

38393

1938

38393

KENYA

Sisal Research StationEstablishment of -Application for assistance from C.A.F.

Previous									
	R 299	3/8							
	297	1/8							
	309	2/8							
	Mr W. Davies	2/8							
Subsequent	297								
	98								
	297	17/6							
	309	20.6							
	Sci F. Stockdale	21/6							
	Mr Dawe	22.6							
	Mr Parkin								
	R. 297	26/7							
	297 309	3/8							
	Mr. Lunnage	3/8							
	Mr. S.W. Smith	5/8							
	Mr. Lunnage	5/8							
	Mr. Lunnage	5/8							
	Mr. Lunnage	—							
	R. 298	19/8							
	R. 297	19/8							
	309	19/8							

FILE A.

(1097) W.F. 22-484(10) 8,000 10/37
N.P. Co. (1932) 77a

Ch. Agre
CAF.

1^o to C.F.S.
10^o spares to R.63.

Gov. 318.
20.6.38. 2
This applies for assistance from CAF
for £4000 representing half of the estimated
capital expenditure on establishment of a high
level civil research station.

Sir F. Stockdale

May we have your
views on this, please?
Do you support it?

W. J. Dave
20.6

This proposal may be supported by the CAF.
As will be seen from the opening paragraph of the
memorandum it was discussed when I was in
Kangra in 1937 and the establishment of a high
level station for civil research had my
support. The lines of work projected are all
workings of investigation & they will not overlap
with the work being carried out at the high
level station in Tangayika at Klongons

F. A. Stockdale
2/6.

Off. to be used covering
memo. and let Sir J. Harshbale
see it.

It should come before

The C'ttee at their next
meeting and reach the
Defg. Sec. by 6th July.

Attn
H. J. Bawe
22.6

Comemo.

20/7
3 boab 2365 - 2 July 38.

H C.M.C. 2380 27.7.38
Remnds for grant of £4,000 to meet
half the cost of establishment of
the station. Scheme is allotted serial number
516.

3
Mrs. Sawridge, no.

You will remember that at
the last C.M.C. meeting an application
from Kenya for a grant of £4,000
towards the capital expenditure on the
establishment of a high level ^(basic) research
station in the colony was considered.

The Committee recommended a free
grant of £4,000 and a letter in this
sense has been sent to the Gov. Secretary.

Sir John Engleson, one of the
members of the C.M.C., has asked
whether there would be any objection
to his mentioning this matter to a
friend of his who is interested in
[sil] machinery.

Do you see any objection?
(The insistence, of course, that the Committee's
recommendation requires covering Treasury
approval).

20/7
Mrs. Sawridge

DESTROYED UNDER STATUTE

Eaglesome
to Mr. D. Smith
Promises to make no public announcement
until authorized.

Mr. Smith

The letter of 5 has a reference
concerning Mr. John Eaglesome's
request and then can, as far
as the E. A. Dept. is concerned,
be no longer open to his mentioning
the matter to a third party. It
is his own business.

(2) Show show Mr. Davis the
M. and to decide what
they should be put on a
file (D. has thought a
gen. or economic file
has been in existence).

W. Smith
2/10/38

Many thanks. Would you please
let me know as soon as I
can inform Sir J. Eaglesome
that the matter has been made
public.
You will now send the
usual letter to the Treasury on (4).

W. Smith
5/8/38

W. Smith
5/8/38

DESTROYED UNDER STATUTE

Treasury
12.8.38
Ref. sanctions grant of £4,000. from Colonial
Development Fund.

Draft submitted

Clarke White 23/8

Mr. T. W. Davies would like this file
sent to him in red after the despatch
has gone in order that Sir J.
Eaglesome may be informed. It is
that the matter has been made
public. (See slip above (8) in CSAC file
705 below)

Clarke White 23/8

F.S.
W. Smith
Mr. Davis will give you
a slip to file in the
end of this week

W. Smith
23/8/38

Kenya 519. (2, 2, 27) (banned) 31 8 38

Have indicated
a draft 5/8/38

Draft submitted after speaking with
Mr. Davies
Clarke White 2/9

Thanks.
W. Davies
2/9

28 293 / 38

C. D.

Mr. Colquhoun 2/8
Mr. Sumida 13/8

Mr.

Sir H. Moore.

Sir G. Tomlinson.

Sir C. Bottomley.

Sir J. Shuckburgh

Permt. U.S. of S.

Parly. U.S. of S.

Secretary of State.



Sir

I have etc to ask the receipt
(1) of your dep No 318 of the
10th of June transmitting an
application for a grant for
the Colonial Development
to meet half the estimated capital expenditure
Fund in connexion with the
establishment of a high-
level social research station
in Kenya

2. I enclose for your
information a copy of the
Memorandum submitting
your application to the
Colonial Development Advisory
Committee, together with a copy
of letters from the Committee
and from the Treasury
recommending that a
grant of £4000 be
made from the Treasury
Sanctioning of this

DRAFT.

Keya
No. 519
G.M.

Memorandum
No 2 (copy as per No 3 will
for C.D.C. in No 3 with
do to avoid copying again)
C.D.C. No 7
Treasury No 7

FURTHER ACTION.

Rever to
Mr Colquhoun
in red when
Dept has
issued

reference is had
the estimated
capital expenditure
on the station

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. 34609/0477.



TREASURY CHAMBERS.

15th August, 1938.

Sir,

I have laid before the Lords Commissioners of His Majesty's Treasury Mr. Surridge's letter of the 12th instant (38393/38) signifying Mr. MacDonald's concurrence in the recommendation of the Colonial Development Advisory Committee, conveyed in the Secretary's letter of the 27th ultimo (C.D.A.C. 2380) that a free grant of £4,000 should be made from the Colonial Development Fund to the Government of Kenya representing half the estimated capital expenditure on the establishment of a high level sisal research station in the Colony. My Lords note that the balance of the capital cost will be contributed by the Sisal Industry Committee, who will also bear the whole of the annually recurrent expenditure on the station, assisted by such contributions as may be made by the Government of Kenya under the terms of the Sisal Industry Ordinance.

I am now to request you to inform the Secretary

of

The Under Secretary of State,
Colonial Office.

INDIA DEPARTMENT

Copy to Kenya

of State that My Lords sanction the grant of £4,000 from the Colonial Development Fund in accordance with the recommendation of the Committee.

Copies of this letter have been sent to the Secretary of the Colonial Development Advisory Committee and to the Crown Agents for the Colonies.

I am,

Sir,

Your obedient Servant,

J. A. Barlow

Communications on this subject should be addressed to

THE SECRETARY

Telephone: WHITEHALL 9191

C. D. A. C. 2380.



COLONIAL DEVELOPMENT ADVISORY COMMITTEE

COLONIAL OFFICE,
Caxton House (East Block),
~~10, CAXTON HOUSE, STRAND,~~

Tot Hill Street, S.W.1.

27th July, 1956.

Sir,

I am directed by the Colonial Development Advisory Committee to request you to inform Mr. Secretary MacDonald that, at their 110th meeting on the 20th of July, they had before them an application from the Government of Kenya (C.D.A.C. 2365) for a free grant of £4,000 representing half the estimated capital expenditure on the establishment of a high level sisal research station in the Colony. The balance of the capital cost will be contributed by the Sisal Industry Committee, who will also bear the whole of the annually recurrent expenditure on the station, assisted by such contributions as may be made by the Government of Kenya under the terms of the Sisal Industry Ordinance.

2. The Committee had the advantage of receiving evidence, during their discussion, from Sir Frank Stockdale, K.C.M.G., C.B.E., Agricultural Adviser to the Secretary of State.

THE UNDER SECRETARY OF STATE,

COLONIAL OFFICE.

D. J. W.

3. The work which is at present being carried out at the low level research station at Mlingano in Tanganyika relates mainly to crop experiments, whereas the investigations which it is proposed should be undertaken in Kenya will have as their main object the more complete utilisation of the sisal plant and the introduction of new types of sisal fibre. These experiments, if successful, will confer great benefits on the sisal industry in British East Africa.

4. The Committee recommend a free grant of £4,000 to meet one half of the capital cost of the establishment of the research station.

5. The serial number allotted to this scheme is 516.

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

I am,

Sir,

Your obedient servant,

Geo Smith

Assistant Secretary to the Committee.

C.D.A.C. 1305.

COLONIAL DEVELOPMENT ADVISORY COMMITTEE

Establishment of a low level research station in Kenya

The Committee on the establishment of a low level research station in Kenya have considered the proposal and have estimated the capital expenditure on the establishment of a high level sisal research station in the Colony.

A Colonial Office memorandum with the financial summary is attached.

Geo. Smith

Assistant Secretary to the Committee.

FINANCIAL SUMMARY.

1. Dependency. Kenya.
2. Description of scheme. High level staff research station.
3. Date of commencement. As soon as approved.
4. Period of scheme. Three years.
5. Total cost. £8,000.
6. Allocation of cost. Local: £4,600.
U.K.: £3,400.
7. Assistance desired. Free grant of £4,000.
8. Suggested terms of loan. Not applicable.
9. Probable yearly amounts required.

1938/39	£3,025
1939/40	475
1940/41	500

140

MEMORANDUM.

The Governor of Kenya has submitted proposals for the establishment of a high level sisal research station in the Colony, where an attempt will be made to produce new types of fibre suitable for trades not at present using sisal fibres.

It is proposed that work at the research station will be directed first to the recovery of the total fibre content of the sisal leaf by a process of crushing between rollers followed by cleaning in an accelerated ret; second, to the production of a clean soft tow suitable for the weaving of fabrics of the canvas type from the fibre of ~~summer~~ plants which are at present a waste product of sisal cultivation; third, to the more complete utilization of the sisal plant, particularly of the coarse resilient fibre in the bole.

These investigations, which if successful may lead to considerable modifications in the methods of fibre production and confer great benefits on the industry in British East Africa, were discussed with the Sisal Industry Committee in Kenya last year by Sir Frank Stockdale, who has expressed agreement with the proposals. In his opinion, the subjects covered by the projected lines of research merit investigation, and will not overlap with the work at present being carried out at the low level sisal research station at Mlingani in Tanganyika. (C.D.A.C. 2362).

A despatch from the Governor of Kenya, together with an explanatory memorandum and a note on

Sisal

sisal research by the Senior Agricultural Chemist of Kenya, is attached. It will be observed that the estimated capital cost of the scheme is £8,000 and that the Governor is anxious to secure assistance from the Fund to the extent of one half of the total cost, i.e. a free grant of £4,000. The Sisal Industry Committee has agreed to contribute the balance of the capital cost, and will bear the whole of the annual recurrent expenditure on the station, including maintenance of buildings, assisted by such contributions as may be made by Government annually under the terms of the Sisal Industry Ordinance.

The Secretary of State desires to support the Governor's application, which he trusts the Committee may find it possible to grant.

Colonial Office,

2nd July, 1938.

KENYA.

No. 318.

Government House,

Nairobi,

Kenya.

10th June, 1938.

Sir,

I have the honour to transmit to you, for your consideration, an application for a grant from the Colonial Development Fund of £4,000, representing half the estimated capital expenditure on the establishment of a high-level sisal research station in Kenya. The application is contained in the accompanying completed questionnaire and explanatory memorandum.

2. This project has no relation to previous schemes for which assistance has been granted from the Colonial Development Fund in connection with sisal experiments, and I trust that it may be submitted to the Colonial Development Advisory Committee with your recommendation.

I have, etc.

(Sgd.) R. BROOKE-POPHAM

AIR CHIEF MARSHAL
GOVERNOR.

G.D.A.C.

2088
2090
2199
2214

THE RIGHT HONOURABLE
MALCOLM MACDONALD, M.P.,
SECRETARY OF STATE FOR THE COLONIES,
DOWNING STREET,
LONDON, S.W.1.

Mr. MacDougall. 28-6.
Mr. Paskin. 28-6.
Sir F. Stockdale. 29/6 27/6
Sir J. Campbell.
Mr. Dawe. 30.6 *Atome*

MEMORANDUM.

The Governor of Kenya has submitted proposals for the establishment of a high level sisal research station in the Colony, where an attempt will be made to produce new types of fibre suitable for trades not at present using sisal fibres.

It is proposed that work at the research station will be directed first to the recovery of the total fibre content of the sisal leaf by a process of crushing between rollers followed by cleaning in an accelerated ret; second, to the production of a clean soft tow suitable for the weaving of fabrics of the canvas type from the fibre of sucker plants which are at present a waste product of sisal cultivation; third, to the more complete utilization of the sisal plant, particularly of ^{the} coarse resilient fibre in the bole.

These investigations, which if successful ~~may lead to considerable modifications in the~~ ~~will revolutionize~~ methods of fibre production and confer great benefits on the industry in British East Africa, were discussed with the Sisal Industry Committee in Kenya last year by Sir Frank Stockdale, who has expressed agreement with the proposals. In his opinion, the subjects covered by the projected lines of research merit investigation, and ~~they~~ will not overlap with the work ^{at present} being carried out at the low level ^{sisal} research station at Mlingano in Tanganyika. (CONF 2262)

Fr. Kenya 10318 12 June 10

with all ends.

Copy to Kenya

A despatch from the Governor of Kenya, together with an explanatory memorandum and a note on sisal research by the Senior Agricultural Chemist of Kenya, is attached. It will be observed that the estimated capital cost of the scheme is £8,000 and that the Governor is anxious to secure assistance from the Fund to the extent of one half of the total cost, i.e. a free grant of £4,000. The Sisal Industry Committee has agreed to contribute the balance of the capital cost, and will bear the whole of the annual recurrent expenditure on the station, including maintenance of buildings, assisted by such contributions as may be made by Government annually under the terms of the Sisal Industry Ordinance.

The Secretary of State desires to support the Governor's application, which he trusts the Committee may find it possible to grant.

Colonial Office.

2 July, 1936.

FINANCIAL SUMMARY.

1. Dependency. Kenya.
2. Description of scheme. High level visual research station.
3. Date of commencement. 15 NOVEMBER 1938
4. Period of scheme. Three years
5. Total cost. £. 8,000...
6. Allocation of cost. Local: £. 4,600...
U.K. £. 3,400...
~~Expenditure on expenditure will be (local) (in U.K.)~~
7. Assistance desired. ~~Local loan~~
Free grant of £. 4,000...
8. Suggested terms of loan. Not applicable.
9. Probable yearly amounts required.
- | | | |
|---------|-------------|------|
| 1938/39 | £. 8,050... | 3025 |
| 1939/40 | £. 7,750... | 475 |
| 1940/41 | £. 1,000... | 500 |
- ~~Subsequent to 1941~~

Notes.

Question 2. A very brief description only of the project is required.

Question 3. A very brief description only of the project is required.

Question 4.

If a loan is not applied for, will the Government...
If application is being made, please state the amount of loan within which the loan should be raised, suggested terms of repayment and whether application is made for a grant or interest for any period.

In the absence of special considerations to the contrary the rate of interest usually recommended at present is 5% and from the Colonial Development Fund is 3%, and the method of repayment that of equated annual instalments covering principal and interest.

Question 9. Assuming that the scheme is begun on the date given in question 3 state the estimated sums which will be required from the Fund during each financial year during the term of the scheme during the currency of the loan.



10 June, 1938.

Sir,

I have the honour to transmit to you, for your consideration, an application for a grant from the Colonial Development Fund of £4,000, representing half the estimated capital expenditure on the establishment of a high-level sisal research station in Kenya. The application is contained in the accompanying completed questionnaire and explanatory memorandum.

2. This project has no relation to previous schemes for which assistance has been granted from the Colonial Development Fund in connection with sisal experiments, and I trust that it may be submitted to the Colonial Development Advisory Committee with your recommendation.

I have the honour to be,
Sir,
Your most obedient,
humble servant,

R Brooke-Popkum

AIR CHIEF MARSHAL
GOVERNOR.

THE RIGHT HONOURABLE
MALCOLM MACDONALD, M.P.,
SECRETARY OF STATE FOR THE COLONIES,
DOWNING STREET,
LONDON, S.W. 1.

627C 2088

627C 2090

627C 2214

627C 2199

8

Answer

FORM OF APPLICATION FOR ASSISTANCE

from

THE COLONIAL DEVELOPMENT FUND.

HIGH-LEVEL SISAL RESEARCH STATION.

- (1) Kenya.
- (2) The establishment of an experiment station for sisal at the higher altitudes.
- (3) Immediately.
- (4) Three years.
- (5)(a) Expenditure to be incurred in first year.....£6,050.
" " " " " second " 950
" " " " " third " 1,000
£8,000
- (b) Detailed estimates have been prepared on technical advice.
- (6)(a) Local Expenditure: £4,600
- (b) Expenditure in the United Kingdom:
Direct (including freight & insurance) £1,225
Indirect (material manufactured in United Kingdom and purchased locally) 2,175.
£3,400
- (7) Lack of funds.
- (8) Half the capital cost of the station will be met from the accumulated funds of the Kenya Sisal Industry, and assistance from the Colonial Development Fund is sought in respect of the remaining half of the capital cost.
- (9) Memorandum attached.
- (10) A free grant of £4,000.

MEMORANDUM

For some years the establishment of an experiment station for sisal at the higher altitudes has been under consideration. The project was discussed with the Sisal Industry Committee in 1937 by Sir Frank Stockdale, who stated (at page 76 of his Report on his visit to East Africa) that there is every reason to believe that a small experiment station on the lines of that established at Mlingo in Tanganyika would be of great value to the Kenya sisal industry. A new factor which has increased the importance of the scheme arises out of the investigations carried out during the last year into the problem of the reclamation of flume waste tow. Between 20% and 30% of the total fibre content of sisal leaves is wasted in the course of the normal method of decortication. It has been possible by mechanical means to recover this waste tow, but manufacturers have hitherto been prejudiced against the tow on account of an irritating dust; the recent investigations have led to a successful system of retting which produces a greatly improved tow. This method has been applied to other sisal products with encouraging results, and preliminary laboratory investigations indicate that the retted fibre is softer than normal fibre, is less liable to deteriorate by oxidation and so is more durable.

The first line of research will be the recovery of the total fibre content of the sisal leaf by a process of crushing between rollers followed by cleaning in an accelerated ret. The recovery of all the fibre of the leaf in an improved form will be of great value to the sisal industry in East Africa. It is also probable that the process will be applicable to the recovery of other classes of fibre.

One of the waste products of sisal cultivation is

the crop of sucker plants that develop at the base of the parent plants. These suckers contain a fine strong fibre, which normal decorticating machines cannot recover. Some years ago an attempt was made to produce sucker tow but this failed because of the difficulty of removing adherent tissue. Preliminary investigations recently have shown that it is possible to produce a clean soft tow which will be suitable for the weaving of fabrics of the canvas type.

The third line of investigation will lie in the more complete utilisation of the sisal plant. The bole contains a coarse, resilient fibre which would probably be suitable for upholstery, reinforcement of plastics, and the manufacture of certain classes of brushes.

These investigations will call for a well equipped workshop where the experimental machinery can be constructed and erected.

If these investigations are successful, it is highly probable that the agronomic side of sisal fibre production will be profoundly affected in the direction, chiefly, of earlier cutting, encouragement of sucker growth and recovery of bulbil and sucker fibre after approximately one year. For this reason agronomic experiments will not be laid down before 1940.

The proposed lines of research, if successful, will completely revolutionise the methods of fibre production and possibly of sisal cultivation. New types of fibre will be produced suitable for trades not at present using sisal fibres. It is estimated that the total annual benefit to the industry in British East Africa will be in the neighbourhood of £1,500,000.

2. Detailed estimates of the proposed capital expenditure are as follows:-

Buildings.

Officer's house.....	900	
Assistant's house.....	800	
Office, laboratory & store.	600	
Factory and workshop.....	400	
Labour lines.....	450	
	<u>£3,150</u>	3,150

Land.

Clearing, development (roads, anti-erosion measures, cover crops), planting 100 acres		650
---	--	-----

Water Supply.

Oil Engine, pump, piping, clearing tanks and reservoir		750
--	--	-----

Electric power installation.

550

Equipment

Motor vehicle.....	250	
Scientific and office equipment	375	
Field equipment.....	200	
Machinery for factory and workshops.....	800	
Special machinery for line-fibre retting research	1275	
	<u>£2,900</u>	<u>2,900</u>

£8,000

These estimates have been prepared by the Joint Standing Committee on Sisal Research, consisting of officers of the Department of Agriculture and certain sisal producer members of the Committee of the Kenya Sisal Growers' Association in consultation with the Director of Public Works.

3. The funds of the Sisal Industry Committee do not permit it to undertake the full capital expenditure involved. It is estimated that a reserve approximating to £5,000 will be in the hands of the Committee at the end of 1938, of which it is proposed that the sum of £4,000 should be contributed towards the capital cost of the station, the balance being maintained as a reserve for the development of sisal research.

The Sisal Industry Committee has agreed to bear the whole of the annual recurrent expenditure on the station including maintenance of buildings, assisted by such contributions as may be made by Government annually under

the terms of the Sisal Industry Ordinance.

4. The Station, for which a suitable site has been selected on Crown land in the Thika district, would be owned by Government and staffed by the Department of Agriculture, the Government being reimbursed by the Sisal Industry Committee to the extent of the whole of the recurrent expenditure.

5. A note by the Senior Agricultural Chemist is attached.

SISAL RESEARCH

The proposal for sisal research at the higher elevations in East Africa was concurrent with that for research at the lower. The latter has received its Sisal Research Station (in Tanganyika) and the Sisal Industry Committee of Kenya, appointed under the Sisal Industry Ordinance, has since the time has come to set up a Sisal Research Station in this Colony. A few researches have been proceeding in Kenya for some little time under the general charge of the Senior Agricultural Chemist of the Agricultural Department, with a technical assistant employed by the Sisal Industry Committee. Government has provided an extra sum of £500 in the 1938 Estimates as a contribution towards the initiation of field research. Recently the Joint Standing Committee on Sisal Research was established, consisting of officers of the Agricultural Department and of the sisal planters who are members of the Committee of the Kenya Sisal Growers' Association, and a complete programme of scientific and non-scientific investigations has been prepared and considered. A suitable site, on Crown Land, for a station has been selected in the thick bush and Government has been approached for the disposal of this land for research purposes.

A Sub-Committee of the Research Committee was appointed to prepare estimates for the establishment of a research station and in the course of considering the estimates the programme of work was discussed and the following conclusions arrived at :-

(1).....

(12)

- (i) It is advisable to proceed with the establishment of the research station immediately.
- (ii) In view of the immediate importance of the programme of non-agronomic work, the agronomic work should be postponed in order that all services may be devoted to the non-agronomic programme and that the agronomic programme be laid down on the station in 1940.
- (iii) It is desirable that an assistant be appointed in 1942.
- (iv) In order to secure continuity of the work it is desirable that the officer in charge of the station and directly conducting the experiments should be a member of the Government service.

The reason for these recommendations lies mainly in the non-agronomic programme. The success of the retting research on flax now has opened a new vista of work. In the present methods of decortication, between 20% and 30% of the fibre in the leaf is lost. It appears possible to recover all the fibre and to clean it by a single process of retting. There are several advantages in this process. The cost of decortication both as regards machinery and recovery, will be less than in the fibre produced by retting. The softer fibre appears to be less liable to attack by weather; it is more durable. The tea produced by brushing will be of a different character - softer and finer. The sisal leaves for the retting research will be secured from a neighbouring estate.

THE.....

The retting will make possible the production of sucker tow, a very much finer fibre which will be suitable for a different trade. It is possible to produce a perfectly clean tow by retting. The same machinery as is evolved for the line fibre production will be suitable for this. Suckers, instead of being a liability, will become an asset; in fact, it is probable that it may become desirable to encourage sucker growth. Another useful fibre is that derived from young bulbil plants a year old.

These developments, if successful, besides altering factory practice, will profoundly affect field practice. The Sub-Committee therefore recommended the postponement of the economic programme. In the meantime the land on the station will be prepared for planting in 1940 according to the economic programme to be decided upon.

V. A. BECKLEY.

SENIOR AGRICULTURAL CHEMIST.

/HMM.