

Mr. Sydney Gordon Butler, Principal of the Tsolo Agricultural School,  
Mr. Fred Roland Blythe Thompson, Principal of the Teko Agricultural School.

called and examined:-

CHAIRMAN: I believe you have prepared a statement for us, Mr. Butler?-(Mr. Butler): Yes. In considering the evidence which I should like to put before this Commission, I have more or less grouped agricultural matters together, dealing with the general development of agriculture in the Territories, and leading from that on to the results of this development and the present economic conditions. I do not know whether you wish me to explain how the developments have come about in the Territories.

I think you might give us an outline of that?--  
 The original scheme of agricultural development in the Transkei started at Tsolo. The first scheme was a system of apprentices, but that did not prove to be successful. In 1913~~2~~ a school of agriculture was established at Tsolo and, after a number of years, during which the people up there began to take an interest in matters, the institution gradually grew. A large number of students came forward, so much so that, in 1920, it became necessary to start another school of agriculture, which was established at Teko, and, since then, another school has been started at Flagstaff and the Union Agricultural Department have now started a further college at Fort E Cox. This, I think, was the first form of education in which the Native people really felt that it was in touch with the community with which it was working. They deal with such things as stock and agriculture, and a<sup>great</sup> deal of the success of the movement is due to that fact.

At the schools of agriculture the students get a very thorough training, both in practical and theoretical

work. At the same time, we carry out work for the students and we endeavour to make them better citizens with broader ideas and with the idea of benefiting the community; not merely with the idea of becoming purely wage earners after leaving the colleges. In addition, the colleges carry out a certain amount of experimental work, finding out the best crops, best suited to a particular area, the best type of stock, poultry and so on. We also produce quite good stock, which we sell to the Natives at very reasonable prices, mainly cattle of different descriptions. That, in a nutshell is what we are trying to do.

Arising out of this training, one naturally had the idea of benefiting the community at large and at first the best men were selected as agricultural demonstrators to demonstrate up-to-date methods of agriculture to the people in the different locations. This has continued and you will get more information about this later on.

The schools have been the forerunners of demonstration work. Out of that short resume which I have given you, we have found that the Native people have taken the very greatest interest in agriculture and there has been a distinct economic bettering of conditions due to this agricultural development idea. In this way, particularly the Territories are now a maize-exporting country. That means that practically every individual has benefited by this agricultural training. Only ten years ago, for instance, mealies, to take an example, were from 10/- to 15/- per bag, and today the price has come down in many areas to as little as 5/- and 6/- per bag, which shews that even the poorest today are able to get the staple food material at very reasonable prices.

We find signs that this bettering of economic

how any surplus, any available surplus from the lands is applied for marketing purposes, how the Native income is expended, and how, under a more economic and better system of agriculture, this could be very much improved. Then I have a few notes on the main obstacles to the more economic use of land. I have notes on a number of other subjects also dealing with the lack of incentive among the Natives to produce more crops and, in dealing with the goods, and also the means of raising the standard of living, the present standard being really due to this lack of incentive to produce a greater crop.

I also have some remarks to make on education. The figures given in regard to the actual area under cultivation in the Transkei in the 1921 Census, are 761431 morgen under cultivation. This is for the Transkei, including Pondoland. Taking the 1921 figures as a basis, I think it is a fair figure if one were to say that there is probably 820,000 morgen under cultivation, due to the increase in the amount of land which is being utilised for crop production.

On the estimated basis of four bags to the morgen, this should yield 3,280,000 bags of grain. Taking the needs of the people as being 2,75 bags per unit of production, this would mean that 2,750,000 bags of grain would be required to feed the people. The last grain season, 1930, in spite of relatively poor yields in certain districts, has shewn that there is a surplus of grain.

It would be very difficult to get exact figures as to the various crops produced, but I have put down the following approximate figures?— Maize 2,600,000 bags; Kaffircorn 300,000 bags; Beans and Wheat 100,000. Tobacco, pumpkins, potatoes and other crops, would make up the balance of the land utilised for crop production. Maize,

of course, is the main crop that is grown, and the principal factor in maize production in the Territories today, excluding poor methods, is the question of rainfall, as practically all the crops are grown without irrigation. Where we have a good season and heavy rainfall, the crop production goes up - where we have a bad one, vice versa.

The main factors that bring about this very low yield of 4 bags to the morgen, are, of course, primitive methods of cultivation, the use of poor seed, the lack of crop rotation and the lack of use of fertilizers. There are a number of other factors as well, such as the lack of control of insect pests and plant diseases. In certain cases there is a lack of marketing facilities and then there is a lack of incentive to grow better crops due to the low standard of living.

The means that have been taken up to date, I have already described to you and these means have been taken by our agricultural schools ~~te-de~~ through demonstrators and so on, with a view to increasing these yields. The question of marketing is a very big one in the future, and

I think the <sup>surplus</sup> maize will be marketed in the future due to indirect means such as feeding to pigs and poultry and marketing of eggs and meat, and also by feeding to sheep and selling a greater amount of wool of better quality. The minor crops, such as pumpkins, beans, wheat, etc., are practically all utilised for food consumption.

When we come to the question of stock, here as well as elsewhere overstocking is the greatest evil that we have to contend with in the Territories today. I do not think it is necessary for me to tell you about the evils of overstocking. You have heard about that. In the Transkei we have, roughly,  $1\frac{1}{2}$  head of cattle, 3,000,000

/  
million

sheep and 1,150,000 goats. Taking the average amount of land required to sustain this amount of stock as five morgen to each head of stock and one morgen to each sheep or goat, we would require here today 11,650,000 morgen. We have actually got 3,156,660. That is to say that, for cattle, you would require 7,500,000 morgen, for sheep 3,000,000 morgen, and for goats 1,150,000 morgen.

From these figures, it will be seen that the Transkeian Territories are very seriously overstocked.

SENATOR VAN NIEKERK: When you give that figure of 3,156,660 morgen, does that include arable land?— No, I did not include that. In this figure I have included the whole of the locations, including rivers and mountains.

CHAIRMAN: But you have excluded arable land?— Yes, I have excluded that.

SENATOR VAN NIEKERK: Is not that figure of 5 morgen per beast somewhat on the high side?— These were the figures given by Mr. Thornton at the Conference which we had.

CHAIRMAN: Could you just add the figure for the arable land?— The arable land is about 800,000 morgen. The total area in the Territories of all locations is 4,009,640 morgen. Those are the census figures of 1920, and, in those figures, they give the amount of arable land as 760,000, but quite a considerable portion has been added since that date.

DR. ROBERTS: That is, three morgen per unit of population?— Practically a morgen per unit of population --- three morgen grazing and one morgen arable land. I do not think it is necessary to go into the cause of overstocking. I heard most of them today. The question of Native customs - the difficulty of marketing - the unequal distribution of stock, these are all causes of overstocking. It naturally

follows that, if one man has ten head of cattle, and another has only one or has none - that one man should have more than he has. The communal system of grazing, which means that everyone tries to get as many head of cattle as possible, on the commonage, leads to that position.

SENATOR VAN NIEKERK: Does lobolo play a part? - Yes, and then the Natives look upon cattle as money. That is their religion.

CHAIRMAN: Which is more important, the fact that a Native looks upon cattle as money, or lobolo? - I think that, today, lobolo is the more important of the two. I think the idea is gradually going out of looking upon cattle as money, because you find quite a number of Natives today who prefer to take money instead of cattle for lobolo. That number is increasing today.

If we look at the minimum number of cattle required for the people in the Territories, I have worked out the figures and I come to this. It is estimated that there are 240,000 oxen available so that each ox has to plough from 3 to 4 morgen of ground, or a span of six oxen from 18 to 24 morgen. If you take into consideration the fact that these animals are often in very poor condition and also the fact that the ploughing season is a short one - the Native does not plough till November - I consider that we are very much understocked as regards the ox population of the territory. We see that everywhere in the fact that cows are being put in the ploughs as well as young calves, and the amount of ground put it for ploughing in the territories today.

SENATOR VAN NIEKERK: Three to four morgen is not excessive? - That means that a span of six oxen will take from 36 to 40 days to plough an ordinary allotment, taking it that one span of six oxen will plough one acre per day.

What is the size of the allotment then?— Four morgen to the allotment.

It takes a span of six oxen eight to ten days then?— No, it would take from 36 to 40 days. Each ox has to plough four morgen. What I am ~~getting-at~~ giving there is for six allotments. Each allotment would take 30 days — each set of allotments. If you took the six oxen you must work it that way.

Now we come to the cows. There are about 625,000 cows in the Territories, capable of producing calves, probably more. That is a very low estimate. Now, if those cows gave an average quantity of milk, there would be ample milk for all the people in the Territories. Unfortunately, the proportion is very much below this owing to the cows being of the scrub type as a result of the overstocking of the commonages. They produce very little milk. The general overstocking of the commonages makes it essential for the animal to spend all its time to keep itself alive looking for food, particularly in the winter months. The tendency is for more and more degeneration owing to lack of sufficient foodstuffs on the veld. The rate of increase is very low. I have worked out the rate of increase, which gives me that 25% of the cows calve every year. I have worked that out on the fact that, in 1927 to 1929, the increase in cattle in the Territories was only 135,777. That is in two years. And adding the deaths to that, we find that the total increase is approximately 331,000, making an increase of 25% per annum.

SENATOR VAN NIEKERK: Is that without taking into consideration the number of cattle slaughtered?— Yes, the number of cattle slaughtered in the Territories is a very small proportion. They are only slaughtered in the small villages and in a couple of the small towns.

That is not so in other parts of the Union?—  
I cannot speak of other parts, but that is so here.

MR. LUCAS: Why cannot you have closed in or sealed trucks here to take the stock away, as they do in Bechuanaland?— You can get a certain amount out in the sealed trucks, but then you are entirely at the mercy of the person who is buying if you put it on the market. The man who is buying knows quite well that you have to take what he cares to give you, because you cannot get your stock back into the Territories, once it has been taken out in that way. So what are you to do?

Are not a number of your districts clean?— Yes.  
And is it not possible to isolate the others?—  
Not unless we have a compulsory system of branding and have a complete system under which every head of cattle is branded.

Does the Native object to that?— Yes he does.

Have the Bunga considered this question?— Yes.

MR. MOSTERT: You say that the people in East London would buy the meat?— Yes, the canning factory would.

Is it not possible to enter into a contract with these people, whereby you would supply them with stock from a centre like Umtata, you could kill your stock here and then send it in refrigerator cars to East London?— I think the cost would be very much higher than if you were able, simply, to put it into sealed trucks and send it off. It might be possible if you had a man here to buy here and then put into the sealed trucks and send it off. I think that that would meet the requirements of the East Coast Fever Authorities. Then, on arrival at East London, these animals would be slaughtered at once.

You said that they would not allow that, but if you were to kill here for selling in bulk?— I do not think that they would allow that either. The stock are

not branded and people are afraid that the animals might come from a quarantined area. Say it came to Umtata unbranded - they do not know where it comes from.

Is the whole of this area in quarantine?- The Transkei as a whole is. That is, as regards the removal of cattle from the Transkei.

Have the views which you have been expressing in regard to the possibilities of branding been explained fully to the members of the Bunga?- Yes, as a matter of fact there is a great deal of correspondence going on with the Veterinary Department. The Bunga want to know exactly what is required in order to get these cattle out. But, up to the present, the Veterinary Department have not stated exactly what it is that they want.

Is there any means of expediting that?- I understand that they are sending a deputation to Pretoria and that Mr. Hughes, the Director of Agriculture, is going to Pretoria for a <sup>an</sup> person interview.

MAJOR ANDERSON: What company is doing this canning at East London, is it an established company?- I do not know. I was told about this six months ago, that a company was to be started, but I cannot tell you whether it has definitely been established.

Is it a special company?- Yes. I was told that they wanted about 80 head of scrub stock per day from the Territories. That is all I know.

Will it be an economic proposition?- Well, I do not suppose that the Company would have gone into it otherwise.

MR. MOSTERT: While you are on this question of branding, do you mean the branding of individual cattle?- Yes.

The same as we have on the High Veld?- Yes, exactly the same.

SENATOR VAN NIEKERK: What was the increase per year of the cattle?— 135,000. That is the increase for two years. That is the increase per annum taken over a two years' period.

Now, from what you said, this factory would consume about 28,000 per annum.

So that there would still be a big surplus?— Yes.

If East Coast fever were to disappear, do you think a fair percentage of decent slaughtered stock could be procured?— Yes, I think so. It would, of course, be purely reasonable. Today we have got so far with overstocking that, unless we get a really good season, there is not sufficient nourishment in the veld to meet the position.

There may be times when you will be able to keep fat stock?— Yes, there may be.

MAJOR ANDERSON: Do you know what price the canning factory will be prepared to pay?— I was told that it would work out at about £3 per beast. It was suggested having a weighbridge at each centre, purchasing at so much per hundred pounds live weight. The gentleman who informed me of this said he did not want quality, he wanted scrub stock.

MR. MOSTERT: Would it amount to about 20/- per 100.lbs.?— I think it would be less.

That is dead weight?— Yes, I think it would work out at about that. Now, I come to the means of overcoming this overstocking. First of all, I would suggest, by means of propaganda, by means of opening the market, of course, for the sale of unnecessary animals, and, of course, by means of voluntary restriction of stock on the commonages. By that, I mean that the Native people themselves, through their Council, should adopt a resolution to restrict their cattle on the commonages, and I think that is quite probable.

The losses in big stock are very heavy and I think, due to the economic conditions, the Native is beginning to realise that he cannot carry the number of stock on the commonage which he did before. As regards sheep, from 1921 to 1927 sheep increased at the rate of approximately 160,000 per annum. That is the natural increase. To that must be added ~~xxxxxxixxxragaxaxxx~~ the introduction of stock. From 1927 to 1929, the increase was 90,000 per annum, so that there has been a big drop in the increase of sheep in the Territories. The next census will shew a big increase due to the fact that sheep are very cheap and that they have been bought up in large numbers.

SENATOR VAN NIEKERK: When you say 'bought up' do you mean bought up outside?— Yes, and brought into the Territories. I certainly think that the Territories are very much overstocked with sheep. At the present time we have a large number of poor quality sheep and, at the present price of wool, they are of little economic value indeed, and, if we could do away with this number of sheep, reduce them to 2,000,000, it would be to the benefit of the sheep farmer in this country. Because he would produce a better class of wool, as the sheep would have sufficient to eat, for one thing, and the name of the Transkei wool would be very much improved by getting rid of this coarse and hairy type. The wool produced would be pure wool and higher prices would be realised the whole way through. As you know, the wool bought by the trader is thrown into one pack and sold as Transkeian wool, irrespective altogether of what the quality may be.

MR. LUCAS: Is there any chance of a man producing good wool getting an advantage?— Yes, but the only way is to co-operative with a number of other men

who also produce good wool and sending direct to the big markets. In that way it could be done.

Is that done today?— It has been done. Of course, this is a new phase, but several people have done it.

MAJOR ANDERSON: There is room for development there through the co-operative societies?— Yes.

MR. MOSTERT: Do they not sort their wool?— Only these few men who have a better class of wool.

It is only natural that they cannot get decent prices if they do not sort?— I must admit that I cannot understand the wool market. Two years ago they were getting 15d per lb. for shank ends and things like that.

It has been put to us by some Natives that they do not get the same prices as the Europeans do, but the Europeans grow better wool and their sheep are in better fettle?— Yes. In the Territories today, the reason why the better price is not got by the man with the better wool, is that he sells to the trader and everything is thrown into one bale. That is the reason.

MR. LUCAS: The trader recognises no difference?— No, he evidently does not.

SENATOR VAN NIEKERK: What is the average yield per sheep?— From 3½ to 4 lbs.

Is the Transkeian wool supposed to be good wool?— The major portion is of very high class, a very fine wool. You would naturally expect, with overgrazed commonages, that wool would become finer owing to the lack of nutrition. On the other hand, we have a very large number of hairy sheep.

I was thinking of the quality of wool you could grow?— We could grow a very good quality. The schools have proved that. Now, the same methods for reducing the number of sheep are possible as, I think, in the case of cattle.

The next big item, of which we have a large number, is goats. As is a well known fact, goats are the most destructive of all animals and we have been endeavouring to get rid of goats altogether in the Transkei, if at all possible. But there are two big obstacles in the way. The one is the fact that Native customs play a very big part. The goat is used for sacrifices to a great extent, and further, the goat produces a small amount of milk and the result is that the poorest of the poor keep their goats. The number of goats in the Transkei today is 1,238,578. There has been an increase of 3,916 in two years, which seems to point to the fact that they are reducing their number of goats. The increase is very small indeed. Those are the census figures.

CHAIRMAN: Are these number, these figures, derived from the numbers that pass through the dipping tanks?—Yes, that is how they are arrived at. Now, I come to poultry and, I think, poultry breeding is going to be one of the most important branches of Native farming in the future. It has only been possible in the last few years to make real progress, since we got the advent of the motor lorry, which made marketing of poultry a possibility.

With the ox wagon it was an impossibility, it was too slow. There are several reasons for this being a very prominent industry in the future. First of all, the capital outlay that is required is very small and then, by the formation of egg circles, eggs can be supplied in bulk, either to the markets or to larger egg circles, such as those at East London and other big towns, and by co-operative marketing, and co-operative collection and loading on motor lorries, we shall be able to get this produce out of the country very easily.

The Natives are taking a very real interest

in poultry and there has been a very marked improvement in this particular branch of industry. In addition to these particular classes of stock which I have mentioned, we have a very large number of horses on the commonages here - I should say that their number ran to approximately one hundred thousand. These are things which have not been considered at all. These horses are of very little economic value, they are used for riding and racing, and hardly ever for draught purposes.

MAJOR ANDERSON: Could they be used for mule breeding? - I consider that they are not of the right type, they are too light.

Of course, you know there is a demand for the light mule? - We keep jacks at the schools, but only in very isolated cases do they bring the mares for breeding. The Native looks upon his horse as something for recreation, something for pleasure, something to ride.

MR. LUCAS: And as a means of transport? - Yes. Now, there is another interesting point which I wish to bring forward, and that is the economic position of the average Native family in the Transkei.

Before you come to that, what is the position with regard to pigs? - At the present time there is a big demand for pigs at the schools, and the industry is certainly going forward.

MAJOR ANDERSON: Where do they go? - They are collected by motor lorries and they are sent to the factories and sold.

Are they sold to bacon factories? - Anywhere in the open market.

MR. LUCAS: The bacon factories will not take pigs that have been fed on mealies? - They take pigs that have been fed on far worse than mealies, especially from the Transkei.

MR. MOSTERT: What about measles?— There is a certain amount of measles in the Transkei, and those pigs shewing any outward signs are rejected.

MR. LUCAS: You say that that is a branch in which they are making progress?— Yes, in so far that they are selling very much larger numbers today, but they are making very little progress in the method of keeping pigs. That is another point.

Now, I want to speak about the question of the economic position of the average Native family. Now, if we take a family unit in the Transkei as being five, man, wife and three children, then the amount of land per family unit, if each person had the same amount of land and if every person had land, would be .8 morgen of arable land, multiplied by five - would give 4 morgen, and grazing - 3.5 morgen. Multiply that by five will give you 17 morgen. Now, if we take the average yield per morgen of ground as being four bags of grain to the morgen, that would give us 16 bags to the family. The needs of that family are 13.75 bags of grain, so the surplus of grain would amount to 2.25 bags for the family. Now, with the exception of wool and hides, if an animal dies, there is no other income which comes to that family. They get the milk from the cows, of course, but as a surplus production from the pasturage, I think if you reckon 60 lbs. of wool at an average price of 6d, that practically covers the income from the animals running on the commonage. That is £1.10.0 from the wool, and ~~£2.12.6~~ £1.2.6 from the 2.25 bags of mealies, at an average price of 10/- per bag, making a total of ~~£2.12.6~~ £2.12.6. £2.12.6 is the total perfamily in the form of surplus products from the lands that are available, - that is the amount of surplus from the products available for marketing.

MR. LUCAS: There you take 10/- per bag as which the price/would be realised for the surplus?— Yes, of course it is very much lower than that just at present.

You regard that low price as temporary?— Yes. Otherwise, most of the farmers will have to go out of the market completely. Now, with this income of £2.12.6, the average Native family has to pay taxes and buy other additional articles of diet and clothing and so on. It is rather interesting to see the additional articles of food which he requires and which he has to purchase. These additional articles are sugar, tea, paraffin, meal, soap, coffee, condensed milk. The extraordinary thing is, looking through the articles of diet which the Native purchases, that sugar and tea, the two main items, are purchased as a substitute for milk. I think there are 625,000 cows in this territory, and yet the Native buys a substitute for milk.

DR. ROBERTS: I understand that there is a great purchase of condensed milk. Is that so?— Yes, it is so, and it is a growing thing. They are buying more and more condensed milk. I have worked these things out in connection with his economic position.

SENATOR VAN NIEKERK: Were you able to sum up what the requirements of a Native family are and were you able to work out what the lump sum would be?— I think that depends purely on the man's income. A man who has money buys, and the man who has not got money does not buy. I tried to get figures, but things are so different that it was practically impossible and, further, everything depends on the standard of living completely.

Now I have tried to work out the idea of what agricultural development seems to lead to. Of course, it is

interesting in shewing the population in this country will be able to sustain in the future.

If we take the amount of land available today for the present population, we take three morgen of land producing 5.6 bags of grain per acre. That was the average amount produced by Native demonstrators on 1524 acres of ground in all parts of the territories. I want to make it clear that that is without any fertilizer, simply by better agricultural methods and better seed over one year. I am using last year's figures. At the same time the owner of the land next to the demonstrator's ground, only produced four bags to the morgen, whereas the demonstrator produced 11 bags to the morgen.

CHAIRMAN: Was any kraal manure used? - No, not on these plots. Now those figures would come to a total of 33 bags less 13.75, shewing a surplus of 19.25 bags. That one morgen of ground utilised for the production of winter foods - lucerne, oats, wheat, etc., - for feeding cattle, sheep, poultry and pigs, and for the production of vegetables and fruit, that would enable, roughly, six head of large stock and 14 sheep to be kept on the estimate of two morgen per head of large stock and one acre per head of small stock.

I think working with these figures which we have at Tsole and the production of grain, that that is a very fair estimate. There would be no overstocking in the Territories if these figures were adhered to. Then, the cash value of the surplus would be 19.25 bags of grain at 10/- per bag, £9.12.6, 18 sheep, shearing 6 lbs. of wool, at 6d per lb., £2.17.-, and sales of vegetables, poultry and eggs, £2. That would give you a total of £14.9.6. I have divided these into various parts. Mealies, wool and the sale of vegetables are put in at a low

figure. I think I made a mistake there in my calculations. The total comes to £13.14.6. Now, I think, we make take this figure of £13.14.6 as being the normal requirements of a family in the Transkei today, because when a Native goes to the mines on a six months' contract, his average savings, or rather the amount which he remits, amounts to £10. I do not know whether these figures are correct, but I enquired from a large number of people and they agree with me on these figures.

This amount, plus the original surplus, comes to £12.12.6.

MR. LUCAS: Are you taking dry farming?— Yes, it is all dry farming here, there is no irrigation at all.

MAJOR ANDERSON: And is it a fairly reliable rainfall here?— We do have droughts here occasionally, but we do not have any regular droughts. They come in cycles.

MR. MOSTERT: What is your rainfall?— At Tsolo it is about 25 inches. It varies in other parts. At St. Johns last year it was a little over a hundred, I think.

It was 72, I think?— Yes, that may be. At Lusikisiki it was 100. I know there is one town, they told me that they were waiting for one more inch of rain to celebrate the century.

Now, I come to obstacles in the way of the more economic use of land. Well, to my mind this embraces the lack of knowledge how to use the land.

SENATOR VAN NIEKERK: What is your production when you use fertilizers, does that make a further increase?— Yes, that would make quite a big increase. Our average yield at Tsolo is 16 bags to the morgen, that is over a period of years. That is 8 bags to the acre.

CHAIRMAN: That is using kraal manure?— No, that is using fertilizer.

MR. MOSTERT: How much fertilizer do you use to the acre?— We were using 100 lbs.

MAJOR ANDERSON: Did you work at a profit on the use of that fertilizer?— Yes.

MR. LUCAS: You got  $2\frac{1}{2}$  bags extra by the use of the fertilizer?— Two bags. The normal amount of fertilizer is 200 lbs. to the acre, but the soil is good and we did not want to put on too much.

What does 100 lbs. cost?— About 5/-.

MAJOR ANDERSON: Is that superphosphate?— Yes. We use the basic super. That has the lime basis. It keeps the soil from getting sour.

MR. LUCAS: Are you trouble with the stalkborer?— Yes.

Is that a serious factor in the amount of production by the Native?— Yes, it is a very serious factor.

In those instances where the experiments were made by the demonstrators, were they affected by the stalkborer?— I could not say, but in any case the other man was just as much affected.

CHAIRMAN: The effect would be the same for the demonstrator's plot as the man next door?— Yes.

MR. LUCAS: Can we take it that the conditions, except for the different methods by the demonstrator, were identical?— Yes, they were different method and, of course, better seed. That is all.

Otherwise everything is strictly comparable?— Yes.

MR. MOSTERT: Are there any remedies for the stalkborer?— Yes, there are a number, but the principal one is winter fallowing. It is mainly a question of co-operation, and if the whole of the location were to tackle it you would be able to get rid of it. That is the principal thing. But, of course, there are different methods of dealing with it.

MR. LUCAS: Have you been able to persuade any

location to do that?- No, not so far.

Have you attempted it?- Yes, but it is very difficult to get all the people in one location even to accept the demonstrator.

Are there any instances of progressive chiefs or headmen who are willing to insist upon this co-operation?- I cannot say that I have heard of any cases.

Have you succeeded in any of the surveyed areas?- I am not in a surveyed area. I have that point in my notes as regards the question of the low yield per acre. Now, another great point as regards the low yield per acre is the lack of incentive to produce more, due to the low standard of living. We find that, when we have a really good season and there is quite a big surplus, quite a number of these people look upon the surplus as meaning that they can either have a longer period of idleness or more beer, or that they have more money for the purpose of investing in still more stock.

Have you noticed that there is a tendency to produce less the following year if they happen to have a good crop this year?- Yes, that undoubtedly does happen.

Now, I think the only way in which we can make this incentive to produce more, is by raising the standard of living and, in this respect, I want to say that, if we are going to raise the standard of living, I think the people who are to raise that standard are the women, and to meet this position we want to have a special type of education - an education that goes to produce homemakers, that is to say girls who will be taught to take a greater pride in their homes and maintain a higher standard of living and help others to do so. It will be necessary to train them to make the best economic use of any income coming into that home, that is of any of their household funds.

41

We find in our young men of education today that many of them have a real difficulty in a great many instances in getting wives who will live up to their standard. In many cases, one does find that they get married and they are dragged back to the level of the kraal, which is due to the wives. To train girls to obtain a certain amount of pin money for themselves and to train them how to utilise this money should be one of the best means to follow. They should be trained in poultry-keeping, in bee-keeping, vegetable gardening and fruit culture. These girls should be trained to produce articles of value to the home from the material products of the locality, such as grass mats, and buckets, blankets and woollen garments from the wool of the sheep by means of spinning and weaving. Girls should be trained to community work, to become leaders of the ~~XXXXXXXX~~ womenfolk in the community, with the object of raising the standard of living and ensuring the welfare and the health of the community. Now, the method of carrying out this particular work appears to be in training these girls in what one may call the ideal home in the Transkei conditions, that is to say, the buildings for each group of students would be five wellbuilt huts on the most suitable and economical plan. I am now referring to the method of carrying out the project. This group of huts would be a group unit and would have attached to it the poultry pens, vegetable gardens and so on. The idea is that, when the girl leaves that training, she is really ready to face the household duties in the future and she will know the best way of utilising every penny that may come into that particular house. Three of these huts would be living rooms to take four students in each. Then a common room and your dining room and kitchen, pantry and bathroom combined. The furniture would be very simple

There would be a common lecture room for all the students. Each girl in turn would undertake for a week to have entire charge, under supervision, of one of the branches of the course, for example, the cooking, the washing and laundry, general care and cleaning of the buildings, the poultry section and so on. The simplest form of household budgets to be prepared, shewing weekly costs of each branch of the work. This would give the necessary practical training and make home making an education. In the homemaker's course, we find the use of better hygienic methods in the home, better methods of cooking and improved scales of diet, simple practical sewing to meet the needs of the community, laundry work, simple nursing including the use of simple remedies and the care of the child, budgeting for limited incomes, the improvement of the appearance of the home and a scheme for the management of the home.

The agricultural course would include such items as to promote the interest in agriculture among the womenfolk and the children at the homes; to enable agriculturists the ~~agriculturists~~ wife to earn a certain amount of money that can be used as pin money and to add to the articles of diet that can be used in the home. Now, community work is of the greatest importance, that is to train the girls in the means of getting into closer touch with the community and how to solve its problems. The first point, of course, is to teach the girls how to get the confidence of the people in the community, which should be done through resident nurses at that school. She comes more into contact with the community around her. Now, the value of this training lies in the fact that it will give the girls a new outlook on life and make them realise the important part that women have to play in the life of a

community, that the raising of the standard of living and the general health of the community depends, to a great extent, on them. It will tend to stop the drift to the towns. The low standard of living is undoubtedly one of the main causes of that drift, and, of course, to the great benefit of everyone, it will show the economic progress that is made in the Territories by the raising of the general standard of living throughout the Territories.

CHAIRMAN: Well, will you carry on, Mr. Thompson?—  
(Mr. Thompson): I prepared my evidence on quite different lines. I took your guiding list and made a few brief remarks on each point, but I did not go into the whole system of our organization. In regard to Native agriculture, I say that the standard of Native agriculture is still low, but it has improved remarkably during the past ten years, as the result of Native agricultural education and demonstration introduced by the General Council.

Considering the financial resource of the average Native peasant, he responds reasonably well to agricultural teaching. The present overstocked condition of the country retards progress and development in agriculture. On the subject of what is being done to develop agriculture, the Transkeian Territories General Council's Agricultural Department consists of a Director of Agriculture, three Schools of Agriculture with full staffs, two European Supervisors and 71 demonstrators working in the field. At the schools of agriculture over 50 students are in residence each year, and the policy is to combine theory and practise in agricultural teaching, great importance being attached to the practical training that is given. The very best of students have been employed by the Council as demonstrators in the field, to teach the people by demonstration better

44

methods of cultivation and crop raising. Stud sheep, cattle, horses, poultry and selected maize seed, are sold to the people from the schools and Council farms, experimental stations, etc. Through the activities of the Council's Agricultural Department, an agricultural paper is printed in the Kaffer language.

Short courses are held at the schools for the men during the vacation period, and are patronised. Eleven agricultural shows and one central show, are held annually and are well supported.

A tour of all districts is undertaken in the winter each year by four officers, who give several lectures in each district and carry suitable samples of seed, fertilizers, wool, stock etc., for demonstration purposes. Lectures are also given at odd times in the district.

A proclamation in regard to inferior sires has effect in these territories and is judiciously enforced.

Through Council activity the people have started thrift societies themselves in many districts, and some of these banks already claim capital to the amount of £2,000 at Qumba, £1,000 at Mount Fletcher, £900 at another place, £50, £50, £40 and £30, the scheme being to issue loans for productive purposes. There are also 12 or more active Native farmers' association, each having sub-branches, Considerable work has been carried out in regard to sluiting or donga erosion.

The fact of  
/Natives working for Europeans has an instructive effect, and those Natives who have worked for some time on European farms always work their plots well and to advantage. Numerous illustrations of this effect come to one's mind.

The effect upon European farming caused by the employment of Natives, is considered by many to be demoralising and not economic, but, as the cheapest labour,

is considered for the time being essential.

The rural Native areas in the Transkeian Territories are adequate for the present population when views in comparison with the older European countries, but the Natives will have to improve their methods of cultivation and stop breeding considerably if a greater population is to be supported on the land. Ways and means of relieving the pressure of overstocking will go a long way to help in this direction.

There appears to be need for the establishment of small plantations to supply fuel in order to prevent the collection of manure for this purpose, as manure is of more economic use on the veld and for improving and maintaining soil fertility on cultivated ground.

In the first instance, the average Native is ignorant and conservative in character; he lacks the power of application and work and has little or no capital to invest in farm operations; arable land is seldom fenced; the grazing ground is overstocked and animals do not get enough to eat. Communal grazing grounds and scrub stock are all obstacles to the more economic use of land.

In the past, all savings were put into stock, which was regarded as "the bank", quantity of stock denoting wealth. Lack of scientific knowledge in agriculture and the use of good seed, fertilizers and modern methods of cultivation generally, are also obstacles to the more economic use of land.

In regard to the concentration of residential plots, the objection, apart from Native dislike to this, is the difficulty and cost of proper sanitation, without which there would be great danger of serious epidemics.

The economical grouping of arable and grazing

lands has, to a large extent, already been attempted and practised by the Natives themselves, and grazing grounds have been more or less reserved. The tendency is to work as much as possible in this direction by encouraging such economic grouping. This is being done.

In regard to housing and housing material, the ordinary Native hut has many advantages. It is cheap, easy of construction, lasts a long time, cool in summer, warm in winter, can easily be ventilated and vermin is more easily controlled. Huts should be maintained as long as sufficient thatch grass is obtainable, but scarcity of this material of recent years is forcing some people to use wood and iron roofs. Where such roofs have to be used, it would be better to build houses of proper bricks as a square sod or wattle building is seldom durable.

Sanitation in the real sense of the word is unknown to the average Native. The free and easy methods of using the veld for all purposes has proved to have its advantages, which, however, can only last as long as the kraals are more or less scattered and there is plenty of open space for sun and air to disinfect. It is also to be remembered that Native dogs act as scavengers and help to keep the country more or less clean.

Stock kept by Natives includes cattle, sheep, horses, goats, pigs and poultry, and with the exception of progressive men who have improved their stock by the use of good sires, it can all be classified as scrub type and poor in quality. Every effort is being made to induce the people to improve the type of their animals by the use of better sires in selection and to eliminate the boer goat in areas suitable for more economic animals such as sheep.

Propaganda is used to impress upon the people

the advantages of quality and production over numbers and that, from a few good cattle or sheep, hens, etc., greater production can be obtained.

Overstocking and its general effects of denudation of pasture and the prime factor in soil erosion, is today the greatest economic question facing the Territories. We have, in these Territories, approximately six acres to a beast, which is regarded as the usual area to allow for a beast, and we are overstocked to the approximate extent of all sheep, horses, goats and other miscellaneous stock which the country is carrying.

The country is so overstocked, that even in the Autumn, when stock should be in good condition, many of our animals are not fat. Animals lose their teeth at 5 to 6 years old and die young.

Methods of combating this evil are extremely difficult to suggest, in view of communal grazing lands which make limitation of stock difficult. There is also the 'Nqoma' system of lending cattle to friends.

Before the days of East Coast fever, big business was done by the speculator and trader, who bought up cattle, debts being frequently paid with cattle, and this stock left the Territories in large numbers. We have been a watertight compartment for twenty years, and, with consistent and regular dipping, preventing many tick-borne diseases, stock has increased considerably in this period.

If East Coast fever restrictions could be made easier in order to stimulate speculation and the sale of cattle in the open market, the position would, to a great extent, improve through natural business channels.

In regard to irrigation and water supply, the country does not lend itself to irrigation schemes of a

costly nature, because there is insufficient irrigable ground in any one locality to warrant a big scheme.

Quite a lot can be done in a small way with the water furrow system of irrigation, particularly in suitable localities in proximity to towns and villages with a view to market gardening.

Under the heading of "General economic conditions" I say that the system of banking depends entirely on the stage of development of the individual. In earlier times, Natives put all their earnings into stock, and particularly cattle, but the more enlightened people are now using ordinary banks.

In the past, Natives had not adopted any system of co-operation, but in 1927 certain propaganda was carried out in regard to the establishment of people's banks, or thrift societies, and there are a number of such co-operative systems in vogue now, with capital amounting to £2,000 in one instance, the object being to advance loans for agricultural and other productive works.

The cost and standard of living of Natives in rural and urban areas varies considerably in accordance with the stage of development, education and civilisation of the individual. I estimate the cost per annum for red Natives in rural areas, for a family of five, to be about £30, the standard of his living being low, his diet consisting mainly of mealies and milk - if he can get milk in these days - beans, pumpkins, and of recent years a little tea and coffee. He has no furniture and his clothing is one blanket.

The more civilised and educated Native requires from £70 to £90 per annum for a family of five, as he dresses in European clothing and is accustomed to furniture, beds, blankets, etc., while his diet includes bread, groceries, tea, coffee, and even some of the more delicate dishes.

In urban areas, I suggest that £84 to £120 is

the approximate amount required for a family of five, the increase being due to extra rents, rates, sanitary fees and possibly a little more expenditure on amusements and sports. These figures apply to educated Natives.

The credit system is admittedly bad, whether applied to Europeans or Natives and, in my opinion, it would be a distinct advantage if there were legislation making it impossible to recover book debts in the courts.

Such a law might operate harshly in the first instance, but would soon be understood and necessities would be provided for in due time instead of, as at present, credit being taken in full measure. Short of such legislation, I am afraid I see no means of successfully dealing with the question of credit.

Development in regard to Native handicraft has advanced considerably of recent years, particularly in the weaving of baskets, carving of sticks and pipes, pottery and beadwork, but it is by no means general. Of these crafts, the basketwork is deserving of the most encouragement. The making of cane and grass chairs and leatherwork is being encouraged under European instruction at some mission institutions in the country.

The most important Native products are grain, wool, hides, skins and tobacco, and eggs in small quantities. At present, nearly all these products are disposed of to the country trader, who sells through his agents at the ports. Recent a little co-operative selling has been arranged, and, in a few instances, when in sufficient quantity, men have reeled their produce to their own agents at the ports. Tobacco is exported in small quantities to the Natives on the mines.

At present there is little competition of Natives

with Europeans in regard to produce such as wool and maize.

CHAIRMAN: You have described to us a certain amount of improvement that has taken place as a result of the work of the demonstrators in these territories. Would it be possible to estimate what proportion of the population are shewing a substantial amount of improvement in their agriculture?— (Mr. Butler): It would be extremely difficult because certain districts shew much more improvement than others.

Taking your best districts, which do you think that would be in the Territories?— I think that the Director of Agriculture would be in a better position to answer that.

Take the district of Tsolo, which I think you know pretty well; could you make an estimate for that district?— I take it that you mean every avenue of improvement, such as stock, better seed and every method of agriculture

I take it you will agree that when a Native starts improving he does not just touch one thing, but a number of things?— When he falls for it, he is sufficiently advanced to try more than one thing. I should say that about ten percent of my district would fall in among those who have improved.

The rest have either not been influenced, or very slightly?— Yes, very slightly. Some areas shew a bigger percentage and other areas shew less. I am only speaking of my district now, but you could say that that would apply to the districts surrounding Tsolo too.

Now the land in the Territories is now divided between arable and grazing, in the surveyed districts, by survey, and in the unsurveyed districts by custom. Of ~~the~~ the land which is now divided, and which is devoted to grazing, is there a considerable proportion which could be used as

Messrs. Butler and Thompson.

arable land now if it were wanted? - Yes, there is.

Is there a considerable proportion? - Yes, there is.

Would it be half, or would it go beyond that? -

That, again, would depend upon the district.

Let us take now the sort of area which you find between here and, say, Mount Ayliff? - I say, between fifty or sixty percent. There is a lot of mountainous country which you would not turn into arable land at all. You could not use it for that.

So you think that between fifty and sixty percent could, if necessary, be turned into arable land? - Yes, I think so.

What sort of subjects do you teach at your school apart from the purely practical work? - We teach a number of ordinary subjects ---

To what extent is the scientific ground work of agriculture taught? - In practically every one of their practical branches and other branches too, we take agricultural economics as one of the subjects - that is one course of study.

Do you do any soil chemistry? - No.

Any botany - I do not mean the commoner plants? - Just the elementary work.

I take it that not all your students go out eventually as demonstrators? - No, that is so.

Do you get a large proportion who are employed later on as demonstrators? - Well, this is the position at present. There is a tremendous demand for demonstrators and we really cannot cope with that demand. You will realise how great that demand is when I tell you that some of our demonstrators are even appointed by the Tanganyika Government and by the Belgian Congo. They go right through the two Rhodesian Governments and so on, right through Belgian Congo. There is a very vast area drawing on a comparatively small

Messrs. Butler and Thompson

number of people. At present, practically 70% become demonstrators. (Mr. Thompson): The same applies to us.

Why do not the others also become demonstrators if there is this big demand - the remaining 30%. (Mr. Butler): They are not particularly qualified.

It is a matter of ability? - Yes.

I want to put a matter to you which will probably be one of considerable importance to this Commission; bearing in mind, not the demand there is for demonstrators, but the fact that, if you want to carry up the level of agriculture to a basis which will make it possible for these Territories generally to carry a much bigger population, you will have to have a very much larger number of demonstrators, than are being turned out now. Bearing in mind too, the possibility that, if conditions are more favourable, you could probably get a main choice of the educated Natives, of the young educated Natives who are just beginning to look around for some way of using their abilities --- bearing all that in mind, would it be possible to train with the existing facilities or with increased facilities at the existing farms and schools much more extensively but for a shorter period a very much larger number of demonstrators to teach a few elementary things such as the need for better seed, better ploughing, manuring, early castration of animals and so forth. What I mean is, do you think it is possible to reduce the length of the course and yet get men who could try and raise the great bulk of Native agriculture in those elementary things? - No. If anything, I should like to see the course lengthened.

I should like to have your reasons for that? - I think the main reason is that, to a certain extent, this is something new to the Native and, whatever type of man we turn out, he must, in the first place, be a thorough and practical man. If you turn out a man who has not got a

Messrs. Butler and Thompson  
thorough knowledge, you will find that the Natives will not listen to him. At the schools, we find that we have to go on hammering on the same point again and again. He ~~make~~ may take in something and, when you ask him a question, he may understand what you are driving at, but we have not only to make these fellows learn things, we have to teach them to understand things, and that takes up a great deal of our time. The point is this, that you cannot teach a man to understand a thing in a short space of time. We want these students to have a good range of subject matter because they will not always be planting seeds and be doing a few jobs like that. They will be on a whole-time job and a man who has had two years thorough training will find that he has his hands occupied, but if you have a fellow who has only picked up a smattering of knowledge, who, for instance, only knows something about better seed, he will find himself with nothing to do at various times of the year when planting of seed and such things is not going on. You want the man to be able to occupy himself throughout the year.

SENATOR VAN NIEKERK: What does he do in his spare time now? - He should not have any. The length of the course will always give him something to do. The course is so varied that it will always enable him to put in his time. I think the main point is this - in Native education, we have found that the faculty which the Native does possess is a magnificent memory. My experience has shewn me that a Native has a marvelous memory. He will remember things which it is almost impossible for a white man of the same standard to do. If you give him a text book, he will repeat the whole thing from beginning to end, but it is a very different thing - it is quite another story to get that fellow to understand really what he has written or talked about.

Messrs. Butler and Thompson

I do not know what the intellectual capacity is of the Natives whom you have in your schools now. I am visualising a system in which you will get some of the best intellectual capacity there is among the Natives. Will that make it possible to shorten the course?— No, I do not think so. I think we have some of the best intellectual Natives now, and it still takes two years.

CHAIRMAN: Have you not got rather in mind the more advanced conditions in these Territories when you ask for a two years' course?— No, I am afraid that, in the course that you suggest, you will turn out a half-baked article. You will have no basis to work on for your agricultural knowledge and that man will not have the incentive to go on because he has not got the foundation.

It is not a question of his going on; it is a question of the people he is teaching getting on?— Yes, but, of course, a man who is demonstrating must keep ahead of his people and he must be able to answer every question that is put to him, because, once people lose faith in him, he is useless.

It really means that he must make people think that he knows more than he does?— I do not say that, but it is a great thing to have the faith of people.

SENATOR VAN NIEKERK: The Natives themselves are very keen on having a high standard?— Yes, that is so.

MR. MOSTERT: Do you not think that the first year is really a probationary period?— Not at our school.

The first year is only the probationary period and it is only the second year when he reaches a certain stage; what I mean is that<sub>x</sub> it is only the second year that he begins to get certain knowledge?— Well, how are you going to do away with the first year?

I am only putting that to you. I do not agree with the other proposition?— (No answer).

Messrs. Butler and Thompson

MR. LUCAS: Has anything been done under this resolution of the Bunga about taking in agriculturists resident in the district who may desire to attend the school or the college, irrespective of their educational qualifications?— They must have an educational qualification.

That is for training as demonstrators. But I understand the object was to give some theoretical and practical instruction - mainly practical, to residents in the neighbourhood - the intention was to have periodical courses. Has anything been done in that respect?— We have always had short courses. We have special short courses to which it was thought men would go to learn practical work.

Are there many making use of that?— No.

MAJOR ANDERSON: How long does such a short course last?— Four days.

And are they making use of those courses?— Yes, the short courses are fairly well patronised.

Do you get Natives from long distances?— Yes, they come from long distances.

The Commission adjourned at 1 p.m., until  
2.15 p.m.

-----

On the Commission resuming at 2.15 p.m., the examination of Mr. Butler and Mr. Thompson was continued.

CHAIRMAN: The proportion that you gave between oxen and cows in the cattle population, how was that arrived at?— (Mr. Butler): It was arrived at, there being half a million male animals in the Territory and then taking 240,000 as practically one half of that.

Leaving the other half for occasional young bulls and so on?— Yes.

- 0001 -

Messrs. Butler and Thompson

Why do you allow one third only for the males? - That I got from information which I have been endeavouring to gather, both from Europeans and from Natives. So far as the Natives are concerned, they consider that it is bigger than that. They say it is one male to two or three females. But, I think, the proportion is correct, because every stock-owner keeps a female, even the poorest of the poor keep one female.

What would account for the disparity between the two, supposing that it does exist. If you had an area where a large number of animals were killed, it would account for that, but this is not such an area? - I have nothing to account for it. I have been endeavouring to find out whether more males were sold than females and, in some cases they say that if they had anything to sell they would sell males.

Yes, that may be, but the animals cannot get out of the Territories, so the only difference can be through slaughtering in the Territories and the number that is slaughtered is quite a small one? - Yes, it is comparatively a small one.

Would there be any natural reason why there should be a preponderance of female animals? - None that I know of.

Has there been any attempt made to get at this through the dipping supervisors? - No, not as to why there should be a difference. I have approached a few on the matter and they say it is just about one to two - they say my basis is correct.

They could very easily determine the proportion of any that are dipping? - Yes.

I do not suppose that that has actually been done? - No, it has not been done officially.

Now, with regard to the East Coast fever regulations, I take it that the boundaries of the Territories are sealed, to all intents and purposes? - That is so.

But inside the Territories themselves, what limitation of movement is there? There is practically free movement from one district to another, of course with permission of the magistrate. That, naturally, is where there is no East Coast fever.

And what is the position in East Coast fever areas? There is practically no movement whatever in such areas.

Even inside a particular district? I could not tell you how far the movement is restricted there.

Do you know which are the clean districts? I could give them to you, more or less, but I could get the correct information for you from the Veterinary Department.

Do you happen to know anything about the Pondo tobacco - as a business proposition? Well, it is grown in certain parts of the Territory. The best is grown in Bombanaland.

Before the tax on roll tobacco was introduced, there was a prospect of the thing becoming an industry, was there not? Yes, there was then.

Has it not recovered from that setback? Not at the present time, - it has not recovered so far.

Has any scientific work been done to determine which are the good areas and whether any marketable crop can be grown - a crop that is marketable outside the area? We have been carrying on experiments on a small scale and we had a farm down in Mkanduli district. But I do not think we had gone as far as finding a market, - we have not gone as far as putting it on the market or finding out whether a market could be got outside the Territories.

Is not it a case of first finding out where you can grow a marketable tobacco? can you grow it in the Territories? Yes, we have proved it in certain parts of the Territories. Wherever we have grown it, a marketable

Messrs. Butler and Thompson

tobacco can be produced,

It is a question of breeding out a certain aroma? - Yes.

MR. MOSTERT: You said that there were 625,000 cows? - Yes, that is so.

That does not include heifers and calves? - No.

That would bring it more or less to 50/50, so far as males and females are concerned? - No, it is 1,000,000 females and 500,000 males.

Would that be because they never sell the old cows? - Well, I will not say that they never do. The Native is forced to sell a beast now and then, and when he does sell, he always sells the oldest thing he has, something without teeth.

Now, you say that you consider that there is about 25% increase among these cows. That would be a little over 100,000 per annum? - Yes.

Being overstocked, what is the result? - It leads, to a certain extent, to a constant increase in the stock every year.

But you cannot get over a certain number, can you. In a bad year, for instance, or even in good years some of them die off? - Yes, about 80,000 die every year.

It is the losses that keep it more or less to the number that is carried? - Yes.

Now, what is your opinion; if a country is overstocked - say it can carry 100% of stock, - as time goes on these numbers may increase, but the carrying capacity of the country will remain the same? - The country cannot carry more than a certain number.

What about tramping the country out in the meantime. Does it not reduce the value of your grazing area? - Yes.

And, instead of being able to carry 100%, that carrying capacity will be reduced. Is that so? - Yes, that is so.