

PUBLIC RECORD OFFICE

CONTINUED FROM PREVIOUS FILM

PUBLIC RECORD OFFICE

C0533/411

ORDER NO. ↪ FN/E474
CAMERA NO. ↪ 19
OPERATOR. ↪ EM
REDUCTION. ↪ 12
EMULSION NO. ↪ 321061
DATE. ↪ 27/4/72

CROWN COPYRIGHT

THESE COPIES ARE SUPPLIED FOR INFORMATION
AND RESEARCH ONLY-NO REPRODUCTION MAY BE
MADE FOR PUBLICATION WITHOUT THE ASSENT OF
THE PUBLIC RECORD OFFICE

77

BOARD OF AGRICULTURE.

TUBERCULOSIS IN IMPORTED ANIMALS.

The Board has had referred to it by the Hon. the Chief Veterinary Officer, his proposed amendments to the rules under the Diseases of Animals Ordinance, of which a copy is attached.

In support of his proposal the Chief Veterinary Officer explained that the existing rules do not provide powers adequate to control the introduction of tuberculosis into the Colony through the medium of animals imported from overseas.

Hitherto, provided an animal as imported is accompanied by the certificate of the competent authority in the country of origin that it has not reacted to the ^{tuberculin} ~~Maffain~~ test for tuberculosis applied previously to exportation no further restrictions exist on its import.

It has been generally assumed that such a restriction is adequate but the Board was satisfied by the evidence of the Chief Veterinary Officer who reported authentic cases of tuberculosis in animals so certificated that more effective testing is necessary.

In view of the grave consequences which would result from the introduction of this disease, of which the Colony is at present free, the Board is in full agreement that no risks can be taken. It therefore supports the recommendation of the Chief Veterinary Officer that powers should be invested in him to test and, if need be, slaughter imported animals upon arrival in the Colony whether or no they be accompanied by a ^{tuberculin} ~~Maffain~~ test Certificate. It is further of opinion that this should be done at a Veterinary Quarantine Station rather than on the farm, firstly in order to reduce the risk of infection to a minimum and secondly in view of the practical difficulties of control by the Veterinary Department of tests conducted on farms.

The Board recommends that in substance all the 18 attached Rules proposed by the Chief Veterinary Officer should be made and applied.

20 / 12 / 30

Certificate required 6(1). The certificate of a qualified Veterinary Surgeon certifying that they have come from an area free from contagious and infectious disease must be furnished to the inspecting officer at the time of importation at the port of entry in respect of all animals imported from overseas. Such certificate shall be dated not more than ten days prior to the date of embarkation. In addition certificates relating to certain specified diseases must be furnished in accordance with regulations hereunder.

Certificate of freedom from ticks required in the case of cattle from South Africa.

(41). In the case of cattle imported from the Union of South Africa, Southern Rhodesia or Australia, a certificate to the effect that the cattle imported were free from tick infestation at the time of export, must be produced to the Inspecting Officer at the time of importation. Such certificate to be signed by the Veterinary authority at the port of embarkation.

Certificate of test of freedom from tuberculosis.

(411). In respect of all cattle imported into the Colony, the certificate of a qualified Veterinary Surgeon must be furnished to the Inspecting Officer at the time of importation, certifying that they are free from tuberculosis as determined by an approved test carried out within twenty days of embarkation.

All animals to have been free from infection during the voyage.

7. The Inspecting Officer shall satisfy himself after due enquiry, that the animals imported had not during the voyage either been in contact with any animal which would be likely to spread disease or been exposed to any other infection.

No fodder or food-stuffs on board during voyage to have been in contact with animals imported.

8. The importer shall satisfy the Inspecting Officer that no fodder or foodstuffs likely to cause disease or the spread of disease have

been taken on board and have been in contact with the animal imported, and no fodder, food-stuffs or equipment shall be landed from the ship except such as are approved by the inspecting officer acting in accordance with instructions from the Chief Veterinary Officer.

All cattle imported to be quarantined and tested for tuberculin.

9(i). All cattle imported from overseas shall, immediately on being landed, proceed by train to a Veterinary Quarantine Station at Nairobi or Kabete, where they will remain under observation for a period of not less than thirty days, at the owner's expense; after which they shall be subjected to a test for Tuberculosis, as prescribed by the Chief Veterinary Officer.

Disposal of reacting cattle to the tuberculois test.

(ii) In the event of any such animal giving a positive reaction to the test, any such cattle shall be slaughtered or otherwise dealt with as the Chief Veterinary Officer may direct, and no compensation shall be payable to the owner in accordance with the provisions of Section 11 of the Principal Ordinance, unless Veterinary Officers of the Department have been unable to find visible lesions of tuberculosis on post mortem or to demonstrate the existence of tuberculosis by bacteriological, bacteriological or biological methods. Such compensation shall not in any case be more than the original selling price to the importer of the animal in the country whence imported together with all reasonable charges for freight and keep up to the time that the animal is destroyed, provided, however, that in any case in which an animal has been insured by the owner against condemnation as a

Director of the Department of Agriculture, Chief Veterinary Officer, Nairobi.

that the owner shall receive the amount of the premium paid by him for such insurance plus such additional expenses as he may have incurred prior to the slaughter of the animal, which are not covered by the insurance premium, providing the total compensation paid does not exceed £100.

Evidence in respect of these matters shall include such documents, statutory declarations and other such information as the Chief Veterinary Officer may require.

(iii). No such cattle shall be released from the quarantine station until they have given a negative reaction to the test for Tuberculosis.

(iv). No cattle shall be imported from India or Zanzibar.

Prohibits importation of cattle from India and Zanzibar.

All equines to be accompanied by Mallein certificates.

10.(i). In respect of all horses, mules or donkeys the certificate of a qualified Veterinary Surgeon at the time of importation at the port of entry, certifying that they are free from glanders as determined by an approved test in respect of all horses, mules and donkeys imported from overseas.

Such certificate shall be dated not more than 21 days prior to the date of embarkation for the Colony. The Chief Veterinary Officer may further require any horse, mule or donkey to be submitted to the Mallein test, under such conditions as he may direct, and in the event of a reaction the animal shall be destroyed and no compensation shall be payable to the owner in accordance with the provisions of Section 11 of the Principal Ordinance.

Prohibits importation of equines from India.

(ii) The importation of horses, mules or donkeys from India is prohibited.

Certificate of health 11. In respect of all swine the certificate of required in the case of all swine, of a qualified Veterinary Surgeon, certifying

that they have come from an area free from contagious and infectious disease, must be furnished to the Inspecting Officer at the time of importation at the port of entry, in respect of all swine imported from overseas. Such certificate shall be dated not more than ten days prior to the date of embarkation, and the animals may be required to undergo quarantine at the port of importation or at such other place for such period as the Chief Veterinary Officer may direct.

Certificate of health 12. In respect of all sheep or goats the required in the case of sheep or goats, certificate of a qualified Veterinary Surgeon, certifying that they have come from an area

free from contagious and infectious disease, must be furnished to the Inspecting Officer at the time of importation at the port of entry, in respect of all sheep or goats imported from overseas. Such certificate shall be dated not more than ten days prior to the date of embarkation and the animals may be required to be dipped at such places as the Chief Veterinary Officer may direct.

Conditions of importation of rabbits. 13. The importation of rabbits is prohibited except such rabbits may be allowed subject to such conditions as the Chief Veterinary Officer may direct.

Conditions of importation of animals from Tanganyika Territory and Uganda. 14. The importation of animals from Tanganyika Territory or Uganda may be allowed subject to such conditions as the Chief Veterinary Officer may direct.

Conditions of impor-
tation of animals
from Abyssinia or
Italian Somaliland.

15. The importation of animals overland from Abyssinia or Italian Somaliland is subject to the conditions governing movement out of the Northern Frontier Province, as laid down in Government Notice No., issued in accordance with Rule 14 of the Diseases of Animals Ordinance

The Chief Veterinary
Officer may authorise
the importation of
animals under special
circumstances.

16. Notwithstanding anything to the contrary in the foregoing Rules, the Chief Veterinary Officer may in special circumstances authorise the importation of any animal.

Inspecting Officer
may cause imported
animal to be disin-
fected.

17. The Inspecting Officer may cause any animal imported into the Colony to be inoculated, dipped, disinfected, sprayed or otherwise treated, before a permit for movement is issued from the place of detention.

Authority to destroy
imported animal if
suspected of being
infected or in con-
tact with a diseased
animal.

18. An Inspecting Officer may, with the authority of the Chief Veterinary Officer, cause any animals imported, which are affected or suspected of being affected with any disease or which has been in contact with a diseased animal or has otherwise been exposed to infection or contagion of disease, and subject the animals to such treatment in accordance with regulation.

Repeal.

19. Rules 3,4,5,6,7,8,9,10 and 11 are hereby repealed.

MEMORANDUM REGARDING TAKING COMPLETE AGRICULTURAL
CENSUS ANNUALLY.

From the commencement of the operation of the Statistics Ordinance 1928, which took place in respect of the Agricultural Census for the year 1919-20, a complete Census was collated annually until the year 1925, when for reasons of economy and consequent reduction of staff, it was decided that an abbreviated Census should only be undertaken, excepting at triennial periods when the complete Census should be taken. This decision was observed until 1928, when it was decided to generally conform with the proposals of the International Institute of Agriculture, to have a World Agricultural Census taken at quinquennial periods from 1930 onwards. As a consequence a complete Census is being collated for 1930 (the previous one having been taken in 1928). As at present arranged the next complete Census falls due to be taken in 1935.

2. There can be no argument extended to support the view that a complete annual Census is undesirable and unnecessary. On the contrary strong arguments can be put forward to the effect that a complete Census taken at quinquennial periods would be inadequate in many respects, indeed past experience of the triennial period has, from time to time, shown the need for considerable amplification in intervening years.

3. At no time has the Statistical Branch of the Department of Agriculture been opposed to the complete census being taken annually, but for reasons over which the Department had no control, referred to above, it was found impracticable to devote more staff than the existing establishment, to the work of its collection and tabulation.

4. There may be objections to the proposal to take the complete census annually, but as far as is at present seen these are but 3 in number and are (A) Extra expense, (B) later production of results and (C) opposition by enumerators. The following paragraphs are devoted to a criticism of these objections.

- (A) At the inception of this service, a staff larger than the present one was necessary to effect the work of organization, the scrutiny and listing of all occupiers etc. etc. this work is now well established and calls for no additional outside assistance, as a consequence it is not considered that any staff additional to the existing establishment is necessary (indeed the complete Censuses of 1928 and 1930 have been executed without extra outside aid), provided that a continuity of efficient staff skilled and experienced in such work is maintained. As far as can be seen the only additional expenditure involved, would be paper, cost of printing the enlarged report, and extra cards utilized in tabulating work, all of which are inconsiderable.
- (B) The complete census naturally demands increased work from the Statistical Staff, but as previously explained, the time spent between the closing date and the production of the report is largely devoted to efforts to extract returns from enumerators. If therefore some pressure is brought to bear upon defaulters and returns are submitted spontaneously, the time so saved to the Statistical Branch would more than counterbalance that spent upon the work accruing from the larger census. In this regard a few prosecutions in different districts of the Colony, would, it is believed, have the effect of inducing occupiers to deal with their returns more promptly. There is no apparent reason why the Census report should not be completed within 6 weeks of the receipt of the last return.
- (C) Complaints and abuse from individual enumerators regarding the volume of the complete schedule are inevitable, it should however, be recollected that such would emanate only from those of lesser public spirited proclivities, who perpetually carry an objection against such

measures, even though they may be in their own personal interests.

In this regard the following culled from the 1930 Census return of a settler of over 20 years standing is typical of what can be and is expected:-

"It is delightful to hear that this Census is to be tabulated by the new "Hollerith" machines. I presume that in some unexplained way it will increase the price of my milk, the value of my cattle, and the fertility of my farm (but I doubt it) up to the present the only person who has benefitted by this Census is the Statistical Officer".

The Statistical Branch has invariably given every consideration towards enumerators by annually revising the schedule, by simplifying it as far as possible, by making it as readily understandable as possible even to the semi-illiterate, and by reducing it to a minimum limit commensurate with efficiency, and the satisfactory discharge of the functions expected of it. In this connection copies of Schedules were presented to the Board with tentative alterations endorsed therein for consideration. It is believed that these alterations will considerably simplify the Schedules and if accepted, will result in little (if any) loss of efficiency. Further, a comparison will show that very little more time will be required to complete the revised Schedules than was devoted to the former abbreviated one. An endeavour is being made to rearrange the Schedules so that it will occupy but 4 pages instead of 8 as hitherto and accordingly appear less formidable to enumerators.

It should be noted that advantage is now being taken of the newly installed "Hollerith" Tabulating Machines, and the tabulation work of the 1930 Census is being executed by that means. This has relieved the Statistical Staff of that part of the work, as a consequence more time has been

devoted towards securing the prompt reception of returns and has resulted in the Branch being 5 weeks ahead of last year's working, when only an abbreviated Census was being collected.

Final reminders were despatched by registered post to 223 defaulters on the 6th. Instant, the final reminder of the 1929 Census was posted on the 13th. November, 1929.

At date of writing 96 returns are still required to bring the total up to last year's total figure of 2035. On October 15th, 1929, 390 returns were outstanding.

Additional work has also been under-taken this year in an endeavour to secure figures of Indian and Native development.

The net result is expected to be, despite the fact that the complete Census plus Indian and Native Census is being taken that this year's Census will be complete about three weeks earlier than that of 1929. this of course is contingent upon the outstanding returns being received without undue delay.

7. In view of the fact that it has already been proposed to alter the Census date with effect from next year, and having regard to the importance of observing continuity and uniformity in the future, there can be no doubt that a complete annual census would be of added value. The Schedule laid before the Board has been so designed as to provide for all future needs of importance that can be unforeseen. There are certain items of information which may from time to time be required which are not included in the Schedule e.g. "monthly average wage paid to labourers" has been deleted in order to simplify the schedule. It is suggested that information of this nature can well be secured by means of a questionnaire at any time when desired. In this connection Crop Correspondents who number 265 and are increasing, are thoroughly representative of the industry and districts.

They have shown a keenness to assist the Department and would form a particularly appropriate medium for the acquisition of any information desired not ordinarily falling within the scope of the Census.

Finally, it is desired to reiterate the desirability of laying down a policy which will as far as is possible under changing conditions definitely ensure continuity and uniformity. Agricultural Census, statistics and crop reports are gradually becoming more and more interwoven. It can therefore be well realized that any alteration affecting any one of these services involves corresponding adjustments to the others. It is also pointed out that in conducting a study into the Economics of the Agricultural Industry, it is essential that continuity of information and material should be available.

Nairobi.
22.10.50.

///

BOARD OF AGRICULTURE.

PORTION OF "MEMORANDUM ON COSTS OF PRODUCTION"
DEALING WITH MAIZE.

From the figures examined by the Board, it appears that while the cost of producing maize fluctuates considerably with districts and individuals, namely between—
Shs. 47/50 and Shs. 98/45 per acre.

or Shs. 5/80 and Shs. 13/42 per bag, F.O.R.
the average cost over all districts from which figures were received is

Shs. 64/61 per acre

or Shs. 6/80 per bag, F.O.R.
in all cases bag included.

The average yield from the estates under review was high, namely 9½ bags per acre, or nearly 3 bags per acre above the average yield for the Colony as shown by the Agricultural Census Returns.

It should be remembered in this connection that the Board has confined its researches to those estates from which reliable and carefully kept figures were received and that such estates are likely to be more efficiently run than the average.

Since the average yield of maize for the Colony over the past three years, as shown by the Agricultural Census, is 6.30 bags per acre, it is evident that a yield of 9½ bags per acre cannot be taken as a fair figure on which to base calculations of production costs in prevailing circumstances.

On the other hand, the Agricultural Census figure of 6.30 bags per acre requires examination. It is necessarily based on the total acreage returned as planted. It should also be noted that for the production of a crop of grain in a new country where development is in progress and new areas being tested, it is inevitable that some areas returned as under maize

proved to be unsuitable for the crop and were abandoned or destroyed, the effect of which would be to depreciate the average yield for the whole Colony.

The Board in its previous report, has taken 8 bags as the actual average yield for the Colony for what may be described as the genuine maize area, in the existing state of the industry, for all climatic and soil conditions, over a period of years, with a reasonable allowance for the periodical drought and pest infestations; nor have the figures examined by the Board furnished any reasonable grounds for revising this figure. If 9½ bags per acre are produced at a cost of Shs. 2/80 per bag, a yield of 8 bags would cost in the region of Shs. 8/- per bag, on the same basis of calculation, and a yield of 6.30 (the actual average yield for the Colony, as shown by the records of the Agricultural Census) would cost Shs. 9/75 per bag.

Such a basis of calculation can only produce the roughest approximations since expenditure does not increase or diminish in exact ratio to yield.

But the Board is of opinion that the figure of 8 bags can and should be increased and that an average yield of 9½ bags is not unreasonably high on which to base estimates for the future.

Many farmers state that yields of 12 bags can be maintained. Individual crops of 25 and even 30 bags in exceptional seasons are on record, and in the case of many estates whose returns have been submitted to the Board, a yield of 11 bags was shown over a period of years.

It cannot be too strongly emphasised that there is one point on which all the evidence concurs, namely that, though costs can be materially reduced by economies in farm management and working and particularly by more efficient supervision of native labour, yet the factor of supreme importance in reduction

of costs is increase of yield, and that better yields are obtainable from improved cultural methods. In any country there is a wider margin for the improvement of cultural methods than in old established countries. Consequently, the factor is well within the control of the Kenya farmer.

The general conclusion to which this evidence leads is that, given efficiency of management and a normal cycle of climatic conditions, the average yield shown by the figures examined, of 9 1/2 bags can be obtained in the districts suitable to maize over a period of years.

If so, maize can be produced at Shs. 6/80 per bag on the average at the present rate of production costs and with reasonable economies in estate management can probably be produced at Shs. 6/- per bag, in all cases inclusive of bag.

It is not the object of the present memorandum to enter upon an exhaustive discussion of the ways and means whereby yield can be increased. Obviously, the prime factors are improved methods of seed bed preparation, the replacement, wherever possible, of hand by mechanical labour, correct rotation of crops, the increased use of manures and fertilisers and, perhaps, the most important single factor of all, the stoniness of the soil.

Since a stand of crops, than 75% of seed sown is rare and the average considerably less, the waste of land and consequent increase in the cost of production which results, unless this factor is taken into account at sowing, is obvious. On this question, farmers are referred to a valuable brochure by the Plant Breeder (Bulletin 2 of 1939).

The three main items of cost on a maize farm appear to be Management, Depreciation, and Payments in respect of Labour. On an average they may be taken to be slightly over 20% each of the total cost. Considerable variations are shown in their order of importance in individual cases, but, taken together, they generally account for about 60% of the total cost.

The biggest fluctuations are shown in payments in respect of native labour, and analysis and comparison of data examined suggest that management of native labour is one of the most important factors to be scrutinised by the farmer seeking to reduce costs. On the two farms in the same district this item figures as 18% and 39% respectively of total cost.

Attempt was made to allocate labour and general expenses among the various operations of the farm, but, as indicated above, the returns received by the Board were inadequate for this purpose.

It is evident from the data examined that mechanical draught at the present cost of power fuel is, as a general rule, disproportionately expensive in relation to animal draught. That this fact is being recognised by farmers is indicated by the returns the Board is receiving, in connection with another investigation in train, of the number of tractors which are being substituted by oxen.

As regards capital cost and depreciation in the case of the two respectively, opinion and experience are divided.

On the one hand it is argued that the initial cost of oxen is higher than that of a tractor. A tractor of 15 H.P. with the drawbar at a cost of £330, including gear, will do the work of 12 oxen at 4 teams of 16 oxen. 4 teams of 16 trained oxen cost about £500 and their gear a further £30 or £40. This figure is the general average price quoted by the auctioneers. The term gear does not include implements. Clearly, the cost of implements is higher per acre tilled in the case of oxen. On the other hand, it may be argued that a farmer can buy untrained oxen at £3 to £5 apiece and train them without calculable cost, in which case their initial cost is roughly the same as, or less than, that of their equivalent in tractors.

As regards depreciation it may be argued, and is the practical experience of some farmers, that this item is negligible or non-existent in the case of oxen. In fact, it has been observed that oxen bought untrained and re-sold trained after a few years

use show an appreciation. It is not every farmer, however, who is in the fortunate position that he can sell his draught stock after some years' work at original cost or more, and obviously if this were the universal practice the market would automatically close. It is submitted, therefore, that this cannot be taken to be a general rule upon which to base calculations.

On the other hand, it is argued that the working life of an ox, if employed the same number of days per annum as a tractor, is probably not much greater than that of a tractor. The nominal life of a tractor appears to be taken to be 4 years; that of an ox in these circumstances probably 5 - 6 years, including the average rate of mortality. Depreciation on the tractor would therefore be ... £90 per annum, and on 64 oxen at a 5 year life.. £108

(including gear at the same rate of depreciation.)

On 64 oxen at a 6 year life ... £ 90 " "

On the whole it will probably be generally agreed that though the working life of an ox, if employed the year round, may be correctly put at 5 - 6 years, it cannot at worst be altogether written off at the end of that period. Consequently it may be safely asserted that capital expenditure and depreciation are higher in the case of tractors than in that of oxen, but in the absence of any common basis of calculation no estimate of the difference can be attempted which would be of any value to the individual.

Repairs and renewals also are higher in the case of tractors, but as so much depends on their management and the ground conditions under which they work, again no satisfactory estimate can be taken as a guide.

It is in the working costs that the tractor appears at greatest disadvantage in relation to oxen. And in this case a fair average estimate can be made of comparative costs:

The working costs of a 15 H.P. tractor are not less

than Shs. 24/-, for one day's output of any 8 acres, i.e.,

14 gallons of paraffin	0	Shs. 19/-
1 gallon of oil	0	2/75
Driver, Assistant & ploughboy,		
including posho,	at 3/-	2/35
		Shs. 14/-

or Shs. 3/- per acre. The working costs per day of 4 to ms of oxen do not exceed Shs. 10/44, i.e.,

8 drivers @ -/85, including posho.	S. s.	5/54
4 ploughboys @ -/85		2/60
3 herd boys @ -/60		1/20
	Shs.	10/44

or Shs. 1/30 per acre.

That is, the working costs of a tractor employing 3 men at Shs. 3/- a day are more than double those of its equivalent in oxen employing 14 men at Shs. 10/44 a day.

NOTE: There are farmers whose conditions do not admit of a two-acre task per team, but there are equally conditions in which the small tractor cannot plough an acre on 12 gallons of fuel. Since opinions and experiences differ so widely in this respect, a reasonably high standard of performance in either case has been taken for the purpose of comparison. It will be observed that of the total working cost of a tractor of cca. 4/-, fuel and oil represent Shs. 21/75.

In these calculations no account is taken of the capitalized value of the grazing land used by oxen, since in conditions of Kenya a portion of many farms is needed for no other purpose and its use cannot therefore be regarded in a practical sense as a cost.

There are, of course, conditions in which the use of oxen for all or most of the draught purposes of the farm is impracticable. For instance, in the high wet country with a limited period of the year during which cultivation is possible. These circumstances would necessitate a herd of uneconomical size in order to till the fields in the time available while grazing idle for the rest of the year. Or, again, on a small intensively cultivated area it may be more economical to employ

tractors rather than grazing arable fields.

Further, it must be born in mind that with the progress of settlement and development of a mixed farming industry and the consequent more intensive use of land, grazing land will tend to increase in value. Again, in arriving at those comparisons, the question whether the feeding of concentrates will increase or diminish the efficiency of work oxen is material. No sufficient experience on this point is available in the Colony on which to form any conclusions. So far as the Board is aware, the only indication is that a pair of Indian-owned corn fed bullocks can pull a load which would require 4 to 6 grass fed bullocks.

Nevertheless, the returns examined prove that costs of production are appreciably lower both per acre and per bag wherever oxen are employed as the sole or principal means of draught.

Comparisons with other countries in this respect are of little value. It is possible that in the conditions prevailing in the great prairie lands of America the large unit of 120 H.P. pulling 30 furrows and ploughing as much as 50 acres a day might compete economically with animal draught, though from such American statistics as have been examined this would appear doubtful at the price of power fuel and oil prevailing in Kenya. But hitherto the small unit within the capacity of the native has been found most suitable to Kenya conditions prevailing in Kenya that the conclusions are necessarily founded.

This question of the comparative costs of mechanical and animal power for field work is an important factor in the general costs of production and where ample grazing is available and seasonal conditions admit, at the present cost of fuel oil, farmers should carefully weigh the advantages of concentrating on the use of oxen.

The Board would again emphasize that it has been

unable to collect sufficient data upon which to base final conclusions, and the above observations must be regarded as general. They are made with the object of directing attention to the question and indicating the lines on which individuals should examine their own position.

Figures of production costs of maize in the Union of South Africa and Southern Rhodesia have been scrutinised by the Board in the hope that they would supply more useful data upon which to found conclusions and suggestions for economies than those afforded by the figures received from Kenya farmers, but it is evident that the same difficulty in evolving uniform costing systems exists in South Africa and the figures furnish no useful basis of comparison for this purpose.

It may, however, be of value for future reference to record the results as showing how Kenya compares as regards yield and cost with South Africa.

1. The Rhodesian figures are taken from results obtained at the Government Farm at Gwelo for the year 1929-30. They show:-

A yield of 9.06 bags at a cost of Sh. 4/11 per bag or Sh. 40/10 per acre, delivered to railway siding.

(cost of bag and twine at Sh.1/0.3 included).

The yield in the case taken, however, is abnormally high; the average yield per acre for Southern Rhodesia as shown by the statistical returns of the Department of Agriculture for 1929, is

5.67 bags, which, on the above basis of calculation, equals Sh. 32/9 per acre.

Analysis of the figures gives the following results:-

	<u>RHODESIA.</u>	<u>KENYA.</u>
Management.	13.88% of total cost.	25%
Depreciation.	7.78% " " "	30%
Native labour.	24.38% " " "	19%
	<u>Total. 46.04%</u>	<u>64%</u>

- 11 -

Taken only on machinery and tools, a proportion must therefore be added for buildings. Even with such allowance made, the total is still appreciably lower than the corresponding costs in Kenya. Other cost items are lower in Kenya than in Rhodesia.

B.		
Cost of Cultivation	- Sh. 8/10 per acre	-/94 cts. per bag or 15.5% of total cost
Planting & Seed	- Sh. 6/-	-/66 cts per bag or 11% of total cost.
Manures.	- Sh. 11/-	1/21 per bag or 20.56% of total cost.
Harvesting.	- Sh. 4/50	-/49 cts per bag or 8.32% of total cost.

(The balance being allocated between Management, Bags and twine, Transport to station, Depreciation, and Miscellaneous.)

A comparison with Kenya costs on this principle of allocation must be accepted with reserve, owing to the difficulty of obtaining the figures. Such as are available to the Board show the following on average:-

Cultivation and planting.	25% of total
Manure	9% " "
Harvest	7% " "
Bags and twine	14% " "
Depreciation.	20% " "
Management	25% " "

2. The South African figures date back to 1924, no more recent statistics being available. When the latest figures are received they will be analysed and issued as an appendix to this memorandum.

They are taken over several hundred representative estates in the three Provinces of Natal, Orange Free State and the Transvaal, at altitudes varying from 4,600 feet to 6,000 feet, and show:-

An average yield of 3.57 bags at cost of Shs. 9/75 per bag or or Shs. 34/60 per acre.

This average comprises variations between yield of 1 bag at Shs. 10/90 per bag or Shs. 18/60 per acre and 7.7 " " " " " " 25/95 " "

Costs are so allocated on the returns that add up to 100%

afford no useful basis of comparison with Kenya conditions.

The following table summarises the above figures:-

Comparative costs of production of Maize as shown by the figures above for Kenya, Southern Rhodesia and South Africa, respectively.

		<u>Yield:</u>	<u>Cost per Bag.</u>	<u>Cost per acre.</u>
<u>Kenya.</u>	On the figures examined by the Board.	9 bags.	Shs. 6/80	Shs. 64/61
	Corrected to the Census average yield of the Colony.	6.30 "	" 10/25	" 64/61
<u>S. Rhodesia.</u>	On the figures of the Gwobi Farm experiment.	9.08 "	" 6/-	" 54/25
	Corrected to the Census average yield.	5.67 "	" 9/58	" 54/25
<u>S. Africa.</u>	On figures examined.	3.57 "	" 9/75	" 34/80

MAIZE AND OTHER CEREALS. Charges incurred in exporting from Kenya compared with those of South Africa.

<u>MAIZE.</u>	<u>KENYA.</u> P. long ton.	<u>SOUTH AFRICA.</u> P. long ton.
Railage from Main Line Stations.	11/20	
Railage from any Station to the Ships' slings including elevator, grading and cleaning charges...		16/80
Port Charges... ..	5/00	-/28
Grading Charges	-/55	NIL.
	16/75	17/08
Branch Line Rates	2/75	NIL
	19/50	17/08
Cost of 11 Bags @ 90 Cents 9/00		
Less allowance for bags K.U.R.)	2/33	
	7/57	NIL
	27/07	17/08

Kenya Maize reaches the Ships' slings with a handicap of Shs. 9/99 per long ton compared with South African Maize.

The percentage of the K.U.R. & H. charges to the C.I.F. United Kingdom values of these two commodities as levied from Main Line Stations appears from the following tables:-

<u>C.I.F. U.K. Value.</u>	<u>K.U.R. & H.Charges.</u>	<u>Percentage</u>
Maize 24/- per qr.	16/75 per ton.	15%
Wheat 38/- -do-	18/70 -do-	9%
Barley 14/- nominal per qr.	18/50 -do-	26%
Oats 10/- per qr.	18/50 -do-	32%

DEPARTMENT OF AGRICULTURE,
P.O. BOX 525,
NAIROBI,
KENYA.

No. C.27/29/1

7th November, 1950.

The Hon. Ag. Colonial Secretary.

BOARD OF AGRICULTURE.

Ref. Para. 2 of your minute No. S/AGR. 39/1/152
of October (undated).

So far few questions dealt with by the Board of Agriculture have definitely and specifically referred to Native Agriculture, but when they have I have not failed, in accordance with the Secretary of State's direction, to watch Native as well as Indian interests.

2. Referring now to the suggestion of Sir Daniel Hall as to petite culture by natives and Indians, the position is that within or adjacent to townships with any considerable population both natives and Indians are in occupation of land for the pursuit of petite culture and in fact the markets for "small" produce, mostly of a perishable kind which may be embraced in the above term, are already supplied by producers of these races. At other centres the consumption is so small that the returns to be obtained are insignificant and would not therefore appreciably affect the progress and prosperity of non-European agriculturists. Further the proposal is likely to raise a political controversial issue in regard to land and the matter is not in my opinion of great importance.

5. I am of opinion that having regard to the numerous Consulting and Advisory Committees already in existence in addition to the Board, agricultural organisation is already

tbp-heavy

top-heavy. As to the question of native agriculture in relation to the Board of Agriculture, in my judgment an ad hoc Board is not required to deal solely with Native Agriculture, nor do I favour the division of the Board of Agriculture into two Committees, one dealing with "(a) European Agriculture", and the other "(b) Native Agriculture". Certain broad issues dealt with by the Board of Agriculture are common to both. There are no real problems of native agriculture which are not common to the agricultural industry and the means whereby native agriculture, apart from other activities linked therewith, may be promoted are comparatively so simple in character that in my judgment the setting up of a special body to deal with them is not justified, and I endorse generally Sir Daniel Hall's opinion that "the problems of native agriculture are less technical than administrative, social and educational."

4. I am of opinion, however, that the need exists for the appointment of a body to deal with Development in Native Reserves in a wide sense. The whole question of native advancement is linked up with medical, educational and agricultural services, as well as with transport, water supply and other public services, and all of these are dependent upon sound organisation and sustained effort on the side of the Administration.

Many Departments are concerned in the development of Native Reserves and the advancement of their peoples, and although Heads of Departments confer with one another independently at different times the results of their efforts would in my opinion be greatly enhanced if a reviewing and co-ordinating body were brought into existence.

5. I have therefore to suggest that a body advisory to Government be constituted somewhat along the following lines:-

- Colonial Secretary (Chairman)
- Chief Native Commissioner (Deputy Chairman)
- Two of the most Senior Provincial Commissioners
- Director of Medical & Sanitary Services
- Director of Agriculture
- Director of Education

together with one or two non-officials selected perhaps from Missionary bodies.

In addition there should be co-opted from time to time according to the special business to be transacted the Provincial Commissioner of the area affected thereby, also the Director of Public Works and the Conservator of Forests.

6. As and when any purely agricultural question should be brought under review by the Board of Agriculture representations from the above body could be made to the Board either by members of the Board representing native interests, or through the Director of Agriculture.

7. I am strongly of opinion that some such body as that indicated is greatly needed and am confident that it could achieve much for the benefit of the native population and the prosperity of the Colony.

(Sgd.) ALEX. HOIM.

DIRECTOR OF AGRICULTURE.

AH/WVA