

1935.

Kenya

No. 38049.

SUBJECT

C0533/456

Colonial Development Fund.

Coffee Industry.

Previous

23133/34

see 23133/1/34

Subsequent

1936.

C.I.
C.D.F.
Agric.

1. Gov. Kenya. 34. 12th Jan. 36.

Submit, for consen., application to the C.D.F. for a free grant of £1,100 for the provision of certain equipment and apparatus for investigation of coffee diseases.

copy C & D by
S.P.P.

A memorandum was prepared for the C.D.F. C.A. Rossinck
9.2.36.

C.D.F. very properly dislike overlapping; and they will quite possibly ask (a) whether anything on these lines has been attempted at Ammani (b) whether this work could not better be undertaken at Ammani than in Kenya. No doubt there are good answers - perhaps Dr. Stockdale will supply them.

The estimates are rather sketchy; it would have been better if Kenya had sent home specifications & left C.D. to ascertain the price.

S.P.P.
11/2

A Research Conference was convened in Nairobi, 1934 by the Secretary of the Government's reference to consider and co-ordinate the research programmes

programmes of East African Departments of Agriculture and the East African Agricultural Research Station in respect of

- (i) Coffee
- (ii) Pests and Diseases of Crops in East Africa.

The Director of the Amani Research Station was Chairman of the Conference, and the delegates consisted of the Directors of Agriculture of Kenya, Uganda, and Zanzibar. Six technical officers from the Kenya Dept. of Agriculture, four from the Tanganyika Dept. of Agriculture, two from the Uganda Dept. of Agriculture, and two from the East African Agricultural Research Station also attended.

The Conference had before them research programmes dealing with coffee prepared by the Amani Research Station and the Departments of Agriculture of Kenya and of Uganda. The programme of the Tanganyika Dept. of Agriculture was not available owing to the very recent arrival of the Senior Scientific Officer for the Coffee Station in that Territory. It was understood by the Conference, however, that the Tanganyika research programme would be co-ordinated fully with that of the Amani Station and with the research controlled by the Depts. of Agriculture of Kenya and Uganda.

After examining the programmes before the Conference, it was decided (para. 9 of the Report) that the following major projects should be allocated to the Kenya Dept. of Agriculture :-

- (1) Foliar

- (i) Foliar diagnosis of Nutrient Deficiency.
- (ii) Influence of Spraying on Liquefying qualities
- (iii) Role of Copper in the Nutrition of Coffee.
- (iv) Preparation of the Bean.

Appendix IV to the Report also gives the co-ordinated programme of investigations of subjects related to coffee cultivation and includes, inter alia, the following for the Kenya Dept. of Agriculture

- (1) Coffee Berry Disease.
 - (a) Selection for disease resistance, with a view to seed selection and vegetative propagation.
 - (b) Trials of sprays and spreaders.
 - (c) Manuring trials.
 - (d) Cultural trials.
- (ii) Study of the various types of dieback prevalent in Kenya, and the conditions conducive to them.

This present application is submitted so that work on the Coffee Berry disease, and the study of dieback under Kenya conditions may be commenced, and the major investigations relating to nutrient deficiency and the role which copper plays in the nutrition of coffee may be undertaken.

The apparatus specified is necessary for the investigations which are foreshadowed in this programme of work, and the greenhouse is essential to the satisfactory equipment for the work of the Mycologist whether on coffee berry disease or any other diseases affecting crop plants in the Colony.

The request for financial assistance is for research work which has been assigned to the Kenya Department

Department of Agriculture by the Conference which was held at Amari in February last, and should, therefore, be supported.

I enclose, for reference, my copy of the Report of this Conference, but should be glad to have it returned to me in due course.

F. A. Stockdale

11.2.35.

For this is to enable Kenya to do its share of the work decided upon at the Conference. The work can't be done at Amari & is appropriate for Kenya.

Prepare memo accordingly quoting X, Y, & Z in Mr Stockdale's minute.

J. W. King
11.2.
same

2. C. D. A. C. 1704 _____ 15 Feb. 35

3. C. D. A. C. _____ 30 April 35

Recomd. free grant of £1,100 for the provision of equipment & apparatus in connection with an investigation into the disease affecting coffee & other remunerative crops.

Draft to Treasury Kenia

C. A. Ross with
14/31

To Treasury. Bona. 5/11/35

5 Treasury _____ 10 AM. 35

Sanction grant of £1,100 from C.D.A. for provision of equipment & apparatus required in connection with investigation into diseases affecting coffee & other remunerative crops

Draft to Mr. Kenia Kenia

C. A. Ross with
12/4/35.

7. 100 (Dated) - 12/11/35
DESTROYED UNDER STATUTE

To Kenya, 270 (w/c's 243) 16 APR 1935
1 answer

Also get to be
state copy of journal

2 The Lords Commissioners of
the Treasury have sanctioned
the free grant of £1100
from the Colonial Development
Fund for ~~the~~ in accordance
with the recommendation of
the Committee.

I have etc.

(1961) P. OUNLIFFE-LETER

Telephone No.: WHITEHALL 1234.

Any reply to this letter should be addressed to—

THE SECRETARY
TREASURY,
WHITEHALL, LONDON, S.W.1.

and the following number quoted:

S.34609/349. 10 APR 1935

65
TREASURY CHAMBERS.

10 April, 1935.

Sir,

No H
No 3
I have laid before the Lords Commissioners of His Majesty's Treasury Mr. Flood's letter of the 5th instant (38049/35) signifying Sir Philip Cunliffe-Lister's concurrence in the recommendation of the Colonial Development Advisory Committee, conveyed in the Secretary's letter of the 30th ultimo (C.D.A.C.1743) that a grant of £1,100 to the Government of Kenya for the provision of equipment and apparatus required in connection with an investigation into the diseases affecting coffee and other remunerative Crops should be made from the Colonial Development Fund.

I am now to request you to inform the Secretary of State that My Lords sanction a grant of £1,100 to the Government of Kenya from the Colonial Development Fund in accordance with the recommendation of the Committee.

A copy of this letter has been sent to the Secretary of the Colonial Development Advisory Committee.

I am, Sir,
Your obedient Servant,

The Under Secretary of State,
Colonial Office.

R. V. Noel Hoops Peiris

C. O.

Mr. *Worthington* 1/4/35
Mr. *Freeston* 1/4/35
Mr.

Mr. Parkinson.
Sir G. Tomlinson.
Sir C. Bottomley.
Sir J. Shuckburgh
Permt. U.S. of S.
Parly. U.S. of S.
Secretary of State.

38049/35

Answered by No 5
SC

C.D.
24 APR
H.

5. April, 1935

vi,

DRAFT.

The Secretary,
Treasury.

(3)

I am etc to refer to the
letter from the Colonial
Development Advisory
Committee of the 30th of
March (^{reference} C.D.A.C. 1743)
recommending the grant to
the Government of Kenya
of £1100 for the provision
of equipment and apparatus
required in connection
with an investigation
into the diseases affecting
Coffee and other remunerative
Crops.

I am to request that
the Lords Commissioners of
the Treasury may be
pleased

FURTHER ACTION.

Moved to signify their
approval of this grant
from the Colonial Development
Fund.

Sameli.

GEORGE E. W. FLOOD

83
/

Communications on this subject
should be addressed to—
THE SECRETARY.
Telephone : WHITEHALL 9191.



COLONIAL DEVELOPMENT ADVISORY COMMITTEE,
COLONIAL OFFICE,
DOWNING STREET,
S.W.1.

RECEIVED
- 1 APR 1955
C. O. REGY

bc

C.D.A.C. 1745.

Sir,

I am directed by the Colonial Development
Advisory Committee to request you to inform
Secretary Sir Philip Cunliffe-Lister that, at their 77th
meeting on the 27th of March, they had before them an
application from the Government of Kenya for a free
grant from the Fund of £1,100 for the provision of
equipment and apparatus required in connection with an
investigation into the diseases affecting coffee and
other remunerative crops in East Africa. (C.D.A.C. 1704)

Copy to Kenya (7)

No. 1

2. The Committee are satisfied as to the
desirability of the investigation and that the assistance
required is in respect of capital expenditure for the
necessary equipment and apparatus. They recommend a
free grant of £1,100 for the purpose.

3. A similar letter is being sent to the Treasury.

I am,
Sir,
Your obedient servant,

L.S. Smith

The Under Secretary of State,
Colonial Office,

Secretary to the Committee.

9 2

ansd. 3.

C.D.A.C. 1704.

COLONIAL DEVELOPMENT ADVISORY COMMITTEE.

Kenya: Coffee Berry Disease Research.

I circulate, for the consideration of the Committee, a Colonial Office memorandum submitting an application from the Government of Kenya for a free grant from the Fund of ¹¹⁰⁰ ~~2,000~~ for the provision of equipment and apparatus required for certain research work in connection with coffee and other economic crops in East Africa.

The usual Financial Summary is prefixed.

L.S. Smith.

Secretary to the Committee.

copy to Kenya (7)

Colonial Office,
15th February, 1935.

COLONIAL DEVELOPMENT ADVISORY COMMITTEE

Kenya: Coffee Berry Disease Research

I circulate for the consideration of the Committee

a Colonial Office memorandum submitting an application from the Government of Kenya for a free grant from the fund of £1,000 for the provision of equipment and apparatus required for certain research work in connection with coffee and other economic crops in East Africa.

The usual financial summary is prefixed.

L. S. Smith

Secretary to the Committee.

Colonial Office

19th February, 1956

FINANCIAL SUMMARY.

- | | |
|---|---|
| 1. <u>Dependency</u> : | Kenya. |
| 2. <u>Description of scheme.</u> | Provision of a greenhouse and special apparatus required in connection with an investigation into the diseases affecting coffee and other remunerative crops. |
| 3. <u>Date of commencement.</u> | As soon as approved. |
| 4. <u>Period of scheme.</u> | The work would be continuous. |
| 5. <u>Total cost.</u> | £1,100. |
| 6. <u>Allocation of cost.</u> | Local: £360
U.K. £1,100. 7/6 |
| 7. <u>Assistance desired.</u> | Free grant of £1,100. |
| 8. <u>Suggested terms of loan.</u> | Not applicable. |
| 9. <u>Probable yearly amounts required.</u> | 1955/56 £1,100. |

11

MEMORANDUM.

The Governor of Kenya applies for a free grant of £1,100 from the Colonial Development Fund for the provision of certain equipment and apparatus required for certain research work in connection with coffee and other economic crops of East Africa.

It will be seen that the application is made so that work on the Coffee Berry disease, and the study of "dieback" under Kenya conditions, may be commenced, and major investigations relating to nutrient deficiency and the rôle which copper plays in the nutrition of coffee may be undertaken.

Mr. Gov.
12.1.35.

The Secretary of State is advised that the apparatus specified is necessary for the investigations which are foreshadowed in this programme of work, and the greenhouse is essential for the work of the Mycologist, whether on Coffee Berry disease or any other diseases affecting crop plants in the Colony.

The request for financial assistance is for work which has been assigned to the Kenya Department of Agriculture by an inter-Territorial Conference on the Co-ordination of Scientific Research which was held at Amani in February 1934.

The Secretary of State has no hesitation in supporting the Governor's application, and trusts that the Committee will be able to recommend the free grant of £1,100 from the Colonial Development Fund to enable this important work to be carried out.

- 1 -

KENYA.

NO. 34.

Government House,

Nairobi,

KENYA.

12th January, 1935.

Sir,

I have the honour to submit for your consideration an application to the Colonial Development Fund for a free grant of £1,100 to enable certain equipment and apparatus to be procured so that research into the nature of the diseases which at present diminish the yield from coffee and other remunerative crops may be more thoroughly explored.

2. The equipment which is required consists of a greenhouse and certain spectographic and electrical apparatus, the need for which is fully explained in the enclosed Memoranda compiled by the Senior Agricultural Chemist and the Senior Mycologist.

3. The details of the application are set out in the Questionnaire which forms the third enclosure to this despatch, and you will observe that of the sum of £1,100 applied for, £740 will be expended in Great Britain.

4. Since the investigations envisaged can not fail to be of great benefit to other parts of the Empire besides this Colony, I trust that the application may receive your support.

I have etc.,

(Sgd.) J. Byrne.

BRIGADIER-GENERAL,
GOVERNOR.

THE RIGHT HONOURABLE
MAJOR SIR PHILIP CUNLIFFE-LISTER, P.C. G.B.E., M.C., M.P.,
SECRETARY OF STATE FOR THE COLONIES,
DOWNING STREET,
LONDON, S.W.1.

DRAFT

Mr. Grossmith. *B/1/21*

In. Trees in 13

R. Flood 13.

S. Campbell 13/2

S. C. B. Thomas 13/2

W. L. S. Smith

MEMORANDUM.

The Governor of Kenya applies for a free grant of £1,100 from the Colonial Development Fund for the provision of certain equipment and apparatus which is required in connection with the ^{the} research ^{work} in connection with coffee and other economic crops of E. Africa. ~~work described in the following paragraph.~~ *It will be seen that the*

The application is made so that work on the Coffee Berry disease, and the study of 'dieback' under Kenya conditions, may be commenced, and ~~the~~ major investigations relating to nutrient deficiency and the rôle which copper plays in the nutrition of coffee may be undertaken.

The Secretary of State is advised that the apparatus specified is necessary for the investigations which are foreshadowed in this programme of work, and the greenhouse is essential ~~to the satisfactory equipment~~ for the work of the Mycologist, whether on Coffee Berry disease or any other diseases affecting crop plants in the Colony.

The request for financial assistance is for work which has been assigned to the Kenya Department of Agriculture by ~~the~~ Conference which was held at Amani in February 1934.

The Secretary of State has no hesitation in supporting the Governor's application, and trusts that the Committee will be able to recommend the free grant of £1,100 from the Colonial Development Fund to enable this important work to be carried out.

*an inter-territorial
Conference on the
co-ordination of
scientific research*

from Governor Kenya 12/1/34

KENYA.

No. 34.



14
GOVERNMENT HOUSE,
NAIROBI,
KENYA.

RECEIVED
- FEB 1935
C. O. REGY

12th JANUARY, 1935.

Sir,

I have the honour to submit for your consideration an application to the Colonial Development Fund for a free grant of £1,100 to enable certain equipment and apparatus to be procured so that research into the nature of the diseases which at present diminish the yield from coffee and other remunerative crops may be more thoroughly explored.

2. The equipment which is required consists of a greenhouse and certain spectrographic and electrical apparatus, the need for which is fully explained in the enclosed memorandum compiled by the Senior Agricultural Chemist and the Senior Mycologist.

3. The details of the application are set out in the Questionnaire which forms the third enclosure to this despatch, and you will observe that of the sum of £1,100 applied for, £740 will be expended in Great Britain.

4. Since the investigations envisaged can not fail to be of great benefit to other parts of the Empire besides this Colony, I trust that the application may receive your support.

I have the honour to be,

Sir,

Your most obedient, humble servant,

BRIGADIER-GENERAL.

GOVERNOR.

THE RIGHT HONOURABLE
MAJOR-SIR PHILIP CURRIE-LESTER, B.C., G.C.S.I., M.C., M.P.,
SECRETARY OF STATE FOR THE COLONIES,
BONNIE STREET,
LONDON, S.W.1.

And Tel 17/1/35

Ref. No. Cof/2/11/30.The Deputy Director (Plant Industry),
NAIROBI.COFFEE BERRY DISEASE.

Coffee Berry Disease is undoubtedly the limiting factor in coffee production in a great deal of the country to the west of the Rift Valley. The results of the investigations at the Sotik Station indicate that resistance is the most promising line of defence. There is no question of immunity, it is only resistance that is being sought.

2. It is an interesting fact that Coffee Berry Disease is only a major menace on a certain soil type, a soil which can only be described as showing incipient podsolisation. In the soil changes incurred, during the processes of podsolisation, there is a very severe leaching of compounds of the heavy metals from the upper soil horizons. My observations on these soils lead me to the conclusion that the zone of accumulation, a feature of the podsolisation process, occurs only at fair depths, beyond the reach of the main root system of coffee. On soils showing no signs of podsolisation, Coffee Berry Disease either does not occur or is of very minor importance indeed.

3. The deciding factor in susceptibility to Coffee Berry Disease, it is highly conceivable, may lie in the absence or deficiency of one of the trace elements concerned in plant nutrition. The resistance exhibited by some coffee varieties or even individual trees may lie in their power to abstract more of the trace elements from the small supply in the soil. If this hypothesis be correct it is root stock rather than scion which is important, and any attempt to make the Coffee Berry Disease areas productive by top working to a resistant scion would be doomed by failure.

4. This aspect of the subject has been attacked by ordinary chemical methods without success. The quantities of the trace elements are so minute that ordinary methods of chemical analysis fail to reveal them. It is only when their presence is suspected that modern micro-methods can be employed and these are laborious and time consuming. Further we do not know for what elements to search. It is only recently that it was discovered that copper is an essential element, present in coffee to the extent of 10 to 15 parts per million. More recently still it has been found that zinc is an essential element needed in quantities even more minute than copper. It is suspected that elements such as cobalt, arsenic, vanadium, among others, may be needed by plants. The estimation by chemical analysis of traces of such elements, if it were possible, would be very slow and liable to errors, swamping any variations.

S. A. ...

5. A suitable instrument does exist, the quartz spectograph. With this it is possible in the course of an hour to estimate to an accuracy of 10 per cent. the quantities of trace elements in a sample of plant material or of soil. It is only within the last few years that the applicability of spectrographic analysis to agricultural research has been learned, especially to the subject of deficiency of trace elements. The possibility of its applicability of Coffee Berry Disease research is one that should not be overlooked, a very great deal of work may otherwise be wasted.
6. Spectrographic apparatus is expensive, the spectrograph of a suitable robust type alone costs over £200, while the necessary accessories and local equipment would raise the cost of the complete apparatus to approximately £500. An additional piece of electrical apparatus, which would be of great value in attacking the problem, would cost a further £80.
7. Applying the results of the spectrographic analysis directly to field conditions, where one would have to depend on chance infections and chance climatic conditions, may lead one to false conclusions or at least postpone the general application of the results. It would be necessary to work under controlled conditions of humidity and temperature and soil conditions replicating those of the Coffee Berry Disease areas. This aspect of the investigation has been discussed with the Senior Mycologist and it is agreed that a greenhouse of modern design is essential. The Senior Mycologist will deal with the need for a greenhouse, from the botanical and mycological aspect.
8. There are other problems in coffee culture in Kenya which are at present unelucidated and upon which spectrographic analysis may shed much light. One of the most important is that condition, so common in many districts, in which dieback of branches and roots occurs whenever what would be considered a normal crop elsewhere is carried. The result of this condition is that only every three years is there a fair crop, during the other two years a very light crop, certainly unprofitable, is carried.
9. While the direct cause of this condition is now known we do not know the ultimate cause. Our recommendations now are directed to the maintenance of a medium crop every year. It is suggestive that where this condition occurs, although soil and climatic conditions are suited to tree growth, the natural vegetation is never true forest. It is conceivable that here too mineral deficiencies may play an important part, a possibility that should not be overlooked.
10. Spectrographic analysis will also be of great assistance in the multifarious analyses of soils and plant material called for, analyses which today occupy much time and use much material. Such an apparatus as mentioned above would greatly increase the outfit of the Section at no increased cost. In view of the far reaching possibilities of spectrographic analysis I would suggest that an application be made for a grant from the Colonial Development fund for this purpose.

SD: V.A. Beckley.
SENIOR AGRICULTURAL CHEMIST.

17
COPY.

SCOTT AGRICULTURAL LABORATORIES.

24th November, 1934.

Ref.No.Coff/2/11/32.

Deputy Director (Plant Industry).

COLONIAL DEVELOPMENT FUND.
GREENHOUSE ACCOMMODATION.

The Senior Agricultural Chemist and I have agreed on the necessity for a co-operative investigation into the possibility that resistance of coffee bushes to berry disease may be bound up with the supply of some minor element to the plant. If this is the case - and sufficient indications that it may be so have been obtained to justify the hypothesis - the fact may be of fundamental importance in the selection of rootstocks for vegetative propagation designed to establish coffee plantations of a type resistant to berry disease. There is also every likelihood that the same consideration may be of equal applicability to the general problem of producing profitable types of coffee for areas where at present the ordinary Moqhs variety is unsuccessful. The suggested investigation may therefore be of far-reaching importance to the coffee industry.

2. The Senior Agricultural Chemist is dealing separately with the subject of the necessary chemical apparatus required. For my own part in the investigation, greenhouse accommodation is an essential. Amongst other things, it will be necessary to test by artificial infection the effect of various treatments on the resistance of bushes and, in order to do this, a greenhouse in which conditions can be so controlled as to imitate those of districts where berry disease is prevalent will be required.

3. Another important direction in which the provision of greenhouse accommodation would greatly facilitate my work is in the testing of important coffee varieties, new selections etc., for resistance to leaf disease (Hemileia vastatrix) which is a serious factor in coffee cultivation in certain districts. I recently received a request from the Coffee Section for this kind of assistance and have already found the absence of a greenhouse a considerable handicap in my attempts to carry out the tests required.

4. A less important line of work, but one nevertheless worthy of attention, is the elucidation of the factors involved in outbreaks of seedling blight in coffee nurseries. This disease has been known occasionally to kill many thousand seedlings in a single nursery but suggestions for control have had to be based on entirely inadequate information concerning the conditions conducive to the disease. Contemplated investigations into such matters have had to be postponed largely for lack of greenhouse facilities.

5. In ...

18

2.

5. In view of the foregoing considerations and of the necessity for placing this Section in a more favourable position to carry out its obligations to the Coffee industry, on which the country depends so largely for its prosperity, I would strongly urge that an application be made for a grant from the Colonial Development Fund to defray the cost of a greenhouse. An estimate recently obtained from the Public Works Department for a simple type of greenhouse of suitable size was £408. Allowing for certain refinements required to give humidity control necessary for the work described in para. 2 above, I suggest that the application be for a sum of £460.

6. Although the case put forward above is on the basis of investigations required for the coffee industry, there are innumerable occasions where research problems connected with other crops demand greenhouse accommodation for its satisfactory pursuance. In this connection it may be mentioned that Mr. Stockdale during his visit to Kenya in 1929 remarked to me that he considered a greenhouse a fundamental part of the equipment of any mycologist. At the present moment investigations in hand on a suspected new disease of wheat, the nodule bacteria of indigenous legumes, bacterial blight of beans and groundnut wilt are all suffering from lack of the necessary greenhouse facilities.

SD: J. McDonald.

SENIOR MYCOLOGIST.

19

QUESTIONNAIRE.

APPLICATION FOR GRANT FROM COLONIAL DEVELOPMENT
FUND FOR THE PROVISION OF A GREENHOUSE AND
SPECIAL CHEMICAL EQUIPMENT.

- (1) Q. Colony.
A. Kenya.
- (2) Q. Description of scheme, stating its objects and advantages together with any plan or specification that may be available.

A. A greenhouse and spectrographic apparatus is required primarily for the investigation of the role of trace elements in the nutrition of coffee bushes, their influence on relative susceptibility or resistance of such bushes to berry disease and their consequent importance in the selection of rootstocks for use in combating the disease through vegetative propagation of resistant scion material.

Spectrographic apparatus is required for the estimation of the trace elements, and greenhouse, accommodation is necessary for carrying out inoculation tests of grafts under controlled conditions. Many other lines of work both chemical and mycological, which have been hampered in the past by lack of such facilities would be made possible through their provisions.

- (3) Q. Earliest estimated date of commencement.
A. On receipt of Secretary of State's approval.
- (4) Q. Approximate period of scheme.
A. Work would be continuous.
- (5) Q. (a) Detailed estimates of the cost showing probable total expenditure in United Kingdom in each financial year (1st April to 31st March) during the currency of the scheme:
(b) Have these estimates been based on expert advice ?

A.

(a)	(i) Green house	-	£460.	} £1040.
	(ii) Spectrographic apparatus		£500	
	(iii) Electrical apparatus		£ 80.	
	(iv) Freight		£ 60.	
	Total ...		<u>£1,100</u>	

Total amount of £1,100 would be expended in the United Kingdom - financial year ending 31st March 1936.

(b) Greenhouse estimate prepared by the Public Works Department. Spectrographic apparatus estimate prepared by the Senior Agricultural Chemist who will select apparatus while on leave if the application is approved.

6. Q. Approximate/

6. Q. Approximate estimate of cost between:
 (a) local expenditure:
 (b) expenditure in Great Britain.
- A. (a) £360 for greenhouse.
- (b) £100 for greenhouse }
 £580 for apparatus } £740.
 £ 60 for freight }
7. Q. What circumstances have prevented work from being put in hand before.
- A. Financial stringency.
8. Q. Proposed method of financing capital expenditure contemplated.
- A. Does not apply.
9. Q. The advantages to be derived and the additional yearly net revenue estimated to be earned as a result of the proposed expenditure.
- A. The scope of the Botanical and Chemical sections would be greatly increased. It is not possible to calculate the direct gain in revenue to Government but if the investigations prove successful in diminishing the losses obtained by disease to coffee and other crops, considerable indirect revenue will eventually be received.
10. Q. In what form is assistance under the Act desired ?
- A. By a direct grant of £1,100 from the Colonial Development Fund.