approved, afterwards would have to go before the Colonial Office for sanction, both of which processes would take time.

I know that His Excellency is very anxious to get the project established and I feel sure that he will accelerate matters as much as is possible. I am hopeful that there will be no opposition in the Legislative Council either to the subsidy proposals or the road making required.

His Excellency mentioned that as we were now profit making at Seysie the point might be raised that a subsidy would not be necessary, but I pointed out that in order to attain success here the Company had lost almost a quarter of a million pounds, and that we were not prepared to undertake the possibility of such, or even substantially less, losses, in the present scheme, and I considered those facts would be sufficient to answer any objections.

11. To summarise, my conclusions and recommendations are as follows:—

1. There are ample palms in the area to supply two mills with fruit and in both cases I would suggest that the mills are built with a view to later extension.
2. The population of the district seems ample to supply the fruit cutters required and I am inclined to believe the chiefs and people when they say that men who have gone to work on farms in the cacao lands will return to their homes and work on fruit collection.
3. I think that the sites I have suggested are the two best as they are ten miles apart on the river and each have an area of over 20 square miles of palm land to draw on.
4. I have no hesitation in recommending that the scheme be taken in hand providing that the following points are accepted:—

A. That Mate Kole and his elders guarantee that the people will supply fresh palm fruit of good quality at 1s. 6d. per box of 74 lbs. or £2 5s. per ton.

B. That the Government will arrange that the following roads shall be made:—

1. From Bukunor to site of No. 1 Mill. (About 950 yards for heavy lorries).
2. From site of No. 1 Mill to Apimsu over the old Chiefs' Road for 1 ton lorries about  $5\frac{1}{2}$  miles.
3. From Apimsu to the point on the Pawmpawm Stream where the Anyaboni-Adjena Road crosses it. This road must be for heavy lorries. (Mill Site No. 2).
- 3a. Alternative to No. 3 Road for heavy lorries from Anyaboni to Mill Site No. 2 as given above.
4. Road from Mill Site No. 2 to a point between Kwabia and Akokoma for 1-ton lorries.

C. That the leases for Mill Sites are arranged for 99 years at a rental of £10 per annum each site.

D. That the Government arranges for a subsidy as discussed by the Governor and Mr. Snelling and uses its influence with the Chiefs and people to support the Company in all reasonable matters.

12. In discussing matters with Mate Kole I agreed that the Company would pay to him a bonus of 3s. per ton on all fruit supplied to and worked by the two mills mentioned. I also agreed that a further 1s. per ton bonus would be paid, through Mate Kole, for distribution to the six principal Krobo Chiefs. Mate Kole, asked that the latter rate be 2s. per ton, which proposal I agreed to submit to you. I suggest that the 1s. be paid to commence with and if later deemed advisable or justified by the results obtained the amount be increased.

(See sketch plan  
opposite.)

13. I have used Topographical Map, Africa, Sheet North B.30/L.IV. during my tour and the names given are taken therefrom. I will attach a rough sketch map shewing the area traversed and the sites selected. The roads are possibly not exact but I have asked the Survey Department to let me have a map shewing them accordingly.

I sent my cable No. 97 informing you generally that I thought the project was sound and hope that you would receive it immediately after your arrival back in London. I asked that staff, as discussed when I saw you at Accra, should be sent as soon as possible. I will be glad of both McAllan and the assistant with motor experience for the collection work as soon as they can be despatched. They will be all the better for having some time at Seysie and as Mr. Mead is leaving by this mail and Mr. Morrison in four weeks they will ease matters here.

I will write you as soon as I hear from His Excellency that roads are going ahead. I think that matters to be decided by Mate Kole will soon be settled. As soon as the road work is in hand I propose to go and get the first site cleared but it would be advantageous if McAllan were here to undertake the preparation work previous to the arrival of plant.

Yours, etc.,

J. P. TAYLOR.

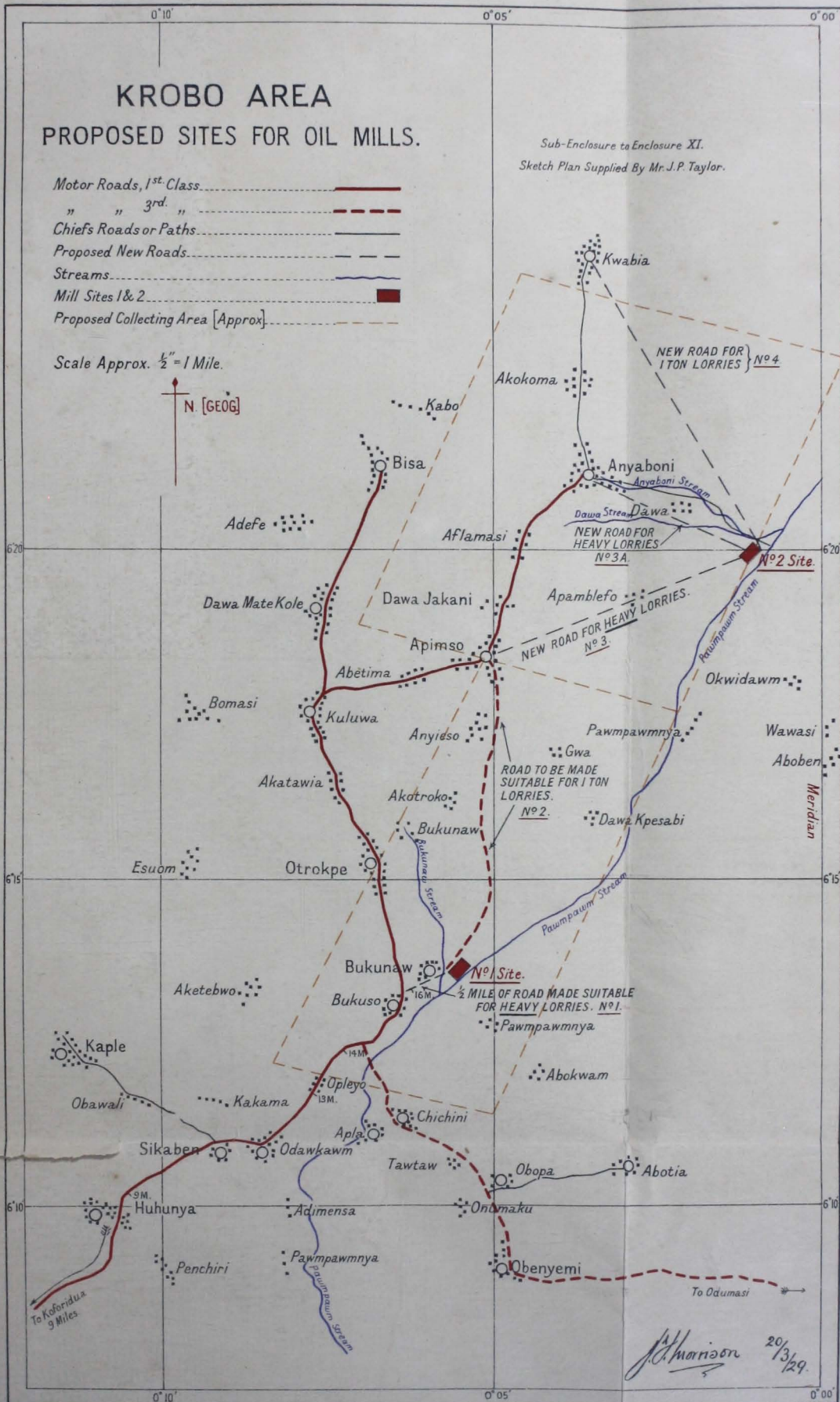
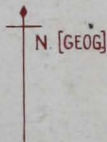
# KROBO AREA

## PROPOSED SITES FOR OIL MILLS.

Sub-Enclosure to Enclosure XI.  
Sketch Plan Supplied By Mr. J.P. Taylor.

- Motor Roads, 1<sup>st</sup> Class
- "    "    3<sup>rd</sup>    "
- Chiefs Roads or Paths
- Proposed New Roads
- Streams
- Mill Sites 1 & 2
- Proposed Collecting Area [Approx]

Scale Approx.  $\frac{1}{2}$ " = 1 Mile.



*Copy of a letter from Sir Robert Waley Cohen to the Governor.*

7th May, 1929.

His Excellency

SIR RANSFORD SLATER, K.C.M.G., C.B.E.

*Government House,*

*Accra, Gold Coast Colony.*

DEAR SIR RANSFORD,

I cabled to you on the 2nd instant as follows:—

“ United Africa Company prepared proceed immediately with arrangements erection first mill Krobo district. Will you kindly inform me whether you are now in position to definitely confirm subsidy proposals provisionally agreed also your agreement to points raised in letter March thirteenth from Mr. Taylor to Colonial Secretary,”

(See page 28)

and must thank you very much for your reply, reading as follows:—

“ Your telegram 2nd May regret cannot reply definitely yet stop prior approval of Secretary of State is necessary and hope to address him shortly.”

We are looking forward to carrying on the experiment which you discussed with the Niger Company in the direction of the more scientific handling of Palm Fruit in the Krobo district. I see that the discussions contemplate the erection of the two mills, but I have no doubt that the Government will agree with us that it would be best to try our experiment in one mill so that we may utilise this experience before going further with the second and any subsequent mills which might be justified.

I shall hope to hear from you at an early date that the Secretary of State has given his approval to the proposals so that we can go forward with the experiment and proceed with the necessary arrangements for the erection of the first mill.

Yours etc.,

R. WALEY COHEN.

II.

*From the Secretary of State to the Governor.*

Telegram dated 17th October, 1929.

With reference to your despatch No. 665 dated 6th September, Oil Palm, proposal approved.

*Secretary of State.*



GOLD COAST COLONY.

DESPATCH

RELATING TO THE

Oil Palm Industry

WITH PARTICULAR REFERENCE TO A

Subsidy Scheme for Palm Oil Mills.

---

*Ordered by His Excellency the Governor to be Printed.*

---

GOLD COAST :

*Printed by the Government Printer at the Government Printing Office, Accra.  
To be purchased from the Government Printing Office (Publications Branch),  
Accra, Gold Coast Colony, and from the Crown Agents for the Colonies,  
4, Millbank, London, S.W. 1.*

1930.

Price—Two Shillings.